



TOWN OF WAKEFIELD

Department of Public Works
William J. Lee Memorial Town Hall
One Lafayette Street
Wakefield, MA 01880
781-246-6301 x4120

Standard Operating Procedure Bioretention Areas and Rain Gardens

I. PURPOSE

Bioretention Areas and Rain Gardens are treatment Best Management Practices (BMPs) that are designed to collect, treat, and infiltrate stormwater. They are often designed as shallow depressions filled with sandy soil, topped with a thick layer of mulch, and planted with dense native vegetation. Bioretention areas can be designed to act as an organic filter and exfiltrate stormwater for groundwater recharge.

II. INSPECTION

Regular inspections are important to prevent against premature failure of bioretention areas or rain gardens. Bioretention Areas should be inspected monthly when regular maintenance/observance such as lawn care occur. All accumulated trash should be collected at this time. The basin and sediment forebay shall be inspected for any side-slope erosion and vegetation identified for replacement. The sediment forebay shall be cleared of accumulated trash and sediment levels monitored. Any outlet control structure or overflow structure shall be monitored for sediment accumulation in their sumps and if they are clogged with vegetation or debris.

III. MAINTENANCE

Regular maintenance shall be conducted at the following intervals to maintain bioretention areas so they may operate efficiently and as designed.

Activity	Time of Year	Frequency
Inspect and Remove Trash	Year Round	Monthly
Inspect and Rem. Sediment	Fall	Bi-Annually
Mulch	Spring	Annually
Replace Dead Vegetation	Spring or Fall	Annually
Prune Vegetation	Spring or Fall	Annually
Replace Entire Media/Veg.	Late Spring/Early Summer	As needed

IV. LOCATION OF BIORETENTION AREAS



a. Gertrude Spaulding Park
147 Lowell Street
Wakefield, MA 01880

b. Veteran's Field
468 North Avenue
Wakefield, MA 01880

V. ATTACHMENTS:

- a. Maintenance Report, Bioretention Areas
- b. Plan, Gertrude Spaulding Bioretention Area,
- c. Cross-Section Detail, Veteran's Field Bioretention Area (proposed, Fall 2021)

VI. REVISION

These procedures contained in the SOP are reviewed as part of the NPDES MS4 Annual Report development and updated as needed.

VII. EFFECTIVE:

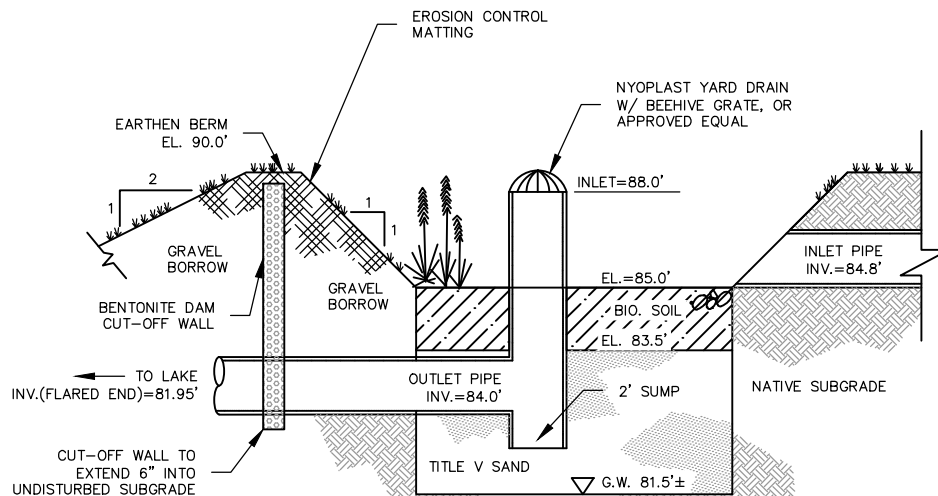
June 2021

SIGNED:

A handwritten signature in black ink, appearing to read 'W. Renault, Jr.', with a stylized flourish at the end.

William J. Renault, Jr., P.E.
Town Engineer
Engineering Division
Wakefield Department of Public Works

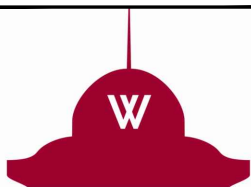
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BIO-RETENTION NOTES:

1. THE SOIL MIX FOR BIO-RETENTION AREAS SHOULD BE A MIX OF SAND, COMPOST AND SOIL
 - 40% SAND
 - 20% TO 30% TOPSOIL AND
 - 30% TO 40% COMPOST
 AND SHALL CONFORM TO THE SPECIFICATIONS IN THE STORMWATER HANDBOOK VOL. 2 CH.2 PAGE 26.
2. REMOVE NATIVE SOILS TO ELEVATION 81.5 AND INSTALL WASHED SAND (TITLE V SAND).

BIORETENTION AREA & INLET CONTROL STRUCTURE
NOT TO SCALE



**TOWN OF
WAKEFIELD**

ENGINEERING DIVISION - WAKEFIELD PUBLIC WORKS

STANDARD OPERATING PROCEDURE
VETERAN'S FIELD BIORETENTION AREA

SCALE: N.T.S.

DATE: JUNE 2021