



Jeff Caso

Introduction

Agenda

Milestone

- In early February our LLC attorneys sent the developer a list of claims that the GHCA Class A members want addressed prior to turnover
- This is the beginning of the Transition Agreement negotiation
- There are 5 categories of claims
- We posted these claims and other backup documents on ghohllc.com and made the information available to you and all GH residents

Claims	
<u>Category</u>	<u>\$</u>
Remediation	\$14,026,348
Things that need to be fixed now	

Claims	
<u>Category</u>	<u>\$</u>
Remediation	\$14,026,348
Reserves	\$2,926,371
Things that need to be fixed in the future	

Claims	
<u>Category</u>	<u>\$</u>
Remediation	\$14,026,348
Reserves	\$2,926,371
Accounting/ Financial	\$943,287
For accounting irregularities	

Claims	
<u>Category</u>	<u>\$</u>
Remediation	\$14,026,348
Reserves	\$2,926,371
Accounting/ Financial	\$943,287
Bridge	\$600,000
Pipe Cleaning	\$61,925

Claims	
<u>Category</u>	<u>\$</u>
Remediation	\$14,026,348
Reserves	\$2,926,371
Accounting/ Financial	\$943,287
Bridge	\$600,000
Pipe Cleaning	\$61,925
	\$18,557,931

Goals for Today

- Take you through each claim item
 - Give you a better understanding of each claim
 - Tell you where you can find additional information
- Give you a good idea of work to be done and what we will need of you
- Answer your questions

Agenda

- | | |
|--|--------------|
| • Condition Report, Remediation, Reserves | Lance Hall |
| • Accounting and Finance | Ginny Hall |
| • Other Claims and Next Steps | Roger Andrus |
| • GHCA Contracts, Management Services, Vendors | Bob Garrison |
| • Questions & Answers | |

Lance Hall

Condition Assessment and Claims

Condition Assessment & Claims

- What we did
- The Report
- Remediation Claim
- Reserve Requirement

I am going to take you through the asset assessments we did leading up to 2 of the 5 \$\$ claims we presented to the developer earlier this month. I will briefly take you through what we did, what is in the report that KH repaired and the resulting remediation and reserve requirement claims.

What We Did

- What GHCA is Responsible For
- Hired Kimley-Horn and Shenandoah
 - Visual Inspections
 - Soil and Groundwater Exception

The first thing we did was to determine what the GHCA is responsible for. We started with all the plats and searched all that was available publically. Roger was very helpful sorting through everything and is the one who finally obtained a copy of a marina survey that identified ownership of all the sea walls around the marina. We hired KH to do inspections and Shenandoah to inspect all of the pond interconnections. The only non visual inspection was some ground water and soil sampling we did near an former golf course maintenance facility.

What We Did

- What GHCA is Responsible For
- Hired Kimley-Horn and Shenandoah
 - Visual Inspections
 - Regulatory Review
 - The Report

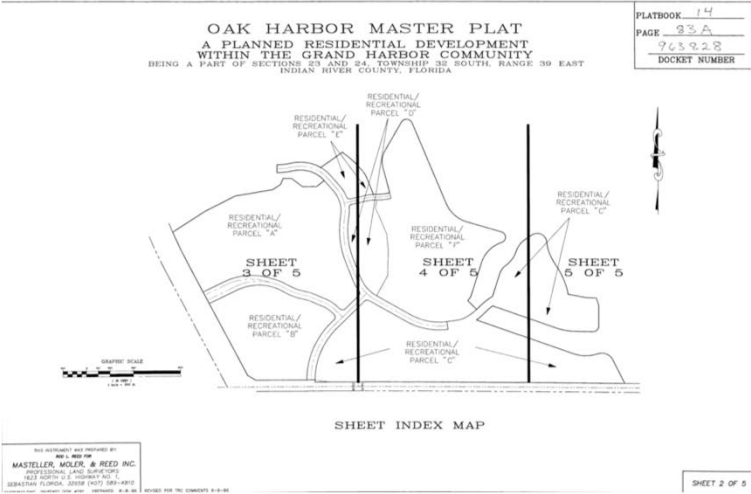
Additionally, KH and GT Law did a regulatory review to identify all regulatory obligations that the developer and GHCA had. And lastly, KH wrote a comprehensive report of the the conditions of all those assets GHCA needs to maintain.

Inspections

- Right of Way
 - Roadways
 - Sidewalks
 - Landscaping
 - Streetlights
 - Guardrails
 - Retailing Walls

Here is what we inspected. You will see these categories and items throughout the report and the tables that follow. First is all the items within the rights of way on all the roads GHCA is accountable for.

Not GHCA Responsibility



There is a section of the main loop roadway that GHCA does not have responsibility for. The developer transferred ownership for a section of the loop road to Oak Harbor. OH is therefore responsible for the care and maintenance for all the RoW assets along that section. It begins at Coventry, follows out to the OH gate and the 45th st gate, and east to the entrance to St Anne’s.

Inspections

- Right of Way
- Bridges and Tunnels
- Walls
 - Seawalls – Harbor Pointe
 - River Village Pond

There are 2 bridges, 4 tunnels, 2 short sections of seawall in Harbor Pointe, and the wall in the front River Village pond.

Inspections

- Right of Way
- Bridges and Tunnels
- Walls
- Storm Water Management
 - Ponds, Control Structures, catch basins, Interconnections
 - Exfiltration Trenches

All of the storm water management system in GH and OH including things call exfiltration trenches. These are like french drains buried beneath the ground to collect runoff and route it to the river or estuary where a pond is not nearby.

Inspections

- Right of Way
- Bridges and Tunnels
- Walls
- Storm Water Management
- Conservation Easement
- Security
- Fountain
- Pier
- Irrigation

And there is security items, the fountain, the pier in River Village, and the irrigation system including the recycled water reservoir near the 16th tee on the Harbor Course.

Regulatory Review

- **Agencies**
 - Army Corps of Engineers
 - Florida Department of Environmental Protection
 - St John's River Water Management District
 - Indian River Country

We looked at current and historical permits for 4 agencies.

Regulatory Review

- Agencies
- SJRWMD Permits
 - Construction and Operating
 - Two Series
 - 18679- 1 to 42
 - 85661- 8 & 11

The critical permits we found were with the St Johns River Water Management District. There are 2 series of permits. 85661 covers the 3 ponds in the Reserve and the pond next to #3 Harbor. Modifications 8-11 apply. 18679 covers all the other ponds and SWM structures in the rest of GH and OH including the estuary. There have been 42 modifications since 1986.

Regulatory Review

- Agencies
- SJRWMD Permits
 - Construction and Operating
 - Developer is the named “owner” of these permits
 - GHCA has operation and maintenance responsibility
 - Operational transfer pre 1995
 - Operational transfer post 1995

The process starts with construction permits and when construction is complete there is a certification and The permitted system covered by the modification becomes an operating permit. The regulations changed in 1995 that defines a more defined operational permit approval. Some of the permit modifications were pre 1995, where the process was much less defined, and some are post 1995. This creates some messiness in attributing responsibility for ongoing maintenance which we will need to deal with.

Regulatory Review

- Agencies
- SJRWMD Permits
 - Construction and Operating
 - Developer is the named “owner” of these permits
 - GHCA has operation and maintenance responsibility
 - The actual “structures” are owned by many entities
 - There are special conditions attached to these permits requiring continuing maintenance

And in addition to the regulatory complexity, many of the structures are “owned” by various entities, like the club or sub HOA’s. It is clear, though, that GHCA has operational and maintenance responsibility for all.

Lastly, a number of conditions are attached to the permits, particularly the main 18679 permit that the agencies expect to be maintained by the designated operating entity, GHCA.

Regulatory Review

- Agencies
- SJRWMD Permits
 - Consumption and Use Permit
 - Developer is named “owner”
 - Limits and controls the consumption of all surface and ground water
 - Covers all ponds, wells, and pumps
 - Requires semi annual usage reporting
 - 374 mgy of surface water
 - 74 mgy of ground water
 - Unlimited recycled water

SJ's also controls consumption of surface and ground water with a Consumption and Use permit.

Regulatory Review

- Agencies
- SJRWMD Permits
 - Consumption and Use Permit
 - Developer is named “owner”
 - Limits and controls the consumption of all surface and ground water
 - Covers all ponds, wells, and pumps
 - Requires semi annual usage reporting
 - Is accountable for water conservation and emergency usage planning and execution
 - Renewed in 2013 for 30yrs
 - No CUP for Reserve ponds

There is a conservation plan on file, it has recently been renewed. There is no CUP for the Reserve ponds and a to do is to find out if one is needed or if the current CUP is sufficient. Importantly, the permit holder is the developer, not GHCA. We will need to work with the developer to transfer the CUP and the other permits to GHCA as part of the transition process.

Regulatory Review

- Agencies
- SJRWMD Permits
- Conservation Easement
 - FDEP grant to GHCA
 - Requires maintenance of the hydrology and natural vegetation
 - Mosquito control and maintenance agreements with IRC

Lastly, there is a FDEP permit for the construction of all the original ponds and the estuary. All of the conditions and design parameters are identical to the SJRWMD permits. In exchange for allowing the developer to build some golf holes on environmentally restricted land, the developer needed to create other wetlands that is covered under a Conservation Easement to compensate. This is the estuary. There are two conditions of that easement. Grantee must maintain the Hydrology and eliminate all non-native species in perpetuity. GHCA is the grantee and there are additional maintenance and mosquito control agreements with IRC in force today.

Regulatory Review

There are 3 overviews available on the Web (ghohllc.com) for more detailed information on:

- **Permits**

ghohllc.com/Engineering/Permits and Easement/Permits at Grand Harbor and Oak Harbor

- **Storm Water Management**

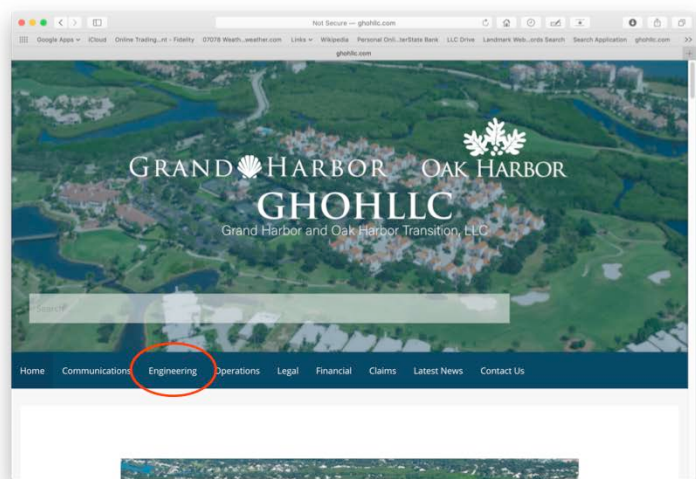
ghohllc.com/Engineering/Asset Reviews/ Storm Water Management/ Storm Water Management at Grand Harbor and Oak Harbor

- **Conservation Easement**

ghohllc.com/Engineering/Asset Reviews/Conservation Easement/Estuary History

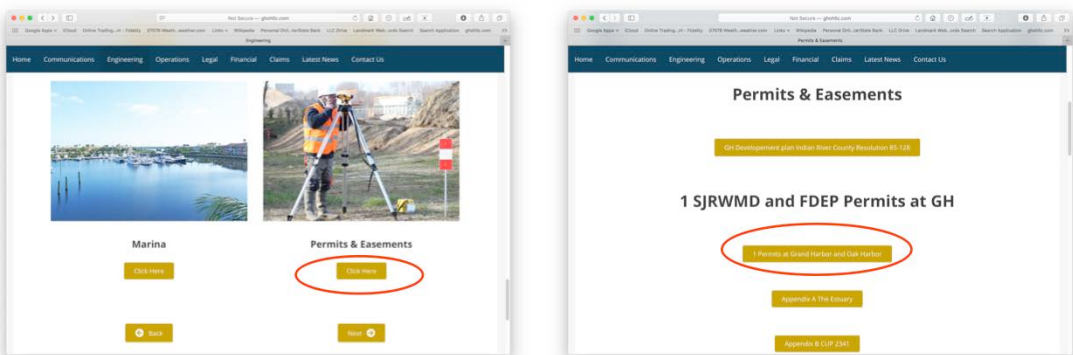
We have written 3 papers that are overviews of 3 subjects for those interested in a bit more detail. They can be found on our web site.

ghohllc Home Page / Engineering



Go to the home page at ghohllc.com. Click on “engineering”

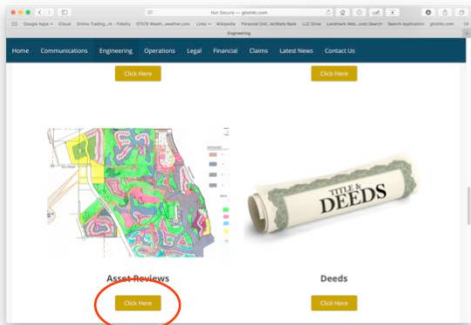
Engineering Page



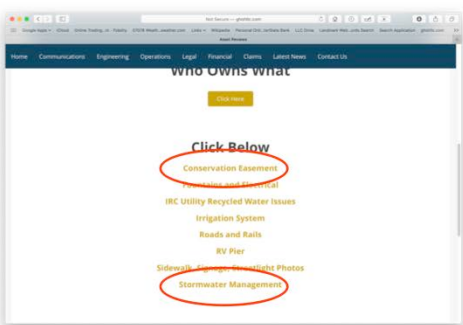
Scroll down to Permits
and Easements

Scroll down the engineering page to “permits and easements”. Locate the permits in GH overview and click to bring it up.

Engineering Page



Scroll down to
Asset Reviews



Estuary and Storm
Water Management

To get to the estuary and storm water management overviews go to the asset Review pages within the Engineering pages. You will find the 2 links to those overviews (and other information there).

The Condition Report

That is what we did and a bit on the permit reviews. I will now move on to the report of findings prepared by KH.

The Report

- Detailed report of the condition of all the assets inspected
 - Right of Way
 - Bridges and Tunnels
 - Walls
 - Storm Water Management
 - Conservation Easement
 - Security
 - Fountain
 - Pier
 - Irrigation

You will find the report organized in sections related to all the assets we inspected.

The Report

- Detailed report of the condition of all the assets inspected
- Three Parts
 - Executive Summary
 - Report of Findings
 - Appendices

There are 3 parts of the report.....

The Report

- Detailed report of the condition of all the assets inspected
- Three Parts
- Two Tables
 - RemediationThese are conditions found that we are expecting the developer to fix or replace now based on the reported condition.

And 2 tables. A Remediation Table.

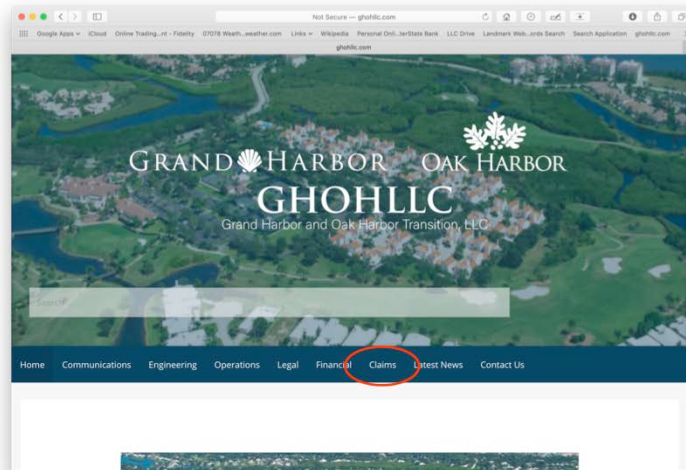
The Report

- Detailed report of the condition of all the assets inspected
- Three Parts
- Two Tables
 - Remediation
 - Reserve Requirement

These items have a significant replacement value and will need to be replaced at some date in the future. GHCA should have in reserve on 12/31/2020 funds for replacing these items based on the expected life and remaining useful life of each item.

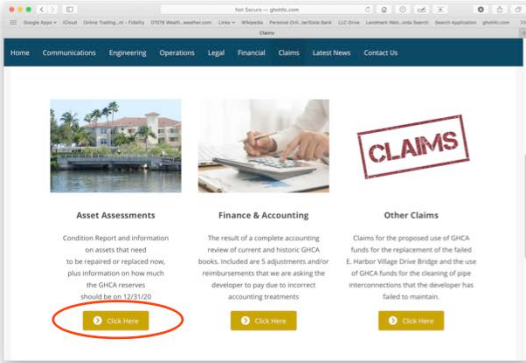
And a Reserve Requirement Table

ghohllc Home Page / Claims



Go to the home page. Look for the “Claims” link

Claims Page



Asset Assessments

Condition Report and information on assets that need to be repaired or replaced now, plus information on how much the GHCA reserves should be on 12/31/20

Click here

Finance & Accounting

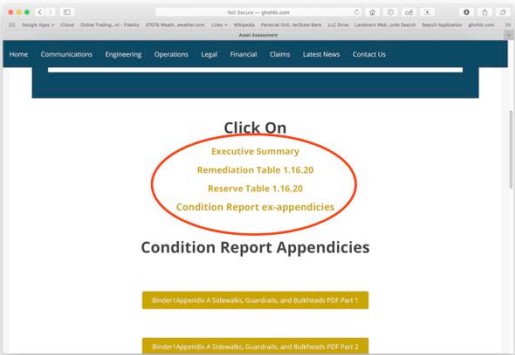
The result of a complete accounting review of current and historic GHCA books. Included are 5 adjustments and/or reimbursements that we are asking the developer to pay due to incorrect accounting treatments

Click here

Other Claims

Claims for the proposed use of GHCA funds for the replacement of the failed E. Harbor Village Drive Bridge and the use of GHCA funds for the clearing of pipe interconnections that the developer has failed to maintain.

Click here



Click On

Executive Summary

Remediation Table 1.16.20

Reserve Table 1.16.20

Condition Report ex-appendices

Condition Report Appendices

Under Appendix A Sidewalks, Guardrails, and Bulkheads PDF Part 1

Under Appendix A Sidewalks, Guardrails, and Bulkheads PDF Part 2

Scroll down

Scroll down

Scroll down and click on the asset assessment page. You will see the report in it's parts there.

Condition Report

- Executive Summary
 - Overview of findings by assets inspected
 - Overall condition
 - Indicates deficiencies that need to be corrected

The Executive Summary. If you read anything, read this. It will tell you what we found in general.

Condition Report

- **Executive Summary**
 - Overview of findings by assets inspected
 - Overall condition
 - Indicates deficiencies that need to be corrected
- **Full Report**
 - Detailed description of what was found and what needs to be fixed
 - Includes references to regulatory requirements that need to be met

The full report without appendices will give you a detailed review of all assets and what was found.

Condition Report

- **Executive Summary**
 - Overview of findings by assets inspected
 - Overall condition
 - Indicates deficiencies that need to be corrected
- **Full Report**
 - Detailed description of what was found and what needs to be fixed
 - Includes references to regulatory requirements that need to be met
- **Appendices**
 - Photos
 - Supporting Documentation

And the appendices are mostly photos and diagrams supporting the findings.

Appendicies

- A. Sidewalks, Guardrails, and Bulkheads
- B. Roadways, Curbs, and Gutters
- C. Signage
- D. Site Lighting
- E. Shenandoah Pipe Inspection
- F. Landscaping
- G. Flushing Channels and Watercourses
- H. Environmental Assessment

They are....

Remediation Table

Things that need to be fixed prior to GHCA members taking control

The findings were then reviewed and we created a table of items that needs to be addressed now.

Remediation

- Things that need to be fixed prior to GHCA members taking control

Remediation

- An item is broken, not working, or needs repair
- An item has passed it's Economic Useful Life
- A condition of a permit or the Conservation Easement is out of compliance

Remediation

- Total Value of Remediation Claim is \$14,029,348
- Two Items Account for \$13,393,665
 - Conservation Easement
 - Storm Water Management

Remediation

Category	Sub Category	No.	Item	Reference	Unit	Quantity	Cost per Unit	Total Cost
Bridges and Tunnels	Bridge #1	bt1	Replace Bridge #1	16.0 GRAND HARBOR BRIDGE #1 and #2	EA	0	\$800,000	\$0
	Bridge #2	bt2	Bridge #2 Repairs	16.0 GRAND HARBOR BRIDGE #1 and #2	SF	1	\$1,000	\$1,000
	Tunnels	bt3	Tunnel Drainage Improvements (4)	19.0 GRAND HARBOR PEDESTRIAN TUNNELS #1 THROUGH #4	SF	500	\$7	\$3,500
		bt4	General Tunnel Repairs	19.0 GRAND HARBOR PEDESTRIAN TUNNELS #1 THROUGH #4	EA	4	\$750	\$3,000
Bridges and Tunnels Total								\$7,500
Buildings	53rd St	bd6	Guard Shack Repairs/Replacement	Repairs not economical since remaining life is 1 year. Replace	EA	1	\$15,000	\$15,000
	IRB	bd1	Grand Harbor Guard House Repairs	17.0 GRAND HARBOR GUARD HOUSES #1 AND #2	EA	1	\$1,500	\$1,500
		bd2	The Falls Guard House Repairs	17.0 GRAND HARBOR GUARD HOUSES #1 AND #2	EA	1	\$1,500	\$1,500
Buildings Total								\$18,000
Conservation Easement	Hydrology	es2	Flushing Channel Repairs - Two Channels	NOT COMPLIANT WITH CONSERVATION EASEMENT OR0922 PG 2192	CY	1,476	\$150	\$221,400
		es3	Water Courses - Narrow	NOT COMPLIANT WITH CONSERVATION EASEMENT OR0922 PG 2192	CY	11,424	\$150	\$1,713,600
		es4	Water Courses - Wide	NOT COMPLIANT WITH CONSERVATION EASEMENT OR0922 PG 2192	CY	29,992	\$150	\$4,498,800
	Plant Removal	es1	Invasive Species Removal - Brazilian Pepper	NOT COMPLIANT WITH CONSERVATION EASEMENT OR0922 PG 2192	DAYS	60	\$5,000	\$300,000
Conservation Easement Total								\$6,733,800
Irrigation	Recycled Water Reservoir	irr1	Pond Liner Fabric Replacement	Needs to be replaced within 5 years and the wood fascia requires replacement now. The liner should be replaced now and properly attached to the steel sheet pile behind the wood fascia	SF	90,000	\$2	\$180,000
	Recycled Water Reservoir	irr2	Wooden Facade Replacement	18.0 GRAND HARBOR RETAINING WALLS #1 THROUGH #4	EA	1,200	\$70	\$84,000
Irrigation Total								\$264,000

Let’s review what information is in this table.....

Remediation

Category	Sub Category	No.	Item	Reference	Unit	Quantity	Cost per Unit	Total Cost
Bridges and Tunnels	Bridge #1	b1	Replace Bridge #1	16.0 GRAND HARBOR BRIDGE #1 and #2	EA	0	\$800,000	\$0
	Bridge #2	b2	Bridge #2 Repairs	16.0 GRAND HARBOR BRIDGE #1 and #2	SF	1	\$1,000	\$1,000
	Tunnels	b3	Tunnel Drainage Improvements (4)	19.0 GRAND HARBOR PEDESTRIAN TUNNELS #1 THROUGH #4	SF	500	\$7	\$3,500
		b4	General Tunnel Repairs	19.0 GRAND HARBOR PEDESTRIAN TUNNELS #1 THROUGH #4	EA	4	\$750	\$3,000
Bridges and Tunnels Total								\$7,500
Buildings	53rd St	bd6	Guard Shack Repairs/Replacement	Repairs not economical since remaining life is 1 year. Replace	EA	1	\$15,000	\$15,000
	IRB	bd1	Grand Harbor Guard House Repairs	17.0 GRAND HARBOR GUARD HOUSES #1 AND #2	EA	1	\$1,500	\$1,500
		bd2	The Falls Guard House Repairs	17.0 GRAND HARBOR GUARD HOUSES #1 AND #2	EA	1	\$1,500	\$1,500
Buildings Total								\$18,000
Conservation Easement	Hydrology	es2	Flushing Channel Repairs - Two Channels	NOT COMPLIANT WITH CONSERVATION EASEMENT OR0922 PG 2192	CY	1,476	\$150	\$221,400
		es3	Water Courses - Narrow	NOT COMPLIANT WITH CONSERVATION EASEMENT OR0922 PG 2192	CY	11,424	\$150	\$1,713,600
		es4	Water Courses - Wide	NOT COMPLIANT WITH CONSERVATION EASEMENT OR0922 PG 2192	CY	29,992	\$150	\$4,498,800
	Plant Removal	est1	Invasive Species Removal - Brazilian Pepper	NOT COMPLIANT WITH CONSERVATION EASEMENT OR0922 PG 2192	DAYS	60	\$5,000	\$300,000
Conservation Easement Total								\$6,733,800
Irrigation	Recycled Water Reservoir	irr1	Pond Liner Fabric Replacement	Needs to be replaced within 5 years and the wood fascia requires replacement now. The liner should be replaced now and properly attached to the steel sheet pile behind the wood fascia	SF	90,000	\$2	\$180,000
	Recycled Water Reservoir	irr2	Wooden Façade Replacement	18.0 GRAND HARBOR RETAINING WALLS #1 THROUGH #4	EA	1,200	\$70	\$84,000
Irrigation Total								\$264,000

Each individual item to be fixed

Remediation

Category	Sub Category	No.	Item	Reference	Unit	Quantity	Cost per Unit	Total Cost
Bridges and Tunnels	Bridge #1	bt1	Replace Bridge #1	16.0 GRAND HARBOR BRIDGE #1 and #2	EA	0	\$800,000	\$0
	Bridge #2	bt2	Bridge #2 Repairs	16.0 GRAND HARBOR BRIDGE #1 and #2	SF	1	\$1,000	\$1,000
	Tunnels	bt3	Tunnel Drainage Improvements (4)	19.0 GRAND HARBOR PEDESTRIAN TUNNELS #1 THROUGH #4	SF	500	\$7	\$3,500
		bt4	General Tunnel Repairs	19.0 GRAND HARBOR PEDESTRIAN TUNNELS #1 THROUGH #4	EA	4	\$750	\$3,000
	Bridges and Tunnels Total							\$7,500
Buildings	53rd St	bd6	Guard Shack Repairs/Replacement	Repairs not economical since remaining life is 1 year. Replace	EA	1	\$15,000	\$15,000
	IRB	bd1	Grand Harbor Guard House Repairs	17.0 GRAND HARBOR GUARD HOUSES #1 AND #2	EA	1	\$1,500	\$1,500
		bd2	The Falls Guard House Repairs	17.0 GRAND HARBOR GUARD HOUSES #1 AND #2	EA	1	\$1,500	\$1,500
Buildings Total								\$18,000
Conservation Easement	Hydrology	es2	Flushing Channel Repairs - Two Channels	NOT COMPLIANT WITH CONSERVATION EASEMENT OR0922 PG 2192	CY	1,476	\$150	\$221,400
		es3	Water Courses - Narrow	NOT COMPLIANT WITH CONSERVATION EASEMENT OR0922 PG 2192	CY	11,424	\$150	\$1,713,600
		es4	Water Courses - Wide	NOT COMPLIANT WITH CONSERVATION EASEMENT OR0922 PG 2192	CY	29,992	\$150	\$4,498,800
	Plant Removal	es1	Invasive Species Removal - Brazilian Pepper	NOT COMPLIANT WITH CONSERVATION EASEMENT OR0922 PG 2192	DAYS	60	\$5,000	\$300,000
Conservation Easement Total								\$6,733,800
Irrigation	Recycled Water Reservoir	irr1	Pond Liner Fabric Replacement	Needs to be replaced within 5 years and the wood fascia requires replacement now. The liner should be replaced now and properly attached to the steel sheet pile behind the wood fascia	SF	90,000	\$2	\$180,000
	Recycled Water Reservoir	irr2	Wooden Facade Replacement	18.0 GRAND HARBOR RETAINING WALLS #1 THROUGH #4	EA	1,200	\$70	\$84,000
Irrigation Total								\$264,000

This is the place you can find what needs to be done in the report or it notes that a permit condition is out of compliance.

Remediation

Category	Sub Category	No.	Item	Reference	Unit	Quantity	Cost per Unit	Total Cost
Bridges and Tunnels	Bridge #1	bt1	Replace Bridge #1	16.0 GRAND HARBOR BRIDGE #1 and #2	EA	0	\$800,000	\$0
	Bridge #2	bt2	Bridge #2 Repairs	16.0 GRAND HARBOR BRIDGE #1 and #2	SF	1	\$1,000	\$1,000
	Tunnels	bt3	Tunnel Drainage Improvements (4)	19.0 GRAND HARBOR PEDESTRIAN TUNNELS #1 THROUGH #4	SF	500	\$7	\$3,500
		bt4	General Tunnel Repairs	19.0 GRAND HARBOR PEDESTRIAN TUNNELS #1 THROUGH #4	EA	4	\$750	\$3,000
Bridges and Tunnels Total								\$7,500
Buildings	53rd St	bd6	Guard Shack Repairs/Replacement	Repairs not economical since remaining life is 1 year. Replace	EA	1	\$15,000	\$15,000
	IRB	bd1	Grand Harbor Guard House Repairs	17.0 GRAND HARBOR GUARD HOUSES #1 AND #2	EA	1	\$1,500	\$1,500
		bd2	The Falls Guard House Repairs	17.0 GRAND HARBOR GUARD HOUSES #1 AND #2	EA	1	\$1,500	\$1,500
Buildings Total								\$18,000
Conservation Easement	Hydrology	es2	Flushing Channel Repairs - Two Channels	NOT COMPLIANT WITH CONSERVATION EASEMENT OR0922 PG 2192	CY	1,476	\$150	\$221,400
		es3	Water Courses - Narrow	NOT COMPLIANT WITH CONSERVATION EASEMENT OR0922 PG 2192	CY	11,424	\$150	\$1,713,600
		es4	Water Courses - Wide	NOT COMPLIANT WITH CONSERVATION EASEMENT OR0922 PG 2192	CY	29,992	\$150	\$4,498,800
	Plant Removal	es1	Invasive Species Removal - Brazilian Pepper	NOT COMPLIANT WITH CONSERVATION EASEMENT OR0922 PG 2192	DAYS	60	\$5,000	\$300,000
Conservation Easement Total								\$6,733,800
Irrigation	Recycled Water Reservoir	irr1	Pond Liner Fabric Replacement	Needs to be replaced within 5 years and the wood fascia requires replacement now. The liner should be replaced now and properly attached to the steel sheet pile behind the wood fascia	SF	90,000	\$2	\$180,000
	Recycled Water Reservoir	irr2	Wooden Façade Replacement	18.0 GRAND HARBOR RETAINING WALLS #1 THROUGH #4	EA	1,200	\$70	\$84,000
Irrigation Total								\$264,000

And the later columns provide data to calculate the estimated cost of remediating that item.

Remediation

Category	Sub Category	No.	Item	Reference	Unit	Quantity	Cost per Unit	Total Cost
Bridges and Tunnels	Bridge #1	bt1	Replace Bridge #1	16.0 GRAND HARBOR BRIDGE #1 and #2	EA	0	\$800,000	\$0
	Bridge #2	bt2	Bridge #2 Repairs	16.0 GRAND HARBOR BRIDGE #1 and #2	SF	1	\$1,000	\$1,000
	Tunnels	bt3	Tunnel Drainage Improvements (4)	19.0 GRAND HARBOR PEDESTRIAN TUNNELS #1 THROUGH #4	SF	500	\$7	\$3,500
		bt4	General Tunnel Repairs	19.0 GRAND HARBOR PEDESTRIAN TUNNELS #1 THROUGH #4	EA	4	\$750	\$3,000
Bridges and Tunnels Total								\$7,500
Buildings	53rd St	bl6	Guard Shack Repairs/Replacement	Repairs not economical since remaining life is 1 year. Replace	EA	1	\$15,000	\$15,000
	IRB	bl1	Grand Harbor Guard House Repairs	17.0 GRAND HARBOR GUARD HOUSES #1 AND #2	EA	1	\$1,500	\$1,500
		bl2	The Falls Guard House Repairs	17.0 GRAND HARBOR GUARD HOUSES #1 AND #2	EA	1	\$1,500	\$1,500
Buildings Total								\$18,000
Conservation Easement	Hydrology	es2	Flushing Channel Repairs - Two Channels	NOT COMPLIANT WITH CONSERVATION EASEMENT OR0922 PG 2192	CY	1,476	\$150	\$221,400
		es3	Water Courses - Narrow	NOT COMPLIANT WITH CONSERVATION EASEMENT OR0922 PG 2192	CY	11,424	\$150	\$1,713,600
		es4	Water Courses - Wide	NOT COMPLIANT WITH CONSERVATION EASEMENT OR0922 PG 2192	CY	29,992	\$150	\$4,498,800
	Plant Removal	es1	Invasive Species Removal - Brazilian Pepper	NOT COMPLIANT WITH CONSERVATION EASEMENT OR0922 PG 2192	DAYS	60	\$5,000	\$300,000
Conservation Easement Total								\$6,733,800
Irrigation	Recycled Water Reservoir	irr1	Pond Liner Fabric Replacement	Needs to be replaced within 5 years and the wood fascia requires replacement now. The liner should be replaced now and properly attached to the steel sheet pile behind the wood fascia	SF	90,000	\$2	\$180,000
	Recycled Water Reservoir	irr2	Wooden Facade Replacement	18.0 GRAND HARBOR RETAINING WALLS #1 THROUGH #4	EA	1,200	\$70	\$84,000
Irrigation Total								\$264,000



I now want to review a couple of items in the table. First is bridge #1 that was found to be structurally unsound. The money to repair this bridge is not in this table. It is the subject to a separate claim to recover funds that we think should not be the responsibility for GHCA to pay for. Roger will describe this later.

Remediation

Category	Sub Category	No.	Item	Reference	Unit	Quantity	Cost per Unit	Total Cost
Bridges and Tunnels	Bridge #1	bt1	Replace Bridge #1	16.0 GRAND HARBOR BRIDGE #1 and #2	EA	0	\$800,000	\$0
	Bridge #2	bt2	Bridge #2 Repairs	16.0 GRAND HARBOR BRIDGE #1 and #2	SF	1	\$1,000	\$1,000
	Tunnels	bt3	Tunnel Drainage Improvements (4)	19.0 GRAND HARBOR PEDESTRIAN TUNNELS #1 THROUGH #4	SF	500	\$7	\$3,500
		bt4	General Tunnel Repairs	19.0 GRAND HARBOR PEDESTRIAN TUNNELS #1 THROUGH #4	EA	4	\$750	\$3,000
Bridges and Tunnels Total								\$7,500
Buildings	53rd St	bl6	Guard Shack Repairs/Replacement	Repairs not economical since remaining life is 1 year. Replace	EA	1	\$15,000	\$15,000
	IRB	bl01	Grand Harbor Guard House Repairs	17.0 GRAND HARBOR GUARD HOUSES #1 AND #2	EA	1	\$1,500	\$1,500
		bl02	The Falls Guard House Repairs	17.0 GRAND HARBOR GUARD HOUSES #1 AND #2	EA	1	\$1,500	\$1,500
Buildings Total								\$18,000
Conservation Easement	Hydrology	es2	Flushing Channel Repairs - Two Channels	NOT COMPLIANT WITH CONSERVATION EASEMENT OR0922 PG 2192	CY	1,476	\$150	\$221,400
		es3	Water Courses - Narrow	NOT COMPLIANT WITH CONSERVATION EASEMENT OR0922 PG 2192	CY	11,424	\$150	\$1,713,600
		es4	Water Courses - Wide	NOT COMPLIANT WITH CONSERVATION EASEMENT OR0922 PG 2192	CY	29,992	\$150	\$4,498,800
	Plant Removal	est1	Invasive Species Removal - Brazilian Pepper	NOT COMPLIANT WITH CONSERVATION EASEMENT OR0922 PG 2192	DAYS	60	\$5,000	\$300,000
Conservation Easement Total								\$6,733,800
Irrigation	Recycled Water Reservoir	irr1	Pond Liner Fabric Replacement	Needs to be replaced within 5 years and the wood fascia requires replacement now. The liner should be replaced now and properly attached to the steel sheet pile behind the wood fascia	SF	90,000	\$2	\$180,000
	Recycled Water Reservoir	irr2	Wooden Facade Replacement	18.0 GRAND HARBOR RETAINING WALLS #1 THROUGH #4	EA	1,200	\$70	\$84,000
Irrigation Total								\$264,000



Here is the first of the biggies. \$6.7 M to remediate the estuary. I will take you through the elements

Conservation Easement

- Requires the elimination of all non-native species of vegetation
 - No internal invasives
 - Extensive non-native plants around the perimeter

The easement requires that all non-native species be removed. Actually, in the interior there does not appear to be much invasion. Mangroves are predominant and when Island Arbor trims areas they will remove any non-natives they find. The problem is all along the perimeter there are invasive species like Brazilian Pepper, these need to be removed.

Conservation Easement

- Requires the elimination of all non-native species of vegetation
 - No internal invasives
 - Extensive non-native plants around the perimeter
- Must maintain hydrology as built
 - 2 of 4 flushing channels are blocked
 - Internal waterways silted in
 - Open Water Mosquito Management System compromised

The hydrology needs to be kept as built. That means the open water areas need to be open and the flows maintained. The flushing connections to the river need to be open allowing the estuary to continue flow in all the channels. Additionally, the design uses OWMM to eliminate mosquito habitat. That basically means that all streams and water course need to continue to flow and fish habitat maintained that deigns mosquitos of breeding grounds. There is a specific agreement with IRC Mosquito Control to maintain the estuary so that it does not breed mosquitos and have a chemical backup if needed.

Conservation Easement

- Requires the elimination of all non-native species of vegetation
 - No internal invasives
 - Extensive non-native plants around the perimeter
- Must maintain hydrology as built
 - 2 of 4 flushing channels are blocked
 - Internal waterways silted in
 - Open Water Mosquito Management System compromised
- No Heavy Equipment Allowed Within the Estuary

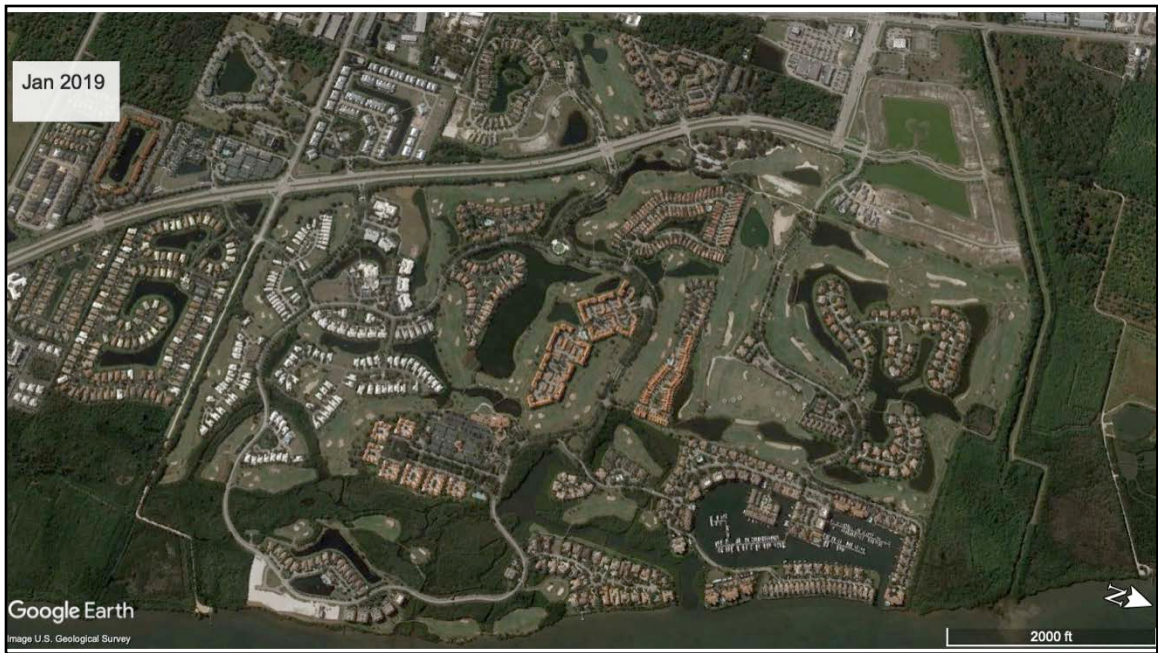
Lastly, there is an agreement with IRC signed and officially filed with the county that describes how the waterways are to be cleared if needed. Needless to say, no heavy equipment is allowed so this will be an expensive proposition.



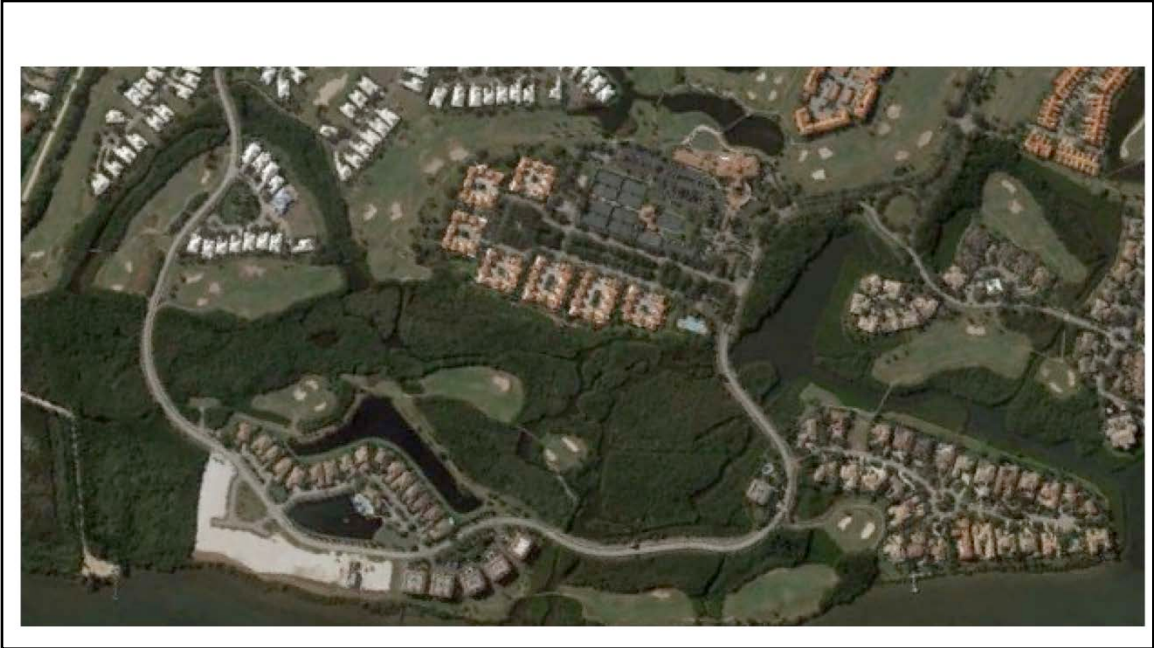
This is what the Grand Harbor looked like in 1994. That is about 4-5 yrs after the estuary was created.



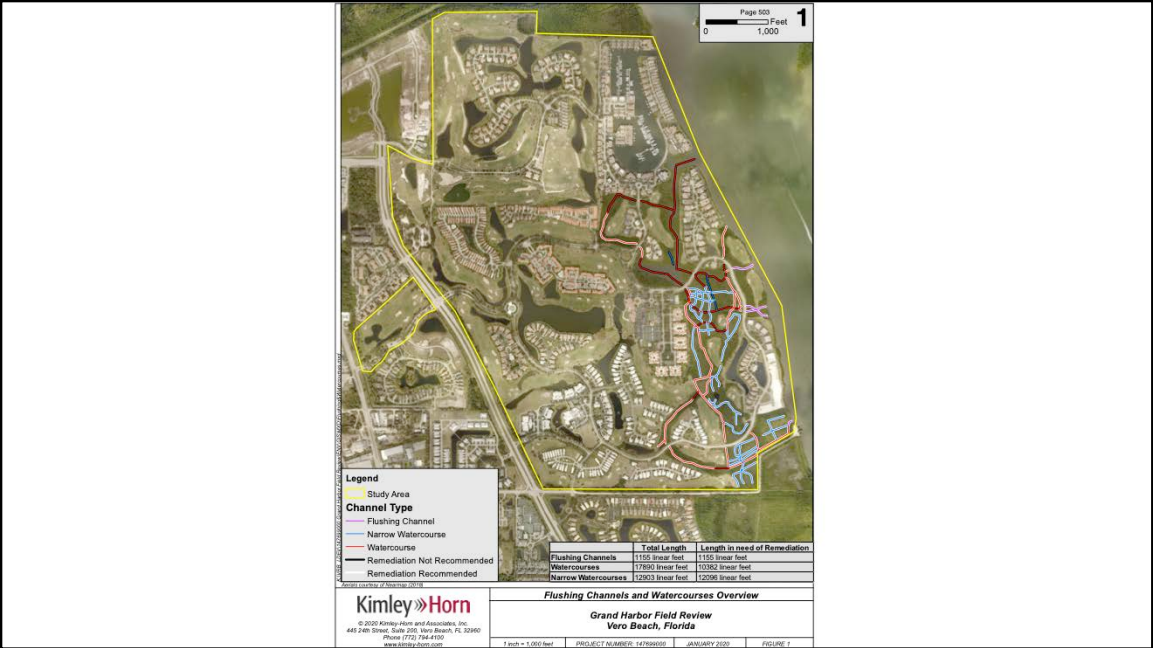
This is enlarged. You can see the wide waterways. Often 40-70 feet wide. There are many smaller waterways and mosquito ditches that are 2-3 feet wide and there are some open pools throughout. You can also clearly see the flushing channels allowing water exchange with the river.



Here is GH in 2019.



A blowup of the estuary in 2019. The contrast is not as good but if you zoom in even further, you will see almost no mosquito ditches. The wider channels are considerably more narrow. 20 feet not 60 feet and many of the pools are gone. 2 of the flushing channels are almost completely impaired. The time to dredge is past due to comply with the easement.



You will find this in Appendix G of the report. It shows you what we are claiming needs to be dredged.

Conservation Easement Remedy

- Dredge the 2 blocked flushing channels
- Remove all non-native species
- Clear Blocked Culverts within the estuary
- Dredge the internal waterways to the as built condition

Included in the \$6.7M total is money to

Remediation

Category	Sub Category	No.	Item	Reference	Unit	Quantity	Cost per Unit	Total Cost
Bridges and Tunnels	Bridge #1	bt1	Replace Bridge #1	16.0 GRAND HARBOR BRIDGE #1 and #2	EA	0	\$800,000	\$0
	Bridge #2	bt2	Bridge #2 Repairs	16.0 GRAND HARBOR BRIDGE #1 and #2	SF	1	\$1,000	\$1,000
	Tunnels	bt3	Tunnel Drainage Improvements (4)	19.0 GRAND HARBOR PEDESTRIAN TUNNELS #1 THROUGH #4	SF	500	\$7	\$3,500
		bt4	General Tunnel Repairs	19.0 GRAND HARBOR PEDESTRIAN TUNNELS #1 THROUGH #4	EA	4	\$750	\$3,000
Bridges and Tunnels Total								\$7,500
Buildings	53rd St	bl6	Guard Shack Repairs/Replacement	Repairs not economical since remaining life is 1 year. Replace	EA	1	\$15,000	\$15,000
	IRB	bl01	Grand Harbor Guard House Repairs	17.0 GRAND HARBOR GUARD HOUSES #1 AND #2	EA	1	\$1,500	\$1,500
		bl02	The Falls Guard House Repairs	17.0 GRAND HARBOR GUARD HOUSES #1 AND #2	EA	1	\$1,500	\$1,500
Buildings Total								\$18,000
Conservation Easement	Hydrology	es2	Flushing Channel Repairs - Two Channels	NOT COMPLIANT WITH CONSERVATION EASEMENT OR0922 PG 2192	CY	1,476	\$150	\$221,400
		es3	Water Courses - Narrow	NOT COMPLIANT WITH CONSERVATION EASEMENT OR0922 PG 2192	CY	11,424	\$150	\$1,713,600
		es4	Water Courses - Wide	NOT COMPLIANT WITH CONSERVATION EASEMENT OR0922 PG 2192	CY	29,992	\$150	\$4,498,800
	Plant Removal	est1	Invasive Species Removal - Brazilian Pepper	NOT COMPLIANT WITH CONSERVATION EASEMENT OR0922 PG 2192	DAYS	60	\$5,000	\$300,000
Conservation Easement Total								\$6,733,800
Irrigation	Recycled Water Reservoir	irr1	Pond Liner Fabric Replacement	Needs to be replaced within 5 years and the wood fascia requires replacement now. The liner should be replaced now and properly attached to the steel sheet pile behind the wood fascia	SF	90,000	\$2	\$180,000
	Recycled Water Reservoir	irr2	Wooden Facade Replacement	18.0 GRAND HARBOR RETAINING WALLS #1 THROUGH #4	EA	1,200	\$70	\$84,000
Irrigation Total								\$264,000

Also on the first page is the remediation of the recycled water reservoir near #16 Harbor tee. This is really a tank with steel sheet walls, wooden fascia, and a rubber liner on the bottom to keep the recycled water from contaminating the aquifer. The steel wall is good but we need to replace the wood fascia and the bottom liner.

Remediation

Category	Sub Category	No.	Item	Reference	Unit	Quantity	Cost per Unit	Total Cost
Landscaping	Invasive Species Removal	Lsc12	The Falls at Grand Harbor Landscape - Brazilian Pepper	14.0 THE FALLS AT GRAND HARBOR LANDSCAPE	DAYS	2	\$5,000	\$10,000
		Lsc2	45th Street Perimeter Buffer Vines	9.0 GRAND HARBOR 45th STREET PERIMETER BUFFER	LF	600	\$10	\$6,000
		Lsc4	Indian River Boulevard Perimeter Buffer - Vines	10.0 GRAND HARBOR/ OAK HARBOR INDIAN RIVER BOULEVARD PERIMETER BUFFER	LF	500	\$10	\$5,000
	Fence Repair	Lsc5	Indian River Boulevard Perimeter Buffer Perimeter	10.0 GRAND HARBOR/ OAK HARBOR INDIAN RIVER BOULEVARD PERIMETER BUFFER	LF	640	\$15	\$9,600
	Irrigation Pumps and Controllers	Irr7	Indian River Boulevard Perimeter Buffer Irrigation Equipment Repairs	10.0 GRAND HARBOR/ OAK HARBOR INDIAN RIVER BOULEVARD PERIMETER BUFFER	EA	1	\$200	\$200
	Tree/Shrub Replacement and Pruning	Lsc1	45th Street Perimeter Buffer	9.0 GRAND HARBOR 45th STREET PERIMETER BUFFER	EA	6	\$100	\$600
		Lsc11	The Falls at Grand Harbor Landscape Tree/Shrub Replacement and Pruning	14.0 THE FALLS AT GRAND HARBOR LANDSCAPE	EA	37	\$287	\$10,619
		Lsc3	Indian River Boulevard Perimeter Buffer	10.0 GRAND HARBOR/ OAK HARBOR INDIAN RIVER BOULEVARD PERIMETER BUFFER	EA	45	\$150	\$6,750
		Lsc6	River Club/ Harbor Village R/W Landscape	11.0 RIVER CLUB/ HARBOR VILLAGE R/W LANDSCAPE	EA	11	\$269	\$2,959
		Lsc7	Grand Harbor R/W Landscape	12.0 GRAND HARBOR R/W LANDSCAPE	EA	7	\$95	\$665
		Lsc8	River Village Tract C Stormwater Buffer Landscape	13.0 RIVER VILLAGE TRACT C STORMWATER BUFFER LANDSCAPE	EA	4	\$250	\$1,000
Landscaping Total							\$53,393	
Misc	Misc	misc1	River Village Pier Repair	20.0 GRAND HARBOR MISCELLANEOUS STRUCTURES	LF	225	\$200	\$45,000
		misc2	Main Fountain Replace Lighting System and General Repairs	20.0 GRAND HARBOR MISCELLANEOUS STRUCTURES	EA	30	\$300	\$9,000
Misc Total							\$54,000	

Another notable expense is to repair the River Village fishing pier that GHCA owns. There are many cross braces missing. This is to replace those missing structural members.

Remediation

Category	Sub Category	No.	Item	Reference	Unit	Quantity	Cost per Unit	Total Cost
Right of Way	Curbs and Gutters	row8	Replace Curbs and Gutters in 12 locations	4.0 GRAND HARBOR ROADWAYS, CURBS, AND GUTTERS. Replace 12 clipped and cracked items	LF	155	\$25	\$3,875
	Guardrails	row3	Replace Guardrails	3.0 GRAND HARBOR SIDEWALKS, GUARDRAILS, AND BULVAHEADS 13 items	LF	4,450	\$23	\$102,350
	Lighting	row5	Replace Lighting Fixtures and bury wires	6.0 GRAND HARBOR SITE LIGHTING	EA	14	\$1,000	\$14,000
	Roadways	row10	Full replacement (Subgrade Included) in 7 locations	4.0 GRAND HARBOR ROADWAYS, CURBS, AND GUTTERS. Repair 7 locations in poor condition	SY	111	\$45	\$4,995
	Sidewalks	row1	Replace 8x5 Panels after removing any tree roots causing the upheaval of the panels.	3.0 GRAND HARBOR SIDEWALKS, GUARDRAILS, AND BULVAHEADS item 14	EA	102	\$280	\$28,560
		row2	Replace Asphalt Sidewalk with a poured concrete sidewalk	3.0 GRAND HARBOR SIDEWALKS, GUARDRAILS, AND BULVAHEADS	SY	1,452	\$30	\$43,560
	Signs	row6	Post Replacement (9)	5.0 GRAND HARBOR SIGNAGE	EA	9	\$150	\$1,350
		row7	Sign Replacement (30)	5.0 GRAND HARBOR SIGNAGE	EA	30	\$250	\$7,500
Right of Way Total								\$206,190
Security	Equipment	sec1	Immediate Camera Replacement	7.0 GRAND HARBOR SITE SECURITY	EA	15	\$200	\$3,000
Security Total								\$3,000

There are many elements of the RoW. 2 of significant value are the replacement of the guardrails and the sidewalks. Most of the guardrails are rotted and need new posts and fascia. It is the vast majority so this redoes them all.

The sidewalks, as you know are an issue. We want the ashpalt Via Marbella walkway replaced with concrete. Secondly, the ADA requires any sidewalk with a 1/4in gapin any of the 4 directions, to be fixed so they are not tripping hazards. We want all panels not within that tolerance to be replaced.

Remediation

Category	Sub Category	No.	Item	Reference	Unit	Quantity	Cost per Unit	Total Cost
Stormwater Management	Exfil Trenches	swm8	St Andrews Exfiltration Trench Replacement	Not compliant with S.R.WIND 18679 Permit Condition and FEDP 311043029 Permit Condition	LF	890	\$125	\$111,250
	Ponds	swm1	Pond Bank Restoration (Single Bag)	Not compliant with S.R.WIND 18679 Permit Condition and FEDP 311043029 Permit Condition	LF	54,107	\$50	\$2,705,350
		swm1.1	Pond Bank Restoration (Double Bag)	Not compliant with S.R.WIND 18679 Permit Condition and FEDP 311043029 Permit Condition	LF	2,200	\$80	\$176,000
		swm3	St Andrews Pond Rebuild	Not compliant with S.R.WIND 18679 Permit Condition and FEDP 311043029 Permit Condition	EA	1	\$20,000	\$20,000
		swm4	Storm Pipe Lining	8.0 GRAND HARBOR PONDS	LF	80	\$200	\$16,000
		swm5	Storm Pipe cutoff and replace	8.0 GRAND HARBOR PONDS	EA	3	\$8,600	\$25,800
		swm6	Littoral Zone Planting	Not compliant with S.R.WIND 18679 Permit Condition and FEDP 311043029 Permit Condition	SF	719,393	\$5	\$3,596,965
		swm7	Replace the aeration system	Not compliant with S.R.WIND 18679 Permit Condition and FEDP 311043029 Permit Condition	EA	1	\$7,500	\$7,500
	Stormwater Management Total							\$6,658,865
Walls	Bulkheads	wal1	Replace Bulkhead #3	3.0 GRAND HARBOR SIDEWALKS, GUARDRAILS, AND BULKHEADS 13 items	EA	1	\$7,500	\$7,500
	River Village Retaining Wall (Retaining Wall #3)	wal2	Retaining Wall #3 Wooden Façade Repair	18.0 GRAND HARBOR RETAINING WALLS #1 THROUGH #4	LF	330	\$70	\$23,100
Walls Total								\$30,600
Grand Total								\$14,029,348



Here is the second biggy....Storm Water Management....another \$6.7 M. There are many elements.

Storm Water Management

- 4 Functions
 - Flood control

There are 4 functions that the SWM system performs.....

Storm Water Management

- 4 Functions
 - Flood control
 - Treat water before entering the river
 - Runoff picks up petroleum products, agri chemicals, dirt
 - Regulations require all runoff be treated before it enters the river
 - Dry Retention areas and Exfiltration Trenches are used when there is no opportunity to send runoff through the pond system

Treatment or removal of contaminants that is picked up as water drains into the ponds. They are gas and oil, herbicides, pesticides, excess nutrients, and just plain old dirt. Regulations require that runoff be “treated” before it is discharged into the river. This is done with plants, forcing percolation of the runoff through the ground, and settling in the ponds. Those locations that are not close to a pond have other structures that force the water to percolate and get cleaned in the process.

Storm Water Management

- 4 Functions
 - Flood control
 - Treat water before entering the river
 - Water source for Irrigation

It is a major water source for irrigation.

Storm Water Management

- 4 Functions
 - Flood control
 - Treat water before entering the river
 - Water source for Irrigation
 - Habitat for wildlife

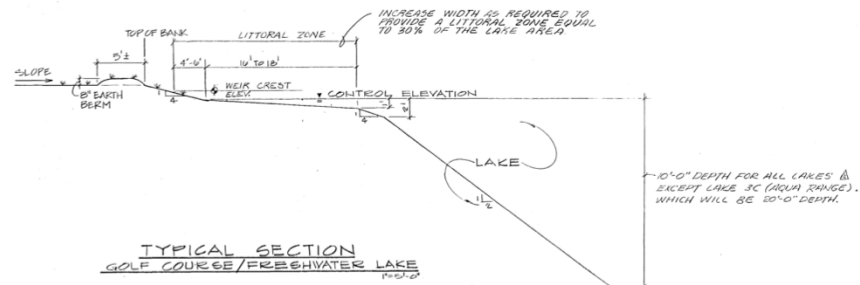
And it is habitat for small creatures that get eaten by bigger creatures. That is a big feature for our community that we all enjoy.

Storm Water Management Condition

- Extensive erosion
 - Pond banks gone

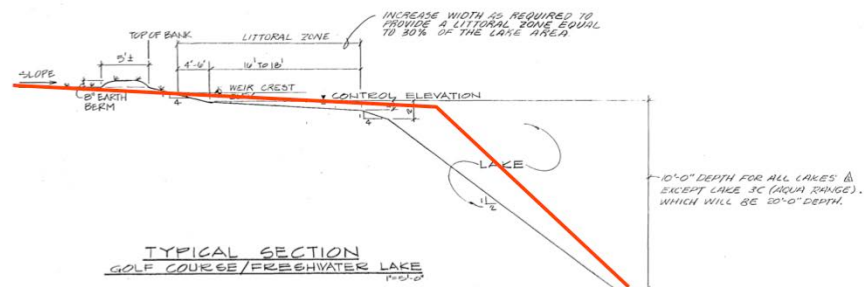
In the report you will find that the systems state is not good. First, there has been significant bank erosion.

Pond Profile



This is a typical pond profile. There is berm at the top of the bank. There is a shelf going 16-20 foot out that begins at the “crest level” of the pond to 1 ft deep, where the bank then dives to the bottom....8-10 ft except for the big pond that is 20ft deep. The crest level is where the water level should be after a huge storm...9in in 24 hrs. The control level is the normal water level after the runoff flows towards the estuary 4-5 days after the storm. The littoral zone should be planted with approved species that do the cleaning of the water.

Pond Profile



Those berms are gone. The shelves are 20 yards wide not 20ft wide. The water has, over the years been washed into the ponds plus the ponds have 30 years of silt from runoff. The profile has change significantly.

Storm Water Management Condition

- Extensive erosion
 - Pond banks gone
 - Silt has reduced the storage volume and the 'treatment' volume of the system
 - Silt has retarded water flow
 - Banks are encroaching on private property

The permanent storage volume is much less than designed. The room for runoff is less than designed. And the lake margins have encroached on private property. Not good.

Storm Water Management Condition

- Extensive erosion
- Several Control Structures were modified without a permit.
 - 'Control Elevations' +1.5 ft higher than permitted
 - Major cause of bank erosion
 - Water table too high - slowing drainage
 - Reduces flood control capability

There are control structures...weirs and head gates that control the pond levels and flows...that have been modified without permit. Many ponds have seen 1.5 ft more water for years. That has caused much of the significant bank degradation.

Storm Water Management Condition

- Extensive erosion
- Several Control Structures were modified without a permit.
- Permit Condition Variances
 - Littoral Zones must be 22.1 acres with 80% plant coverage
 - At best 9 acres
 - Invasive species

And the plants are no longer in most ponds as designed. And the plants that are there are not the right ones. Many, many weeds as you know. This is a variance with specific SJRWMD and FDEP conditions of permit 18679.

Storm Water Management Condition

- Extensive erosion
- Several Control Structures were modified without a permit.
- Permit Condition Variances
 - Littoral Zones must be 22.1 acres with 80% plant coverage
 - Missing aeration system
 - 4 damaged pipe interconnections

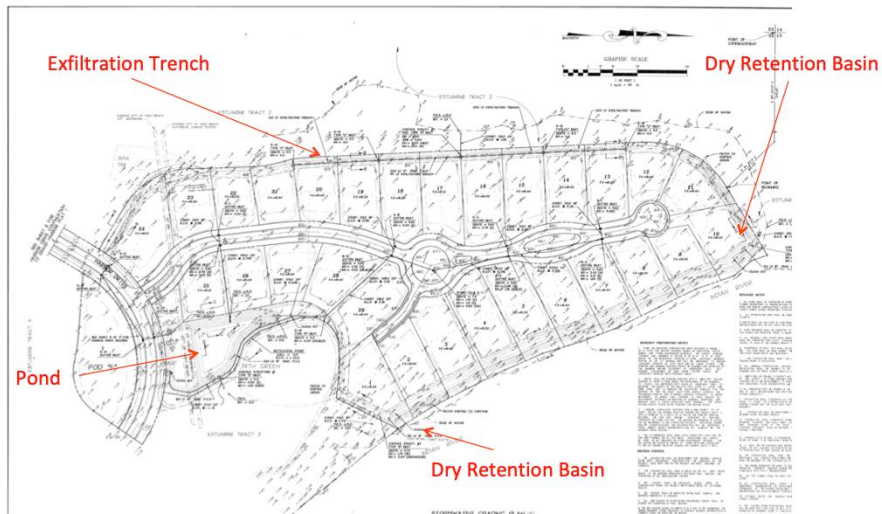
An aeration system is missing, and there are 4 damaged pipes found that are restricting inter pond flow.

Storm Water Management Condition

- Extensive erosion
- Several Control Structures were modified without a permit.
- Permit Condition Variances
- St Andrews SWM systems not functional/ flooding

And lastly, the ST Andrews system is not functioning.

St Andrews Storm Water Management



There are 4 structures in the approved and certified SWM design around the St Andrews neighborhood. all but the SE dry retention basin are not functioning.

Storm Water Management

- Extensive erosion
- Several Control Structures were modified without a permit.
- Permit Condition Variances
- St Andrews SWM systems not functional/ flooding
 - 890 ft Exfiltration trench blocked
 - A dry detainment structure is silted in and non-functional
 - Pond control structure is not as permitted
 - 'Recovery' system non-functional
 - Silted

The three “subsystems need to be completely replaced. That is

SWM Remedy

- Dredge ponds rebuild pond all pond banks and littoral shelves

We need to return the ponds to their original shape, remove excess silt, and rebuild the littoral shelves.

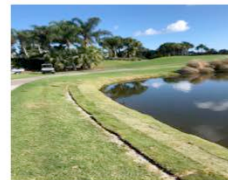
Geotubes

Uses dredged spoils to fill tubes

No dewatering and disposal required

Minimal future erosion

Will rebuild banks and littoral zones



We have priced in the use of geo-tubes to rebuild the banks and the littoral shelves to the original state. These are resistant to the wave action and water washing soil back into the ponds. The also give us a place to put the dredging spoils. If we use this product it is likely that we can avoid major rebuilds far into the future.

SWM Remedy

- Dredge ponds rebuild pond all pond banks and littoral shelves

We need to restore the profile and shelves and return to the original pond volumes.

SWM Remedy

- Dredge ponds rebuild pond all pond banks and littoral shelves
- Remove all weeds and invasive plant species in the ponds
- Replant the littoral zones to meet the 22.1 acre/80% coverage condition

We need to get rid of the bad plants and replant the littoral zones

SWM Remedy

- Dredge ponds rebuild pond all pond banks and littoral shelves
- Remove all weeds and invasive plant species in the ponds
- Replant the littoral zones to meet the 22.1 acre/80% coverage condition
- Repair the 4 damaged culverts
- Install an aeration system
- Dig up and replace the exfiltration trench and dry retention structures in St Andrews
- Dredge St Andrews pond, replace side drain and control structure as permitted

We need to repair the 4 pipes dig up the exfil trench and rebuild the ST Andrews pond and control structures.

Remediation

Category	Sub Category	No.	Item	Reference	Unit	Quantity	Cost per Unit	Total Cost
Stormwater Management	Exfil Trenches	swm8	St Andrews Exfiltration Trench Replacement	Not compliant with S.R.WIND 18679 Permit Condition and FEDP 311043029 Permit Condition	LF	890	\$125	\$111,250
	Ponds	swm1	Pond Bank Restoration (Single Bag)	Not compliant with S.R.WIND 18679 Permit Condition and FEDP 311043029 Permit Condition	LF	54,107	\$50	\$2,705,350
		swm1.1	Pond Bank Restoration (Double Bag)	Not compliant with S.R.WIND 18679 Permit Condition and FEDP 311043029 Permit Condition	LF	2,200	\$80	\$176,000
		swm3	St Andrews Pond Rebuild	Not compliant with S.R.WIND 18679 Permit Condition and FEDP 311043029 Permit Condition	EA	1	\$20,000	\$20,000
		swm4	Storm Pipe Lining	8.0 GRAND HARBOR PONDS	LF	80	\$200	\$16,000
		swm5	Storm Pipe cutoff and replace	8.0 GRAND HARBOR PONDS	EA	3	\$8,600	\$25,800
		swm6	Littoral Zone Planting	Not compliant with S.R.WIND 18679 Permit Condition and FEDP 311043029 Permit Condition	SF	719,393	\$5	\$3,596,965
		swm7	Replace the aeration system	Not compliant with S.R.WIND 18679 Permit Condition and FEDP 311043029 Permit Condition	EA	1	\$7,500	\$7,500
	Stormwater Management Total							\$6,658,865
Walls	Bulkheads	wal1	Replace Bulkhead #3	3.0 GRAND HARBOR SIDEWALKS, GUARDRAILS, AND BULKHEADS 13 items	EA	1	\$7,500	\$7,500
	River Village Retaining Wall (Retaining Wall #3)	wal2	Retaining Wall #3 Wooden Façade Repair	18.0 GRAND HARBOR RETAINING WALLS #1 THROUGH #4	LF	330	\$70	\$23,100
Walls Total								\$30,600
Grand Total								\$14,029,348

That all adds up to \$14M. That is for fixing now. We are assuming that these items get fixed as we move on to determine the reserves we should have if the developer had met their obligation to do so.

Reserves Table

Funds for Future Capital Repairs and Replacement

Reserves

- GHCA covenants require the Board to maintain adequate reserves for the repair and maintenance of managed property
- Remediation settlement will effect the level of Reserves we should have on 12/31/2020.
 - Repairing an item will extend useful life
 - Replacing an item will reset the “clock” to begin the next cycle of fund accumulation

A couple of important points to know as you review this table.....

Reserves

- GHCA covenants require the Board to maintain adequate reserves for the repair and maintenance of managed property
- Remediation settlement will effect the level of Reserves we should have on 12/31/2020.
- Not all items require a reserve
 - Long life if maintained.....tunnels

Reserves

- GHCA covenants require the Board to maintain adequate reserves for the repair and maintenance of managed property
- Remediation settlement will effect the level of Reserves we should have on 12/31/2020.
- Not all items require a reserve
 - Long life if maintained
 - Small replacement costsOH Irrigation pump

Reserves

- GHCA covenants require the Board to maintain adequate reserves for the repair and maintenance of managed property
- Remediation settlement will effect the level of Reserves we should have on 12/31/2020.
- Not all items require a reserve
 - Long life if maintained
 - Small replacement costs
 - Regular maintenance item....Landscaping

Reserves

Category	Sub Category	No.	Item	Unit	Cost per Unit	Present Age	Typical Life	Est. Rem. Life	Total cost	Reserve Contribution Per Yr	Require Reserves 1/1/2021
Bridges and Tunnels	Bridge #1	b45	Bridge #1 Repair/ Replace	EA	\$800,000	0	50	50	\$800,000	\$16,000	\$0
	Bridge #2	b46	Bridge # 2 Repair/ Replace	EA	\$1,000,000	30	50	20	\$1,000,000	\$20,000	\$620,000
Bridges and Tunnels Total									\$1,800,000	\$36,000	\$620,000
Buildings	IRB	b44	East Guardhouse Roof	SF	\$18	29	40	11	\$14,670	\$367	\$11,003
		b45	West Guardhouse Roof	SF	\$18	15	40	25	\$21,600	\$540	\$8,640
Buildings Total									\$36,270	\$907	\$19,643
Conservation Easement	Hydrology	es14	Flushing Channel Repair 2 channels	CY	\$150	0	20	20	\$221,400	\$11,670	\$0
		es15	Flushing Channel Repair other 2 channels	CY	\$150	10	20	10	\$221,400	\$11,670	\$121,770
		es16	Water Courses Repair - Narrow	CY	\$150	0	25	25	\$1,827,900	\$73,116	\$0
		es17	Water Courses Repair - Wide	CY	\$150	0	25	25	\$7,752,300	\$310,092	\$0
Conservation Easement Total									\$10,023,000	\$405,348	\$121,770
Irrigation	Recycled Water Reservoir	irr3	Pond Liner Fabric Replacement	SF	\$2	0	35	35	\$180,000	\$5,143	\$0
		irr4	Sheet Piling Retaining Wall Repairs/Replacement	LF	\$250	31	50	19	\$300,000	\$6,000	\$192,000
		irr5	Wooden Facade Retaining Wall Repairs/Replacement	EA	\$70	0	25	25	\$84,000	\$3,360	\$0
Irrigation Total									\$564,000	\$14,503	\$192,000
Misc	Misc	misc3	River Village Pier Pier Replacement	LF	\$200	0	20	0	\$40,000	\$2,250	\$2,250
Misc Total									\$45,000	\$2,250	\$2,250
Right of Way	Guardrails	row13	Guardrails Repair/Replacement	LF	\$23	0	25	25	\$102,350	\$4,094	\$0
	Lighting	row19	Lighting Poles and Fixtures	EA	\$3,500	10	20	10	\$525,000	\$26,250	\$288,750
	Roadways	row14	Patching (1" Mill and Resurfacing)	SY	\$8	10	20	10	\$757,432	\$37,872	\$416,588
	Sidewalks	row11	Concrete Sidewalk (8X5 Panels)	SY	\$30	20	30	10	\$409,890	\$13,663	\$286,923
Right of Way Total									\$1,794,672	\$81,879	\$992,261

Let me explain what is in the reserve table. The first 4 columns are similar to the Remediation Table and organized around the assets we have.

Reserves

Category	Sub Category	No.	Item	Unit	Cost per Unit	Present Age	Typical Life	Est. Rem. Life	Total cost	Reserve Contribution Per Yr	Require Reserves 1/1/2021
Bridges and Tunnels	Bridge #1	bts	Bridge #1 Repair / Replace	EA	\$800,000	0	50	50	\$800,000	\$16,000	\$0
	Bridge #2	bte	Bridge #2 Repair / Replace	EA	\$1,000,000	30	50	20	\$1,000,000	\$20,000	\$620,000
Bridges and Tunnels Total									\$1,800,000	\$36,000	\$620,000
Buildings	RB	bd4	East Guardhouse Roof	SF	\$18	29	40	11	\$14,670	\$367	\$11,003
		bd5	West Guardhouse Roof	SF	\$18	15	40	25	\$21,600	\$540	\$8,640
Buildings Total									\$36,270	\$907	\$19,643
Conservation Easement	Hydrology	est4	Flushing Channel Repair 2 channels	CY	\$150	0	20	20	\$221,400	\$11,670	\$0
		est5	Flushing Channel Repair other 2 channels	CY	\$150	10	20	10	\$221,400	\$11,670	\$121,770
		est6	Water Courses Repair - Narrow	CY	\$150	0	25	25	\$1,827,900	\$73,116	\$0
		est7	Water Courses Repair - Wide	CY	\$150	0	25	25	\$7,752,300	\$310,092	\$0
		Conservation Easement Total									\$10,023,000
Irrigation	Recycled Water Reservoir	irr3	Pond Liner Fabric Replacement	SF	\$2	0	35	35	\$180,000	\$5,143	\$0
		irr4	Sheet Piling Retaining Wall Repairs / Replacement	LF	\$250	31	50	19	\$300,000	\$6,000	\$192,000
		irr5	Wooden Facade Retaining Wall Repairs / Replacement	EA	\$70	0	25	25	\$84,000	\$3,360	\$0
Irrigation Total									\$564,000	\$14,503	\$192,000
Misc	Misc	misc3	River Village Pier Pier Replacement	LF	\$200	0	20	0	\$40,000	\$2,250	\$2,250
Misc Total									\$45,000	\$2,250	\$2,250
Right of Way	Guardrails	row13	Guardrails Repair / Replacement	LF	\$23	0	25	25	\$102,350	\$4,094	\$0
	Lighting	row19	Lighting Poles and Fixtures	EA	\$3,500	10	20	10	\$525,000	\$26,250	\$288,750
	Roadways	row14	Patching (1" Mill and Resurfacing)	SY	\$8	10	20	10	\$757,432	\$37,872	\$416,588
	Sidewalks	row11	Concrete Sidewalk (8'X5' Panels)	SY	\$30	20	30	10	\$409,890	\$13,663	\$286,923
Right of Way Total									\$1,794,672	\$81,879	\$992,261

It is different in that we now introduce the concept of useful life and remaining useful life. These are estimates based on industry standards and the current state of any give asset.

Reserves

Category	Sub Category	No.	Item	Unit	Cost per Unit	Present Age	Typical Life	Est. Rem. Life	Total cost	Reserve Contribution Per Yr	Require Reserves 1/1/2021
Bridges and Tunnels	Bridge #1	b45	Bridge #1 Repair / Replace	EA	\$800,000	0	50	50	\$800,000	\$16,000	\$0
	Bridge #2	b46	Bridge # 2 Repair/ Replace	EA	\$1,000,000	30	50	20	\$1,000,000	\$20,000	\$620,000
Bridges and Tunnels Total									\$1,800,000	\$36,000	\$620,000
Buildings	RB	b44	East Guardhouse Roof	SF	\$18	29	40	11	\$14,670	\$367	\$11,003
		b45	West Guardhouse Roof	SF	\$18	15	40	25	\$21,600	\$540	\$8,640
Buildings Total									\$36,270	\$907	\$19,643
Conservation Easement	Hydrology	es14	Flushing Channel Repair 2 channels	CY	\$150	0	20	20	\$221,400	\$11,670	\$0
		es15	Flushing Channel Repair other 2 channels	CY	\$150	10	20	10	\$221,400	\$11,670	\$121,770
		es16	Water Courses Repair - Narrow	CY	\$150	0	25	25	\$1,827,900	\$73,116	\$0
		es17	Water Courses Repair - Wide	CY	\$150	0	25	25	\$7,752,300	\$310,092	\$0
Conservation Easement Total									\$10,023,000	\$405,348	\$121,770
Irrigation	Recycled Water Reservoir	irr3	Pond Liner Fabric Replacement	SF	\$2	0	35	35	\$180,000	\$5,143	\$0
		irr4	Sheet Piling Retaining Wall Repairs/Replacement	LF	\$250	31	50	19	\$300,000	\$6,000	\$192,000
		irr5	Wooden Facade Retaining Wall Repairs/Replacement	EA	\$70	0	25	25	\$84,000	\$3,360	\$0
Irrigation Total									\$564,000	\$14,503	\$192,000
Misc	Misc	misc3	River Village Pier Pier Replacement	LF	\$200	0	20	0	\$40,000	\$2,250	\$2,250
Misc Total									\$45,000	\$2,250	\$2,250
Right of Way	Guardrails	row13	Guardrails Repair/Replacement	LF	\$23	0	25	25	\$102,350	\$4,094	\$0
	Lighting	row19	Lighting Poles and Fixtures	EA	\$3,500	10	20	10	\$525,000	\$26,250	\$288,750
	Roadways	row14	Patching (1" Mill and Resurfacing)	SY	\$8	10	20	10	\$757,432	\$37,872	\$416,588
	Sidewalks	row11	Concrete Sidewalk (8X5 Panels)	SY	\$30	20	30	10	\$409,890	\$13,663	\$286,923
Right of Way Total									\$1,794,672	\$81,879	\$992,261

This column is the estimated cost to replace or repair each item. These are order of magnitude numbers. In a few cases they are based on an actual estimate but mostly they are based on industry sources.

Reserves

Category	Sub Category	No.	Item	Unit	Cost per Unit	Present Age	Typical Life	Est. Rem. Life	Total cost	Reserve Contribution Per Yr	Require Reserves 1/1/2021
Security	Gates	sec3	7 Electric Bar Gates	EA	\$10,000	15	25	10	\$70,000	\$2,800	\$44,800
		sec4	45th Street Gate	EA	\$12,000	15	25	10	\$12,000	\$480	\$7,680
Security Total									\$82,000	\$3,280	\$52,480
Stormwater Management	Exfil Trenches	swm10	Exfiltration Trenches	LF	\$125	0	30	30	\$111,250	\$3,708	\$3,708
	Ponds	swm11	Storm Pipe Lining	LF	\$200	20	50	30	\$1,852,000	\$37,040	\$777,840
		swm9	Pond Bank Restoration (Single Bag)	LF	\$50	0	30	30	\$2,705,350	\$90,178	\$0
		swm9.1	Pond Bank Restoration (Double Bag)	LF	\$80	0	30	30	\$176,000	\$5,867	\$0
	Stormwater Management Total									\$4,844,600	\$136,793
Walls	Bulkheads	wal3	Bulkheads Repair/Replacement	EA	\$7,500	15	20	5	\$30,000	\$1,500	\$24,000
	River Village Retaining Wall (Retaining Wall #5)	wal5	River Village Retaining Wall Wooden Facade Replacement	LF	\$70	0	30	30	\$23,100	\$770	\$770
		wal6	River Village Retaining Wall Sheet Piling Replacement	LF	\$250	20	50	30	\$82,500	\$1,650	\$34,650
	Seawalls (Retaining Walls #1-#2)	wal4	Seawalls Repair/Replacement	LF	\$500	15	40	25	\$212,500	\$5,313	\$85,000
Walls Total									\$348,100	\$9,233	\$144,420
Grand Total									\$19,537,642	\$690,192	\$2,926,371

We estimate that there are \$19.5 M of assets that we should have reserves for.

Reserves

Category	Sub Category	No.	Item	Unit	Cost per Unit	Present Age	Typical Life	Est. Rem. Life	Total cost	Reserve Contribution Per Yr	Require Reserves 1/1/2021
Bridges and Tunnels	Bridge #1	b45	Bridge #1 Repair / Replace	EA	\$800,000	0	50	50	\$800,000	\$16,000	\$0
	Bridge #2	b46	Bridge # 2 Repair/ Replace	EA	\$1,000,000	30	50	20	\$1,000,000	\$20,000	\$620,000
Bridges and Tunnels Total									\$1,800,000	\$36,000	\$620,000
Buildings	RB	b44	East Guardhouse Roof	SF	\$18	29	40	11	\$14,670	\$367	\$11,003
		b45	West Guardhouse Roof	SF	\$18	15	40	25	\$21,600	\$540	\$8,640
Buildings Total									\$36,270	\$907	\$19,643
Conservation Easement	Hydrology	es14	Flushing Channel Repair 2 channels	CY	\$150	0	20	20	\$221,400	\$11,070	\$0
		es15	Flushing Channel Repair other 2 channels	CY	\$150	10	20	10	\$221,400	\$11,070	\$121,770
		es16	Water Courses Repair - Narrow	CY	\$150	0	25	25	\$1,827,900	\$73,116	\$0
		es17	Water Courses Repair - Wide	CY	\$150	0	25	25	\$7,752,300	\$310,092	\$0
Conservation Easement Total									\$10,023,000	\$405,348	\$121,770
Irrigation	Recycled Water Reservoir	irr3	Pond Liner Fabric Replacement	SF	\$2	0	35	35	\$180,000	\$5,143	\$0
		irr4	Sheet Piling Retaining Wall Repairs/Replacement	LF	\$250	31	50	19	\$300,000	\$6,000	\$192,000
		irr5	Wooden Facade Retaining Wall Repairs/Replacement	EA	\$70	0	25	25	\$84,000	\$3,360	\$0
Irrigation Total									\$564,000	\$14,503	\$192,000
Misc	Misc	misc3	River Village Pier Pier Replacement	LF	\$200	0	20	0	\$40,000	\$2,250	\$2,250
Misc Total									\$45,000	\$2,250	\$2,250
Right of Way	Guardrails	row13	Guardrails Repair/Replacement	LF	\$23	0	25	25	\$102,350	\$4,094	\$0
		row19	Lighting Poles and Fixtures	EA	\$3,500	10	20	10	\$525,000	\$26,250	\$288,750
	Roadways	row14	Patching (1" Mill and Resurfacing)	SY	\$8	10	20	10	\$757,432	\$37,872	\$416,588
	Sidewalks	row11	Concrete Sidewalk (8X5 Panels)	SY	\$30	20	30	10	\$409,890	\$13,663	\$286,923
Right of Way Total									\$1,794,672	\$81,879	\$992,261

This is simply the value divided by the typical life. This is how much each year of that life should be reserved to be fully funded at the end of the economic life.

Reserves

Category	Sub Category	No.	Item	Unit	Cost per Unit	Present Age	Typical Life	Est. Rem. Life	Total cost	Reserve Contribution Per Yr	Require Reserves 1/1/2021
Security	Gates	sec3	7 Electric Bar Gates	EA	\$10,000	15	25	10	\$70,000	\$2,800	\$44,800
		sec4	45th Street Gate	EA	\$12,000	15	25	10	\$12,000	\$480	\$7,680
Security Total									\$82,000	\$3,280	\$52,480
Stormwater Management	Exfil Trenches	swm10	Exfiltration Trenches	LF	\$125	0	30	30	\$111,250	\$3,708	\$3,708
	Ponds	swm11	Storm Pipe Lining	LF	\$200	20	50	30	\$1,852,000	\$37,040	\$777,840
		swm9	Pond Bank Restoration (Single Bag)	LF	\$50	0	30	30	\$2,705,350	\$90,178	\$0
		swm9.1	Pond Bank Restoration (Double Bag)	LF	\$80	0	30	30	\$176,000	\$5,867	\$0
	Stormwater Management Total								\$4,844,600	\$136,793	\$781,548
Walls	Bulkheads	wal3	Bulkheads Repair/Replacement	EA	\$7,500	15	20	5	\$30,000	\$1,500	\$24,000
	River Village Retaining Wall (Retaining Wall #5)	wal5	River Village Retaining Wall Wooden Facade Replacement	LF	\$70	0	30	30	\$23,100	\$770	\$770
		wal6	River Village Retaining Wall Sheet Piling Replacement	LF	\$250	20	50	30	\$82,500	\$1,650	\$34,650
		Seawalls (Retaining Walls #1-#2)	wal4	Seawalls Repair/Replacement	LF	\$500	15	40	25	\$121,500	\$5,313
	Walls Total								\$348,100	\$9,233	\$144,420
Grand Total									\$19,537,642	\$690,192	\$2,926,371

To get to 100% funding, we should be contributing about %690K per year to reserve balances each yr.

Reserves

Category	Sub Category	No.	Item	Unit	Cost per Unit	Present Age	Typical Life	Est. Rem. Life	Total cost	Reserve Contribution Per Yr	Require Reserves 1/1/2021
Bridges and Tunnels	Bridge #1	b45	Bridge #1 Repair / Replace	EA	\$800,000	0	50	50	\$800,000	\$16,000	\$0
	Bridge #2	b46	Bridge # 2 Repair/ Replace	EA	\$1,000,000	30	50	20	\$1,000,000	\$20,000	\$620,000
Bridges and Tunnels Total									\$1,800,000	\$36,000	\$620,000
Buildings	RB	b44	East Guardhouse Roof	SF	\$18	29	40	11	\$14,670	\$367	\$11,003
		b45	West Guardhouse Roof	SF	\$18	15	40	25	\$21,600	\$540	\$8,640
Buildings Total									\$36,270	\$907	\$19,643
Conservation Easement	Hydrology	es14	Flushing Channel Repair 2 channels	CY	\$150	0	20	20	\$221,400	\$11,670	\$19,643
		es15	Flushing Channel Repair other 2 channels	CY	\$150	10	20	10	\$221,400	\$11,670	\$121,770
		es16	Water Courses Repair - Narrow	CY	\$150	0	25	25	\$1,827,900	\$73,116	\$0
		es17	Water Courses Repair - Wide	CY	\$150	0	25	25	\$7,752,300	\$310,092	\$0
Conservation Easement Total									\$10,023,000	\$405,348	\$121,770
Irrigation	Recycled Water Reservoir	irr3	Pond Liner Fabric Replacement	SF	\$2	0	35	35	\$180,000	\$5,143	\$0
		irr4	Sheet Piling Retaining Wall Repairs/Replacement	LF	\$250	31	50	19	\$300,000	\$6,000	\$192,000
		irr5	Wooden Facade Retaining Wall Repairs/Replacement	EA	\$70	0	25	25	\$84,000	\$3,360	\$0
Irrigation Total									\$564,000	\$14,503	\$192,000
Misc	Misc	misc3	River Village Pier Pier Replacement	LF	\$200	0	20	0	\$40,000	\$2,250	\$2,250
Misc Total									\$45,000	\$2,250	\$2,250
Right of Way	Guardrails	row13	Guardrails Repair/Replacement	LF	\$23	0	25	25	\$102,350	\$4,094	\$0
	Lighting	row19	Lighting Poles and Fixtures	EA	\$3,500	10	20	10	\$525,000	\$26,250	\$288,750
	Roadways	row14	Patching (1" Mill and Resurfacing)	SY	\$8	10	20	10	\$757,432	\$37,872	\$416,588
	Sidewalks	row11	Concrete Sidewalk (8'X5' Panels)	SY	\$30	20	30	10	\$409,890	\$13,663	\$286,923
Right of Way Total									\$1,794,672	\$81,879	\$992,261

Required reserves are then the age of the assets this December times the per year requirement for each item.

Reserves

Category	Sub Category	No.	Item	Unit	Cost per Unit	Present Age	Typical Life	Est. Rem. Life	Total cost	Reserve Contribution Per Yr	Require Reserves 1/1/2021
Security	Gates	sec3	7 Electric Bar Gates	EA	\$10,000	15	25	10	\$70,000	\$2,800	\$44,800
		sec4	45th Street Gate	EA	\$12,000	15	25	10	\$12,000	\$480	\$7,680
Security Total									\$82,000	\$3,280	\$52,480
Stormwater Management	Exfil Trenches	swm10	Exfiltration Trenches	LF	\$125	0	30	30	\$111,250	\$3,708	\$3,708
	Ponds	swm11	Storm Pipe Lining	LF	\$200	20	50	30	\$1,852,000	\$37,040	\$777,840
		swm9	Pond Bank Restoration (Single Bag)	LF	\$50	0	30	30	\$2,705,350	\$90,178	\$0
		swm9.1	Pond Bank Restoration (Double Bag)	LF	\$80	0	30	30	\$176,000	\$5,867	\$0
	Stormwater Management Total								\$4,844,600	\$136,793	\$781,548
Walls	Bulkheads	wal3	Bulkheads Repair/Replacement	EA	\$7,500	15	20	5	\$30,000	\$1,500	\$24,000
	River Village Retaining Wall (Retaining Wall #5)	wal5	River Village Retaining Wall Wooden Facade Replacement	LF	\$70	0	30	30	\$23,100	\$770	\$770
		wal6	River Village Retaining Wall Sheet Piling Replacement	LF	\$250	20	50	30	\$82,500	\$1,650	\$34,650
	Seawalls (Retaining Walls #1-#2)	wal4	Seawalls Repair/Replacement	LF	\$500	15	40	25	\$212,500	\$5,313	\$85,000
Walls Total									\$348,100	\$9,233	\$144,420
Grand Total									\$19,537,642	\$690,192	\$2,926,371

We should have about \$2.9M in reserves in the account by the end of the year.

Reserves

Category	Sub Category	No.	Item	Unit	Cost per Unit	Present Age	Typical Life	Est. Rem. Life	Total cost	Reserve Contribution Per Yr	Require Reserves 1/1/2021
Bridges and Tunnels	Bridge #1	b45	Bridge #1 Repair/ Replace	EA	\$800,000	0	50	50	\$800,000	\$16,000	\$0
	Bridge #2	b46	Bridge # 2 Repair/ Replace	EA	\$1,000,000	30	50	20	\$1,000,000	\$20,000	\$620,000
Bridges and Tunnels Total									\$1,800,000	\$36,000	\$620,000
Buildings	IRB	b44	East Guardhouse Roof	SF	\$18	29	40	11	\$14,670	\$367	\$11,003
		b45	West Guardhouse Roof	SF	\$18	15	40	25	\$21,600	\$540	\$8,640
Buildings Total									\$36,270	\$907	\$19,643
Conservation Easement	Hydrology	es14	Flushing Channel Repair 2 channels	CY	\$150	0	20	20	\$221,400	\$11,670	\$0
		es15	Flushing Channel Repair other 2 channels	CY	\$150	10	20	10	\$221,400	\$11,670	\$121,770
		es16	Water Courses Repair - Narrow	CY	\$150	0	25	25	\$1,827,900	\$73,116	\$0
		es17	Water Courses Repair - Wide	CY	\$150	0	25	25	\$7,752,300	\$310,092	\$0
Conservation Easement Total									\$10,023,000	\$405,348	\$121,770
Irrigation	Recycled Water Reservoir	irr3	Pond Liner Fabric Replacement	SF	\$2	0	35	35	\$180,000	\$5,143	\$0
		irr4	Sheet Piling Retaining Wall Repairs/Replacement	LF	\$250	31	50	19	\$300,000	\$6,000	\$192,000
		irr5	Wooden Facade Retaining Wall Repairs/Replacement	EA	\$70	0	25	25	\$84,000	\$3,360	\$0
Irrigation Total									\$564,000	\$14,503	\$192,000
Misc	Misc	misc3	River Village Pier Pier Replacement	LF	\$200	0	20	0	\$40,000	\$2,250	\$2,250
Misc Total									\$45,000	\$2,250	\$2,250
Right of Way	Guardrails	row13	Guardrails Repair/Replacement	LF	\$23	0	25	25	\$102,350	\$4,094	\$0
		row19	Lighting Poles and Fixtures	EA	\$3,500	10	20	10	\$525,000	\$26,250	\$288,750
	Roadways	row14	Patching (1" Mill and Resurfacing)	SY	\$8	10	20	10	\$757,432	\$37,872	\$416,588
	Sidewalks	row11	Concrete Sidewalk (8X5 Panels)	SY	\$30	20	30	10	\$409,890	\$13,663	\$286,923
Right of Way Total									\$1,794,672	\$81,879	\$992,261



I will provide some highlights. First one is the bridge. It should be replaced this year so the clock gets reset. We should add \$16K for the replacement of the new bridge starting the 2021 budget year.

Reserves

Category	Sub Category	No.	Item	Unit	Cost per Unit	Present Age	Typical Life	Est. Rem. Life	Total cost	Reserve Contribution Per Yr	Require Reserves 1/1/2021
Bridges and Tunnels	Bridge #1	b45	Bridge #1 Repair/ Replace	EA	\$800,000	0	50	50	\$800,000	\$16,000	\$0
	Bridge #2	b46	Bridge # 2 Repair/ Replace	EA	\$1,000,000	30	50	20	\$1,000,000	\$20,000	\$620,000
Bridges and Tunnels Total									\$1,800,000	\$36,000	\$620,000
Buildings	IRB	b44	East Guardhouse Roof	SF	\$18	29	40	11	\$14,670	\$367	\$11,003
		b45	West Guardhouse Roof	SF	\$18	15	40	25	\$21,600	\$540	\$8,640
Buildings Total									\$36,270	\$907	\$19,643
Conservation Easement	Hydrology	es14	Flushing Channel Repair 2 channels	CY	\$150	0	20	20	\$221,400	\$11,070	\$0
		es15	Flushing Channel Repair other 2 channels	CY	\$150	10	20	10	\$221,400	\$11,070	\$121,770
		es16	Water Courses Repair - Narrow	CY	\$150	0	25	25	\$1,827,900	\$73,116	\$0
		es17	Water Courses Repair - Wide	CY	\$150	0	25	25	\$7,752,300	\$310,092	\$0
Conservation Easement Total									\$10,023,000	\$405,348	\$121,770
Irrigation	Recycled Water Reservoir	irr3	Pond Liner Fabric Replacement	SF	\$2	0	35	35	\$180,000	\$5,143	\$0
		irr4	Sheet Piling Retaining Wall Repairs/Replacement	LF	\$250	31	50	19	\$300,000	\$6,000	\$192,000
		irr5	Wooden Facade Retaining Wall Repairs/Replacement	EA	\$70	0	25	25	\$84,000	\$3,360	\$0
Irrigation Total									\$564,000	\$14,503	\$192,000
Misc	Misc	misc3	River Village Pier Pier Replacement	LF	\$200	0	20	0	\$40,000	\$2,250	\$2,250
Misc Total									\$45,000	\$2,250	\$2,250
Right of Way	Guardrails	row13	Guardrails Repair/Replacement	LF	\$23	0	25	25	\$102,350	\$4,094	\$0
		row19	Lighting Poles and Fixtures	EA	\$3,500	10	20	10	\$525,000	\$26,250	\$288,750
	Roadways	row14	Patching (1" Mill and Resurfacing)	SY	\$8	10	20	10	\$757,432	\$37,872	\$416,588
	Sidewalks	row11	Concrete Sidewalk (8X5 Panels)	SY	\$30	20	30	10	\$409,890	\$13,663	\$286,923
Right of Way Total									\$1,794,672	\$81,879	\$992,261



We are clearing out 2 of the 4 flushing channels and estimate that we will need to do the next 2 in 5 yrs and then cyce each set of 2 every 10 yrs after that. If we dredge the waterways those clocks get reset to 0 as well.

Reserves

Category	Sub Category	No.	Item	Unit	Cost per Unit	Present Age	Typical Life	Est. Rem. Life	Total cost	Reserve Contribution Per Yr	Require Reserves 1/1/2021
Bridges and Tunnels	Bridge #1	b45	Bridge #1 Repair/ Replace	EA	\$800,000	0	50	50	\$800,000	\$16,000	\$0
	Bridge #2	b46	Bridge # 2 Repair/ Replace	EA	\$1,000,000	30	50	20	\$1,000,000	\$20,000	\$620,000
Bridges and Tunnels Total									\$1,800,000	\$36,000	\$620,000
Buildings	IRB	b44	East Guardhouse Roof	SF	\$18	29	40	11	\$14,670	\$367	\$11,003
		b45	West Guardhouse Roof	SF	\$18	15	40	25	\$21,600	\$540	\$8,640
Buildings Total									\$36,270	\$907	\$19,643
Conservation Easement	Hydrology	es14	Flushing Channel Repair 2 channels	CY	\$150	0	20	20	\$221,400	\$11,670	\$0
		es15	Flushing Channel Repair other 2 channels	CY	\$150	10	20	10	\$221,400	\$11,670	\$121,770
		es16	Water Courses Repair - Narrow	CY	\$150	0	25	25	\$1,827,900	\$73,116	\$0
		es17	Water Courses Repair - Wide	CY	\$150	0	25	25	\$7,752,300	\$310,092	\$0
Conservation Easement Total									\$10,023,000	\$405,348	\$121,770
Irrigation	Recycled Water Reservoir	irr3	Pond Liner Fabric Replacement	SF	\$2	0	35	35	\$180,000	\$5,143	\$0
		irr4	Sheet Piling Retaining Wall Repairs/Replacement	LF	\$250	31	50	19	\$300,000	\$6,000	\$192,000
		irr5	Wooden Facade Retaining Wall Repairs/Replacement	EA	\$70	0	25	25	\$84,000	\$3,360	\$0
Irrigation Total									\$564,000	\$14,503	\$192,000
Misc	Misc	misc3	River Village Pier Pier Replacement	LF	\$200	0	20	0	\$40,000	\$2,250	\$2,250
Misc Total									\$45,000	\$2,250	\$2,250
Right of Way	Guardrails	row13	Guardrails Repair/Replacement	LF	\$23	0	25	25	\$102,350	\$4,094	\$0
		row19	Lighting Poles and Fixtures	EA	\$3,500	10	20	10	\$525,000	\$26,250	\$288,750
	Rowways	row14	Patching (1" Mill and Resurfacing)	SY	\$8	10	20	10	\$757,432	\$37,872	\$416,588
	Sidewalks	row11	Concrete Sidewalk (8X5 Panels)	SY	\$30	20	30	10	\$409,890	\$13,663	\$286,923
Right of Way Total									\$1,794,672	\$81,879	\$992,261



The RoW includes many elements totaling almost \$1M. If the road reserve that is actually used to pay for the bridge replacement, the existing reserve would be 0. If the claim we are making that Roger will talk about is sustained we would reduce the requirement that the developer is asked to pay into by the then current balance.

Reserves

Category	Sub Category	No.	Item	Unit	Cost per Unit	Present Age	Typical Life	Est. Rem. Life	Total cost	Reserve Contribution Per Yr	Require Reserves 1/1/2021
Security	Gates	sec3	7 Electric Bar Gates	EA	\$10,000	15	25	10	\$70,000	\$2,800	\$44,800
		sec4	45th Street Gate	EA	\$12,000	15	25	10	\$12,000	\$480	\$7,680
Security Total									\$82,000	\$3,280	\$52,480
Stormwater Management	Exfil Trenches	swm10	Exfiltration Trenches	LF	\$125	0	30	30	\$111,250	\$3,708	\$3,708
	Ponds	swm11	Storm Pipe Lining	LF	\$200	20	50	30	\$1,852,000	\$37,040	\$777,840
		swm9	Pond Bank Restoration (Single Bag)	LF	\$50	0	30	30	\$2,705,350	\$90,178	\$0
		swm9.1	Pond Bank Restoration (Double Bag)	LF	\$80	0	30	30	\$176,000	\$5,867	\$0
Stormwater Management Total									\$4,844,600	\$136,793	\$781,548
Walls	Bulkheads	wal3	Bulkheads Repair/Replacement	EA	\$7,500	15	20	5	\$30,000	\$1,500	\$24,000
	River Village Retaining Wall (Retaining wall #5)	wal5	River Village Retaining Wall Wooden Facade Replacement	LF	\$70	0	30	30	\$23,100	\$770	\$770
		wal6	River Village Retaining Wall Sheet Piling Replacement	LF	\$250	20	50	30	\$82,500	\$1,650	\$34,650
	Seawalls (Retaining Walls #1-#2)	wal4	Seawalls Repair/Replacement	LF	\$500	15	40	25	\$212,500	\$5,313	\$85,000
Walls Total									\$348,100	\$9,233	\$144,420
Grand Total									\$19,537,642	\$690,192	\$2,926,371



For SWM, we will need to reserve for pipe liners for all interconnections since they are currently 30 yrs old. Right now we have found only one rusted through but we anticipate others. Also, pond remediation clocks are reset to 0.

Reserves

Category	Sub Category	No.	Item	Unit	Cost per Unit	Present Age	Typical Life	Est. Rem. Life	Total cost	Reserve Contribution Per Yr	Require Reserves 1/1/2021
Security	Gates	sec3	7 Electric Bar Gates	EA	\$10,000	15	25	10	\$70,000	\$2,800	\$44,800
		sec4	45th Street Gate	EA	\$12,000	15	25	10	\$12,000	\$480	\$7,680
Security Total									\$82,000	\$3,280	\$52,480
Stormwater Management	Exfil Trenches	swm10	Exfiltration Trenches	LF	\$125	0	30	30	\$111,250	\$3,708	\$3,708
	Ponds	swm11	Storm Pipe Lining	LF	\$200	20	50	30	\$1,852,000	\$37,040	\$777,840
		swm9	Pond Bank Restoration (Single Bag)	LF	\$50	0	30	30	\$2,705,350	\$90,178	\$0
		swm9.1	Pond Bank Restoration (Double Bag)	LF	\$80	0	30	30	\$176,000	\$5,867	\$0
	Stormwater Management Total								\$4,844,600	\$136,793	\$781,548
Walls	Bulkheads	wal3	Bulkheads Repair/Replacement	EA	\$7,500	15	20	5	\$30,000	\$1,500	\$24,000
	River Village Retaining Wall (Retaining Wall #5)	wal5	River Village Retaining Wall Wooden Facade Replacement	LF	\$70	0	30	30	\$23,100	\$770	\$770
		wal6	River Village Retaining Wall Sheet Piling Replacement	LF	\$250	20	50	30	\$82,500	\$1,650	\$34,650
		wal4	River Village Retaining Wall Sheet Piling Replacement	LF	\$500	15	40	25	\$12,500	\$5,313	\$85,000
	Walls Total								\$348,100	\$9,233	\$144,420
Grand Total									\$19,537,642	\$690,192	\$2,926,371



Littloral Zone Plants are regular maintenance item

We do not include a littoral zone replanting reserve since we should use regular maintenance to replace as needed each year.

Reserves

Category	Sub Category	No.	Item	Unit	Cost per Unit	Present Age	Typical Life	Est. Rem. Life	Total cost	Reserve Contribution Per Yr	Require Reserves 1/1/2021
Security	Gates	sec3	7 Electric Bar Gates	EA	\$10,000	15	25	10	\$70,000	\$2,800	\$44,800
		sec4	45th Street Gate	EA	\$12,000	15	25	10	\$12,000	\$480	\$7,680
Security Total									\$82,000	\$3,280	\$52,480
Stormwater Management	Exfil Trenches	swm10	Exfiltration Trenches	LF	\$125	0	30	30	\$111,250	\$3,708	\$3,708
	Ponds	swm11	Storm Pipe Lining	LF	\$200	20	50	30	\$1,852,000	\$37,040	\$777,840
		swm9	Pond Bank Restoration (Single Bag)	LF	\$50	0	30	30	\$2,705,350	\$90,178	\$0
		swm9.1	Pond Bank Restoration (Double Bag)	LF	\$80	0	30	30	\$176,000	\$5,867	\$0
	Stormwater Management Total								\$4,844,600	\$136,793	\$781,548
Walls	Bulkheads	wal3	Bulkheads Repair/Replacement	EA	\$7,500	15	20	5	\$30,000	\$1,500	\$24,000
	River Village Retaining Wall (Retaining Wall #5)	wal5	River Village Retaining Wall Wooden Facade Replacement	LF	\$70	0	30	30	\$23,100	\$770	\$770
		wal6	River Village Retaining Wall Sheet Piling Replacement	LF	\$250	20	50	30	\$82,500	\$1,650	\$34,650
	Seawalls (Retaining Walls #1-#2)	wal4	Seawalls Repair/Replacement	LF	\$500	15	40	25	\$12,500	\$5,313	\$85,000
	Walls Total								\$348,100	\$9,233	\$144,420
Grand Total									\$19,537,642	\$690,192	\$2,926,371



Again, the total reserves we should have is \$2.9M if all the remediation gets done.

Reserve Post Takeover

- New Board formally sets up reserve accounts
- Determines the assets needing reserve funding
- Funding dependent on remediation agreement
- Balances risk and assessments and type of reserve account

Some notes about Reserves after takeover. The new board will be making all the decisions about what is funded, how much, and in specific or pooled accounts. There is a relationship between the Remediation agreement and how much reserves should be on hand the end of this year. This reserve calculation assumes the developer agrees to fix what we have flagged as needing fixing.

Also, there are a number of methodologies to determine what adequate reserves are. The board will need to determine the best method for our community and that will determine what reserve cost will be needed each year.

Asset Assessments

- The Report
 - ghohllc/Claims/Asset Assessments
 - /Executive Summary
 - /Condition Report
 - /Appendices

To recap....you will find all the information I have touched on on the web site in the claims link. There is the report itself.

Asset Assessments

- The Report
- Remediation Claim
 - ghohllc/Claims/Asset Assessments/ Remediation Table
- Reserve Requirement
 - ghohllc/Claims/Asset Assessments/ Reserve Table

There are the 2 tables that lists our claims.

Asset Assessments

- Remediation Claim \$14,029,348
- Reserve Requirement \$2,926,371

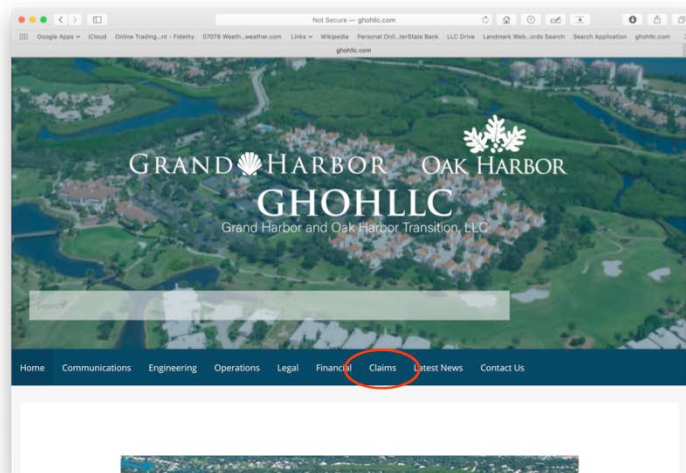
We will need additional reserves if the remediation settlement does not include all of our remediation needs

Which are.....

Virginia Hall- Ginny

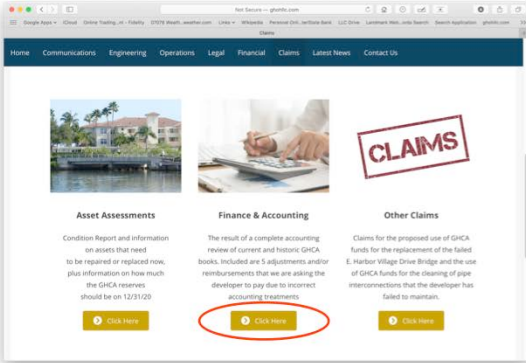
Financial and Accounting

ghohllc Home Page / Claims

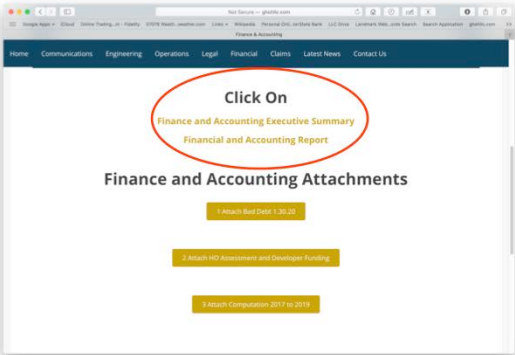


Go to the home page. Look for the “Claims” link

Claims Page



Scroll down



Scroll down

Scroll down and click on the asset assessment page. You will see the report in it’s parts there.

Finance & Accounting Committee

- **Five Basic Areas**

1. Bad Debt Reserve – Reclassify \$49,594 back to Bad Debt Reserve
2. Due to Developer - \$68,635 for 2017 and \$15,885 in 2018
3. Base Assessment Overcharges - \$460,278 for 2017 thru 2019
4. Understatement of Financial Reserves for Capital Assets
5. Diversion of Gate Income to Developers Benefit \$414,374

1. Bad Debt Reserves

- In 2010, property owners approved a new reserve for Bad Debts due to concerns about homeowner defaults.
- The misclassification of annual deficits totaling \$49,594 since 2011 to the Bad Debt Reserve rather than to retained earnings of the GHCA balance sheet. These charges should be restored to the GHCA's Bad Debt Reserve to reflect the correct balance of \$171,000.

1. Bad Debt Reserve Continued

- The New Board will need to go through formal procedures to liquidate this Reserve.
- We will have a new property manager and accounting firm and our committee wanted to be sure that the correct amount of funds were liquidated, not simply to book balance.

2. Due to Developer - \$68,635 & \$15,885

- All Grand Harbor Units pay base assessments
- The Covenants permit the developer to use an alternate method to funding “in lieu of base assessments”.
- Under the alternate method, the developer pays the difference between the annual GHCA expenses and the HOA assessments.
- For example – Total Expenses = \$1,000,000
HOA Assessments = \$970,000
Developer Funding = \$30,000

2. Due to Developer

- In 2017, GHCA revenue exceeded community association expense by \$71,464.
- The developer determined that they were entitled to the surplus overpayment and established an Account Payable, Due to Developer for \$71,464 in 2017.
- The original \$71.4 K included an erroneous item of \$2.9 K that was reversed on 1/1/2018 resulting in a net charge of \$68,535.
- In 2018, there was a deficiency \$15,885 that IEP did not pay (they charged against the prior year surplus)

2. Due to Developer

- The developer claims he is entitled to the surplus due to alternative funding provisions of the Covenants.
- The Declaration of Covenants is silent as to the Surplus.
- Our HOAs have paid in more than \$30 M vs the developers \$1.3 M
- We feel that this surplus belongs to the property owners, not the developer.

3. Assessment Overcharges

- The Covenants require the determination of base assessments
- $\frac{\text{Budget Expenses}}{\text{\# Units}} = \text{Annual Assessment}$
- Understating the number of units in the denominator inflates the base assessment
- Example $\frac{\$1,000,000 \text{ Budget}}{1,000 \text{ units}} = \$1,000 \text{ assessment per unit}$
 $\frac{\$1,000,000 \text{ Budget}}{900 \text{ units}} = \$1,111 \text{ assessment per unit}$

3. Assessment Overcharges

- Property becomes a “unit” when it is annexed and the site plan is approved. Site plans are filed with the county early in the development process, so the actual trigger is annexation.
- There was little property development activity between the 2004 acquisition date through the Florida housing bust until about 2016.
- Three properties were annexed, but not properly included in the denominator.

3. Assessment Overcharges

1. The Reserve

Annexed in 9-2005 and de-annexed in 10-2005

December 2016

Record Reserve Covenants with IRC

Record annexation of lots 1,2, 57 and 59

Record sale of un-annexed Reserve lot – property deeded to independent party

We determined there was a de-facto annexation and added 59 units to the budget assessment computations for 2017, 2018, and 2019

3. Assessment Overcharges

2. The Falls III

Falls III annexed in August 2017, but the developer did not include these units in the computation

We added 35 units to the denominator for 2018 and 2019.

We found no record that Falls I and Falls II were ever annexed

3. Laguna Village

Laguna Village annexed in April 2018, but the units were not included in the computation

2 units were included in the computation in 2018 and 2019 and we added 21 additional units to the denominator

3. Assessment Overcharges

- Rate Sheet Adjustment
- The developer calculated Property Management fees using less than the full number of units
- The worksheet includes only “CO’d” properties.
- We increased the denominator to reflect the full number of units - excluding only the 17 “special” marina units contractually excluded from the property management fee.

3. Assessment Overcharges

- The developer failed to properly assess all units for the road reserve.
- The Covenants do not provide for any “discount” on any unit assessments and all units should be paying the same fee.
- An exception applies to the 17 “special” marina units.
- The developer failed to pay road reserve fees on its developer owned units that are subject to the alternative funding in lieu of base assessments. A Florida Appeals Court determined in 2016, Mackenzie v Centex, that developers are obligated to fund statutory reserves even when they elect the alternative funding in lieu of base assessments.

4. Reserves

- There were 3 Reserves on the books 2018 Balances
 - Road Reserve - \$376,217
 - Bad Debt Reserve - \$121,419
 - Comcast Reserve - \$132,617
- The preparation of capital budgets and determination of reserves are required by the Covenants.
- The developer failed to prepare capital budgets and properly create reserves for capital spending.
- The Audit report excludes the GHCA reserves from the audit opinion.

5. Security Gate Income

- The Covenants provide that under the alternative funding in lieu of base assessment computations, the developer is obligated to pay the difference between the annual expenses and the HOA assessment income.
- The covenants are silent as to any other income.
- In the current case, the developer computes the difference between the expenses and assessment income. He then reduces the funding in lieu of base assessments by the gate income.
- The net effect is that HOAs pay the expenses and the developer gets the benefit of the gate income.

Security Gate Income

- Example

• Expenses	=	\$1,000,000
• HOA Assessments		<u>(930,000)</u>
• Developer Obligation		70,000
• Less Gate Income		(30,000)
• Adjusted Obligation		40,000

Roger Andrus

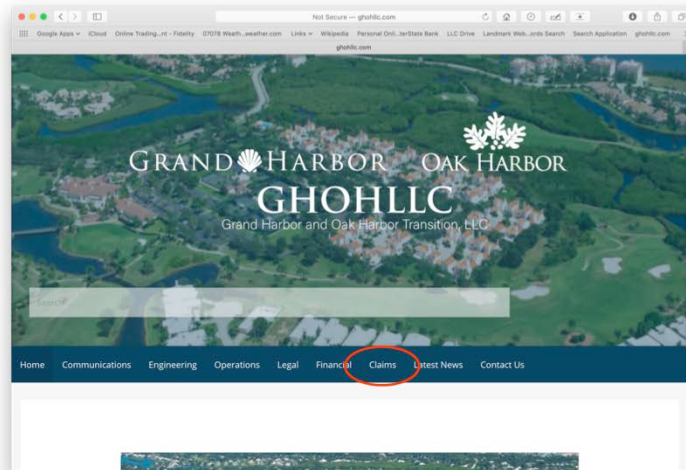
Other Claims

Path to Transition

Other Claims

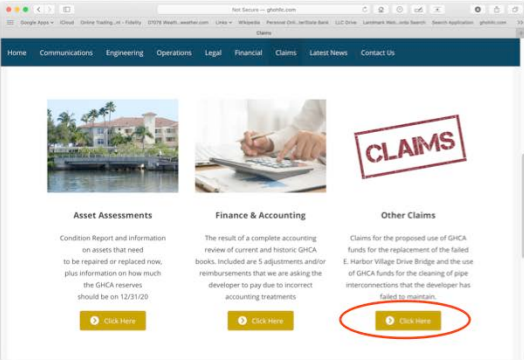
- How to find them on ghohllc.com
- The Bridge
- Cleaning Pond Interconnections

ghohllc Home Page / Claims



Go to the home page. Look for the “Claims” link

Claims Page



Asset Assessments

Condition Report and information on assets that need to be repaired or replaced now, plus information on how much the GHCA reserves should be on 12/31/20

Click Here

Finance & Accounting

The result of a complete accounting review of current and historic GHCA books. Included are 5 adjustments and/or reimbursements that we are asking the developer to pay due to incorrect accounting treatments

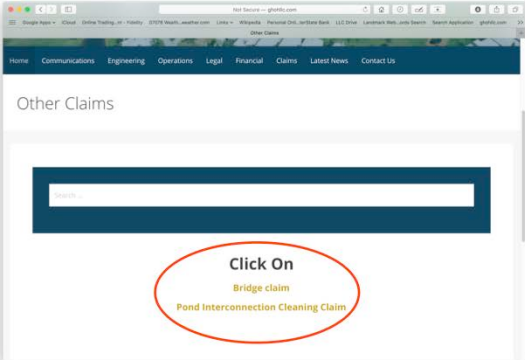
Click Here

Other Claims

Claims for the proposed use of GHCA funds for the replacement of the failed E. Harbor Village Drive Bridge and the use of GHCA funds for the cleaning of pipe interconnections that the developer has failed to maintain.

Click Here

Scroll down



Other Claims

Click On

Bridge claim

Pond Interconnection Cleaning Claim

Scroll down

Scroll down and click on the asset assessment page. You will see the report in it’s parts there.

Bridge Claim

- History and Cost

Bridge Claim

- History and Cost
- Developer's Proposal

Bridge Claim

- History and Cost
- Developer's Proposal
- Our Position

Pond Interconnection Cleaning

- History and Cost

Pond Interconnection Cleaning

- History and Cost
- GHCA Reimbursement to LLC

Pond Interconnection Cleaning

- History and Cost
- GHCA Reimbursement to LLC
- Our Position

Path to Transition

- Class A Members Elect Majority of the Board
- Nominating Process
- Key Decisions
- Turnover Agreement
- Preparation for Enforcing GHCA's Rights

Path to Transition

- Class A Members Elect Majority of the Board
- Nominating Process
- Key Decisions
- Turnover Agreement
- Preparation for Enforcing GHCA's Rights

Class A Members Elect Majority of Board

- Will elect 3 of 5 Board members

Class A Members Elect Majority of Board

- Will elect 3 of 5 Board members
- Developer will appoint 2 Board members

Class A Members Elect Majority of Board

- Will elect 3 of 5 Board members
- Developer will appoint 2 Board members
- At next Annual Meeting Class A members elect all 5 members

Nomination Process

- One member of the Board and 3 others appointed by the Board

Nomination Process

- One member of the Board and 3 others appointed by the Board
- Timing to be determined

Nomination Process

- One member of the Board and 3 others appointed by the Board
- Timing to be determined
- Need to work with developer to smooth process

Key Decisions

- Initial 3 Directors Elected by HOA Presidents

Key Decisions

- Initial 3 Directors Elected by HOA Presidents
- Turnover Agreement
 - Terms of Transition
 - Transfer of Permits
 - Sharing of Common Assets
 - Will be presented to HOA Presidents for vote

Preparation for Enforcing GHCA's Rights

- Litigation strategy in place

Preparation for Enforcing GHCA's Rights

- Litigation strategy in place
- Local (Vero Beach) Litigator on retainer

Preparation for Enforcing GHCA's Rights

- Litigation strategy in place
- Local (Vero Beach) Litigator on retainer
- Finance Committee is interviewing accounting firms that can testify if necessary

Preparation for Enforcing GHCA's Rights

- Litigation strategy in place
- Local (Vero Beach) Litigator on retainer
- Finance Committee is interviewing accounting firms that can testify if necessary
- Commencement and Settlement of Litigation
 - Requires HOA President's Approval

Bob Garrison

Operations Committee Activity

Review of GHCA Service Contracts

- Security – Securitas
- Landscaping – Creative
- Cable Service - Comcast

Management Services

- RFP
 - Who we are
 - Who the client is
 - What the required services are
 - What the proposal schedule is
 - What format the response will be in
 - Requires the authority of GHCA

Management Services

- RFP
- Identify Property Management Candidates