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JULY 26, 2023

Evergreen Property Owners Association
4225 SW Bimini Circle South
Palm City, FL 34990

**EVERGREEN STORM WATER SYSTEM PERMIT NO. 43-0069-S,
PRELIMINARY EVALUATION**

Dear Board of Directors

This stormwater system which was originally designed in 1988 has gone through a couple permit modifications. I have gone back through the permit documents and have found that back bone of the system has not changed.

This system is mostly a swale driven system with a series of control points that step the water elevations down from a west control elevation of 13.5' NGVD to a final control elevation of 3' NGVD.

The system has two permitted control strictures, both with control bleeder openings at Elev. 3' NGVD and both with a large overflow weir at Elev. 5'6" NGVD. It also includes a permitted large slough area which is needed for storm water storage. These are on the eastern section of the property at the lowest levels and discharge into the C-23.

Using the permit documents, surveys, as-bults, existing as well as the original topographic data I have been able to put together a map and spread sheet matrix that will assist us with restoring of this drainage system back to the original design.

While I complete this survey, I would like to address the first and most important issue. The Existing Control structures have been improperly modified. The Swales to Control Structure #2 have been filled in. They are clearly identified on the 1987 topographic survey. These swales to

Control Structure #2 currently do not exist and Control structure #2 is nonfunctional. The slough areas also identified on the permits are no longer present they have been allowed to become overgrown with invasive vegetation with some areas partially filled in. It appears that Control Structure #1 has been improperly modified to try to compensate for the loss of Control Structure #2.

With the condition of these control structures, swales, and sloughs in this eastern and lowest part of the property. It is possible that the dike failure of 2021 can happen again.

Note that the interior lakes and lake interconnect swales are draining but not as designed. For example, the northwest lake is being held 2' +/- above its control. The flow downstream has bypassed Control Structure #3 (see photo attached).

The stormwater from the roads and perimeter properties all enters the system via multiple drainage easements between the homes and into the lake system which drains east to the two control structures at the C-23 discharges.

Many of these easements have been planted over the years. Many of these easements have been piped. If the correct sized pipe was used and installed at the correct elevation this would have been a worthwhile improvement. Most all "improvements" that have been done never took into consideration the planned grade therefore they must be redone.

Some of these easements and road swales can be done now even with the downstream issues. However, these easements and road swale improvements must not get too far ahead of the pond interconnect, slough, and C-23 outfall improvements. Attached I have included a map and estimated cost to restore these sloughs, swales and control structures to their original condition.

I am hoping to be getting with the BOD in the near future to review some of my findings and concerns.

Sincerely,

Timothy R Taylor

Timothy R Taylor, President

Sunshine Land Design Inc.

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