

# Field Checklist

for

## Permeable Pavement

Date of Certification Assessment: \_\_\_\_\_

Assessing and Certifying NCPE: \_\_\_\_\_ Seal:

SCM Facility Name: \_\_\_\_\_

Access Address: \_\_\_\_\_

PIN/s of Parcel/s Where the Facility is Sited: \_\_\_\_\_

### CHECKLIST

**All items in this checklist must be compliant.**

*If an item is not applicable, write "N/A" next to the item.*

*If the engineer believes the non-compliant item still meets its intended purpose and is therefore acceptable, he/she must include the following in the "Additional Comments" box at the end of this form:*

- A description of how the non-compliant item deviates from the standards and/or approved construction drawings, and*
- An explanation of why this deviation is acceptable and how the deviation still meets the intended purpose behind the requirement.*

### **A. Drainage Area**

- The drainage area to the facility is as per the design documents, or if there are deviations from the design drainage area, these deviations do not render the SCM undersized, result in insufficient on-site treatment to meet regulatory requirements, or impair its long term functionality by diverting non-approved pervious area to it.
- The drainage area to the facility is completely stabilized, and no excess sediment is discharging onto the permeable pavement.

### **B. Easements and Accessibility**

- The SCM access way as constructed matches what is shown on the recorded final plat and is fully contained in the SCM Access and Maintenance Easement.
- Unless it has been surfaced with gravel, asphalt, concrete, etc., in accordance with approved construction drawings, 85% of the SCM Access and Maintenance Easement has achieved a healthy stand of grass.

### **C. Permeable Pavement Surface**

- The structural boarder of the permeable pavement has been installed as shown on the construction drawings.

- Run on areas and/or other built upon areas draining onto or into the permeable pavement are as specified on the construction drawings.
- The surface of the permeable pavement is smooth and uniform. Brick pavers do not rock or move when stepped upon or when vehicle loads are applied. Porous asphalt/concrete is not cracked or deformed in a manner which emphasizes deficiencies with subgrade/base/pavement, or pieces of the pavement do not break off when stepped upon or when vehicle loads are applied. There are no depressions or ruts in the surface.
- The surface slope of the permeable pavement does not exceed 6% unless approved construction drawings allow for greater.
- For brick pavers, the fine media as specified on the construction drawings is present between the bricks and is not clogged with sediment and/or debris. Spacing between the pavers is as specified on the construction plans.
- The surface area of the pavement is as shown on the construction drawings.
- Underdrain cleanouts (if installed) have traffic rated caps. The cleanout sections are constructed from solid wall pipe. Underdrain cleanout caps are water tight.
- The permeable pavement educational/warning signage has been installed (except for single family residences).
- The surface or sub-surface bypass to safely convey the 100-year, 24-hour post-development storm event or the maximum storm has been installed in accordance with the construction drawings.
- All accumulated sediment and other debris has been removed.
- Parking striping and other markings are installed as specified on the construction drawings and do not excessively clog the surface pores of the permeable pavement.
- The permeable pavement system has been observed on \_\_\_\_\_ [fill in date] by the certifying engineer to draw down the runoff from the first inch of rainfall (minimum) in a manner consistent with that specified in the approved construction drawings. It will also safely pass the 10-year, 24-hour storm event via infiltration, bypass, or detention and release.
- Run on from adjacent pervious areas have been directed away from the permeable pavement surface to the maximum extent practicable and in accordance with approved construction drawings.
- Hotspots where toxic pollutants are stored or handled are not located where spills or stormwater runoff from these areas enter sections of the permeable pavement.
- Any manufacture specific requirements for the type of permeable pavement installed have been followed.

## D. Observation Wells

- The observation well(s) have been provided. If a tier system is utilized, then one observation well is required per tier.
- Traffic rated cap(s) are provided.
- The observation well pipe is perforated.
- The water level shown in the bottom of the observation well is in accordance with the type of permeable pavement (IWS or non IWS).
- Observation well is as deep as the subgrade surface and at least as deep as the pavement structure per the approved construction drawings.

## E. Stone Base

- Washed aggregate of the standard size number as specified on the approved construction drawings is incorporated into the pavement structure
- The stone thickness(es) is equal to or greater than the thickness(es) on the approved construction drawings.
- Subgrade slope under the stone base has a slope less than or equal to 2% or as the approved construction drawings.
- Baffles with appropriate sized weirs/orifices have been placed between tiered subgrade/stone base in accordance with approved construction drawings.

## F. Control Structure and Principal Spillway Pipe

- The control structure is reinforced concrete.
- The dimensions of the structure match the size specified on the construction drawing.
- The structure and all appurtenant devices appear to be sound.
- The structure is free of debris or obstructions.
- The foundational support for and the backfill around the structure have been placed in accordance with the construction drawings.
- All orifices, valves, siphons, ports, and weirs were installed in accordance with the construction drawings.
- The PSP is reinforced concrete with a minimum pipe strength conforming to ASTM C-76 Class III standards.
- The diameter of the PSP is as specified on the construction drawings.
- Based on a visual inspection, it appears that the joints of the PSP were “homed” reasonably well, and it appears that no joints are leaking.
- Steps down the inside of the structures (if required) have been provided in accordance with the construction drawings.

## G. Outlet and Outfall

- The principal spillway pipe is securely attached/grouted to the headwall or downstream manhole, and this joint is smoothly finished with no evidence of gaps, cracks, and spalling.
- If not discharging to a storm sewer system:
  - The outfall structure has been installed in accordance with the construction drawings and there is no evidence of stability issues.
  - Energy dissipation has been provided in accordance with the construction drawings.
  - The outfall area and downstream channel(s)/receiving area appear stable, and all accumulated silt and debris has been removed.
- If discharging to a storm sewer system, the receiving manhole appears stable and all accumulated silt and debris has been removed.

Additional Comments by Certifying Engineer:

A large, empty rectangular box with a thin black border, intended for the certifying engineer to provide additional comments. The box occupies most of the upper half of the page.