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## Stormwater Operation and Maintenance Plan

### INFILTRATION BASIN

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Regular inspection and maintenance are necessary to preserve long-term functionality of Stormwater Control Measures “SCMs” per the original design intent. This Plan outlines the Town of Chapel Hill requirements for regular inspection and maintenance of Infiltration Basin SCMs. The Owner as defined in the Agreement shall keep a copy of this Stormwater Operations and Maintenance Plan, the SCM Inspection and Maintenance Log, and a copy of the approved As-Built Plans in a known set location and made available to the Town of Chapel Hill upon request.

Annual inspections shall be performed by a qualified licensed Professional Engineer or Landscape Architect. Routine maintenance and inspection shall be performed by a qualified professional with NCSU Stormwater Inspection and Maintenance Certification or similar certification.

The qualified professional shall maintain a **SCM Inspection and Maintenance Log** and make available to the Town of Chapel Hill upon request. All inspections shall be recorded in the log according to the frequency in the Inspection and Maintenance Table (Table 1 below) and within 24 hours after storm events that exceed 1.0 inch of rainfall. Any deficit SCM elements noted during inspection shall be recorded in the log and immediately corrected, repaired, or replaced. All routine and corrective/emergency maintenance activities shall be recorded in the log. The log template can be found at the Town of Chapel Hill Stormwater Control Measures [website](#).

An **Annual Inspection and Maintenance Report** shall be submitted to the Town of Chapel Hill Stormwater Department. The report shall detail the status of the SCM and maintenance performed as outlined in the [SCM Inspection Report Guidelines](#). A copy of the annual report shall be submitted to the Town of Chapel Hill Stormwater Management Division beginning one year after issuance of the Certificate of Occupancy.

#### **REQUIRED INSPECTION AND MAINTENANCE TASKS FOR INFILTRATION BASIN**

*NOTE: The following inspection and maintenance table is not an exhaustive list of inspection and maintenance tasks. It is the responsibility of the professional inspecting the facility to perform comprehensive maintenance for the SCM to be operational.*

**Table 1: Inspection and Maintenance Provisions for Infiltration Basin**

FREQUENCY OF INSPECTIONS	MAINTENANCE ACTIVITIES
Upon completion of construction	<ul style="list-style-type: none"> <li>Watering is needed twice a week until the grass become established (commonly 6-8 weeks), depending on rainfall.</li> </ul>
Once a quarter	<ul style="list-style-type: none"> <li>Mow grass surface areas to a height of approximately six to eight inches and remove grass clippings.</li> <li>Check inlet system, forebay and outlet device for any obstructions or clogging. Remove accumulated grit, leaves, and debris and dispose off-site.</li> <li>Inspect for ponding and bare or eroding areas and make adjustments (i.e. regrading and planting ground cover) as necessary.</li> <li>Remove any trash in and around the basin.</li> </ul>
Twice during the growing season	<ul style="list-style-type: none"> <li>Pull out weeds or invasives preferably by hand.</li> </ul>
Annually	<ul style="list-style-type: none"> <li>Have the embankment inspected by a dam safety expert.</li> <li>Remove woody species on or near embankment area and maintenance access.</li> </ul>
As needed (Typical Problems)	<p><b>Vegetation</b></p> <ul style="list-style-type: none"> <li>If the infiltration basin suffers from dead or diseased plants or overgrown with invasive species, evaluate the source of the problem: soils, hydrology, species, or plant disease.               <ul style="list-style-type: none"> <li>Remediate the problem by selecting new grass species or implementing an eradication plan for invasives.</li> <li>Ensure appropriate plant maintenance is occurring.</li> <li>A one-time fertilizer application to establish ground cover is permissible if a soil test indicates it is necessary. No portion of the infiltration basin shall be fertilized after the initial fertilization that is required to establish the vegetation.</li> </ul> </li> <li>Remediate bare soils or erosive gullies.               <ul style="list-style-type: none"> <li>In perimeter areas, regrade the soil to remove the gully, plant a ground cover and water until it is established.</li> <li>Within the pretreatment area, provide erosion control devices such as reinforced turf matting or riprap to avoid future problems with erosion.</li> </ul> </li> <li>If soil test shows that the pH has dropped, dolomitic lime shall be applied as recommended.</li> </ul> <p><b>Structural Integrity</b></p> <ul style="list-style-type: none"> <li>Replace or repair any cracked, separated or damaged inlet pipes, outfalls, impoundment walls or other structural elements.</li> <li>Shrubs or trees growing on the embankment should be removed immediately and the embankment repaired.</li> </ul>

**Functionality****• Sediment Accumulation**

- Maintain stable ground cover in the drainage area.
- Sweep or vacuum sediment on pavement in the contributing drainage area.
- If sediment has accumulated in the basin reducing its depth to 75% of the original design depth, remove the sediment and dispose of it in a location where it will not impact the SCM or any stream. Search for the source of the sediment in the drainage area and remedy the problem if possible.
- If there is standing water more than 5 days after a storm event, inspect the outlet device for obstructions and unclog immediately. If the problem persists, remove the top few inches of filter media and revegetate the surface. Consult an appropriate professional for a more extensive repair.

For additional information or if damage has occurred at the outlet which effects the receiving water, contact the Town at Chapel Hill Stormwater Management at 919-969-7246 (RAIN).