

BAYMEADOWS SOUTHEASTERN PORTION OF THE MASTER LAKE SYSTEM CRITICAL DRAINAGE COMPONENTS AND OPERATION AND MAINTENANCE GUIDELINES

Pond 2:

- MES #1, Keep the Baypointe inflow MES clear of vegetative growth with monthly inspections
- CS #1, Headwall / Weir (Photos 1 and 2) is not functioning. Structure needs to be retrofitted to original design including reconnecting structure to discharge pipe. This connection is offsite on private property and should be rebuilt. Pond 2 to the north appears to have reasonable freeboard; however, drainage into and around pond 2 from the north and east has not been evaluated as part of this effort.
- HW #1, Culvert is silted in. Recommend removing silt from culvert and ditch to allow for positive discharge.
- Ditch is silted in. The excess debris and vegetation should be removed.
- HW #2 (Photo 3) needs to be inspected for silt and debris. Any blockage needs to be removed.
- CS #1, the ditch and HW #2 needs monthly inspections and debris removal and corrective work performed, as needed.

Pond 1:

- CMP #1, has no end treatment and has been crushed (Photo 4) . This culvert is offsite on private property and needs to be replaced along with a proper end treatment constructed.
- MES #2, Keep the Baypointe inflow MES clear of vegetative growth with monthly inspections.
- CS #2, The current structure has a grate elevation at 25.0 and had 5 – inches water above the grate during our inspection (Photo 5). The CS will be modified to include a 3' wide weir at elevation 24 or possibly 23.5 to increase storage in pond 1. The pre-existing pipe crossing the golf course was at invert elevation 24.8 and silted in to elevation 25. The lowered NWL has been discussed with Elmedin Strikovic with GoldOller.
- MES #3, Keep the Baypointe inflow MES clear of vegetative growth with monthly inspections.
- CMP #1 replacement into pond 1 needs monthly inspections and debris removal and corrective work performed, as needed.

Pond 12-1:

- DD #12-1 and CS #12-1, Keep drawdown and control structure clear of vegetation with monthly inspections. Excavate 12- inches below bleeddown as needed to ensure proper function.
- DBI 1 and 2, Keep surrounding area mowed and throats to DBIs clear.

Pond 9:

- FL #9, appears clear with no issues
- CS #9, The CS was submerged due to the grate being clogged (Photos 6-9). All vegetation and silt needs to be removed. An exterior baffle / skimmer would help limit debris from clogging the grate. Weekly debris removal is required. A weir could be constructed in the side of the CS below the grate to increase Pond 9 storage volume and reduce the pond stage if flooding is a concern.
- HW #9s, The ditch between the Headwalls is choked with fallen trees and debris (Photos 10 and 11). Entire ditch should be cleaned to ensure efficient flow.

- CS #9 should be inspected weekly and cleaned. HW's and ditch needs semiannual inspections and debris removal and corrective work performed, as needed.

Pond 4:

- RCP #4 (Photo 12), There is considerable flow discharging into HW #9 but little apparent flow discharging from RCP #4 to Pond 4. Culvert between HW #9 and RCP #4 should be inspected to determine how the water is flowing.
- Culvert between HW #9 and RCP #4 needs semiannual inspections and debris removal and corrective work performed, as needed.

Recommended Stormwater Maintenance – Best Management Practices (BMPs)

Aboveground Maintenance

Aboveground (BMPs) can vary depending on the needs of the site, and each requires a different type of stormwater maintenance. With a proper understanding of the system on the site, a proactive maintenance plan for any aboveground system will include:

- Inspection of all structures
- Removal of trash and debris
- Sediment control
- Structural maintenance (stabilizing poor coverage and erosion)
- Vegetation management (mowing grass, removing nuisance or invasive growth, managing beneficial species)

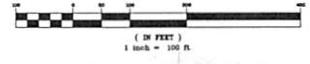
Underground Maintenance

Underground systems also require regular maintenance to ensure proper function. Common underground maintenance plans include:

- Inspection of sumps and structures
- TV inspection of pipes
- Sediment volume assessment
- Removal of sediment, trash, and debris
- Vacuuming (Vactor) and high-pressure jetting
- Documentation for any structural deficiencies or sinkholes

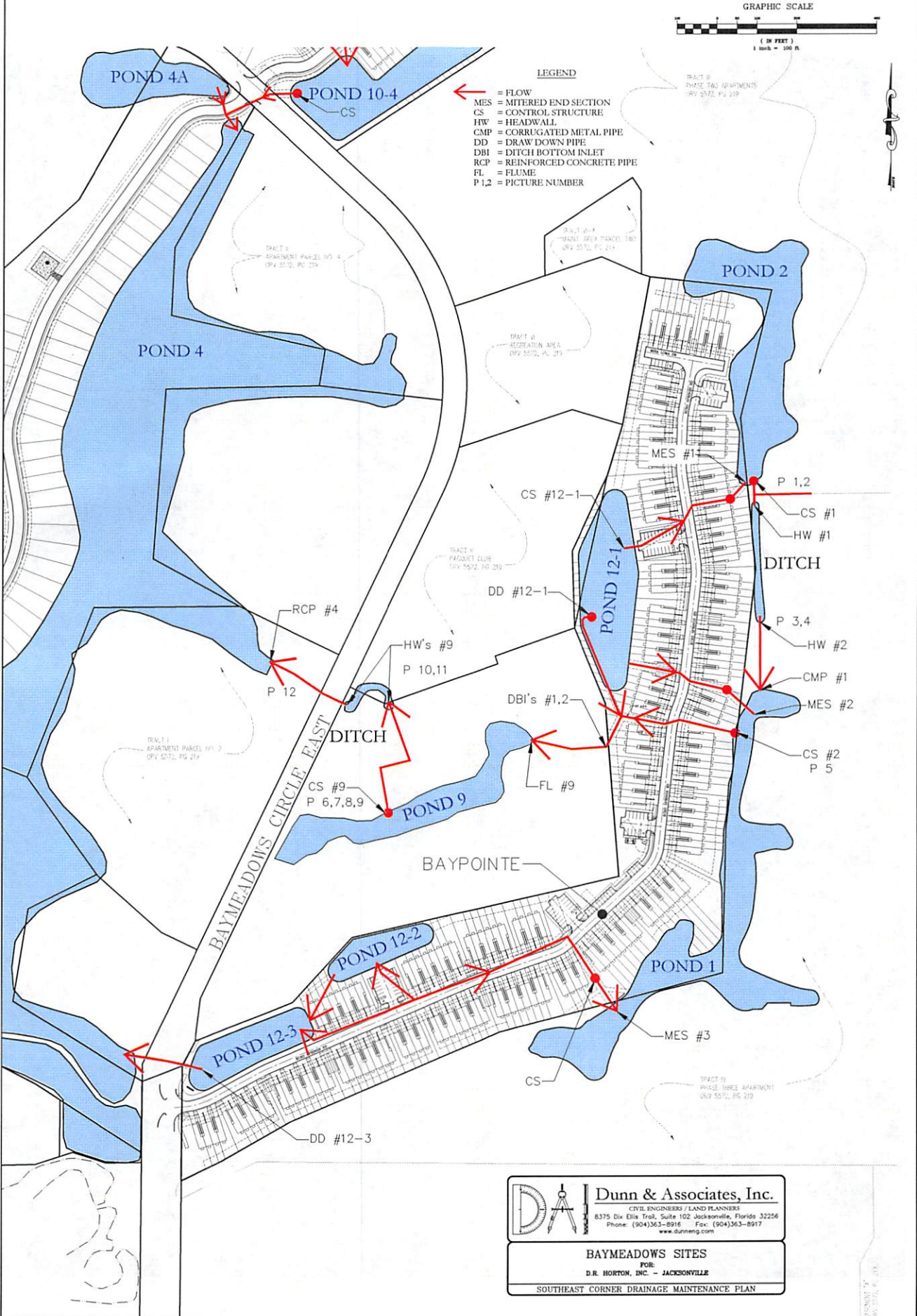
Ongoing maintenance is critical to the performance of every stormwater system. Without regular maintenance, the system will eventually fail due to buildup and structural issues, and routine upkeep can prevent costly rehabilitative and restorative repairs.

GRAPHIC SCALE



LEGEND

- ← = FLOW
- MES = MITERED END SECTION
- CS = CONTROL STRUCTURE
- HW = HEADWALL
- CMP = CORRUGATED METAL PIPE
- DD = DRAW DOWN PIPE
- DBI = DITCH BOTTOM INLET
- RCP = REINFORCED CONCRETE PIPE
- FL = FLUME
- P 1,2 = PICTURE NUMBER



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SOUTHEAST CORNER DRAINAGE MAINTENANCE PLAN

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2



4



1



3



6



8



5



7



10



12



9



11

