

STRUCTURAL CONTROL MAINTENANCE CHECKLISTS

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Operation and Maintenance Inspection Report for Stormwater Management Ponds

(Adapted from Watershed Management Institute, Inc.)

Inspector Name _____ Project Location _____
 Inspection Date _____
 Stormwater Pond _____
 Normal Pool _____
 Normally Dry _____ Watershed _____

Inspection Items	Checked? Yes / No	Maintenance Needed? Yes / No	Inspection Frequency	Comments
Pond Components				
1. Embankment and Emergency spillway				
a. Adequate vegetation and ground cover			A	
b. Embankment erosion			A	
c. Animal burrows			A	
d. Unauthorized plantings			A	
e. Cracking, bulging, or sliding of dam				
i. Upstream face			A	
ii. Downstream face			A	
iii. At or beyond toe			A	
Upstream				
Downstream			A	
iv. Emergency spillway			A	
f. Pond, toe & chimney drains clear and functioning			A	
g. Leaks on downstream face			A	
h. Abutment protection or riprap failures			A	
i. Visual settlement or horizontal misalignment of top of dam			A	
j. Emergency spillway clear of debris			A	
k. Other (specify)			A	
2. Riser and principal spillway				
Type: Reinforced concrete _____				
Corrugated pipe _____				
Masonry _____				
a. Low flow orifice obstructed			A	
b. Low flow trash rack			A	
i. Debris removal necessary			A	
ii. Corrosion control			A	
c. Weir trash rack			A	
i. Debris removal necessary			A	
ii. Corrosion control			A	

Inspection Items		Checked? Yes / No	Maintenance Needed? Yes / No	Inspection Frequency	Comments
d.	Excessive sediment accumulation inside riser			A	
e.	Concrete/Masonry condition			A	
	i. Cracks or displacement				
	ii. Minor spalling (<1")			A	
	iii. Major spalling (rebars exposed)			A	
	iv. Joint failures			A	
	v. Water tightness			A	
f.	Metal pipe condition			A	
g.	Control valve			A	
	i. Operational/exercised				
	ii. Chained and locked			A	
h.	Pond drain valve			A	
	i. Operational/exercised			A	
	ii. Chained and locked			A	
i.	Outfall channels flowing			A	
j.	Other (specify)			A	
3.	Permanent pool (wet ponds)				
a.	Undesirable vegetative growth			M	
b.	Floating or floatable debris removal required			M	
c.	Visible pollution			M	
d.	High Water Marks			M	
e.	Shoreline problems			M	
f.	Other (specify)			M	
4.	Sediment forebays				
a.	Sedimentation Noted			M	
b.	Sediment removal when depth < 50% design depth			M	
5.	Dry pond areas				
a.	Vegetation adequate			M	
b.	Undesirable vegetative growth			M	
c.	Undesirable woody vegetation			M	
d.	Low flow channels clear of obstructions			M	
e.	Standing water or wet spots			M	
f.	Sediment and/or trash accumulation			M	
g.	Other (specify)			M	
6.	Condition of outfalls into pond				
a.	Riprap failures			A,S	
b.	Slope erosion			A,S	
c.	Storm drain pipes			A,S	
d.	Endwalls/headwalls			A,S	
e.	Other (specify)			A,S	

Inspection Items	Checked?	Maintenance	Inspection	Comments
	Yes / No	Needed?	Frequency	
7. Other				
a. Encroachments on ponds or easement area			M	
b. Complaints from residents (describe on back)			M	
c. Aesthetics			M	
i. Grass height				
ii. Graffiti removal necessary			M	
iii. Other (specify)			M	
d. Any public hazards (specify)			M	
e. Maintenance access			M	
8. Constructed wetland areas				
a. Vegetation healthy and growing			A	
b. Evidence of invasive species			A	
c. Excessive sedimentation in wetland area			A	

Inspection Frequency Key A=Annual, M=Monthly, S=After major storm

Summary

1. Inspectors Remarks: _____

2. Overall condition of Facility (Check one)
 _____ Acceptable
 _____ Unacceptable

3. Dates any maintenance must be completed by:

 Inspectors Signature

Operation and Maintenance Inspection Report for Filtration Facility

(Adapted from Watershed Management Institute, Inc.)

Inspector Name _____ Project Location _____
 Inspection Date _____
 Watershed _____
 As-built Plans available? _____

Inspection Items	Checked? Yes / No	Maintenance Needed? Yes / No	Inspection Frequency	Comments
1. Debris removal				
Adjacent area clear of debris			M	
Inlets and outlets clear of debris			M	
Filtration facility free of debris			M	
2. Vegetation				
Adjacent area stabilized			M	
Grass mowed			M	
Any evidence of erosion			M	
3. Oil and grease				
Any evidence of filter clogging			M	
4. Water retention where required				
Water holding chambers at normal pool			M	
No evidence of leakage			M	
5. Sediment deposition				
Filtration chamber clean of sediments			A	
Water chambers not more than ½ full of sediments			A	
6. Structural components				
Any evidence of structural deterioration			A	
Grates in good condition			A	
Any evidence of spalling or cracking of structural parts			A	
7. Outlets/overflow spillway				
Good condition (no need for repair)			A	
Any evidence of erosion			A	
8. Overall function of facility				
Any evidence of flow bypassing facility			A	
Any noticeable odors outside of facility			A	

Inspection Items	Checked? Yes / No	Maintenance Needed? Yes / No	Inspection Frequency	Comments
9. Pump (Where applicable) Catalog cuts and wiring diagram for pump available			A	
Waterproof conduits for wiring appear to be intact			A	
Panel box is well marked			A	
Any evidence of pump failure (excess water in pump well, etc.)			A	

Inspection Frequency Key A=Annual, M=Monthly, S=After major storm

Necessary Action:

If any of the items above were answered Yes for “Maintenance Needed”, a time frame needs to be established for repair or correction.

No action necessary. Continue routine inspections.

Correct noted facility deficiencies by (date) _____

Facility repairs were previously indicated and completed. Site reinspection is necessary to verify corrections or improvements.

Site reinspection completed on (date) _____

Site reinspection was satisfactory.

Next routine inspection is scheduled for approximately (date): _____

Inspectors Signature

Operation and Maintenance Inspection Report for Infiltration Trenches

(Adapted from Watershed Management Institute, Inc.)

Inspector Name _____ Project Location _____
 Inspection Date _____
 Watershed _____
 As-built Plans available? _____

Inspection Items	Checked? Yes / No	Maintenance Needed? Yes / No	Inspection Frequency	Comments
1. Debris removal				
Trench surface clear of debris			M	
Inlets clear of debris			M	
Inflow pipes clear of debris			M	
Overflow spillway clear of debris			M	
2. Sediment traps, forebays, or pretreatment swales				
Obviously trapping sediment			A	
Greater than 50% of original storage volume remaining			A	
3. Vegetation				
Mowing done when necessary			M	
Fertilized per specification			M	
Any evidence of erosion			M	
Contributing drainage area stabilized			M	
4. Dewatering				
Trench dewaterers between storms			M	
5. Sediment removal of trench				
Any evidence of sedimentation in trench			A	
Does sediment accumulation currently require removal			A	
6. Inlets				
Good condition			A	
Any evidence of erosion			A	
7. Outlets/overflow spillway				
Good condition (no need for repair)			A	
Any evidence of erosion			A	
8. Aggregate repairs				
Surface of aggregate clean			A	
Top layer of stone in need of replacement			A	
Trench in need of rehabilitation			A	

Inspection Items	Checked? Yes / No	Maintenance Needed? Yes / No	Inspection Frequency	Comments
9. Vegetated surface				
Evidence of erosion present			M	
Perforated inlet functioning adequately			M	
Does water stand on vegetated surface			M	
Does good vegetative cover exist			M	
10. Overall function of facility				
Any evidence of flow bypassing facility			S	

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Necessary Action:

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No action necessary. Continue routine inspections.

Correct noted facility deficiencies by (date) _____

Facility repairs were previously indicated and completed. Site reinspection is necessary to verify corrections or improvements.

Site reinspection completed on (date) _____

Site reinspection was satisfactory.

Next routine inspection is scheduled for approximately (date): _____

Inspectors Signature

Operation and Maintenance Inspection Report for Enhanced Swales / Grass Channels / Filter Strips

(Adapted from Watershed Management Institute, Inc.)

Inspector Name _____ Project Location _____
 Inspection Date _____
 Watershed _____
 As-built Plans available? _____

Inspection Items	Checked? Yes / No	Maintenance Needed? Yes / No	Inspection Frequency	Comments
1. Debris removal				
Facility and adjacent area clear of debris			M	
Inlets and outlets clear of debris			M	
Any dumping of yard wastes into facility			M	
Has litter (branches, etc.) been removed			M	
2. Vegetation				
Adjacent area stabilized			M	
Grass mowed			M	
Plant height not less than design water depth			M	
Fertilized per specifications			M	
Any evidence of erosion			M	
Is plant composition according to approved plans			M	
Any unauthorized or inappropriate plantings			M	
Any dead or diseased plants			M	
Any evidence of plant stress from inadequate watering			M	
Any evidence of deficient stakes or wires			M	
3. Oil and grease				
Any evidence of filter clogging			M	
4. Dewatering				
Facility dewaterers between storms			M	
5. Check dams/energy dissipators/sumps				
Any evidence of sedimentation buildup			A,S	
Are sumps greater than 50% full of sediment			A,S	
Any evidence of erosion at downstream toe of drop structures			A,S	

Inspection Items	Checked? Yes / No	Maintenance Needed? Yes / No	Inspection Frequency	Comments
6. Sediment deposition Swale clean of sediments			A	
Sediments should not be > than 20% of swale design depth			A	
7. Outlets/overflow spillway Good condition (no need for repair)			A,S	
Any evidence of erosion			A,S	
Any evidence of blockages			A,S	
8. Integrity of facility Has facility been blocked or filled inappropriately			A	
9. Bioretention Planting Soil Any evidence of planting soil erosion			A	
10. Organic Layer Mulch covers entire area (NO voids) and to specified thickness			A	
Mulch is in good condition			A	

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Facility repairs were previously indicated and completed. Site reinspection is necessary to verify corrections or improvements.

Site reinspection completed on (date) _____

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Inspectors Signature