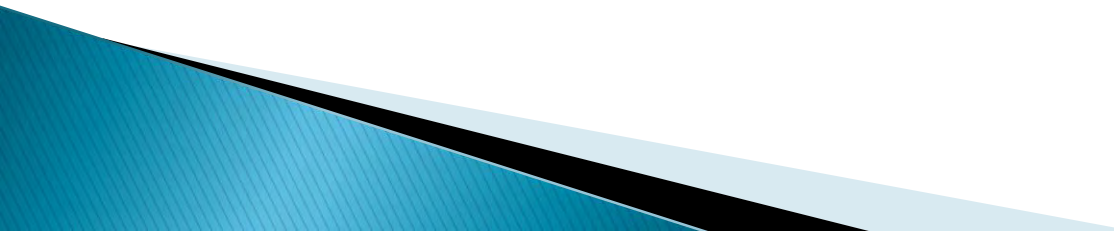


Harbor Ridge of Palm Harbor HOA BOD Project Status update Erosion Control Project October 2020

Updated – S. Bermudez & H. Archie 10.22.20
Note: Updates depicted in **red**

Erosion Control Project

Background

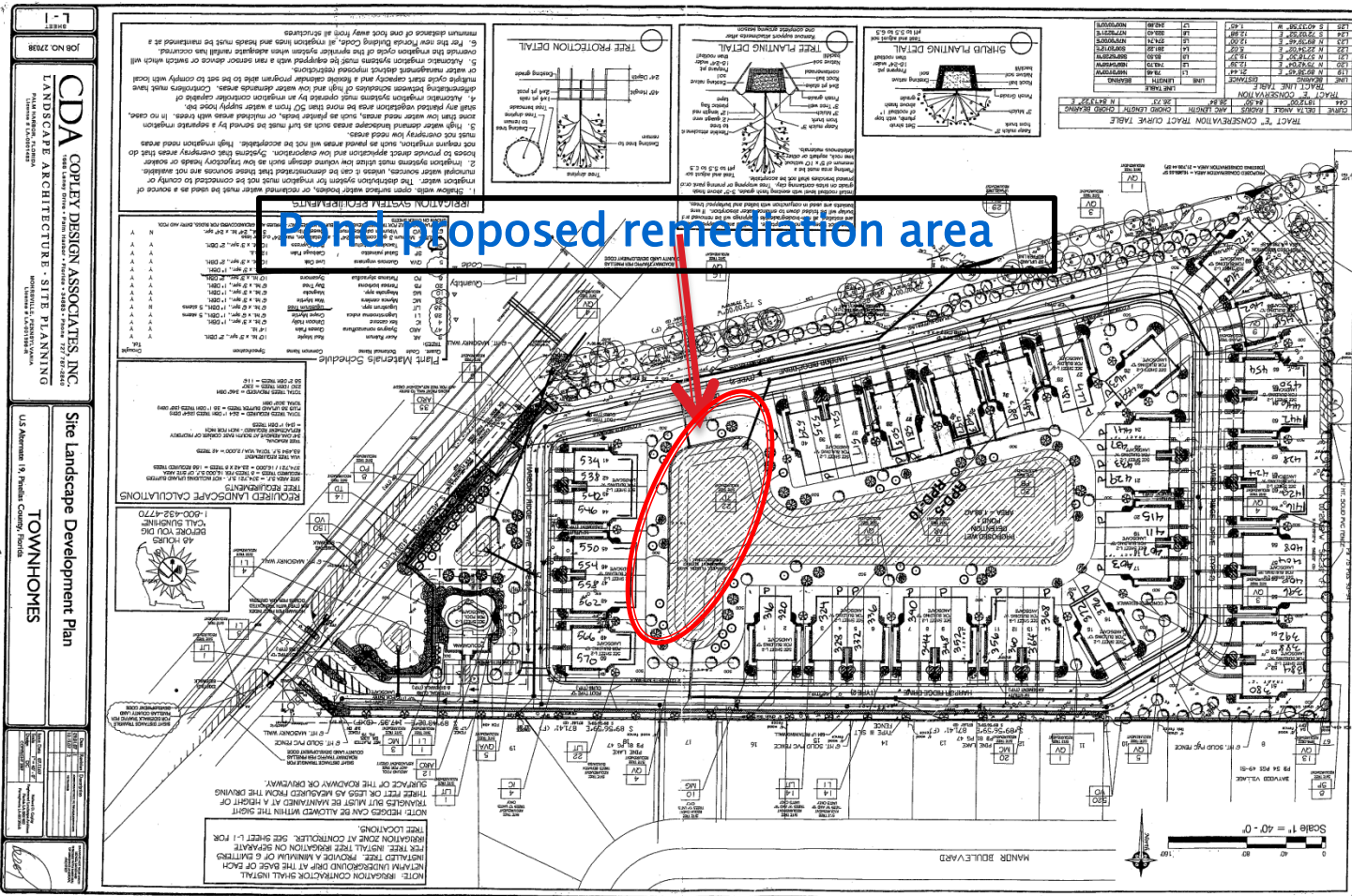
- ▶ On Feb 2017 a Reserve Funding Study was commissioned to define the future financial needs (30 yrs.) for the upkeep of the community major components. The calculations included a 2.50% Inflation rate over the course of the study.
 - ▶ At the time of the study, some erosion was noted at the large pond (1196' perimeter), recommending a remediation of the shoreline on 2020.
 - ▶ The Funding Reserve Analysis is available to all homeowners at the Harbor Ridge of Palm Harbor HOA website (harborridge.org)
- 

Erosion Control Project

Current Situation – October Update

- ▶ Two Suppliers were invited to quote the Pond bank erosion remediation
 - Solitude Lake Management
 - Gulf Coast Lakes & Wetlands
- ▶ Information related to the original shoreline repair has been requested to Developer – Pioneer provided requested information. It has been further clarified no previous repair had taken place – exposed liner is part of the original construction of Intake – Outlet See Erosion Control Project - next slide - **Evaluating current condition of the filter system to ensure compliance to standards**
- ▶ During the inspections, both engineering firms suggested the erosion be driven by:
 - Wind (on the east side of the pond)
 - Water run off resulting from “buildings” around the pond

Erosion Control Project



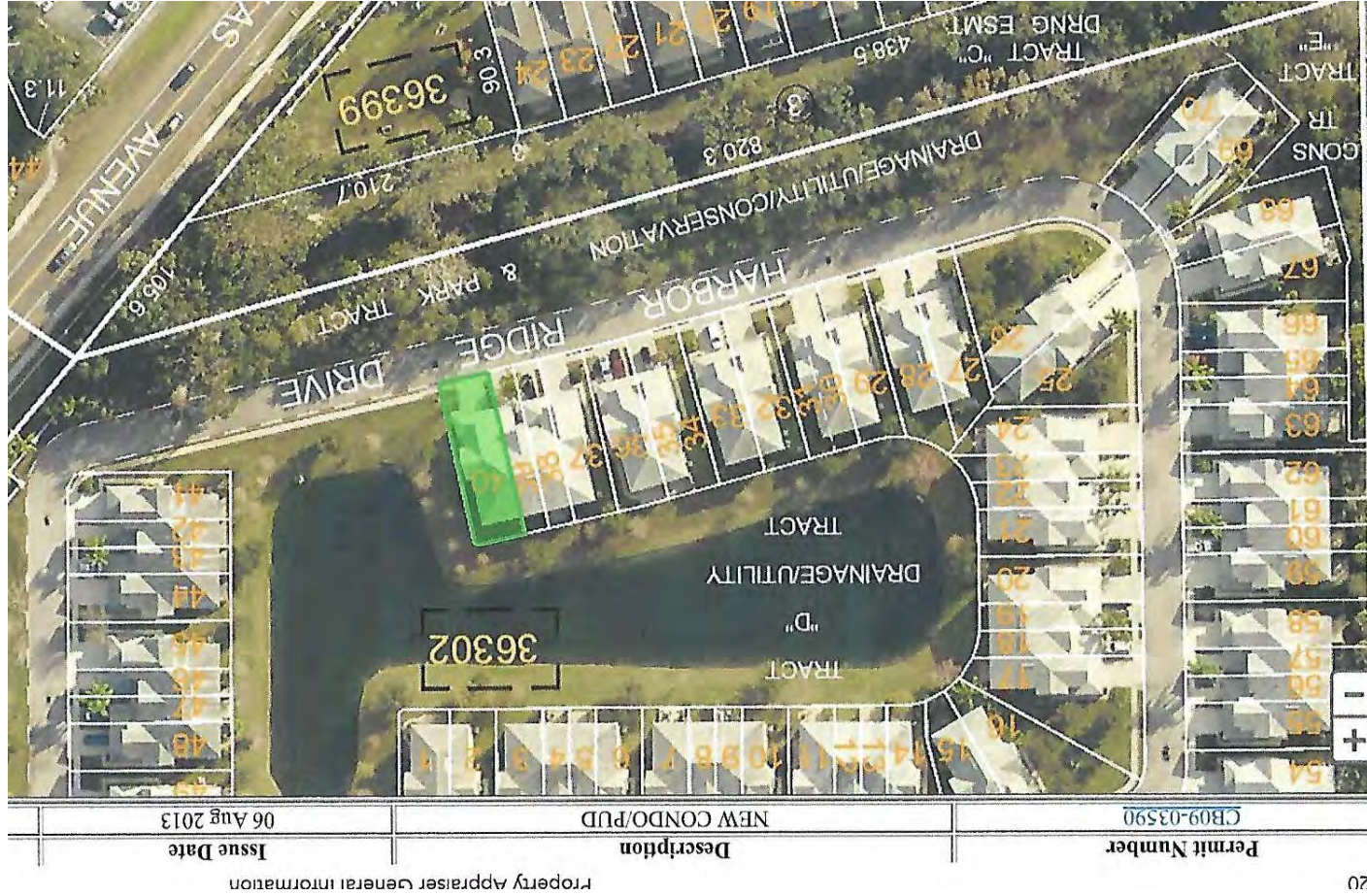
Erosion Control Project

Project Plan

- ▶ Current members supporting project
 - Sonia Bermudez
 - Steve Bove
 - Nancy Hawkins
 - Don Donato
 - Dan McNeill
 - Herman Archie
 - Jeff Jewett
- ✓ Legal consultation to define responsibility for gutters & drains installation cost
- ✓ Request Quotes to address Pond erosion
- ✓ Addressed need for gutters - Gutters will not remediate erosion – details to be included in report
- ✓ Addressed need for piping to direct water to pond – County regulation prohibits gutters be directly connected to pond
- ▶ Complete Engineering assessment – Report received as planned – Currently assessing filter system compliance to standards
- ▶ Evaluate Engineering recommendations – Board members & support team – In progress
- ▶ Request quotes to Suppliers - RFQ's sent to suppliers – On site Pre-bid meeting on 10/20/20
- ▶ Review project funding requirements – Schedule Special Meeting – Planned for November
- ▶ BOD vote on project execution
- ▶ Project execution

Erosion Control Project

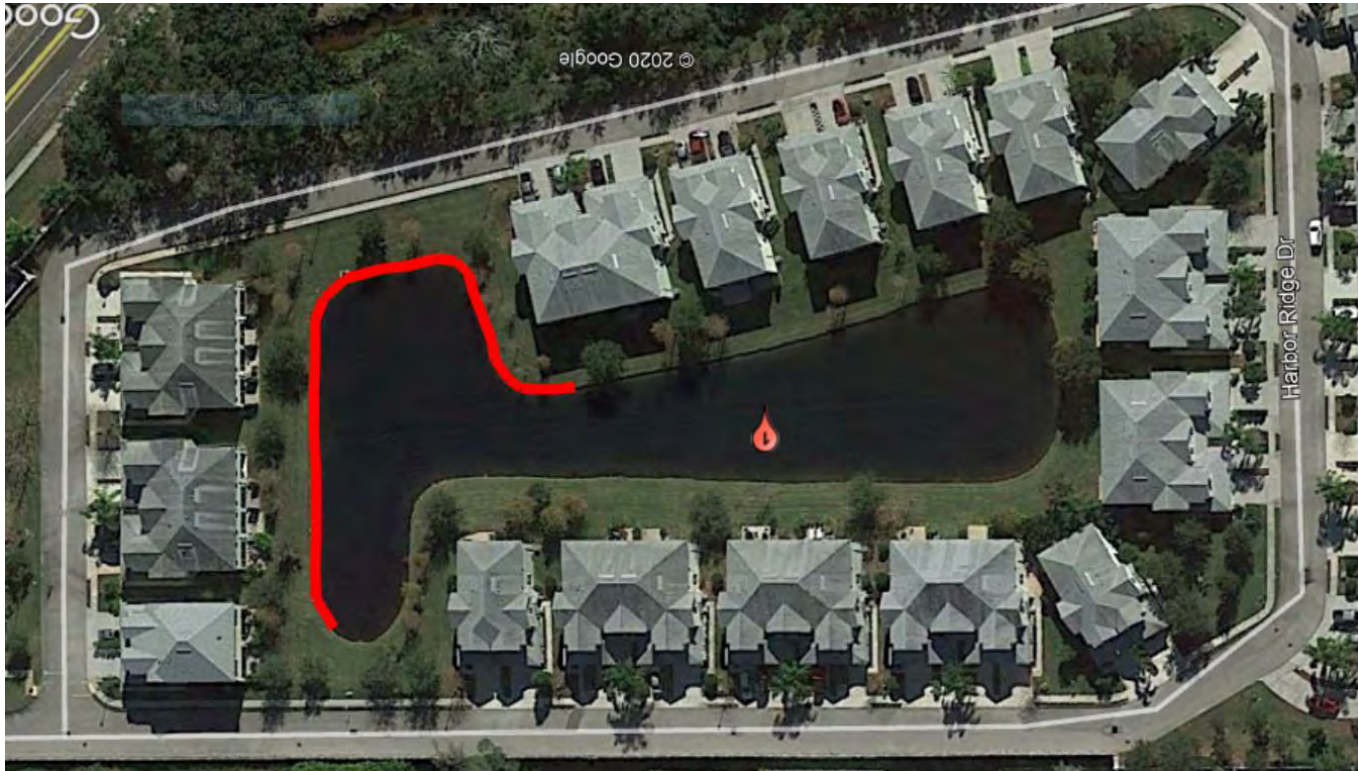
Current pond area aerial view



Erosion Control Project

Proposed solutions

- ▶ Pond bank – **Install Dredge SOX 375LF** – 12' wide

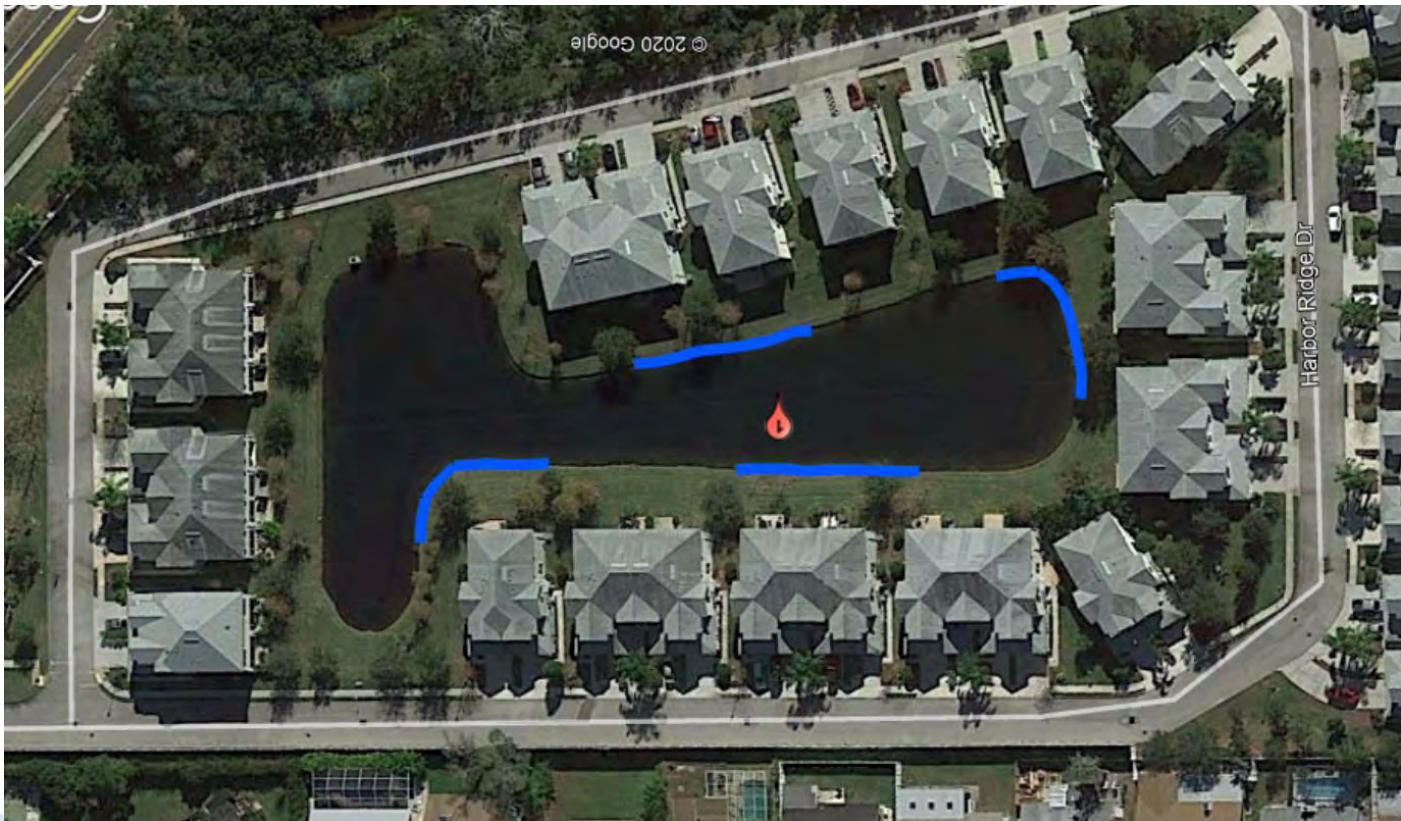


Note: The exposed liner along pond bank east side is part of original construction

Erosion Control Project

Proposed solutions

- Pond bank – **Install aquatic vegetation 400LF** – 3 rows in 4" – 18" of water



Erosion Control Project

Scope expanded

- ❑ Install gutters to manage water flow – **Considering gutters will not remediate erosion – The HOA will not need to incur the additional expense of installing gutters.**

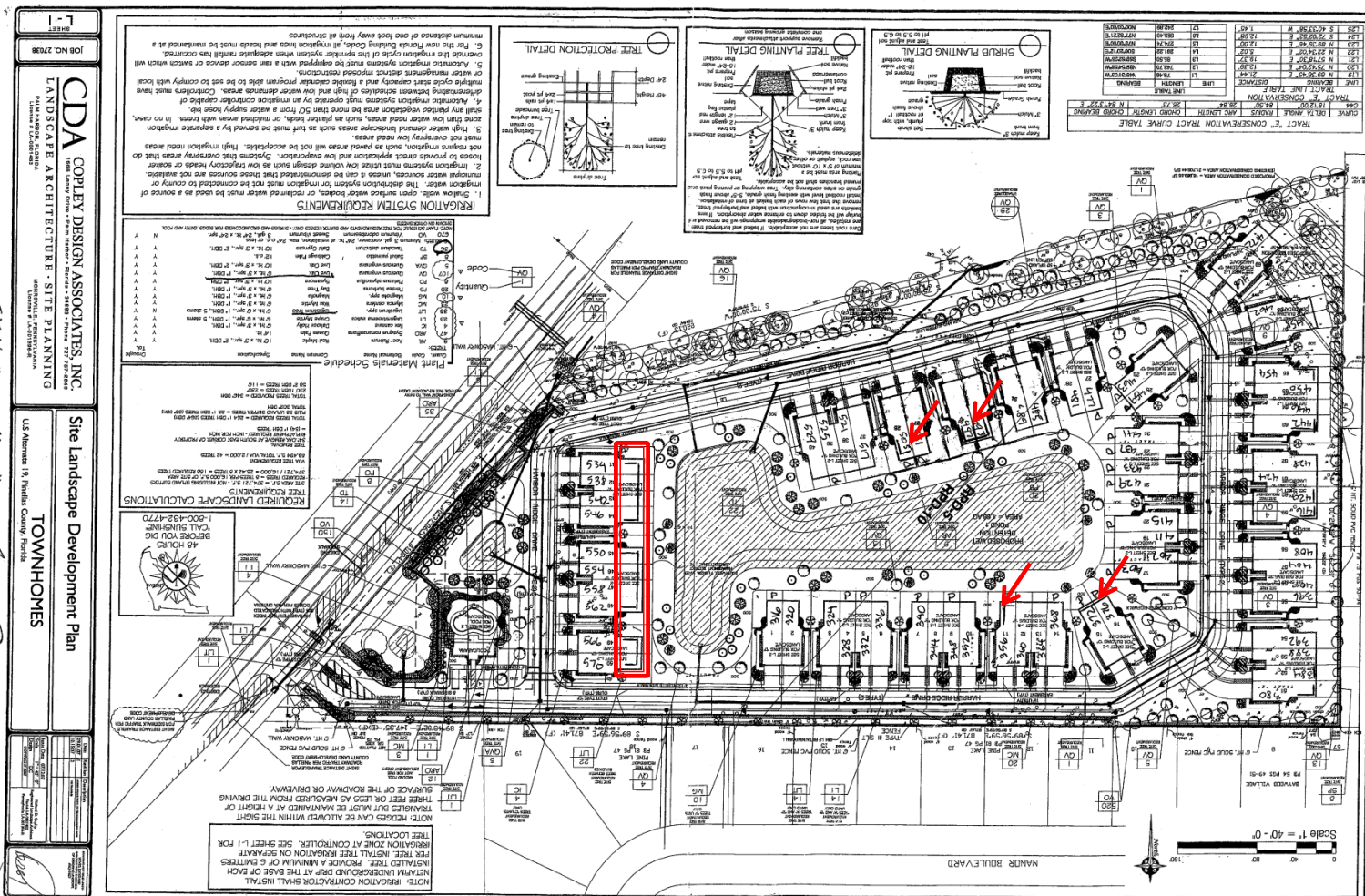
- ❑ Quotes available from:
 - Home Love Construction
 - Gutters Absolute
 - Designer Gutter
 - Gutter Man of Tampa Bay

- ❑ Connect existing gutters to an underground pipe to direct water to pond - County regulation prohibits gutters be directly connected to pond – Downspout dispersion will be required to address erosion caused by gutter downspouts

✓ **RFQ sent to Suppliers – Due Date 11/3/20**

- ✓ TCT Construction
- ✓ Professional Site Development
- ✓ GA Nichols, Inc
- ✓ Southern Landscape Solutions

Expanded Scope: Underdrain system for the existing downspouts – Gutters installation not required on buildings to address erosion – additional info to be available on engineering report



Erosion Control Project Engineering Assessment

With the expanded scope, considering the financial investment and nature of the additional work proposed, the BOD majority voted on seeking technical support, to develop a comprehensive plan to address the erosion & drainage issues. Site inspections completed on 9/7 & 9/14 & 9/23

ROBERT J. HUGENSCHMIDT, P.E.:

USF graduate – Engineer (Civil engineering) with a dual major in structures and water resources. Has managed projects in design of drainage systems. Currently with his own engineering firm, involved in the design and construction of numerous bank sites and rental car facilities throughout the state of Florida, subdivisions, industrial sites, church and school sites and roadway design.

Most all site design involved roadways, parking lots, drainage, sanitary sewer and water design and landscaping

Erosion Control Project

Engineering Assessment – Next steps

- ▶ **Additional field review of erosion issues for each unit on 9/23**
- ▶ **Receive Findings Report**
 - Summarizing conditions of each unit surrounding the pond.
 - Report will identify erosion condition of patios, downspouts and any other conditions that are either presently causing erosion, issues to the pond banks or have potential of causing erosion.
 - Remediation Plan - Will also identify ways that resulting erosion at each unit can be remediated.
- ▶ **Sketches to remediate issues identified**
 - Sketch for retaining wall between Units 415 & 429
 - Typical design for an underdrain system for the downspouts
 - Typical design for a rock bed along the rear of units without gutters or patios
 - Typical design for a rock bed at the pond side of units having patios with erosion issues
- ▶ **Review with Kenney Engineering filtration system condition to ensure compliance to Standards – Meeting preliminarily scheduled for 10/27/2020**

Erosion Control Project

Financial notes

- ▶ Pond erosion Reserve project funding allocation \$40K on 2020.
- ▶ Based on the engineering assessment gutters will not control erosion. The HOA will not need to incur the additional expense of installing gutters.
- ▶ After reviewing the project scope and governing documents with legal counsel, it was concluded, the cost associated to the work required, and necessary for the maintenance & upkeep of the pond, is an HOA cost, such as underdrain system for the downspouts.
- ▶ Underdrain system expenses to remediate erosion resulting from downspouts, not in budget.
- ▶ The project cost and financial impact to HOA will be determined once the Engineering assessment report & quotes to address findings are received. **Engineering Report received as planned RFQ's sent out.**