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Skagit County Auditor

WHEN RECORDED RETURN TO:

Kevin Maas  
Walter Street Cottages LLC  
603 W Blackburn Rd  
Mount Vernon, WA 98273

Document Title: Declaration of Covenants, Conditions, and Restrictions for Walter Street Cottages

Grantors: Walter Street Cottages LLC; Kevin and Sarah Maas  
Grantee: The Public

Abbreviated Legal Description: Lots 2 through 7, short plat of Walter Street Cottages

Assessor's Parcel Number: P29141

**DECLARATION OF COVENANTS,  
CONDITIONS, AND RESTRICTIONS**

**WALTER STREET COTTAGES**

This Declaration of Covenants, Conditions, and Restrictions for Walter Street Cottages, a residential development, situate in the City of Mount Vernon, Skagit County, Washington (hereinafter referred to as the "Declaration") is made this 16<sup>th</sup> day of December, 2020, by Walter Street Cottages LLC, a Washington limited liability company, which declares that the real property hereinafter described is and shall be subject to these covenants, conditions, and restrictions, licenses, and easements hereinafter set forth which are established for purpose of protecting the value and safety of the real property.

**ARTICLE I  
Interpretation**

1.1 Covenant Running with the Land. It is intended that this Declaration shall be operative as a set of covenants running with the land which shall be binding on the Declarant, its successors and assigns, and all subsequent owners of the property together with their grantees, heirs, successors, executors, administrators, devisees or assigns all in the manner hereinafter set forth.

1.2 Definitions.

1.2.1 "Declarant". Walter Street Cottages, LLC, a Washington limited liability company, which currently has its principal office at 603 W Blackburn Rd, Mount Vernon, WA 98273.

1.2.2 "Lot". Any numerically designated plot of land shown on any present or future subdivision map of the Property, with the exception of the existing house on Lot 1.

1.2.3 "Parcel". A record Lot within the Property.

1.2.4 "Owner". The record owner whether one or more persons or entities of fee simple title to any Lot which is a part of the Property including a contract buyer but excluding those having an interest merely as security for the performance of an obligation.

1.2.5 "Property". The real property described on Exhibit A

1.2.6 "Street Trees". The seven trees that are required to be planted, located, and maintained in the planter strip within the right of way dedicated to the City of Mount Vernon and adjacent to the Lots.

1.2.7 "Maintenance Manual". The instructions provided for the maintenance of privately-owned stormwater facilities and permeable driveways located on Lots 2-7 that is contained within Exhibit B of this document.

**ARTICLE II  
General Requirements**

2.1 Residential Use. This development is within an area of the City of Mount Vernon zoned for residential use. Owners will enjoy the use of their Lots in compliance with the laws and ordinances of the City of Mount Vernon, including but not limited to restrictions in the City municipal code on signs, pets, nuisances, and construction.

2.2 Amendments. Amendments to this Declaration of Covenants, Conditions, and Restrictions that would amend, delete, modify, or otherwise affect any provision required by the Mount Vernon Municipal Code or the subject short plat approval shall require the prior written approval of the development services director and the city attorney.

### ARTICLE III Easements

3.1 Easements Reserved. An easement ten feet in depth on each and every parcel adjoining the roadway is dedicated to the City of Mount Vernon for purposes of installing, maintaining, and improving utility services. Said utilities shall include without limitation, telephone, electrical power, natural gas, television, cable, storm drainage systems, sanitary sewer systems, and water lines.

3.2 Easements Granted. The City of Mount Vernon is hereby granted the perpetual right of entry across the Property of the Declarant, its successors, and assigns, for purposes of routine inspection of stormwater drainage facilities on the Lots and emergency maintenance purposes at its own discretion. The Declarant, Owners, and any person having any present or subsequent ownership interest in the properties, and their successors and assigns of owners, hereby agrees to hold the City, its officers, employees and agents harmless in all respects from any and all claims for damages which may be occasioned now or in the future to adjacent property or improvements by reason of construction, operation and maintenance of the said drainage system.

### ARTICLE IV Covenants

#### 4.1 Commitments of all Lot Owners.

4.1.1 Each Owner shall cause the downspout infiltration trench stormwater facility within their Lot to be inspected once per year for defects outlined in Volume V of Department of Ecology's stormwater management manual for western Washington, chapter 4.6. Maintenance activities shall be performed at each Owner's expense to correct any defects, as outlined in the table and more fully described in the Maintenance Manual found in Exhibit B. Each Owner shall replace the downspout infiltration trench stormwater facility within their Lot with a new infiltration trench when maintenance is no longer successful in correcting defects.

4.1.2 Each Owner shall cause the pervious driveway area within their Lot and extending to the sidewalk to be inspected once per year for defects outlined in Volume V of Department of Ecology's stormwater management manual for western Washington, chapter 4.6. Maintenance activities shall be performed at each Owner's expense to correct any defects, as outlined in the table and more fully described in the Maintenance Manual found in Exhibit B. Each Owner shall replace the pervious driveway within their Lot and extending to the sidewalk with a new pervious driveway when maintenance is no longer successful in correcting defects.

4.1.3 The Owners shall have primary responsibility for the Street Trees, planter strip, and sidewalk. Each Owner shall provide maintenance to any Street Tree(s), portion of planter strip, and section of sidewalk adjoining each Owner's respective Lot. Removal of any Street Tree is a violation of this Declaration and of RCW 64.12.030.

4.1.4 The Owners shall have collective responsibility for the pedestal mailbox located in front of Lot 7. Costs for any future maintenance or replacement of the pedestal mailbox shall be shared equally among the Owners of all Lots. In the event that the Owners cannot agree to equally share any necessary future maintenance or replacement of the pedestal mailbox, each Owner shall install at their own expense a locking single mailbox on their own pedestal on the sidewalk adjacent to the road in front of Lot 7, next to the current location of the pedestal mailbox. The Owners shall install these single

James Cox  
(Signature)  
Retul Bluel Huray  
(Title)  
My appointment expires: 12.31.2022

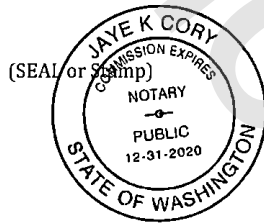
DATED: December 16, 2020SIGNED: [Signature]  
Kevin J. Maas, GrantorSIGNED: [Signature]  
Sarah A. Maas, Grantor

STATE OF WASHINGTON )

)ss.

COUNTY OF SKAGIT )

I certify that I know or have satisfactory evidence that Kevin J. Maas and Sarah A. Maas are the persons who appeared before me, and said persons acknowledged that they signed this instrument and acknowledge it to be their free and voluntary act for the uses and purposes mentioned in the instrument.

Dated: 12.16.20

[Signature]  
(Signature)  
VP- Bethel Street Manager  
(Title)  
My appointment expires: 12.31.2020

**EXHIBIT A**  
**LEGAL DESCRIPTION**

Lots 2 through 7 of the Short Plat of Walter Street Cottages recorded under Skagit

County Auditor's File Number: 202101080198

**EXHIBIT B**  
**MAINTENANCE MANUAL**

**Operation & Maintenance Plan  
WALTER STREET COTTAGES  
P29141**

**June 09, 2020**

**Section 30, Township 34 North, Range 4 East WM**

**Kevin and Sarah Maas  
603 W. Blackburn Road  
Mount Vernon, WA 98273**

**Semrau Engineering & Surveying, PLLC  
2118 Riverside Drive, Suite 208  
Mount Vernon, WA 98273  
C/o John B Semrau, PE & PLS  
360-424-9566**

**Job No. 5621**

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## **Maintenance and Operation Manual for Privately Maintained Drainage Facilities**

### **Maintenance:**

The facility-specific maintenance standards contained in this section are intended to be conditions for determining if maintenance actions are required as identified through inspection. This Maintenance and Operation plan was prepared to comply with the 2012 Stormwater Management Manual for Western Washington (SWMM), amended in December 2014.

Maintenance of storm water systems is perhaps the single most important factor in assuring satisfactory long-term performance of the system. It follows that the lack of proper maintenance is the single most important factor which causes unsatisfactory performance and, in some cases, system failure. It is therefore essential that regular maintenance and cleaning of the system be an integral part of the site operations.

The following Maintenance Standards come from section 4.6 of Volume V of the SWMM. The maintenance facilities for this project include three items. These items are Infiltration Trench (No. 2), Catch Basins (No. 5), and Permeable Pavement (No. 22). The maintenance tables below are provided as a guide to the person in charge of maintenance as to how often maintenance is required, what to look for, expected results, etc. A good maintenance program will prolong the useful life of the system and reduce the likelihood of problems occurring as the system ages. Based upon inspection observations, the inspection and maintenance schedules shall be adjusted to minimize the length of time that a facility is in a condition that requires a maintenance action.

## Infiltration Trench

### What is it?

Infiltration trenches are essentially leaky pipes in a stone-filled trench. Surface runoff or gutter downspouts can be directed to infiltration trenches.

### How Does it Work?

An infiltration trench contains a perforated pipe in a stone trench. It can be thought of as the opposite of a French drain. In a French drain, water flows from the soil into a perforated pipe and away from the wet spot. For an infiltration trench, stormwater runoff is directed into a perforated pipe that is surrounded by gravel. The water then drains out of the perforated pipe into the trench.

During small rain events with a small amount of runoff, stormwater flows out of the pipe through the perforations into the gravel and then into the soil. During larger storms that produce more runoff, some stormwater will be stored in the stone trench, but water will also flow through the pipe to a larger BMP or SCM. Runoff that moves into the soil can help recharge aquifers (ground water) and wells.

## How does a Homeowner maintain it?

### Protection:

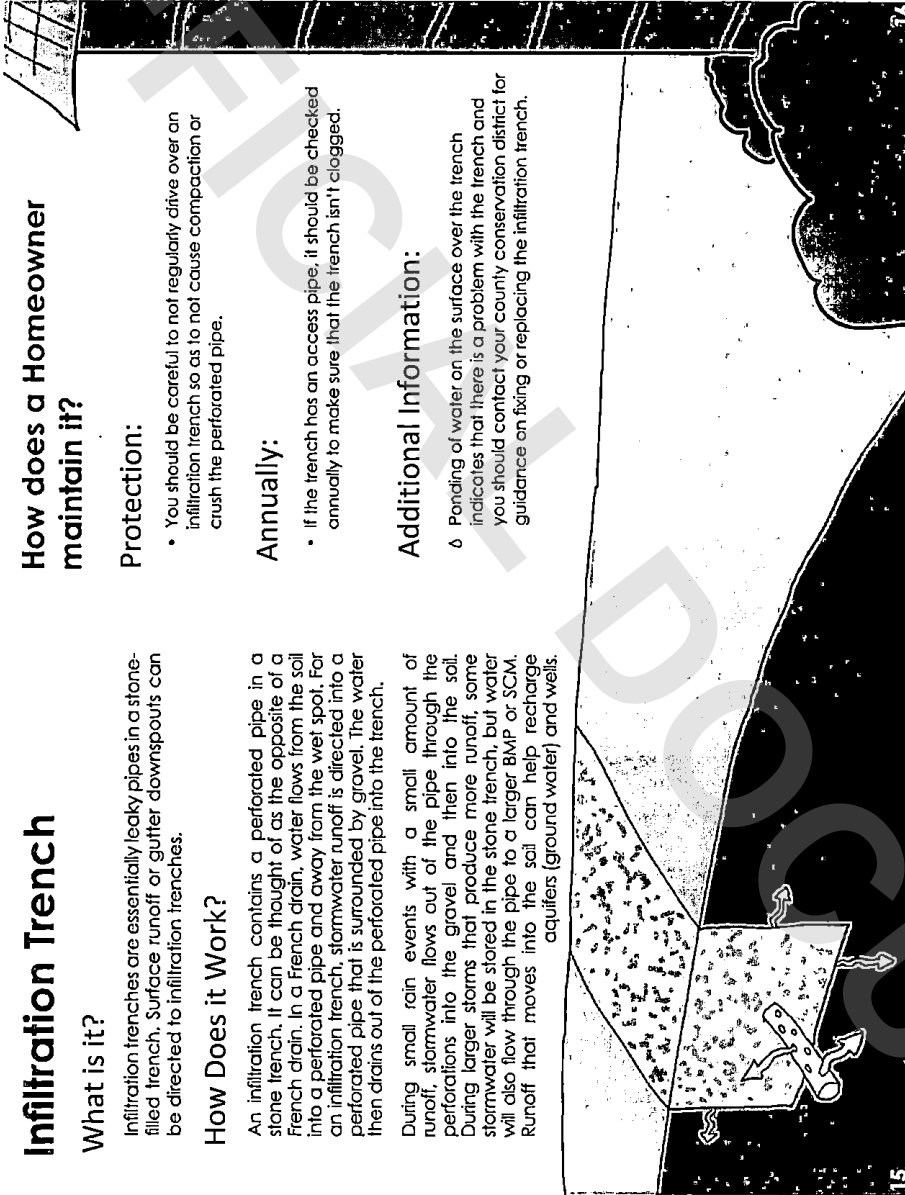
- You should be careful to not regularly drive over an infiltration trench so as to not cause compaction or crush the perforated pipe.

### Annually:

- If the trench has an access pipe, it should be checked annually to make sure that the trench isn't clogged.

### Additional Information:

- △ Ponding of water on the surface over the trench indicates that there is a problem with the trench and you should contact your county conservation district for guidance on fixing or replacing the infiltration trench.



## Downspout Infiltration Facility

### What is a Downspout Infiltration Facility?

A downspout infiltration facility is an underground stormwater storage area that is created by excavating a trench or deep pit (drywell) and filling it with washed drain rock. The drain rock creates void spaces and these void spaces temporarily store the stormwater until it soaks (infiltrates) into the soil. Stormwater runoff from building roofs is piped into the trench or drywell and distributed within it via a perforated pipe.

### How do I maintain my Downspout Infiltration Facility?

The following are required maintenance practices for Downspout Infiltration Facilities:

| Do                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Do Not                                                                                                                                                                     |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• Check for accumulated trash, debris, or sediment that impedes sheet flow or conveyance into the trench or drywell. Remove if present.</li> <li>• Check infiltration trench or drywell for moss or vegetation growth impedes flow and remove if present.</li> <li>• Check for blockages in pipes to or from sump, trench, or drywell. Remove blockage if present.</li> <li>• Ensure that the access lid on the catch basin (if present) is accessible and easy to open (i.e., not buried or missing).</li> <li>• Check for accumulated sediment in catch basin sump, and remove and dispose of in accordance with solid waste requirements.</li> <li>• Check underdrain/ perforated pipe for standing water. If standing water remains in the dispersion area for more than 3 days hours following a storm, address cause of ponding (e.g., remove sediment from pipe).</li> <li>• Check for accumulated sediment and debris in drain rock or underdrain/ perforated pipe. Remove sediment and debris.</li> <li>• Check for evidence of contaminants such as oil, gasoline, or paint and clean as soon as possible (Coordinate source control, removal, and/or cleanup with City of Mount Vernon Surface Water Management 360-336-6204 and/or Dept. of Ecology Spill Response 800-424-8802).</li> </ul> | <ul style="list-style-type: none"> <li>• Pave over trench or drywell area.</li> <li>• Discharge debris to the infiltration trench from roof cleaning practices.</li> </ul> |

**No. 5 – Catch Basins**

| Maintenance Component | Defect                                     | Conditions When Maintenance Is Needed                                                                                                                                                                                                                                                     | Results Expected When Maintenance Is performed                                      |
|-----------------------|--------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| General               | Trash & Debris                             | Trash or debris which is located immediately in front of the catch basin opening or is blocking inletting capacity of the basin by more than 10%.                                                                                                                                         | No Trash or debris located immediately in front of catch basin or on grate opening. |
|                       |                                            | 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 six inches clearance from the debris surface to the invert of the lowest pipe. | No trash or debris in the catch basin.                                              |
|                       |                                            | Trash or debris in any inlet or outlet pipe blocking more than 1/3 of its height.                                                                                                                                                                                                         | Inlet and outlet pipes free of trash or 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.                       |
|                       | 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                                                      |
|                       | Structure Damage to Frame and/or Top Slab  | Top slab has holes larger than 2 square inches or cracks wider than 1/4 inch (Intent is to make sure no material is running into basin).                                                                                                                                                  | Top slab is free of holes and cracks.                                               |
|                       |                                            | Frame not sitting flush on top slab, i.e., separation of more than 3/4 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.          |
|                       | Fractures or Cracks in Basin Walls/ Bottom | Maintenance person judges that structure is unsound.                                                                                                                                                                                                                                      | Basin replaced or repaired to design standards.                                     |
|                       |                                            | Grout fillet has separated or cracked wider than 1/2 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.                                          |
|                       | Settlement/ Misalignment                   | If failure of basin has created a safety, function, or design problem.                                                                                                                                                                                                                    | Basin replaced or repaired to design standards.                                     |
|                       | Vegetation                                 | Vegetation growing across and blocking more than 10% of the basin opening.                                                                                                                                                                                                                | No vegetation blocking opening to basin.                                            |
|                       |                                            | Vegetation growing in inlet/outlet pipe joints that is more than six inches tall and less than six inches apart.                                                                                                                                                                          | No vegetation or root growth present.                                               |
|                       | Contamination and Pollution                | See "Detention Ponds" (No. 1).                                                                                                                                                                                                                                                            | No pollution present.                                                               |

**No. 5 – Catch Basins**

| Maintenance Component        | Defect                        | Conditions When Maintenance is Needed                                                                                                           | Results Expected When Maintenance is performed                           |
|------------------------------|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|
| 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 closed.                                             |
|                              | Locking Mechanism Not Working | Mechanism cannot be opened by one maintenance person with proper tools. Bolts into frame have less than 1/2 inch of thread.                     | Mechanism opens with proper tools.                                       |
|                              | 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. |
| Metal Grates (If Applicable) | Grate opening Unsafe          | Grate with opening wider than 7/8 inch.                                                                                                         | Grate opening meets design standards.                                    |
|                              | Trash and Debris              | Trash and debris that is blocking more than 20% of grate surface inletting capacity.                                                            | Grate free of trash and debris.                                          |
|                              | Damaged or Missing.           | Grate missing or broken member(s) of the grate.                                                                                                 | Grate is in place and meets design standards.                            |

**No. 6 – Debris Barriers (e.g., Trash Racks)**

| Maintenance Components | Defect                 | Condition When Maintenance is Needed                                           | Results Expected When Maintenance is Performed    |
|------------------------|------------------------|--------------------------------------------------------------------------------|---------------------------------------------------|
| General                | Trash and Debris       | Trash or debris that is plugging more than 20% of the openings in the barrier. | Barrier cleared to design flow capacity.          |
| Metal                  | Damaged/ Missing Bars. | Bars are bent out of shape more than 3 inches.                                 | Bars in place with no bends more than 3/4 inch.   |
|                        |                        | Bars are missing or entire barrier missing.                                    | Bars in place according to design.                |
|                        |                        | Bars are loose and rust is causing 50% deterioration to any part of barrier.   | Barrier replaced or repaired to design standards. |
|                        | Inlet/Outlet Pipe      | Debris barrier missing or not attached to pipe                                 | Barrier firmly attached to pipe                   |

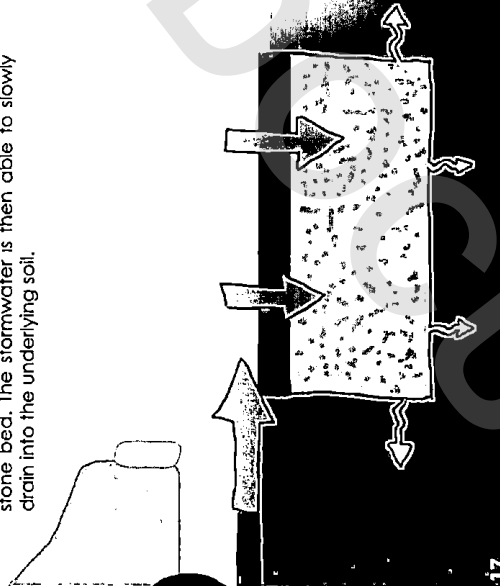
## Pervious Pavements

### What is it?

Pervious pavements are a modification to typical pavement that allow water to drain through the surface rather than run off it. Pervious pavements include porous asphalt or porous concrete which are poured over a gravel bed, or porous pavers on uncompacted soil.

### How Does it Work?

Stormwater drains through the pervious surface and is temporarily held in the voids spaces of the stone bed. The stormwater is then able to slowly drain into the underlying soil.



## How does a Homeowner maintain it?

### Protection:

- The key to maintaining pervious pavements is to prevent the surface from getting clogged.
- Planted areas near the pervious pavement should be well maintained to prevent soil from washing into the pavement. If you see a bare spot or eroded area, it should be replanted to prevent soil wash off.
- If soil does wash onto the pavement, it should be immediately cleaned off before it gets ground into the surface.
- It is very important to never apply a sealing coat. A sealing coat over a pervious asphalt driveway or walkway will clog all the openings and prevent water from draining through it.

### Biannually:

- The surface needs to be vacuumed twice a year with a commercial cleaning unit to remove fine particles from the surface.

### Special Winter Needs:

- Sand or cinders should not be used with pervious pavement because the small particles will clog the surface.
- Snow shoveling and plowing is fine, but be careful not to scrape the surface.
- Salt can be used on pervious pavements, but nontoxic, organic deicers or magnesium chloride-based products are better than sodium chloride.

# No. 22 - Maintenance Standards and Procedures for Permeable Pavement.

Note that the inspection and routine maintenance frequencies listed below are recommended by Ecology. They do not supersede or replace the municipal stormwater permit requirements for inspection frequency required of municipal stormwater permittees for "stormwater treatment and flow control BMPs/facilities."

| Component                | Recommended Frequency * |                     | Condition when Maintenance is Needed (Standards)                                                                                      | Action Needed (Procedures)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|--------------------------|-------------------------|---------------------|---------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                          | Inspection              | Routine Maintenance |                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Surface/Wearing Course   |                         |                     |                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Permeable Pavements, all | A, S                    |                     | Runoff from adjacent pervious areas deposits soil, mulch or sediment on paving                                                        | <ul style="list-style-type: none"><li>Clean deposited soil or other materials from permeable pavement or other adjacent surfacing</li><li>Check if surface elevation of planted area is too high, or slopes towards pavement, and can be regraded (prior to regrading, protect permeable pavement by covering with temporary plastic and secure covering in place)</li><li>Mulch and/or plant all exposed soils that may erode to pavement surface</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|                          |                         | A or B              | None (routine maintenance)                                                                                                            | <ul style="list-style-type: none"><li>Clean surface debris from pavement surface using one or a combination of the following methods:<ul style="list-style-type: none"><li>Remove sediment, debris, trash, vegetation, and other debris deposited onto pavement (rates and leaf blowers can be used for removing leaves)</li><li>Vacuum/sweep permeable paving installation using:<ul style="list-style-type: none"><li>Walk-behind vacuum (sidewalks)</li><li>High efficiency regenerative air or vacuum sweeper (roadways, parking lots)</li><li>ShopVac or brush brooms (small areas)</li></ul></li><li>Hand held pressure washer or power washer with rotating brushes</li></ul></li><li>Follow equipment manufacturer guidelines for when equipment is most effective for cleaning permeable pavement. Dry weather is more effective for some equipment.</li></ul>                                                                                                                                                                                                                                                                                                                               |
|                          | A <sub>s</sub>          |                     | Surface is clogged:<br>Ponding on surface or water flows off the permeable pavement surface during a rain event (does not infiltrate) | <ul style="list-style-type: none"><li>Review the overall performance of the facility (note that small clogged areas may not reduce overall performance of facility)</li><li>Test the surface infiltration rate using ASTM C1701 as a corrective maintenance indicator. Perform one test per installation, up to 2,500 square feet. Perform an additional test for each additional 2,500 square feet up to 15,000 square feet total. Above 15,000 square feet, add one test for every 10,000 square feet.</li><li>If the results indicate an infiltration rate of 10 inches per hour or less, then perform corrective maintenance to restore permeability. To clean clogged pavement surfaces, use one or combination of the following methods:<ul style="list-style-type: none"><li>Combined pressure wash and vacuum system calibrated to not dislodge wearing course aggregate</li><li>Hand held pressure washer or power washer with rotating brushes</li><li>Pure vacuum sweepers</li></ul></li><li>Note: If the annual/biannual routine maintenance standard to clean the pavement surface is conducted using equipment from the list above, corrective maintenance may not be needed.</li></ul> |
|                          | A                       |                     | Sediment present at the surface of the pavement                                                                                       | <ul style="list-style-type: none"><li>Assess the overall performance of the pavement system during a rain event. If water runs off the pavement and/or there is ponding then see above.</li><li>Determine source of sediment loading and evaluate whether or not the source can be reduced/eliminated. If the source cannot be addressed, consider increasing frequency of routine cleaning (e.g., twice per year instead of once per year).</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|                          | Summer                  |                     | Moss growth inhibits infiltration or poses slip safety hazard                                                                         | <ul style="list-style-type: none"><li>Sidewalks: Use a stiff broom to remove moss in the summer when it is dry</li><li>Parking lots and roadways: Pressure wash, vacuum sweep, or use a combination of the two for cleaning moss from pavement surface. May require stiff broom or power brush in areas of heavy moss.</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|                          | A                       |                     | Major cracks or trip hazards and concrete spalling and raveling                                                                       | <ul style="list-style-type: none"><li>Fill potholes or small cracks with patching mixes</li><li>Large cracks and settlement may require cutting and replacing the pavement section. Replace in-kind where feasible. Replacing porous asphalt with conventional asphalt is acceptable if it is a small percentage of the total facility area and does not impact the overall facility function.</li><li>Take appropriate precautions during pavement repair and replacement efforts to prevent clogging of adjacent porous materials</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

<sup>a</sup> Frequency: A= Annually; B= Biannually (twice per year); S = Perform inspections after major storm events (24-hour storm event with a 10-year or greater recurrence interval).

<sup>b</sup> Inspection should occur during storm event.

No. 22 (continued) - Maintenance Standards and Procedures for Permeable Pavement.

| Component                                               | Recommended Frequency <sup>a</sup> |                     | Condition when Maintenance is Needed (Standards)                                                                                        | Action Needed (Procedures)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|---------------------------------------------------------|------------------------------------|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                         | Inspection                         | Routine Maintenance |                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Surface/Wearing Course (cont'd)</b>                  |                                    |                     |                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Interlocking concrete paver blocks and aggregate pavers |                                    | A or B              | None (routine maintenance)                                                                                                              | <ul style="list-style-type: none"> <li>• Clean pavement surface using one or a combination of the following methods:               <ul style="list-style-type: none"> <li>◦ Remove sediment, debris, trash, vegetation, and other debris deposited onto pavement (rakes and leaf blowers can be used for removing leaves)</li> <li>◦ Vacuum/sweep permeable paving installation using:                   <ul style="list-style-type: none"> <li>◦ Walk-behind vacuum (sidewalks)</li> <li>◦ High efficiency regenerative air or vacuum sweeper (roadways, parking lots)</li> <li>◦ ShopVac or brush brooms (small areas)</li> </ul> </li> <li>◦ Note: Vacuum settings may have to be adjusted to prevent excess uptake of aggregate from paver openings or joints.</li> </ul> </li> <li>• Vacuum surface openings in dry weather to remove dry, encrusted sediment.</li> <li>• Review the overall performance of the facility (note that small clogged areas may not reduce overall performance of facility)</li> <li>• Test the surface infiltration rate using ASTM C1701 as a corrective maintenance indicator. Perform one test per installation, up to 2,500 square feet. Perform an additional test for each additional 2,500 square feet up to 15,000 square feet total. Above 15,000 square feet, add one test for every 10,000 square feet.</li> <li>• If the results indicate an infiltration rate of 10 inches per hour or less, then perform corrective maintenance to restore permeability.</li> <li>• Chugging is usually an issue in the upper 2 to 3 centimeters of aggregate. Remove the upper layer of encrusted sediment, sand fines, and/or vegetation from openings and joints between the pavers by mechanical means and/or suction equipment (e.g., use a vacuum sweeper).</li> <li>• Replace aggregate in paver cells, joints, or openings per manufacturer's recommendations</li> <li>• Assess the overall performance of the pavement system during a rain event. If water runs off the pavement and/or there is ponding, then see above.</li> <li>• Determine source of sediment loading and evaluate whether or not the source can be reduced/eliminated. If the source cannot be addressed, consider increasing frequency of routine cleaning (e.g., twice per year instead of once per year).</li> <li>• Sidewalks: Use a stiff broom to remove moss in the summer when it is dry</li> <li>• Parking lots and roadways: Vacuum sweep or stiff broom/power brush for cleaning moss from pavement surface</li> <li>• Remove individual damaged paver blocks by hand and replace or repair per manufacturer's recommendations</li> <li>• Refill per manufacturer's recommendations for interlocking paver sections</li> <li>• May require resetting</li> </ul> |
|                                                         | A <sup>b</sup>                     |                     | Surface is clogged:<br>Ponding on surface or water flows off the permeable pavement surface during a rain event (does not infiltrate)   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|                                                         | A                                  |                     | Sediment present at the surface of the pavement                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|                                                         | Summer                             |                     | Moss growth inhibits infiltration or poses slip safety hazard                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|                                                         | A                                  |                     | Paver block missing or damaged                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|                                                         | A                                  |                     | Loss of aggregate material between paver blocks                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|                                                         | A                                  |                     | Settlement of surface                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|                                                         |                                    | A or B              | None (routine maintenance)                                                                                                              | <ul style="list-style-type: none"> <li>• Remove sediment, debris, trash, vegetation, and other debris deposited onto pavement (rakes and leaf blowers can be used for removing leaves)</li> <li>• Follow equipment manufacturer guidelines for cleaning surface.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|                                                         | A <sup>b</sup>                     |                     | Aggregate is clogged:<br>Ponding on surface or water flows off the permeable pavement surface during a rain event (does not infiltrate) | <ul style="list-style-type: none"> <li>• Use vacuum truck to remove and replace top course aggregate</li> <li>• Replace aggregate in paving grid per manufacturer's recommendations</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|                                                         | A                                  |                     | Paving grid missing or damaged                                                                                                          | <ul style="list-style-type: none"> <li>• Remove pins, pry up grid segments, and replace gravel!</li> <li>• Replace grid segments where three or more adjacent rings are broken or damaged</li> <li>• Follow manufacturer guidelines for repairing surface.</li> <li>• May require resetting</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Open-graded paving grid with gravel                     | A                                  |                     | Settlement of surface                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|                                                         | A                                  |                     | Loss of aggregate material in paving grid                                                                                               | <ul style="list-style-type: none"> <li>• Replenish aggregate material by spreading gravel with a rake (gravel level should be maintained at the same level as the plastic rings or no more than 1/4 inch above the top of rings). See manufacturer's recommendations.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|                                                         | A                                  |                     | Weeds present                                                                                                                           | <ul style="list-style-type: none"> <li>• Manually remove weeds</li> <li>• Presence of weeds may indicate that too many fines are present (refer to Actions Needed under 'Aggregate is clogged' to address this issue)</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

<sup>a</sup> Frequency: A= Annually; B= Biannually (twice per year); S = Perform inspections after major storm events (24-hour storm event with a 10-year or greater recurrence interval).

<sup>b</sup> Inspection should occur during storm event.

No. 22 (continued) - Maintenance Standards and Procedures for Permeable Pavement.

| Component                          | Recommended Frequency * |                                                                                       | Condition when Maintenance is Needed (standards)                                                                                                            | Action Needed (Procedures)                                                                                                                                                                                                                                                                                                    |
|------------------------------------|-------------------------|---------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                    | Inspection              | Routine Maintenance                                                                   |                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                               |
| Surface/Wearing Course (cont'd)    |                         |                                                                                       |                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                               |
| Open-celled paving grid with grass |                         | A or B                                                                                | None (routine maintenance)                                                                                                                                  | <ul style="list-style-type: none"><li>Remove sediment, debris, trash, vegetation, and other debris deposited onto pavement (rakes and leaf blowers can be used for removing leaves)</li><li>Follow equipment manufacturer guidelines for cleaning surface.</li><li>Rehabilitate per manufacturer's recommendations.</li></ul> |
|                                    | A, b                    |                                                                                       | Aggregate is clogged; Ponding on surface or water flows off the permeable pavement surface during a rain event (does not infiltrate))                       | <ul style="list-style-type: none"><li>Remove pines, pry up grid segments, and replace grass</li><li>Replace grid segments where three or more adjacent rings are broken or damaged</li><li>Follow manufacturer guidelines for repaving surface.</li></ul>                                                                     |
|                                    | A                       |                                                                                       | Paving grid missing or damaged                                                                                                                              |                                                                                                                                                                                                                                                                                                                               |
|                                    | A                       |                                                                                       | Settlement of surface                                                                                                                                       | <ul style="list-style-type: none"><li>May require resetting</li></ul>                                                                                                                                                                                                                                                         |
|                                    | A                       |                                                                                       | Poor grass coverage in paving grid                                                                                                                          | <ul style="list-style-type: none"><li>Restore growing medium, reseed or plant, aerate, and/or amend vegetated area as needed</li><li>Traffic loading may be inhibiting grass growth; reconsider traffic loading if feasible</li></ul>                                                                                         |
|                                    |                         | As needed                                                                             | None (routine maintenance)                                                                                                                                  | <ul style="list-style-type: none"><li>Use a mulch mower to mow grass</li></ul>                                                                                                                                                                                                                                                |
| Inlets/Outlets/Pipes               |                         | A                                                                                     | None (routine maintenance)                                                                                                                                  | <ul style="list-style-type: none"><li>Sprinkle a thin layer of compost on top of grass surface (1/2" top dressing) and sweep it in</li><li>Do not use fertilizer</li></ul>                                                                                                                                                    |
|                                    |                         | A                                                                                     | Weeds present                                                                                                                                               | <ul style="list-style-type: none"><li>Manually remove weeds</li><li>Mow, torch, or inoculate and replace with preferred vegetation</li></ul>                                                                                                                                                                                  |
|                                    | A                       |                                                                                       | Pipe is damaged                                                                                                                                             | Repair/replace                                                                                                                                                                                                                                                                                                                |
|                                    | A                       |                                                                                       | Pipe is clogged                                                                                                                                             | Remove roots or debris                                                                                                                                                                                                                                                                                                        |
|                                    | Clean pipe as needed    | Clean orifice at least biannually (may need more frequent cleaning during wet season) | Plant roots, sediment or debris reducing capacity of underdrain (may cause prolonged drawdown period)                                                       | <ul style="list-style-type: none"><li>Jet clean or rotary cut debris/roots from underdrains)</li><li>If underdrains are equipped with a flow restrictor (e.g., orifice) to attenuate flows, the orifice must be cleaned regularly</li></ul>                                                                                   |
|                                    | Clean pipe as needed    | Clean orifice at least biannually (may need more frequent cleaning during wet season) | Plant roots, sediment or debris reducing capacity of underdrain                                                                                             | <ul style="list-style-type: none"><li>Jet clean or rotary cut debris/roots from underdrain(s)</li><li>If underdrains are equipped with a flow restrictor (e.g., orifice) to attenuate flows, the orifice must be cleaned regularly</li></ul>                                                                                  |
| Outlet structure                   | A, S                    | Sediment, vegetation, or debris reducing capacity of outlet structure                 | <ul style="list-style-type: none"><li>Clear the blockage</li><li>Identify the source of the blockage and take actions to prevent future blockages</li></ul> |                                                                                                                                                                                                                                                                                                                               |

<sup>a</sup> Frequency: A= Annually; B= Biannually (twice per year); S = Perform inspections after major storm events (24-hour storm event with a 10-year or greater recurrence interval).

<sup>b</sup> Inspection should occur during storm event.

No. 22 (continued) - Maintenance Standards and Procedures for Permeable Pavement.

| Component                            | Recommended Frequency <sup>a</sup> |                                                                                      | Condition when Maintenance is Needed<br>(Standards)                                               | Action Needed<br>(Procedures)                                                                                                                                                                                                 |
|--------------------------------------|------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                      | Inspection                         | Routine<br>Maintenance                                                               |                                                                                                   |                                                                                                                                                                                                                               |
| <i>Inlets/Outlets/Pipes (cont'd)</i> |                                    |                                                                                      |                                                                                                   |                                                                                                                                                                                                                               |
| Overflow                             | B                                  |                                                                                      | Native soil is exposed or other signs of erosion damage are present at discharge point            | Repair erosion and stabilize surface                                                                                                                                                                                          |
| <i>Aggregate Storage Reservoir</i>   |                                    |                                                                                      |                                                                                                   |                                                                                                                                                                                                                               |
| Observation port                     | A, S                               |                                                                                      | Water remains in the storage aggregate longer than anticipated by design after the end of a storm | If immediate cause of extended ponding is not identified, schedule investigation of subsurface materials or other potential causes of system failure.                                                                         |
| <i>Vegetation</i>                    |                                    |                                                                                      |                                                                                                   |                                                                                                                                                                                                                               |
| Adjacent large shrubs or trees       |                                    | As needed                                                                            | Vegetation related fallow clogs or will potentially clog voids                                    | <ul style="list-style-type: none"> <li>Sweep leaf litter and sediment to prevent surface clogging and ponding</li> <li>Prevent large root systems from damaging subsurface structural components</li> </ul>                   |
|                                      |                                    | Once in May and Once in September                                                    | Vegetation growing beyond facility edge onto sidewalks, paths, and street edge                    | Edging and firming of planted areas to control groundcovers and shrubs from overreaching the sidewalks, paths and street edge improves appearance and reduces clogging of permeable pavements by leaf litter, mulch and soil. |
| Leaves, needles, and organic debris  |                                    | In fall (October to December) after leaf drop (1-3 times, depending on canopy cover) | Accumulation of organic debris and leaf litter                                                    | Use leaf blower or vacuum to blow or remove leaves, evergreen needles, and debris (i.e., flowers, blossoms) off of and away from permeable pavement                                                                           |

<sup>a</sup> Frequency: A= Annually; B= Biannually (twice per year); S = Perform inspections after major storm events (24-hour storm event with a 10-year or greater recurrence interval).

<sup>b</sup> Inspection should occur during storm event.

**EXHIBIT C**  
**Map of Lot Owner**  
**Maintenance Items**

