**Bioretention (Rain Garden) Inspection Checklist**

**[Note: a separate form must be used for each BMP]**

BMP Name and Location: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Deed Book and Page Number: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Project Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Owner’s Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Owner’s Address: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Inspection Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Inspection Time: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Inspector: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Inspector Address/Phone Number: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Inspection Type: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(choose from Final Construction, Maintenance Bond, Annual Compliance, Routine Maintenance, Follow-up, or Other Inspection)

**Compliance Status Information (if applicable)**

|  |  |  |  |
| --- | --- | --- | --- |
| **Notice Issued** | **Notice Date** | **Required Compliance Date** | **Actual Compliance Date** |
| Notice of Violation (NOV) |  |  |  |
| Notice of Violation with Penalty (NOVP) |  |  |  |

**Major inspection/maintenance guidelines for Wet Ponds are:**

* The soil media filter needs to be inspected quarterly and after every major rain (>1”) event.
* Plants may be watered twice weekly after initial planting until the plants become established.
* Standing water more than 5 days after the last rain is a sign of clogging of soil media or underdrain.
* Adequate access must be provided for inspection/maintenance
* Prevention of clogging from sediment
* Prevention of piping (Short-circuiting of filtration through soil media) of concentrated flow to underdrain
* Underdrain and outlet device must be functional
* 2” double hammered mulch layer is to be maintained (replacement or additional mulch may be necessary)
* Unwanted vegetation should be properly maintained to prevent weeds from becoming unmanageable and to improve the appearance
* During maintenance procedures, heavy equipment is not to be driven over the bioretention

**High Priority Corrective Actions** in the Inspection Table below include those actions that have the potential to cause structure failure, functional failure, harm to the public or the environment as determined by a professional engineer or registered landscape architect and should be repaired immediately. Examples of these High Priority items may include (but not limited to):

* Standing water after 120 hours following a rain event (Indicated by stressed or dying plants, organic sheen from mulch, presence of algae)
* Significant sediment accumulation in forebay or bioretention cell that may cause clogging
* Bank failure
* Evidence of storm water bypass
* Clogged inlets or outlets

| **Bioretention (Rain Garden) Inspection Checklist** | | | | | | |
| --- | --- | --- | --- | --- | --- | --- |
| **Maintenance Item** | **Corrective Action Required** | | | **Continue Ongoing Maintenance** | **Recommended**  **Frequency** | **Comments/Actions Required** |
| **High Priority**  **(0-30days)** | **Priority**  **(30-45 days)** | **Not Accessible** |
| 1. **Debris Clean out** |  |  |  |  |  |  |
| Clear of trash and debris |  |  |  |  | M |  |
| **2. Vegetation Management** |  |  |  |  |  |  |
| Banks / surrounding areas mowed (no less than 3”) |  |  |  |  | M |  |
| Unwanted vegetation present |  |  |  |  | M |  |
| Condition of plants |  |  |  |  | M |  |
| Condition of mulch – Must be screened double hammered hardwood, 3 inches deep (Replace at least every 3 years and renew yearly) |  |  |  |  | M |  |
| Ground cover well established (Yearly reseeding needed) |  |  |  |  | M |  |
| **3. Erosion** |  |  |  |  |  |  |
| Evidence of soil erosion on banks or contributing drainage areas |  |  |  |  | M |  |
| **4. Sedimentation** |  |  |  |  |  |  |
| Forebay sediment inspection (clean out every 7 years or when 50% full) |  |  |  |  | M |  |
| Evidence of sediment in bioretention cell |  |  |  |  | M |  |
| **5. Energy dissipators** |  |  |  |  |  |  |
| Condition of dissipator at inlet |  |  |  |  | Y |  |
| Condition of dissipator at outlet |  |  |  |  | Y |  |
| Inspect pea gravel diaphragm (replace as needed) |  |  |  |  | M |  |
| **6. Inlet** |  |  |  |  |  |  |
| Condition of pipes and /or swale (cracks, leaks, sedimentation , woody vegetation) |  |  |  |  | M |  |
| **7. Outlet** |  |  |  |  |  |  |
| Condition of outlet / drop box |  |  |  |  | M |  |
| **8. Dewatering (draw down must be between 49 and 120 hours)** |  |  |  |  |  |  |
| Evidence of standing water |  |  |  |  | M |  |
| **9. Overall Functionality** |  |  |  |  |  |  |
| Evidence of bypass |  |  |  |  | M |  |
| P index test results for soil media (indicate test results and date last tested) |  |  |  |  | Y2 |  |
| **10. Additional comments** |  | | | | | |

W=Weekly, M=Monthly, Q=Quarterly, Y=Yearly

**I do hereby certify that I conducted an inspection of the BMP described herein. I further certify that at the time of my inspection said BMP was performing properly and was in compliance with the approved plans and the terms and conditions of the approved maintenance agreement required by the Post-Construction Storm Water Ordinance.**

**Certification:**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Inspector’s Signature Date**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Professional Engineer’s Signature Date**

**(Professional seal)**

Note: The Post-Construction Storm Water Ordinance requires that inspections be conducted of all BMPs beginning within one (1) year from the date of the approved as-built certification and each year thereafter and that these inspections be completed by a North Carolina Professional Engineer. All inspections must be documented, signed, sealed, and submitted using this form.

The completed inspection form should be emailed to [JRappe@Stallingsnc.org](mailto:JRappe@Stallingsnc.org) or a paper copy submitted to:



Storm Water Administrator

Town of Stallings

315 Stallings Road

Stallings, NC 28104