

Stormwater Planter

Stormwater planters are small landscaped stormwater treatment devices that can be placed above or below ground and can be designed as infiltration or filtering practices. They are ideal for space-limited sites in dense urban areas

Stormwater planters use soil infiltration and biogeochemical processes to decrease stormwater quantity and improve water quality, similar to rain gardens and green roofs.

Three versions of stormwater planters include:

- contained planters,
- infiltration planters, and
- flow-through planters.



Contain planters at Court St.

Contain planter

Contain Planter is filled with soil and plants that accept precipitation only, not stormwater runoff from another source. It is placed above ground on an impervious surface. Rainwater is temporarily stored above the soil, and then filters down through the planter. In some cases, weep holes provide drainage through the bottom of the planter onto the impervious surface.

The benefits of a contained planter it is the reduction of impervious area and stormwater runoff. Contained planters are simple, cost-effective, and visually appealing.

Flow-through planter

Flow-through planters are structures or containers with impervious bottoms or placed on impervious surfaces. They do not infiltrate into the ground. They can be placed in or above the ground level. Flow-through planters are filled with gravel, soil, and vegetation and are typically waterproofed. They temporarily store stormwater runoff on top of the soil and filter sediment and pollutants as water slowly infiltrates down through the planter. Excess water collects in a perforated pipe at the bottom of the planter and drains to a destination point or conveyance system



Flow-through planter NYC

Infiltration planter

Infiltration planters are structures or containers with open bottoms to allow stormwater to slowly infiltrate into the ground. They contain a layer of gravel, soil, and vegetation. Stormwater runoff temporarily pools on top of the soil, and then slowly infiltrates through the planter into the ground .

The benefits of infiltration planters are:

- ideal for space-limited sites with good drainage.
- They reduce stormwater runoff flow rate, volume, temperature and pollutants, and recharge groundwater.
- Infiltration planters can be attractive, and are easily integrated into the overall landscape design.
- They can also provide energy benefits when sited near building walls.



Infiltration planter at 2 Court St.
Design by HAAS Landscape

