

# Guilford County Planning and Development Stormwater/Watershed

## Wet Detention Basin Operation and Maintenance Agreement

Cross Reference to
Plat Book:\_\_\_\_\_ Page:\_\_\_\_
Deed Book:\_\_\_\_\_ Page:\_\_\_\_

Project Name:	
SCM ID:	
Property Owner:	
Date:	
	Return To
Name:	
Address:	

Project:
Date:



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## Wet Detention Basin Operation and Maintenance Agreement

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Deed Book:\_\_\_\_ Page:\_\_\_\_

I will keep a maintenance record on this SCM. This maintenance record will be kept in a log in a known set location. Any deficient SCM elements noted in the inspection will be corrected, repaired, or replaced immediately. These deficiencies can affect the integrity of structures, safety of the public, and the removal efficiency of the SCM.

The wet detention basin system is defined as the wet detention basin, pretreatment including forebays and the vegetated filter if one is provided.

This sy	rstem:
Incorp	orates a vegetated filter at the outlet
	Does
	Does Not
Incorp	orates pretreatment other than a forebay
	Does
	Does Not

### Important maintenance procedures:

- Immediately after the wet detention basin is established, the plants on the vegetated shelf and perimeter of the basin should be watered twice weekly if needed, until they become established (approximately 6 weeks).
- No portion of the wet detention pond should be fertilized after the first initial fertilization that is required to establish the plants on the vegetated shelf.
- Stable groundcover should be maintained in the drainage area to reduce the sediment load to the wet detention basin.
- If the basin must be drained for an emergency or to perform maintenance, the flushing of sediment through the emergency drain should be minimized to the maximum extent practical.
- Once a year, a dam safety expert should inspect the dam embankment.

After the wet detention pond is established it should be inspected once a month and within 24 hours after every storm event greater than 1.0 inch. Records of operation and maintenance should be kept in a known set location and will be available upon request.

Inspection activities shall be performed as follows. Any problems that are found shall be repaired immediately.

The owner (or owners' association when applicable) responsible for maintenance of the SCM shall retain a qualified professional to perform annual inspections of the SCM. Annual inspection reports prepared by the qualified professional shall be provided to the owner and Guilford County Watershed Section for record file with notification of additional maintenance or repair required.



SCM Element	Potential Problem	How to remediate the problem
Entire SCM	Trash/debris is present	Remove the trash/debris
Perimeter of the wet detention basin	Areas of bare soil and/or erosive gullies have formed  Vegetation is too short or too long	Regrade the soil if necessary to remove the gully, and then plant a groundcover and water until it is established. Provide a one-time lime and fertilizer application Maintain vegetation at an appropriate height (approximately six inches)
The inlet device: Pipe or Swale	The pipe is clogged  The pipe is cracked or otherwise	Unclog the pipe, dispose of debris/sediment properly and off site  Replace the pipe
	Erosion is occurring in the swale	Regrade the swale if necessary to smooth it over and provide erosion control devices such as reinforced turf matting or riprap to avoid future problems with erosion
The forebay	Sediment has accumulated to a depth greater than the original design depth for sediment storage	Remove the sediment and dispose of it properly, where it will not cause impacts to streams or jurisdictional features or SCMs. Find the source of the sediment and remedy the problem if possible.
	Erosion has occurred	Provide additional erosion protection such as reinforced turf matting or riprap if needed to prevent future erosion problems
	Weeds are present	Remove weeds, preferably by hand. If pesticides must be used, wipe them on the plants rather than spraying
The vegetated shelf	Best professional practices show that pruning is needed to maintain optimal plant health	Prune according to best professional practices
	Plants are dead, diseased, or dying	Determine the source of the problem: soils, hydrology, disease, etc. Remedy the problem and replace plants. You may provide a one time fertilizer application to establish the vegetation if a soil test indicates it is necessary
	Weeds are present	Remove weeds, preferably by hand. If pesticides must be used, wipe them on the plants rather than spraying.
The main treatment area	Sediment has accumulated to a depth greater than the original design depth for sediment storage	Remove the sediment and dispose of it properly, where it will not cause impacts to streams, jurisdictional features or SCMs. Find the source of the sediment and remedy the problem if possible.



	Algal growth covers over 50% of the basin area.	Consult a professional to remove and control the algal growth
	Cattails, phragmites or other invasive plants cover 50% of the basin surface.	Remove the plants by wiping them with a pesticide, do not spray.
The embankment	Shrubs have started to grow on the embankment.	Remove shrubs immediately
	Evidence of muskrat or beaver activity is present	Use traps to remove muskrats and consult a professional to remove the beavers
	Large woody growth (trees) started to grow on the embankment	Consult a dam safety specialist to remove the tree
	Annual inspection by an appropriate professional, shows that the embankment needs repair	Make all needed repairs
Outlet device	Clogging has occurred	Clean out the outlet device. Dispose of the sediment properly, and off site.
	The outlet device is damaged	Repair or replace the outlet device
Receiving water	Erosion or other signs of damage have occurred at the outlet	Contact Guilford County Stormwater/Watershed Section

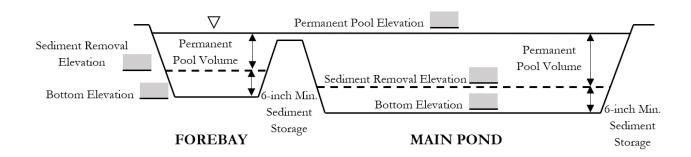
The measuring device used to determine the sediment elevation shall be such that it will give accurate depth reading and not readily penetrate into accumulated sediments.

When the permanent pool depth reads \_\_\_\_\_ ft in the main pond, the sediment shall be removed.

When the permanent pool depth reads \_\_\_\_\_ ft in the forebay, the sediment shall be removed

### **BASIN DIAGRAM**

(fill in the blanks)



Project: Date:



Guilford County Planning and Development Stormwater/Watershed

I acknowledge and agree by my signature below that I am responsible for the performance of the maintenance procedures listed above. I agree to notify Guilford County Planning and Development Department, Stormwater & Watershed Section of any problems with the system or prior to any changes to the system or responsible party.

Project Name:
SCM ID:
Property Owner:
Authorized Signer for Property Owner (Print Name & Title):
Address:
Phone:
Signature:
Date:
I,, a Notary Public for the State of
SEAL
My commission expires: