Protection Requirements for

Right-of-Way

## Green Infrastructure

(Rain Gardens, Infiltration Basin, and Permeable Pavements)



# What is Green Infrastructure?

Right-of-Way (ROW) Green Infrastructure (GI) practices are low-cost sustainable strategies that reduce and treat stormwater through natural processes such as infiltration and evapotranspiration.

#### How to Identify GI

Look for signs of stormwater conveyance:

- tapered curbs
- cuts in the curb
- stormwater grates

Look for other identifying features:

- signs with DEP Logo
- rain garden decals
- pucks on header near sidewalk

#### **General Protection Measures**

- control construction runoff and debris at the source, to the extent possible
- install protection measures at all nearby and downstream GI practices
- set up physical barriers to discourage people, equipment, and materials from entering the GI practice
- avoid stepping in the planting bed when installing protection measures
- never stockpile materials within or on top of a GI practice

<u>Installing protection measures is easier than repairing damage.</u>

## Rain Gardens

#### **Protection Measures**

- install sand bags to block curb cuts
- install inlet filter bags in stormwater drains (empty inlet filter bag when it becomes full)



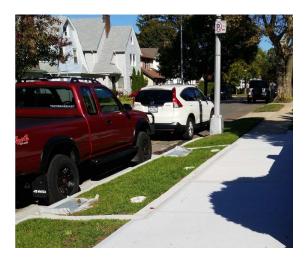
- Landscape fabric or geotextile, 3'-4' high, installed flush to ground and attached to wooden members using zip ties on sidewalk side (may be attached with staples on street side)
- For rain gardens with existing vegetation: Watering as needed per Section GI-4.10(D)(1) of the Standard Green Infrastructure Specs on DDC website (https://www1.nyc.gov/assets/ddc/downloads/publications/infrastructure/



- install temporary coverings erosion control fabric or plastic over bare soil for rain gardens (gently secure)
- avoid stepping into planting bed when installing protection measures
- never place materials within or on top of a rain garden

## **Infiltration Basins**

#### **Protection Measures**



- install sand bags to block curb cuts
- cover or close grate openings using plywood, rigid plastic board, or proprietary filtering system (secure materials as needed)
- place cones to identify tripping hazards on the sidewalk
- never stockpile materials on top of infiltration basins



## Permeable Pavements

#### **Protection Measures near Permeable Surfaces**

- install silt socks around nearby/downstream permeable pavements
- install temporary coverings over entire permeable surface and secure in place
- · avoid heavy machinery
- if heavy machinery is unavoidable, use steel plates place steel plates gently and do not drag across pavement surface



#### Protection Measures within Permeable

#### **Pavements**

- carefully remove precast porous concrete slabs and permeable pavers
  - ° lift slabs vertically and not on an angle (most slabs have cast-in 1/2" lifting inserts)
  - ° only if necessary, cut slabs at joints

 carefully reinstall or replace precast porous concrete slabs and permeable pavers



- clean porous surface with appropriate equipment at the conslusion of construction activities
- conduct infiltration test before work and after reinstallation to ensure similar infiltration performace

#### **Key Contractor Responsibilities**

- keep protective measures in place until completion of construction activity or DOT Street Opening Permit is no longer required
- properly remove all protective measures after completion of construction
- $\bullet$  notify DEP to inspect protection installation and removal

The Contractor is liable for damage to GI practices if proper controls are not installed and maintained throughout.

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