

Department of PUBLIC WORKS

MS4 PERMIT; PART III. A. 1. Structural Controls and Stormwater Collection Systems

Operation

Standard Operating Procedures Structural Control Inspections Swale Systems

These Standard Operating Procedures are for the Town of Lake Park's use in complying with the MS4 NPDES permit requirements of the inspection and maintenance of structural control inspections. The majority of the fully developed areas of the Town are drained by grassy swales in residential neighborhoods leading to storm sewers having outfalls either into South Lake or Lake Worth. The Town Code of Ordinances, Sec. 34-12. Maintenance of town swale areas, states, "It shall be the duty and obligation of all owners and occupants of real property within the town, to maintain all swale areas abutting, adjacent, or contiguous to their property, in a good and proper, neat and clean condition. This maintenance duty and obligation for owners and occupants of real property shall include, but not be limited to, sodding, grass cutting, proper landscape maintenance, tree pruning and maintenance, removal of debris, plant waste, garbage, or trash...."

Inspections:

Town swales are constantly monitored by the Code Compliance Officers for compliance with community standards.

Town swales are constantly monitored by the Sanitation Foreman for depressions and lost sod due to bulk trash collection activities.

Established swales are inspected once every three years, using the attached Structural Control Inspection Form. Inspections are conducted close to the recovery time of that swale (generally 72 hours after a significant rainfall event) to verify that the system still functions as intended.

Areas of standing water, some of which are associated with swale deficiencies, are shown on the hardcopy map submitted as Exhibit No. 8, "Existing Elevations & Standing Water", in the August, 1999, Engineering Investigation and Report, Comprehensive Storm Drainage Improvements Program report for the Town of Lake Park. These areas are regularly inspected to



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see if further deterioration is occurring which shall prompt a more immediate response over less impacted areas.

New swales are inspected annually for the first two years of operation.

If chronic problems are identified with a swale, it is inspected annually until the problem is resolved (two consecutive annual inspections without an issue).

Maintenance:

There are several maintenance activities that may be associated with swales. The appropriate activity is chosen to correspond to the reported condition. The following activities may be required:

- 1. Mow grass (Responsibility of Property Owners, their Contractors, and Town Grounds Maintenance staff, where applicable).
- 2. Remove trash and debris from system and dispose of properly (Responsibility of Property Owner and Town Sanitation Division on a weekly basis).
- Remove accumulated sediment from the inflow and/or outflow pipe and dispose of properly.
- 4. Eliminate any mosquito breeding habitats.
- 5. Repair any undercutting or piping around inflow and/or outflow structure.
- 6. Repair and re-establish any eroded areas on the bottom, side slopes, and/or near any structure.
- 7. Scrape, disc, or otherwise aerate the bottom of the swale to restore the infiltration capacity. Re-establish the surface to its final condition (seed, sod, etc...)



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Documentation:

- 1. The Community Development Department keeps files of Warnings and Notices of Violation written to property owners not properly maintaining their swales. Non-compliance cases are documented when brought before the Town's Special Magistrate.
- 2. The Streets and Stormwater Divisions respond to Work Orders generated by the Sanitation Division for the replacement of fill and sod at trash collection sites.
- 3. The extent of swale remediation projects are recorded in the Lake Park Storm Water Division time sheet with quantities of material removed and replaced noted.



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Grass Swale – Structural Control Inspection

Location Address:			Date:							
Inspection conducted	n conducteddays/hours after significant rainfall event (Must be within 72 hours).									
FUNCTION:										
Wet bottom?	YES NO									
Aquatic vegetation present?	YES NO									
Dead or dying grass on bottom?	YES NO									
Sediment accumulation?	YES NO									
Grading issue?	YES NO									
If YES, report to supervisor for furt	ther investigation or sched	dule for maintenance.								
EROSION:										
Vegetation on bottom or side slop	oes failing? YES	NO								
Any signs of erosion? YES	NO									
If YES, describe and schedule for n	naintenance:									
GENERAL:										
Any signs of damage from parking	g in swale? YES	NO								
Any fences or other objects that co	could obstruct flow into/th	rough the swale? YES NO								
If YES, schedule for maintenance.										
Any indications of illicit discharge	or illegal dumping?	YES NO								
If YES, describe and report to supe	ervisor for proper response	e:								

Lake Park Stormwater Division

Date	Truck #	Perso	onnel	Truck Hours: Start	Truck Hou Finished		Meter Read: Start	Meter Read: Finished
Line Footage		Footage Shot			Catchbasins Cleaned / Inspected			
Cubic Yards Dumpe			d:					
Project Location			Time Started	Time Finished	Job Descriptio	n		