Indigo on the Ashley Bathymetry Mapping

Conducted by High Water Pond Management LLC

Date: 03/21/2024

Location: North Charleston, SC









Each contour line indicates a 1ft change in depth with the darker colors representing the deepest readings.



Number in red indicate the thickness of the sediment deposit layer in ft.

The shaded color indicates the bottom hardness. This whole pond is on the soft side indicating sediment deposits throughout the pond.



Dredging Projections



Areas shaded orange could use dredging.

The number noted in red text is the number of cubic yards to be removed from the area.

This would be my recommendation for maintenance dredging. Removing a total of 395 yards of material.

Dredging Cost Breakdown

Maintenance Dredging: Remove 395 yards of material. Eco bags can be used and deposited in the common area around the pond to the right of the inflow creek to cut down on the cost of hauling material off site.

Estimated Cost Dredging: \$39,500.00-\$65,250.00

Sediment Disposal if moved off site \$6,000.00-\$8500.00

Pond Notes.

Significant shoreline erosion is present along the entire east bank of the pond and should be addressed to reduce sediment washing into the water. If left unaddressed, this will degrade the pond's appearance and lead to increased maintenance costs over time.

At a minimum, I recommend adjusting mowing practices to establish a vegetated buffer around the pond, ideally between 2 to 6 feet wide—the larger, the better. This buffer will help slow runoff and stabilize the soil, reducing further erosion.

Given the severity of the erosion, I also recommend implementing a **coir log erosion repair**. This process involves staking biodegradable coconut fiber logs along the shoreline, backfilling with soil, and planting one wetland plant per foot. This method will reinforce the shoreline, allowing native vegetation to establish and create a long-term, sustainable solution for erosion control. We will provide you with an estimate for this service.