

## Construction Inspection Checklist: Urban Bioretention

### Project Information:

Address: \_\_\_\_\_ Building Permit #: \_\_\_\_\_  
LDA#: \_\_\_\_\_ SWM#: \_\_\_\_\_

---

The following checklist provides a basic outline of the anticipated items for the construction inspection of urban bioretention facilities. This checklist does not necessarily distinguish between all the design variations. Inspectors should review the plans carefully, and adjust these items and the timing of inspection verification as needed to ensure the intent of the design is met. The standard for design of this practice is based on [Virginia Stormwater BMP Clearinghouse](#) and [Arlington County Stormwater Guidance Manual](#).

All items should be crossed off when completed. Items labeled "Certification of..." must be crossed off, dated and initialed by the certifying inspector. The certifying inspector is required to be a licensed professional civil engineer, land surveyor, or landscape architect.

### Pre-Construction Meeting

- ☐ Pre-construction meeting with the contractor designated to install the planter boxes, County DES inspector, and person completing this checklist has been conducted. Date held: \_\_\_\_\_
- ☐ Stormwater has been diverted around the area of the bioretention practice and perimeter erosion control measures to protect the facility during construction have been installed.

### Excavation and Box Construction

- ☐ Area is marked and the size and location conforms to plan.
- ☐ Excavation has achieved proper grades and the required geometry and elevations.
- ☐ Box is constructed using the material specified and to the required dimensions as shown on the approved plans. Constructed interior dimensions: \_\_\_\_\_
- ☐ Waterproofing is installed as specified. (photo required)
- ☐ **Certification of Excavation and Box Construction Inspection:** Inspector certifies the successful completion of the steps listed above and any necessary photos are attached.

### Filter Layer, Underdrain, and Stone Reservoir Placement

- ☐ All aggregates conform to specifications as certified by quarry. Copy of material delivery ticket is included in this certification.
- ☐ Underdrain size and perforations meet the specifications.
- ☐ Placement of underdrain, observation wells, and underdrain fittings (45 degree wyes, cap at the upstream end, etc.) are in accordance with the approved plans. (photo required)
- ☐ Elevations of underdrain and outlet structure are in accordance with approved plans, or as adjusted to meet field conditions.
- ☐ Placement of remaining lift of stone reservoir layer as needed to achieve the required reservoir depth. (photo required)
- ☐ **Certification of Filter Layer and Underdrain Placement Inspection:** Inspector certifies the successful completion of the filter layer and underdrain placement steps listed above. Photos and material delivery tickets for these items are attached.

### Bioretention Soil Media Placement

- ☐ Soil media is certified by supplier or contractor as meeting the project specifications. Copy of material delivery ticket is included in this certification.
- ☐ No filter fabric is to be used between the stone layer and the soil layer. Soil media is placed in 12-inch lifts to the design top elevation of the bioretention area. Elevation has been verified after settlement (2 to 4 days after initial placement). The required 2" freeboard is provided between the top of the overflow pipe and the top of the planter box walls. Provide photos showing measurements from top of soil to top of overflow pipe, and from top of overflow pipe to top of planter box.
- ☐ **Certification of Soil Media Placement Inspection:** Inspector certifies the successful completion of the soil media steps listed above. Photos and material delivery tickets for these items are attached.

### Pretreatment and Plant Installation

- ☐ Placement of energy dissipaters and pretreatment practices (splash block/rocks, gutter guards, etc.) are installed in accordance with the approved plans. (photo required)
- ☐ Overflow has grate installed.
- ☐ Downspouts are installed in accordance with the approved plans.
- ☐ The appropriate number and spacing of plants are installed in accordance with the approved plans. Copy of material delivery ticket is included in this certification. (photo required)
- ☐ A 2-3 inch layer of mulch has been installed. (photo required)
- ☐ **Certification of Soil Media Placement Inspection:** Inspector certifies the successful completion of the soil media steps listed above. Photos and material delivery tickets for these items are attached.

All items checked above have been inspected by me (or by an individual under my responsible charge) and have been completed to my satisfaction and meet the approved plans (or deviations are noted here).

---

Signature

---

License Number (or Seal)