

Infiltration Basin Construction Checklist

This checklist has been designed for BMPs designed in accordance with the Delaware Sediment and Stormwater Program's Post Construction Stormwater BMP Standards and Specifications. Submit interim versions of this construction checklist to the approval agency weekly with the Certified Construction Reviewer report. Submit the final completed checklist with the PCVD.

PROJECT INFORMATION

Project Name/BMP Name: _____

Project Approval Number: _____ NOI number: _____

Location: _____

Contractor: _____

Construction Reviewer: _____

Supervising P.E.: _____

For each checklist item, enter in the blank the date (MM/DD/YY) the item is completed and verified by the construction reviewer. If an item is not applicable, enter "N/A" in the blank for that checklist item.

I. Pre-Construction

A. _____ Infiltration basin field meeting with responsible person and person completing construction checklist.

B. _____ Extents of infiltration basin (to include pretreatment area) delineated and access by equipment prohibited with Sensitive Area Protection (SAP) to prevent compaction of existing soils.

C. _____ Equipment on the site large enough to excavate infiltration basin from the sides of the facility.

D. _____ Pervious areas draining to the infiltration basin stabilized in accordance with the approved plan.

E. _____ Pipe and appurtenances on-site and dimensions and properties checked and confirmed to be in accordance with the approved plan if applicable.

i. _____ Discharge pipe

ii. _____ Overflow catch basin

iii. _____ Other; list: _____

F. _____ Materials on-site and dimensions and properties checked and confirmed to be in accordance with the approved plan. ***Submit materials invoice or delivery tickets to approval agency as part of PCVD for the following items:***

i. _____ Clean washed riprap

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ii. _____ Other; list: _____

G. _____ Necessary amount of topsoil stockpiled for final stabilization of the infiltration basin side slopes.

II. Excavation and Grading

A. _____ Infiltration basin excavated to dimensions and at location as per the approved plan.

B. _____ Infiltration basin excavated to design bottom elevation.

C. _____ Infiltration basin excavated from the sides so as to not compact the existing soil.

Stepwise excavation used for infiltration basins too large to be fully excavated from the side.

D. _____ Groundwater not encountered during excavation. (Note: If groundwater is encountered during the excavation process, construction of the facility must cease, and the designer notified that a plan modification is necessary)

E. _____ Sides of infiltration basin excavated no steeper than 4:1.

F. _____ Bottom of excavation in accordance with the approved plan.

G. _____ Overflow spillway constructed to design elevation and dimensions.

H. _____ Confirmatory testing performed in native soil at design bottom elevation in accordance with Soil Investigation Procedures for Stormwater BMPs. **Submit confirmatory infiltration testing report to approval agency as part of PCVD.**

- Confirmatory infiltration testing
 - Confirmatory rate is at least 150% of the approved design rate
 - Confirmatory rate is less than 150% of approved design rate; designer notified to provide plan revision
- Hand augers to a minimum depth of 3 feet below the bottom of the facility
 - Limiting layer not present
 - Limiting layer present; designer notified to provide plan revision

III. Structural Components

A. _____ Pretreatment method(s) installed per the approved plan.

B. _____ Discharge pipe installed from overflow collection pipe to discharge point.

C. _____ Rock outlet protection provided at all points of discharge and riprap stone size and dimension confirmed.

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D. _____ Photo documentation of construction of structural components taken. **Submit photo documentation to approval agency as part of PCVD.** (Photo #: _____)

IV. Vegetative Stabilization

A. _____ Areas to be vegetated have completed the following items. **Submit soil test report, lime, fertilizer, and seed tickets to approval agency as part of PCVD.**

i. _____ Soil testing.

ii. _____ Side slopes scarified to a minimum depth of 3 inches prior to placing topsoil

iii. _____ Application of topsoil to a minimum depth of 4 inches.

iv. _____ Application of soil amendments including lime and fertilizer in accordance with the recommendations of the soil test or the approved plan.

v. _____ Application of seed to the soil surface using approved methods.

B. _____ Application of soil stabilization matting, and permanent seeding used on side slopes in accordance with approved plan.

C. _____ Application of native soil and seeded on the infiltration basin bottom in accordance with permanent seeding specifications on the approved plan.

A. _____ Photo documentation of landscaping components taken. **Submit photo documentation to approval agency as part of PCVD.** (Photo #: _____)

V. Erosion and Sediment Control

A. _____ Sediment prevented from entering infiltration basin by constructing the basin off-line or by using perimeter controls as specified on the approved plan.

B. _____ Sediment controls removed once drainage area meets final stabilization standard.

C. _____ Basin online.

VI. Maintenance Access

A. _____ Maintenance access to the perimeter of the infiltration basin has minimum width of 15 feet.

B. _____ Profile grade of maintenance access does not exceed 10H:1V.

C. _____ Minimum 10H:1V cross slope on maintenance access.

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VII. Post Construction Verification

Owner shall submit post construction verification documents to demonstrate that the infiltration basin has been constructed within allowable tolerances in accordance with the Approved Sediment and Stormwater Management Plan and accepted by the approving agency.

- A. _____ Constructed top bank elevation at or above design elevation confirmed after ESC controls are removed.
- B. _____ Constructed infiltration basin surface area confirmed equal to or greater than 90% of the design surface area once ESC controls are removed.
- C. _____ Constructed volume of the infiltration basin storage confirmed equal to or greater than 90% of the of the design.
- D. _____ Constructed elevation of all structures confirmed to be within 0.15 foot of the design elevation for:
 - i. _____ Discharge pipe
 - ii. _____ Overflow catch basin/weir
 - iii. _____ Other; list: _____

VIII. BMP Acceptance

- E. _____ Final BMP construction review complete.
- F. _____ All BMP punch list items addressed.
- G. _____ Infiltration basin is online (stabilized drainage area is entering infiltration basin)
- H. _____ As-built survey.
- I. _____ PCVD submitted to approval agency for review and approval. Submit the following pieces of PCVD documentation to the approval agency:
 - Materials invoice or delivery tickets
 - Confirmatory infiltration testing report
 - Photo documentation
 - Soil test report
 - Lime, fertilizer, and seed tickets
 - As-built survey
 - Final, completed BMP Construction Checklist