

**Actions to be Taken:**

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## Stormwater/Wetland Pond Construction Inspection Checklist

Location:  
Site Status:

Date:

Time:

Inspector:

| Construction Sequence   | Satisfactory/<br>Unsatisfactory | Comments |
|---|---------------------------------|----------|
| <b>Pre-Construction/Materials and Equipment</b>   |                                 |          |
| Pre-construction meeting  |                                 |          |
| Pipe and appurtenances onsite prior to construction and dimensions checked  |                                 |          |
| 1. Material (including protective coating, if specified)  |                                 |          |
| 2. Diameter   |                                 |          |
| 3. Dimensions of metal riser or pre-cast concrete outlet structure  |                                 |          |
| 4. Required dimensions between water control structures (orifices, weirs, etc.) are in accordance with approved plans |                                 |          |
| 5. Barrel stub for prefabricated pipe structures at proper angle for design barrel slope                              |                                 |          |
| 6. Number and dimensions of prefabricated anti-seep collars   |                                 |          |
| 7. Watertight connectors and gaskets  |                                 |          |
| 8. Outlet drain valve   |                                 |          |
| Project benchmark near pond site  |                                 |          |
| Equipment for temporary de-watering   |                                 |          |

| Construction Sequence   | Satisfactory/<br>Unsatisfactory | Comments |
|---|---------------------------------|----------|
| <b>2. Subgrade Preparation</b>  |                                 |          |
| Area beneath embankment stripped of all vegetation, topsoil, and organic matter   |                                 |          |
| <b>3. Pipe Spillway Installation</b>  |                                 |          |
| Method of installation detailed on plans  |                                 |          |
| <b>A. Bed Preparation</b>   |                                 |          |
| Installation trench excavated with specified side slopes  |                                 |          |
| Stable, uniform, dry subgrade of relatively impervious material (if subgrade is wet, contractor shall have defined steps before proceeding with installation) |                                 |          |
| Inverts at proper elevation and grade   |                                 |          |
| <b>B. Pipe Placement</b>  |                                 |          |
| <b>Metal/plastic pipe</b>   |                                 |          |
| 1. Watertight connectors and gaskets properly installed   |                                 |          |
| 2. Anti-seep collars properly spaced and having watertight connections to pipe  |                                 |          |
| 3. Backfill placed and tamped by hand under "haunches" of pipe  |                                 |          |
| 4. Remaining backfill placed in max. 8inch lifts using small power tamping equipment until 2 feet cover over pipe is reached                                  |                                 |          |

| Construction Sequence   | Satisfactory/<br>Unsatisfactory | Comments |
|---|---------------------------------|----------|
| <b>3. Pipe Spillway Installation</b>  |                                 |          |
| Concrete pipe   |                                 |          |
| 1. Pipe set on blocks or concrete slab for pouring of low cradle  |                                 |          |
| 2. Pipe installed with rubber gasket joints with no spalling in gasket interface area   |                                 |          |
| 3. Excavation for lower half of anti-seep collar(s) with reinforcing steel set  |                                 |          |
| 4. Entire area where anti-seep collar(s) will come in contact with pipe coated with mastic or other approved waterproof sealant |                                 |          |
| 5. Low cradle and bottom half of anti-seep collar installed as monolithic pour and of approved mix                              |                                 |          |
| 6. Upper half of anti-seep collar(s) formed with reinforcing steel  |                                 |          |
| 7. Concrete for collar of an approved mix and vibrated into place (protected from freezing while curing, if necessary)          |                                 |          |
| 8. Forms stripped and collar inspected for honeycomb prior to backfilling. Parge if necessary                                   |                                 |          |
| <b>C. Backfilling</b>   |                                 |          |
| Fill placed in maximum 8 inch lifts   |                                 |          |
| Backfill taken 2 feet above top of anti-seep collar elevation before traversing with heavy equipment                            |                                 |          |

| Construction Sequence  | Satisfactory/<br>Unsatisfactory | Comments |
|--|---------------------------------|----------|
| <b>4. Riser/Outlet Structure Installation</b>  |                                 |          |
| Riser located within embankment  |                                 |          |
| <b>A. Metal Riser</b>  |                                 |          |
| Riser base excavated or formed on stable subgrade to design dimensions   |                                 |          |
| Set on blocks to design elevations and plumbed   |                                 |          |
| Reinforcing bars placed at right angles and projecting into side of riser  |                                 |          |
| Concrete poured so as to fill inside of riser to invert of barrel  |                                 |          |
| <b>B. Pre-cast concrete structure</b>  |                                 |          |
| Dry and stable subgrade  |                                 |          |
| Riser base set to design elevation   |                                 |          |
| If more than one section, no spalling in gasket interface area; gasket or approved caulking material placed securely |                                 |          |
| Watertight and structurally sound collar or gasket joint where structure connects to pipe spillway                   |                                 |          |
| <b>C. Poured concrete structure</b>  |                                 |          |
| Footing excavated or formed on stable subgrade, to design dimensions with reinforcing steel set                      |                                 |          |
| Structure formed to design dimensions, with reinforcing steel set as per plan  |                                 |          |
| Concrete of an approved mix and vibrated into place (protected from freezing while curing, if necessary)             |                                 |          |
| Forms stripped & inspected for "honeycomb" prior to backfilling; pare if necessary                                   |                                 |          |

| Construction Sequence   | Satisfactory/<br>Unsatisfactory | Comments |
|---|---------------------------------|----------|
| <b>5. Embankment Construction</b>   |                                 |          |
| Fill material   |                                 |          |
| Compaction  |                                 |          |
| Embankment  |                                 |          |
| 1. Fill placed in specified lifts and compacted with appropriate equipment              |                                 |          |
| 2. Constructed to design cross-section, side slopes and top width                       |                                 |          |
| 3. Constructed to design elevations plus allowance for settlement                       |                                 |          |
| <b>6. Impounded Area Construction</b>   |                                 |          |
| Excavated/graded area to design contours and side slopes                                |                                 |          |
| Inlet pipe have adequate outfall protection   |                                 |          |
| Forebay(s)  |                                 |          |
| Pond Benches  |                                 |          |
| <b>7. Earth Emergency Spillway Construction</b>   |                                 |          |
| Spillway located in cut or structurally stabilized with riprap, gabions, concrete, etc. |                                 |          |
| Excavated to proper cross-section, side slopes and bottom width                         |                                 |          |
| Entrance channel, crest, and exit channel constructed to design grades and elevations   |                                 |          |

| Construction Sequence   | Satisfactory/<br>Unsatisfactory | Comments |
|---|---------------------------------|----------|
| 8. Outlet Protection  |                                 |          |
| A. End Section  |                                 |          |
| Securely in place and properly backfilled   |                                 |          |
| B. Endwall  |                                 |          |
| Footing excavated or formed on stable subgrade, to design dimensions and reinforcing steel set, if required |                                 |          |
| Endwall formed to design dimensions with reinforcing steel set as per plan                                  |                                 |          |
| Concrete of an approved mix and vibrated into place (protected from freezing, if necessary)                 |                                 |          |
| Forms stripped and structure inspected for "honeycomb" prior to backfilling; pare if necessary              |                                 |          |
| C. Riprap Apron / channel   |                                 |          |
| Apron / channel excavated to design cross-section with proper transition to existing ground                 |                                 |          |
| Filter fabric in place  |                                 |          |
| Stone sized as per plan and uniformly placed at the thickness specified                                     |                                 |          |
| 9. Vegetative Stabilization   |                                 |          |
| Approved seed mixture or sod  |                                 |          |
| Proper surface preparation and required soil amendments   |                                 |          |
| Excelsior mat or other stabilization, as per plan   |                                 |          |

| Construction Sequence   | Satisfactory/<br>Unsatisfactory | Comments |
|---|---------------------------------|----------|
| 10. Miscellaneous   |                                 |          |
| Drain for ponds having a permanent pool   |                                 |          |
| Trash rack / anti-vortex device secured to outlet structure   |                                 |          |
| Trash protection for low flow pipes, orifice, etc.  |                                 |          |
| Fencing (when required)   |                                 |          |
| Access road   |                                 |          |
| Set aside for clean out maintenance   |                                 |          |
| 11. Stormwater Wetlands   |                                 |          |
| Adequate water balance  |                                 |          |
| Variety of depth zones present  |                                 |          |
| Approved pondscape plan in place  |                                 |          |
| Reinforcement budget for additional plantings   |                                 |          |
| Plant materials ordered 6 months prior to construction  |                                 |          |
| Construction planned to allow for adequate planting and establishment of plant community (April-June planting window) |                                 |          |
| Wetland buffer area preserved to maximum extent possible  |                                 |          |

**Comments:**

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**Actions to be Taken:**

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## Sand/Organic Filter System Construction Inspection Checklist

Project:  
 Location:  
 Site Status:

Date:

Time:

Inspector:

| CONSTRUCTION SEQUENCE   | SATISFACTORY / UNSATISFACTORY | COMMENTS |
|---|-------------------------------|----------|
| <b>1. Pre-construction</b>                                    |                               |          |
| Pre-construction meeting                                      |                               |          |
| Runoff diverted   |                               |          |
| Facility area cleared   |                               |          |
| Facility location staked out                                  |                               |          |
| <b>2. Excavation</b>  |                               |          |
| Size and location   |                               |          |
| Side slopes stable  |                               |          |
| Foundation cleared of debris                                  |                               |          |
| If designed as exfilter, excavation does not compact subsoils |                               |          |
| Foundation area compacted                                     |                               |          |
| <b>3. Structural Components</b>                               |                               |          |
| Dimensions and materials                                      |                               |          |
| Forms adequately sized  |                               |          |
| Concrete meets standards                                      |                               |          |
| Prefabricated joints sealed                                   |                               |          |
| Underdrains (size, materials)                                 |                               |          |
|   |                               |          |

| CONSTRUCTION SEQUENCE   | SATISFACTORY / UNSATISFACTORY | COMMENTS |
|---|-------------------------------|----------|
| <b>4. Completed Facility Components</b>   |                               |          |
| 24 hour water filled test   |                               |          |
| Contributing area stabilized  |                               |          |
| Filter material per specification   |                               |          |
| Underdrains installed to grade  |                               |          |
| Flow diversion structure properly installed                                       |                               |          |
| Pretreatment devices properly installed   |                               |          |
| Level overflow weirs, multiple orifices, distribution slots                       |                               |          |
| <b>5. Final Inspection</b>  |                               |          |
| Dimensions  |                               |          |
| Surface completely level  |                               |          |
| Structural components   |                               |          |
| Proper outlet   |                               |          |
| Ensure that site is properly stabilized before flow is directed to the structure. |                               |          |



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| CONSTRUCTION SEQUENCE   | SATISFACTORY / UNSATISFACTORY | COMMENTS |
|---|-------------------------------|----------|
| <b>1. Pre-construction</b>                                    |                               |          |
| Pre-construction meeting                                      |                               |          |
| Runoff diverted   |                               |          |
| Facility area cleared   |                               |          |
| Facility location staked out                                  |                               |          |
| <b>2. Excavation</b>  |                               |          |
| Size and location   |                               |          |
| Side slopes stable  |                               |          |
| Foundation cleared of debris                                  |                               |          |
| If designed as exfilter, excavation does not compact subsoils |                               |          |
| Foundation area compacted                                     |                               |          |
| <b>3. Structural Components</b>                               |                               |          |
| Dimensions and materials                                      |                               |          |
| Forms adequately sized  |                               |          |
| Concrete meets standards                                      |                               |          |
| Prefabricated joints sealed                                   |                               |          |
| Underdrains (size, materials)                                 |                               |          |
|   |                               |          |

| CONSTRUCTION SEQUENCE   | SATISFACTORY / UNSATISFACTORY | COMMENTS |
|---|-------------------------------|----------|
| <b>4. Completed Facility Components</b>   |                               |          |
| 24 hour water filled test   |                               |          |
| Contributing area stabilized  |                               |          |
| Filter material per specification   |                               |          |
| Underdrains installed to grade  |                               |          |
| Flow diversion structure properly installed                                       |                               |          |
| Pretreatment devices properly installed   |                               |          |
| Level overflow weirs, multiple orifices, distribution slots                       |                               |          |
| <b>5. Final Inspection</b>  |                               |          |
| Dimensions  |                               |          |
| Surface completely level  |                               |          |
| Structural components   |                               |          |
| Proper outlet   |                               |          |
| Ensure that site is properly stabilized before flow is directed to the structure. |                               |          |

