Field Checklist

for

Silva Cell Suspended Pavement with Bioretention

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 or result in insufficient on-site treatment to meet regulatory requirements.
- The drainage area to the facility is completely stabilized, and no excess sediment is discharging into the Silva Cell.

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. The SCM Access and Maintenance Easement is clear of obstructions and traversable by anticipated maintenance equipment.
- Unobstructed maintenance vehicle access has been provided to the control structure and all inlets, and access to the facility and top of the dam meets the following conditions per field observation and survey spot shot data:
    - It is a minimum of 10 feet wide.
    - It has a maximum centerline grade of fifteen percent (15%).
    - It has a maximum cross-slope of ten percent (10%).

- 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. Pretreatment

- Pretreatment devices have been installed in accordance with the approved construction drawings, and are accessible for maintenance.
- All accumulated sediment and other debris in the pretreatment devices has been removed.
- Any flow splitters or bypass systems have been constructed in accordance with the approved construction drawings.
- The flow into the Silva Cell is evenly distributed across the cell in accordance with the construction drawings.

D. Silva Cell

- The number and size of installed Silva Cell units (decks, bases, posts) is in accordance with the approved construction drawings.
- If applicable, any barriers or other devices to prevent water from migrating out of the Silva Cell have been installed in accordance with the approved construction drawings.
- The depth of the internal water storage zone is as shown in the approved construction drawings.
- The surface area of the Silva Cell is in accordance with the approved construction drawings.
- All aggregates used above the Silva Cell decks as bedding, base or sub-base layers were double washed and free of fine particles and debris at the time of installation.
- The required soil mix, choking stone and gravel layers have been installed in accordance with the approved construction drawings, and there is no sediment in the Silva Cell.
- The underdrain system has been installed in accordance with the approved construction drawings. All underdrain joints have glued watertight connections
- Solid underdrain cleanouts have been installed in accordance with the approved construction drawings. Screw-on type (or otherwise approved) cleanout caps have been provided for all cleanout pipes.
- The volume of storage above the filter media surface and within the aggregate layers above the Silva Cell decks is equal to or greater than the design volume, but not more than 18 inches.
- All of the trees specified in the approved construction drawings are thriving.
- The Silva Cell 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.

E. Flow Splitter or Flow Bypass

- For inlets in the right-of-way, a catch basin or overflow inlet is located downslope of those inlets to ensure bypass or overflows will not create flooding.
- For flow splitters:
    - The flow splitter is reinforced concrete and has been installed in accordance with the approved construction drawings.

- All orifices, ports, pipes, and weirs have been installed in accordance with the construction drawings.
- The flow splitter is free of debris or obstructions.
- The flow splitter is accessible for maintenance.

F. Outfall Structure and Outfall Area

- The control structure has been installed in accordance with the construction drawings.
- 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: