Stormwater Operation and Maintenance Plan

INFILTRATION TRENCH

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 Trench 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 Trench

FREQUENCY OF INSPECTIONS	MAINTENANCE ACTIVITIES
Upon completion of construction	• If a pretreatment grass filter strip has been built, watering is needed twice a week until the grass become established (commonly 6-8 weeks), depending on rainfall.
Once a quarter	• If a pretreatment grass filter is present, mow grass surface areas to a height of approximately six to eight inches and remove grass clipping. • Check conveyance system for any obstructions or clogging. Remove accumulated grit, leaves, and debris and dispose any sediment off-site. • Remove any trash present on the infiltration trench surface.
Twice during the growing season	• Remove plants or grass growing on the surface of the trench preferably by hand.

As needed (Typical Problems)	**Structural integrity**
	• Replace or repair any cracked, separated or damaged inlet pipes, outfalls, or other structural elements.
	• Remediate bare soils or erosive gullies by regrading the soil to remove the gully, plant a ground cover and water until it is established. If soil test shows that the pH has dropped, dolomitic lime shall be applied as recommended.
	
	Functionality
	• Sediment Accumulation
	  ○ If sediment has accumulated in the preatreatment area to a depth greater than six inches, remove the top few inches of drainage media and dispose of it in a location where it will not cause impacts to the SCM or a stream. Search for the source of the sediment in the drainage area and remedy the problem.
	  ○ If the depth in the trench is reduced to 75% of the original design depth, remove the accumulated sediment from the infiltration system and dispose in a location that will not impact a stream or a SCM.
	• Drainage issues
	  ○ If water is present in the observation well more than 3 days after a storm event, clean out the underdrain. If this activity does not solve the problem, consult a professional.
	  ○ If ponding is observed on the surface more than 24 hours after a storm event, remove accumulated sediment from top of infiltration trench and dispose of it in a location that will not impact a SCM or stream. If the problem persists, contact a professional.
	• If the water table is within one foot of the bottom of the system for a period of three consecutive months, contact the Town of Chapel Hill Stormwater Management Division.
	
	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).