

When it rains, stormwater washes over the ground and picks up contaminants such as oils, fertilizers and dog waste, washing them into local rivers. Biobasins and porous paving are

important stormwater management strategies that the City has put into place to treat these contaminants before they discharge to outfalls at the Alewife Brook and the Charles River. For this reason, these stormwater quality enhancements, along with water coming from **basement sump pumps** must be properly maintained in order to protect the environmental impacts these elements provide.

# **DID YOU KNOW?**



Stormwater discharges are contributing to at least 55% of impairments to Massachusetts' assessed waters.

A typical city block will generate over five times more runoff than a woodland area of equal size.





# For more information:



City of Cambridge
Department of Public Works
147 Hampshire Street
Cambridge, MA 02139
617-349-4800
www.cambridgema.gov/theworks

City of Cambridge Stormwater Management www.cambridgema.gov/theworks/ourservices/stormwatermanagement

The City's ongoing construction and maintenance efforts are an important part of keeping Cambridge clean and sustainable.

Cover photo: Alewife Stormwater Wetland
Inside panel photo: Charles River outfall along Memorial Drive
Back panel photos: Alewife Stormwater Wetland

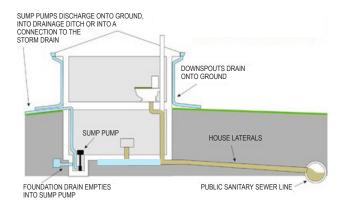
Photos provided by Kleinfelder, MWH Global, and Chester Engineers

CITY OF CAMBRIDGE

# Stormwater Management & Green Infrastructure

**INFORMATION GUIDE** 





#### **Basement Sump Pumps**

If you have a basement, your property may have a sump pump. A sump pump helps keep your basement dry by collecting and pumping high ground water from below your basement floor, or rainwater from around your foundation. Water collected in the sump pit should be pumped to the outside, approximately 10' away



from your foundation. If this isn't possible, sump pumps may be connected to the City's storm drain, which discharge to waterways such as the Charles River or Alewife Brook.

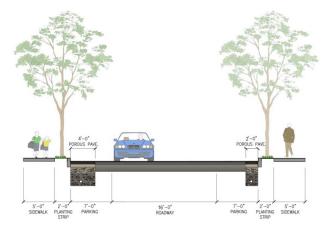
# OVERFLOW DRAIN WATER STORAGE LEVEL NATIVE HERBACEOUS PLANTS RUNOFF SURFACES OVERFLOW SANDY LOAM SOIL UNDER DRAIN SYSTEM EXISTING SUBSOIL

### **Biobasins**

Biobasins are specially constructed planted areas with engineered soils that treat and filter stormwater runoff from roadways and sidewalks. Runoff is then allowed to infiltrate and treated runoff is transported to the City's storm drain system and discharged to local waterways. In urban areas, the highest concentration of pollutants



are washed off the land surface with the first 1/2" to 1" of runoff. The goal for biobasins is to intercept and treat the first inch of pavement runoff, known as the "first flush".



## **Porous Paving**

Porous pavement includes a permeable pavement surface with a stone reservoir and filter layer underneath, located in the parking lanes. The purpose of porous pavement is to collect runoff and remove pollutants as it passes through the filter layer. Runoff is then allowed to infiltrate and treated runoff is transported



to the City's storm drain system and discharged to local waterways. Similar to biobasins, the City's goal for porous pavement is to intercept and treat the "first flush" of runoff.

# **HOW YOU CAN HELP**

While the City will continue to monitor and maintain these areas, you can help us with these enhancements by:

#### **Basement Sump Pumps:**

- Clean the pump inlet screen
- Keep sump pump pit free of debris
- Ensure your pump is working by pouring water into the pit to trigger the switch
- Never allow waste water (including cleaning products) to discharge to your sump pump

#### *Important to note:*

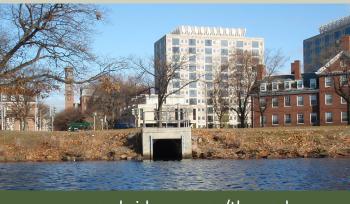
- Floor drains are intended to collect waste water
- Sump pumps are intended to collect groundwater
- The EPA regulates all discharges to the storm drain including basement sump pumps

#### **Biobasins:**

- Water plantings during periods of drought
- Remove any windblown trash or debris
- Keep clear any basin inlets, outlets, check dams and overflow drains
- Call the DPW (617-349-4800) if the biobasin is not draining within 48 hours

#### **Porous Paving:**

- Do not replace vehicle fluids, wash your car, or park cars that are leaking oil/fluids over porous pavement
- Do not apply sand on sidewalks adjacent to porous pavement, or sweep leaves, sand or debris onto the porous surface
- Call the DPW (617-349-4800) if excessive pavement deterioration is observed



www.cambridgema.gov/theworks