PELICAN BAY SERVICES DIVISION Municipal Services Taxing & Benefit Unit

NOTICE OF PUBLIC MEETING

THURSDAY, SEPTEMBER 10, 2020

THE PELICAN BAY SERVICES DIVISION BOARD WILL MEET AT 9 AM ON SEPTEMBER 10 AT THE BOARD OF COUNTY COMMISSIONERS CHAMBERS, THIRD FLOOR, COLLIER COUNTY GOVERNMENT CENTER, 3299 TAMIAMI TRAIL EAST, NAPLES, FLORIDA 34108.

AGENDA

- 1. Pledge of Allegiance
- 2. Roll Call
- 3. Agenda approval
- 4. Approval of 08/12/20 Regular Session meeting minutes
- 5. Audience Comments
- 6. Administrator's report
 - a. New staff position
 - b. SunTrust office space update
 - c. August financial report
 - d. Army Corps of Engineers Report (Dr. Dabees)
- 7. Committee reports
 - a. Budget
 - b. Ad Hoc Strategic Planning
 - c. Clam Bay
 - d. Landscape & Safety
 - e. Water Management
 - i. Lake bank remediation update on Lake 2-9
 - ii. Review of ABB Oakmont Lake proposal
 - iii. Update on ABB's estimates on next 2 potential lakes in Bridgeway
 - iv. Drainage pipes and stormwater easement management options
- 8. Chairman's report
- 9. Old business
- 10. New business
- 11. Adjournment

*indicates possible action items

ANY PERSON WISHING TO SPEAK ON AN AGENDA ITEM WILL RECEIVE UP TO THREE (3) MINUTES PER ITEM TO ADDRESS THE BOARD. THE BOARD WILL SOLICIT PUBLIC COMMENTS ON SUBJECTS NOT ON THIS AGENDA AND ANY PERSON WISHING TO SPEAK WILL RECEIVE UP TO THREE (3) MINUTES. THE BOARD ENCOURAGES YOU TO SUBMIT YOUR COMMENTS IN WRITING IN ADVANCE OF THE MEETING. ANY PERSON WHO DECIDES TO APPEAL A DECISION OF THIS BOARD WILL NEED A RECORD OF THE PROCEEDING PERTAINING THERETO, AND THEREFORE MAY NEED TO ENSURE THAT A VERBATIM RECORD IS MADE, WHICH INCLUDES THE TESTIMONY AND EVIDENCE UPON WHICH THE APPEAL IS TO BE BASED. IF YOU ARE A PERSON WITH A DISABILITY WHO NEEDS AN ACCOMMODATION IN ORDER TO PARTICIPATE IN THIS MEETING YOU ARE ENTITLED TO THE PROVISION OF CERTAIN ASSISTANCE. PLEASE CONTACT THE PELICAN BAY SERVICES DIVISION AT (239) 597-1749.

PELICAN BAY SERVICES DIVISION BOARD REGULAR SESSION AUGUST 12, 2020

The Pelican Bay Services Division Board met on Wednesday, August 12, 2020, at 1:00 p.m. at the Board of County Commissioners Chambers, third floor, Collier County Government Center, 3299 Tamiami Trail East, Naples, Florida 34108.

In attendance were:

Pelican Bay Services Division Board

Michael Fogg, Chairman Joe Chicurel, Vice-Chairman

Tom Cravens

Jacob Damouni (absent)

Nick Fabregas

Pelican Bay Services Division Staff

Neil Dorrill, Administrator

Chad Coleman, Operations Manager

Also Present

Tom Barber, Agnoli, Barber & Brundage

Peter Griffith

Denise McLaughlin Susan O'Brien

Scott Streckenbein (by telephone)

Rick Swider Michael Weir

Karin Herrmann, Operations Analyst (absent)

Lisa Jacob, Project Manager

Barbara Shea, Administrative Assistant

Jim Carr, Agnoli, Barber & Brundage

Jim Hoppensteadt, Pelican Bay Foundation

(by telephone)

APPROVED AGENDA (AS AMENDED)

- 1. Pledge of Allegiance
- 2. Roll Call
- 3. Agenda approval
- 4. Approval of 07/08/20 Regular Session meeting minutes
- 5. Audience Comments
- 6. Administrator's report
 - a. New staff position
 - b. SunTrust office space update
 - c. Beach dune swale
 - d. July financial report
- 7. Committee reports
 - a. *Budget
 - b. Ad Hoc Strategic Planning
 - c. Water Management
 - i. Oakmont Lake
 - ii. Drainage
 - d. Clam Bay
 - e. Landscape & Safety

Pelican Bay Services Division Board Regular Session

August 12, 2020

- i. *Sidewalks Phase I
- ii. Schedule of annual sod/plant replacement
- 8. Chairman's report
- 9. Old business
- 10. New business
 - a. Committee meetings (add-on)
- 11. Adjournment

ROLL CALL

Mr. Damouni was absent and a quorum was established

MR. STRECKENBEIN RECOGNIZED TO PARTICIPATE BY TELEPHONE

Mr. Griffith motioned, Dr. Chicurel seconded to recognize Mr. Streckenbein to participate and vote via telephone. The motion carried unanimously.

Mr. Dorrill noted that a board member may participate by telephone if approved by a vote of the board; however, a member participating by telephone may not be counted toward a quorum. Mr. Cravens suggested that staff contact the County Attorney to obtain a legal interpretation on this issue.

AGENDA APPROVAL

Mr. Cravens motioned, Mr. Griffith seconded to approve the agenda as amended with the addition of item #10a. The motion carried unanimously.

APPROVAL OF 07/08/2020 REGULAR SESSION MEETING MINUTES

Ms. McLaughlin motioned, Dr. Chicurel seconded to approve the 07/08/2020 regular session meeting minutes as presented. The motion carried unanimously.

AUDIENCE COMMENTS

None

CHAIRMAN'S COMMENTS

Mr. Fogg commented on an e-mail received from Mr. Greg Stone, President of San Marino, requesting that the PBSD add flashing lights at the crosswalk on Pelican Bay Blvd. that leads directly to tram station #6, as he has observed traffic on Pelican Bay Blvd. not yielding to pedestrians. Dr. Chicurel commented that he will address this later.

Mr. Fogg commented that he was contacted by Mr. Jim Issenmann regarding signs on Green Tree Drive, at the intersections of Gulf Park Dr. and Ridgewood Dr., which were changed from "yield to pedestrians" to "stop for pedestrians," which has caused confusion at these intersections. Dr. Chicurel commented that he will address this later.

Mr. Fogg commented that he has suggested to Mr. Dorrill that staff provide informal project updates to the board on a regular basis. Mr. Fogg suggested that committee chairs work with staff during this period of time where Covid-19 restrictions have made it difficult for committees to meet on a regular basis.

ADMINISTRATOR'S REPORT

NEW STAFF POSITION

Mr. Dorrill reported that the Associate Project Manager position has been filled. The candidate, Darren Duprey, is currently a Sr. Supervisor in the County's Road and Bridge Maintenance Division. Mr. Duprey had recently worked as a sidewalk inspector and his start date is Aug. 31.

Ms. O'Brien commented that at the July board meeting, Mr. Fogg had requested that the applications of the finalists be provided to the board. Mr. Dorrill responded that he had provided the applications on the three finalists to Mr. Fogg.

Mr. Fogg suggested that it would be helpful if the board was provided with a summary of staff division of work.

SUNTRUST OFFICE SPACE UPDATE

Mr. Dorrill commented on a meeting held last week with the PBF to discuss the first-floor space in the SunTrust Building. He noted that the County's Real Property Division must review a proposed lease, which we are still waiting on to receive. He also noted that the PBSD will be the primary tenant; the PBF will sublet. Mr. Dorrill noted that from the time the letter of intent is signed, it would take approximately six months to complete permitting requirements and the agreed upon construction work including electrical, plumbing, and minor floor plan modifications.

Mr. Hoppensteadt commented that the PBF has looked at other office space, and this space appears to be the most competitive. He noted that the lease expense for the PBF space has been included in next year's PBF budget, scheduled to be approved on Aug. 21. Mr. Hoppensteadt noted that we are still waiting on a final breakdown of included tenant improvements.

BEACH DUNE SWALE

Mr. Dorrill reported that the beach dune swale project is finished and was completed with two minor change orders. He noted that the PBSD intends to remove exotics in the conservation area adjacent to the dune swale.

JULY MONTHLY FINANCIAL STATEMENTS

Mr. Dorrill reviewed the ten-month financial statements and highlighted several items including a current PBSD cash balance of approximately \$10 million.

FY2021 BUDGET PROCESS

Mr. Dorrill commented that the BCC's final approval of our FY2021 budget will be in early September. He noted that we have requested that funds from Fund 778 (street lighting) are transferred into our Projects Fund 322 prior to Oct. 1. Mr. Dorrill commented that when he received the final proposed FY2021 budget, he would share it with board members.

LAKE 2-9 UPDATE

Mr. Dorrill commented that our contractor has replaced the sheet pile wall on the north end, with no additional charge to us. Mr. Fogg commented that based on his observations, the wall is now improved, but not to his total satisfaction. He urged board members to view the completed project and provide input to the board.

Ms. O'Brien expressed disappointment with the finished project. She suggested that the board should have been given a "heads up" sooner on the issues related to the sheet pile wall. Ms. O'Brien commented that it's staff's responsibility to review engineer plans and specifications; the

accountability is with staff. Ms. McLaughlin agreed. Mr. Dorrill commented that the civil engineer prepares the plans and specifications, and is responsible for project oversight. He also noted that the quality of the finishes is outstanding. Ms. Jacob commented that she had completed a walk-through this morning and suggested plantings in front of the wall may serve as adequate mitigation.

COMMITTEE REPORTS

BUDGET COMMITTEE

Mr. Fogg commented that he has suggested to staff that funds be moved out of reserves into specific projects, prior to final PBSD budget approval in September, including (1) a transfer of \$2 million from Fund 778 into the Operations Building replacement project, (2) a transfer of \$800,000 from capital reserves into the lake bank remediation project, and (3) a transfer of \$630,000 from reserves into the Phase 1 sidewalk project. The County's Budget Dept (OMB) has agreed to make these transfers prior to Oct. 1. Mr. Swider requested that the County provide a cash flow statement. Mr. Fogg responded that we could prepare our own cash flow statement. Ms. O'Brien suggested that we use the cash flow models that the PBSD used back in FY2011/FY2012.

Mr. Fogg provided a schedule of a comparison of PBSD 2020/2021 assessments with accompanying text (added to the record) which will be included in a future PBF e-blast. He suggested that staff revise the text which discusses the burden on single family units.

AD HOC STRATEGIC PLANNING COMMITTEE

Mr. Fogg commented that the PBF Design Review Committee has approved our conceptual plans for Phases 1 and 2 of our sidewalk project, and will recommend the project for approval by the PBF Board on Aug. 21. Mr. Dorrill commented that he is in the process of submitting a draft of a resolution to memorialize the PBSD financial interest in the replacement Operations Building to the County Attorney's Office.

WATER MANAGEMENT COMMITTEE OAKMONT LAKE

Our AB&B civil engineer, Mr. Tom Barber, gave a presentation on Lake 4-1 (Oakmont Lake) lake bank conditions, types of remediations, and related costs for each type of remediation. He also provided three options to consider regarding the lengths of the lake bank to repair including (1) the entire lake bank, (2) a majority of the east side of the lake, or (3) specific sections of concern on the east side of the lake. He noted that the survey of the lake's cross-sections has not been completed yet. Mr. Barber provided photos of eroded areas of the lake bank and noted that some areas show increased erosions since the last analysis was completed three years ago. Mr. Fogg noted that in the AB&B study of all of our lake banks completed three years ago, Lake 4-1 was first on the prioritized list of those lakes with critically eroded lake banks. Mr. Barber commented that the South Florida Water Management District (SFWMD) would not object to our completing lank bank repairs only on the critically eroded sections of this lake. He recommended using Geoweb for the lake bank remediation. He noted that Bonita Bay installed Geoweb in several of its lakes, about eight years ago.

Dr. Chicurel emphasized the visibility of the critically eroded east side of Lake 4-1, as there is a well-traveled PBF pedestrian pathway along that side. Mr. Barber suggested a joint project to repair or replace the PBF pathway after the lake bank project is completed. Mr. Hoppensteadt commented that the PBF is aware of the condition of the PBF pathway, and once the lake bank remediation work is completed, the PBF will replace the path. Mr. Barber concluded that once the survey of cross-sections is completed, his report will be updated and provided to the PBSD.

MR. SWIDER LEFT THE MEETING AT 2:35 PM

DRAINAGE

Mr. Fogg commented that this agenda item would not be discussed and will be included on a future board agenda.

CLAM BAY COMMITTEE

Ms. O'Brien provided her August 2020 Clam Bay update in the agenda packet. She highlighted, (1) total phosphorus levels in the quarterly report for January, February, and March 2020 were very good, (2) Mr. Gary McAlpin, Manager of the County's Coastal Zone Management Dept. is willing to provide a presentation for us on the U.S. Army Corps of Engineers' feasibility study on Collier County's shoreline resiliency and she suggested that Mr. Fogg schedule this presentation at a Fall PBSD Board meeting, Clam Bay committee meeting, or special meeting, and (3) the U.S. Army Corps of Engineers has scheduled two workshops on the feasibility study on Aug. 18 and 24 and suggested that staff provide the board with the links to these workshops.

LANDSCAPE & SAFETY COMMITTEE COMMITTEE CHAIR COMMENTS

Dr. Chicurel thanked Mr. Coleman for removing an obstacle in front of a crosswalk sign. He commented on cars broken into and a car stolen from the Avalon community. He also commented that he will work with staff on the possible installation of a flashing light on Pelican Bay Blvd. at the crosswalk at San Marino.

SIDEWALKS PHASE 1

Our AB&B civil engineer, Mr. Jim Carr, gave a presentation on Phase 1 of our sidewalk project. He provided the construction plans and reviewed the entire length of the Phase 1 replacement sidewalk, noting areas where the existing sidewalk is not located within the right-of-way. In these areas he recommended that the new sidewalk be relocated to within the right-of-way, even though in several locations, this will require the removal of additional trees. Mr. Carr and the board discussed various hazards adjacent to the proposed replacement sidewalk and possible remedies.

Ms. Jacob commented that an arborist will be hired in the near future to review the construction plans, provide input on root barriers, and ensure that no canopy trees will be damaged.

By consensus, the board agreed that the replacement sidewalk at the intersection of Green Tree Dr. and Oakmont Pkwy., should be relocated back into the right-of-way (instead of its current location on PBF property).

Mr. Griffith and Mr. Fabregas questioned whether the replacement sidewalks would traverse the driveways of private homes. Mr. Dorrill made a note to determine what the County Land Development Code says about this issue and will report back to the board.

Mr. Carr commented that he is proceeding with the permitting work for Phase 1 while working on the construction plans for Phase 2 on a parallel track.

Mr. Fogg commented that there needs to be communication with the PB landowners regarding the timing and details of our replacement sidewalk project prior to its commencement. Dr. Chicurel commented that this task would be the responsibility of Mr. Dorrill and staff. Mr. Fogg reported that the PBF will allow us to provide the sidewalk project construction plans on the PBF website. Dr. Chicurel commented that he will work with staff on text to accompany the plans.

SCHEDULE OF ANNUAL SOD/PLANT REPLACEMENT

Not discussed.

OLD BUSINESS

Ms. O'Brien commented that at the July PBSD Board meeting, Mr. Dorrill indicated that she was apparently trying to falsify a record because she shared an FDEP document that talked about the mechanical dredging of Section "A" (of Clam Pass) and she noted that falsifying a record is a felony. Ms. O'Brien stated that she wanted to go on the record as objecting to the suggestion that she was attempting to falsify a record. Mr. Dorrill responded that he did not intend to imply that Ms. O'Brien falsified a public record, and he apologized.

NEW BUSINESS

COMMITTEE MEETINGS (ADD-ON)

Mr. Fogg commented that he will have a discussion with Mr. Hoppensteadt regarding the possibility of scheduling committee meetings at the PBF Community Center in the future.

COMPLEMENTS TO THE STAFF

Ms. McLaughlin complemented staff on their ability to work from home during recent Covid-19 related challenges within their work environment.

ADJOURNMENT			
The meeti	ng was adjourned at 3	:55 p.m.	
Michael Fogg, Chair	man	•	
Minutes approved [] as presented OR [] as amended ON [] date

August 31, 2020 (UNAUDITED)	Operating Fund 109	Street Lighting 778	Pelican Bay Landscape, Safety, Lake & Beach Projects 322	Clam Bay Capital Projects 320	TOTAL
ASSETS					
Cash and investments	3,233,272.25	2,121,980.74	3,851,066.09	218,063.37	9,424,382.45
nterest receivable			•		
Trade receivable, net		٠	•	•	1
Due from other governments	ų.	r	136,252.77	1	136,252.77
Total assets	3,233,272.25	2,121,980.74	3,987,318.86	218,063.37	9,560,635.22
LIABILITIES AND FUND BALANCE					
Accounts payable	62,688.31	2,421.45	375,782.37	43.75	440,935.88
Wages payable			ī	t	
Total liabilities	62,688.31	2,421.45	375,782.37	43.75	440,935.88
Fund balances:					
Fund balance	3,170,583.94	2,119,559.29	3,611,536.49	218,019.62	9,119,699.34
Total liabilities and fund balances	3,233,272.25	2,121,980.74	3,987,318.86	218,063.37	9,560,635.22
	a:	ţ	í		r
Fund Balance at the end of the period	3,170,583.94	2,119,559.29	3,611,536.49	218,019.62	9,119,699.34
Unspent balance of projects:					
Small projects under \$200K	ŗ		474,027.30	•	474,027.30
50066-PBSD Landscape Improvement	r	r	377,677.21		377,677.21
501.26-Beach Renourishment	r.	•	563,883.89		563,883.89
50143-PBSD Field Operation Center Improvements		ı	298,817.56		298,817.55
50154-Hurricane Irma			197 610 66		197 610 66
STUZO-FBSD Lake Bailk Nestoliation	u ,		10,010,00	100 012 66	100 013 66
Total unspent balance of major projects		٠	2,522,877.06	188,913.66	2,711,790.72
Budgeted reserves:					
991000-Reserve for contingencies	115,100.00	•	•		115,100.00
991700-Reserve for disaster relief	680,900.00	ï	1	•	680,900.00
992090-Reserve for sinking fund			200,000.00	i	200,000.00
993000-Reserve for capital outlay	200,000.00	90,000,06	1	ā	290,000.00
994500-Reserve for future construction and improvement		1,534,800.00	ı	•	1,534,800.00
998000-Reserve for cash	291,300.00	150,000.00			441,300.00
Total budgeted reserves	1,287,300.00	1,774,800.00	200,000.00		3,562,100.00
Budgeted commitments at the end of the period	1,287,300.00	1,774,800.00	3,022,877.06	188,913.66	6,273,890.72
Brain description (doffert) from balance	1,883,283.94	344,759.29	588,659.43	29,105.96	2.845.808.62

Table Tabl	FELICAN BAY NCOME STATEMENT PERATING FUND - 109 AUGUST 31, 2020 (UNAUDITED)	Adopted Budget	Amended	Commitments	October	November	Decamber	January	February	March	April	May	June	July	August	September	Total Expenditures	Variance	% Budget
1,405,70.00 7,50.00 7,00.00	JENUES AND CARRYFORWARD	The second second				deal State				100000									
1,500,000 1,50	becial assessments	4,845,700.00	4,845,700.00			1,807,894.76	1,373,638.27	1,152,908.74	118,325.35	78,620.49	84,912.34	16,433.13	35,914.15	9,49			4,668,656.72	(177,043,28)	96.3%
Tagooo T	MA											880.88					880.88	880.88	#DIV/DI
1450,000 35,000 35,000 31.56 35,000 12,000	Interest	7,300.00	7,300.00		4,707.57	4,965.16	6,195.18	11,206.38	4,344.27	5,211.78	4,939.77	4,974.70	7,351.02	5,158.53	•		59,054,36	51,754.36	809.0%
1,450,700.00 1,500,000 1	Iscellaneous							2,200.00			27,525.00	2,600.00			•	4	32,325.00	32,325.00	#DIV/OI
1,453,0000 1,453,0000 1,453,0000 1,453,000 1	ansfers in	36,900.00	36,900,00		312.86	26,150.66	36,900.00	(26,463.52)					,	1	•	-	36,900.00	The same of	100.0%
Haragement 1,500,000.00 1,500,	egative 5% of estimated revenue	(242,700.00)	(242,700.00)				,	,	ř	·			i		,		,	242,700.00	
Signo group Signo group Signo de 1,189 group Signo de 1,189 group Signo de 2,199	Budgeted carryforward	1,453,200.00	1,453,200,00											*		4		(1,453,200.00)	
Figure 1, 499,573 00 1,499,573 00 1,499,573 00 1,03,584.3 101,782.4 165.56.6 0 1,07,521.5 109,502.6 116,04.2 109,902.8 161,486.2 109,907.8 102,907.0 0 49,977.3 0 10,572.8 165.56.9 14,070.0 1,000,207	Total revenues + carryforward	6,100,400.00	6,100,400.00		5,020.43	1,839,010.58	1,416,733.45	1,139,851.60	122,669.62	83,832.27	117,377.11	24,888.71	43,265.17	5,168.02	0		4,797,816.96	(1,302,583.04)	78.6%
Ferent I 1,000.000 0 129,000.00 0 1,000.00	EXPENDITURES AND RESERVES Personal services Salaries, taxes and retirement	1,490,973.00	1,490,973.00		46,973.88	103,538.33	101,728.34	166,596.40	107,451.58	107,502.07	109,850.94	116,004.29	109,902.89	161,486.24	109,997.76	T	1,241,032,72	249,940.28	83.2%
1,500,500.00 1,50	Health, dental, life insurance; Short term, it	409,827.00	409,827.00		00 040 00		86,555.50	86,555,50	31,802.50	70 503 504	102,456.75	90,000 341	00 000	102,335.75	27 700 001		2 650 707.00	250.050.28	100.0%
Lake Stormwater Management a 207,000.00 G1,549.33 13,746.54 15,948.01 20,944.73 14,548.54 14,748.54 14,548.01 20,944.73 14,548.54 14,748.54 14,548.54 14,748.54 14,548.54 14,748.54 14,548.54 14,748	Total personal services	1,500,800.00	1,500,800,00		40,973.88	TO2,238,33	100,000,001	06.161,662	133,434,08	10.205,101	414,307,03	67.400,011	103,302,03	66.770,607	01.100,001		7/1000/100/17	27000000	0000
ormwater Management I 554,700.00 64,700.00 62,546.44 15,464.64 15,464.64 15,464.04 12,464.64 15,	oerating 182601-Lake & Stormwater Management a	207,200.00	207,200.00	11,649,93	13,043.05	62,559.98	6,246.85	8,643.25	4,258.59	3,872.58	65,176.41	7,116.89	3,913.76	5,952.00	7,652.52	1	188,435.88	7,114.19	%9'96
ray beautification 102,200.00 102,700.00 <th< td=""><td>182602-Lake & Stormwater Management fi</td><td>674,700.00</td><td>674,700.00</td><td>62,549,33</td><td>18,784.64</td><td>15,948.01</td><td>20,934.73</td><td>26,331.94</td><td>13,316.15</td><td>84,962.95</td><td>23,320.33</td><td>81,898.92</td><td>10,442.67</td><td>73,129.22</td><td>28,111.44</td><td></td><td>397,181,00</td><td>214,969.67</td><td>68.1%</td></th<>	182602-Lake & Stormwater Management fi	674,700.00	674,700.00	62,549,33	18,784.64	15,948.01	20,934.73	26,331.94	13,316.15	84,962.95	23,320.33	81,898.92	10,442.67	73,129.22	28,111.44		397,181,00	214,969.67	68.1%
A Pearuffication field 1,520,900.000 247,794.24 155,200.87 98,490.20 150,1616.83 91,111.88 55,005.70 114,1124.24 104,422.89 122,633.55 32,405.50 14,411.28 1,255.36 1,255.36 1,255.30 1	182900-Right of way beautification	102,200.00	102,200.00	20,307.29	5,696.34	2,266.82	7,418.68	10,184.36	4,737.76	6,082.15	7,182.06	5,058.07	4,030.42	7,110.01	11,240.47		71,007.14	10,885.57	89.3%
2,504,900.00 2,504	182901-Right of way beautification field	1,520,800.00	1,520,800.00	247,794.24	152,908.97	98,490.20	150,016.83	91,811.38	56,005.70	114,184.24	104,452.89	128,263.35	38,280.10	214,089.33	67,406.85		1,215,909.84	57,095.92	96.2%
10,300.00 170,300.00 0.75 12,4147 122,514.7 12	Total operating	2,504,900.00	2,504,900.00	342,300.79	190,433.00	179,265.01	184,617.09	136,970.93	78,318.20	209,101.92	200,131,69	222,337.23	56,666,95	300,280.56	114,411.28		1,872,533.86	290,065.35	88.4%
237,00.00 237,00.00 4813,000 4813,000 123,000	spital outlay	170,300.00	170,300.00	0.75			32,124.88	19,597.96	•	2,360.70	32,369.22	81,259.96		7	,		167,712.72	2,586.53	98.5%
4 413,100.00 4,813,100.00 347,301.54 238,648.35 415,354.81 437,285.57 413,686.34 219,938.59 370,536.31 447,748.12 419,990.10 166,579,48 564,103,75 224,409,04 3886,1839.77 413,686.34 219,938.59 370,536.91 447,748.12 419,990.10 166,579,48 564,103,75 224,409,04 3886,1839.77 413,686.34 419,981.91 447,748.12 419,990.10 166,579,48 564,103,75 224,409,04 3886,1839.77 413,686.34 419,981.91 419,981.91 166,579,48 564,103,75 224,409,04 3886,1839.77 413,686.34 419,981.91 419,981.91 166,579,48 564,103,75 224,409,04 3886,1839.77 413,686.34 419,981.91 419,981.91 166,579,48 564,103,75 224,409,04 3886,1839.77 413,686.34 419,981.91 419,981.91 166,579,48 564,103,75 224,409,04 3886,1839.77 413,686.34 419,748.12 419,981.91 166,579,48 564,103,75 224,409,04 3886,1839.77 413,686.34 419,748.12 419,981.91 166,579,48 564,103,75 224,409,04 3886,1839.77 413,686.34 417,748.12 419,981.91 166,579,48 564,103,75 224,409,04 3886,1839.77 413,686.34 417,748.12 419,981.91 166,579,48 564,103,75 224,409,04 3886,1839.77 413,686.34 417,748.12 419,981.91 166,579,48 564,103,75 224,409,04 3886,1839.77 413,686.34 417,748.12 419,981.91 166,579,48 564,103,77 224,409,04 3886,1839.77 413,686.34 416,748.12 419,981.91 166,579,48 564,103,77 224,409,04 3886,1839.77 413,686.34 416,748.12 419,981.91 166,579,48 564,103,77 224,409,04 3886,1839.77 413,686.34 416,748.12 419,981.91 166,770,48 564,103,77 224,409,04 415,748.12 419,981.91 166,770,48 564,103,77 224,409,04 415,748.12 419,748.12	ansfers out	237,100.00	237,100.00		1,241.47	132,551.47	48,272.76	3,965.55	2,366.22	1,572.22	2,939.52	328.62	1,959.64	0.20			195,197.67	41,902.33	82.3%
or distance relief \$30,900.00 115,100.00 1	Total expenditures	4,813,100.00	4,813,100.00	342,301.54	238,648.35	415,354.81	453,298.57	413,686.34	219,938.50	320,536.91	447,748.12	419,930.10	168,529,48	564,103.75	224,409.04		3,886,183.97	584,614.49	87.9%
115,100.00 115,100.00 15,000.00	udgeted reserves																	00000	
682,900.00 889,900.00 200,000.00 201,200.00	991000-Reserve for contingencies	115,100.00	115,100.00									•	•					115,100.00	
200,000.00 291,300.00 291,300.00 291,300.00 1287,300.0	991700-Reserve for disaster relief	680,900.00	680,900.00	r					i	•			9	9		9		680,900.00	
292,300.00 292,300.00 20	993000-Reserve for capital outlay	200,000.00	200,000,00																
1,287,300.00 1,287,300.00 1,287,300.00 1,287,000.00 6,100,400.00 6,100	998000-Reserve for cash	291,300.00	291,300.00	1		,				,								291,300.00	
6,100,00.00 6,100,00.00 342,30.154 723,648.35 415,554.81 435,234.57 415,556.34 415,556.34 415,555.34	Total reserves	1,287,300.00	1,287,300.00	The state of the state of			-		j									1,087,300.00	-
	Total expenditures + reserves	6,100,400.00	6,100,400.00	342,301.54	238,648.35	415,354.81	453,298.57	413,686.34	219,938.50	320,536.91	447,748.12	419,930.10	168,529.48	564,103.75	224,409.04	The same of	3,886,183.97	1,671,914.49	69.3%

2,258,950.95 Projected carryforward as of 9/30/19 3,170,583.94 Fund balance as of 8/31/20

FELICAN BAY INCOME STATEMENT STREET LIGHTING - 778 (UNAUDITED)	Adopted Budget	Amended Budget	Commitments	October	November	December	Yvenuer	February	March	April	yeM	June	Дпг	August	September	Total Expenditures	Variance	% Budget Consumed
REVENUES AND CARRYFORWARD	608 400 00	608 400 00			264.710.75	250.159.27	28.893.77	15.308.00	8.511.02	11.303.98	1.584.85	5.020.68	5.12	,	,	585,497,44	(22.902.56)	96.2%
Miscellaneous revenue			,			1,049.10	,							5		1,049.10	1,049.10	#DIV/OI
nterest	7,300.00	7,300.00	1	3,041.32	3,646.11	3,832.19	5,798.68	2,093.29	2,522,58	2,333.45	2,389.18	3,497.48	2,838,47	9		31,992,75	24,692.75	438.3%
nsurance refunds			9		200.00	t	,		,	1					j	200:00	200.00	#DIV/OI
Negative 5% of estimated revenue	(30,800.00)	(30,800.00)	0			•	3	,	3	i			,	,	d		30,800.00	
Budgeted carryforward	1,618,900.00	1,618,900.00	9		2					0.00							(1,618,900.00)	
Total revenues + carryforward	2,203,800.00	2,203,800.00		3,041.32	268,556.86	255,040.56	34,692.45	17,401.29	11,033.60	13,637.43	3,974,03	8,518.16	2,843.59	*		618,739.29	(1,585,060.71)	28.1%
SVPENDITURES AND RESERVES Personal services Salaries, texts and retirement Health, dental, life insurance; Short term, long term disability; V_	99,754,00	99,754.00		2,619.97	5,777,98	5,842.87	12,698.54	4,269.55	4,000.89	4,026.97 5,361.50	4,816.25	3,945.95	6,189.79	4,067.21		58,255.97	41,498.03	58.4%
Total operating	121,200.00	121,200.00	*	2,619.97	5,777.98	10,555.62	17,411.29	5,567.05	4,000.89	9,388.47	4,816.25	3,945.95	11,551.29	4,067.21		19,701.97	41,498.03	65.8%
Operating 182700-Street Lighting Operations 182701-Street Lighting Field Operations	67,800.00	67,800,00	10,289.04	5,180.20	6,771.67	4,606.02	7,175.54	4,176.05	4,214.32 5,456.30	9,126.40	4,227.12	3,946.62	4,248.95	3,939.58		57,612.47	(101.51)	100.1%
Total operating	282,800.00	282,800.00	31,504,86	19,506.02	15,902.00	43,135.79	15,231.64	14,048.98	9,670.62	12,894.18	15,690.88	8,809.21	12,020.78	9,577.12		176,487.22	74,807.92	73.5%
Capital outlay Transfers out	1,000.00	1,000.00	10.4		5,337.07	5,003.18	577.88	306.16	170.22	226.08	31.70	100.42	0.09		٠.	11,752,80	1,000.00	49.0%
Total expenditures	429,000.00	429,000.00	31,504.86	22,125.99	27,017.05	58,694.59	33,220.81	19,922.19	13,841.73	22,508.73	20,538.83	12,855.58	23,572.16	13,644.33		267,941.99	129,553.15	69.8%
Budgeted reserves 993000-Reserve for capital outlay	00'000'06	90,000.00	2,	,	,	ğ	3	•	i	ý	•	ş		- 1	í	.1.	90,000.00	
994500-Reserve for future construction and improvement	1,534,800.00	1,534,800.00	×.	1	1												1,534,800.00	
Total reserve	1,774,800,00	1,774,800.00		,								į.		,	,		1,774,800.00	
Total expenditures + reserves	2,203,800.00	2,203,800.00	31,504.86	22,125.99	27,017.05	58,694.59	33,220.81	19,922.19	13,841.73	22,508.73	20,538.83	12,855,58	23,572.16	13,644.33		267,941.99	1,904,353.15	13.6%
STREET OF STREET OF STREET OF STREET				(19 084 67)	741 539 81	196 345 97	1 471 64	105 520 901	(7.808.13)	(NE 178 S)	(16.564.80)	(4 337.42)	(20,728,57)	(13.644.33)		350 797.30		

1,768,761.99 Projected carryforward as of 9/30/19 2,119,559.29 Fund balance as of 8/31/20

PELICAN BAY LANDSCAPE, SAFETY, LAKE & BEACH PROJECTS-322 August 31, 2020 (UNAUDITED) Adopted	PROJECTS - 322 Adopted	4														Total		% Budget
	Budget	Budget	Commitments	October	November	December	January	February	March	April	May	June	July	August	September	Expenditures	Variance	Consumed
REVENUES AND CARRYFORWARD																		
Special assessments	788,000.00	788,000.00		•	533,280,95	1,096,569.91	(925,093.28)	19,239.08	12,783.28	13,806,30	2,671.94	5,839,46	1.54		7	759,099.18	(28,900.82)	96.3%
FEMA		,	,	1						7,987.79		,		•		7,987.79	P.788,7	#DIV/OI
Interest	3,100.00	3,100.00	9	6,561.62	7,776.49	8,334.80	13,179.44	4,220.89	5,114.81	4,686.12	4,917.16	7,151.81	5,890.00			67,833.14	64,733.14	2188.2%
Insurance refunds			9	٠	*				18,025.00			,		•		18,025.00	18,025.00	#DIV/01
Fransfers in	520,000.00	520,000.00				130,000,00	130,000.00			130,000.00		,	130,000.00	ì		520,000.00		100.0%
Negative 5% of estimated revenue	(39,400.00)	(39,400.00)			r					,		•		7			39,400.00	
Budgeted carryforward	310,700.00	3,460,655.15		9	4	191	100	100		- 1-0	200	*		1	1		(3,460,655.15)	
Total revenues + carryforward	1,582,400.00	4,732,355.15		6,561.62	541,057.44	1,234,904.71	(781,913.84)	23,459.97	35,923.09	156,480.21	7,589.10	12,991.27	135,891.54	-		1,372,945.11	(3,359,410.04)	29.0%
Projects: 50066-PBSD Landscape Improvement	175,000.00	410,184,96	10,783,50	21,554.25	2,951.00	6,807.50	4		1,195.00	14			•	1,3	-	32,507.75	366,893.71	10.6%
20 CO		00 540 00															00 14 00	0.000
notation and and and and and and and and and an		54 588 00															54 588 00	0.0%
50106-take Acidemic	מטיטטיטט	563 883 89				ı				,							563 883 89	7600
S0143-PRSD Field Operation Center Improvements	-	331,589,69	12.345.25			15.172.13					11.661.25		3.025.75	2,913,00		32,772,13	286.472.31	13.6%
S0154-Hurricane Irma		1,102,500,58	266.337.28	221 241.77		245,031,60	5.000.00	10.366.77	,			,			1	481,640,14	354.523.16	67.8%
50157-PBSD-Asset Management		48,092.75		1,080,50	1,614.50		741.00	870.00	233.75			1				4,539.75	43,553.00	9.4%
50158-PBSD Roadway Safety		20,945.05				•				•	,	•		1	3		20,945.05	0.0%
50178-Sidewalk Maintenance/Enhancement	20,000.00	335,000.00	286,264.50		,		×		6,578.00				29,221,50	40,230.25		76,029.75	(27,294.25)	108.1%
51026-PBSD Lake Bank Restoration	600,000,00	1,182,199.23	437,070.85	13,156.75	2,740.00	1,803.00	1,822.50		729.50	974.50	626.50	409,835.33	211,279.05	351,621,44	1.00	994,588.57	(249,460.19)	121.1%
Total expenditures	995,000.00	995,000.00 4,144,955.15 1,012,801.38	1,012,801.38	257,033.27	7,305.50	268,814,23	7,563.50	11,236.77	8,736.25	974.50	12,287,75	409,835.33	243,526.30	394,764.69		1,622,078.09	1,510,075.68	39.1%
ransfers out	87,400.00	87,400.00	-		26,340.60	21,931.39	2,174.62	384.78	255.67	276.13	53.44	116.78	0.03	4		51,533.44	35,866.56	59.0%
Total expenditures	1,082,400.00	4,232,355.15	4,232,355.15 1,012,801.38	257,033.27	33,646.10	290,745.62	9,738.12	11,621.55	8,991.92	1,250.63	12,341.19	409,952.11	243,526.33	394,764.69		1,673,611.53	1,545,942.24	39.5%
Budgeted reserves 992090-Reserve for sinking fund	200,000,00	500,000.00						,		,				,	7		200,000,00	

3,912,202.91 Projected carryforward as of 9/30/19 3,611,536.49 Fund balance as of 8/31/20

PELICAN BAY																		
INCOME STATEMENT CLAM BAY CAPITAL PROJECT FUND - 320 AUGUST 31, 2020 (UNAUDITED)																		
	Adopted	Amended	Commitments	October	November	December	January	February	March	Aprill	May	June	July	August	September	Total	Variance	% Budget
REVENUES AND CARRYFORWARD																		
Special assessments	198,600.00	198,600.00			78,864.55	74,037.55	24,461.03	4,841.81	3,217.11	3,474.57	672.44	1,469.59	0,40	r		191,039.05	(7,560.95)	96.2%
Interest	100.00	100.00		358.23	412.28	452.34	749.20	272.54	328.84	310.57	319.49	466.12	355.95			4,025.56	3,925.56	4025.6%
Transfer in					1,503.93		(1,503.93)					í		à	3			#DIV/OI
Negative 5% of estimated revenue	(00.006,0)	(9,900.00)		·	,					i		4				*	00'006'6	0.0%
Budgeted carryforward	7,500.00	164,365.81										1			-	*	(164,365.81)	
Total revenues + carryforward	196,300.00	353,165.81		358.23	80,780.76	74,489.89	23,706.30	5,114.35	3,545.95	3,785.14	991.93	1,935.71	356.35			195,064.61	(158,101.20)	55.2%
EVPENDITURES AND RESERVES Projects 51 nOn-Cinn Rav Rectroation	0701000	306.965.81	11:015/29			7.400.00	8.410.00	(1.563.34)	10.289.68	17637	31,450.19	6,617.50	55.195.00	76.75		118,052.15	121,403.55	60.5%
Total operating	150,100.00	306,965.81	П	1		7,400.00	8,410.00	(1,563.34)	10,289.68	176.37	31,450.19	6,617.50	55,195.00	76.75		118,052.15	121,403.55	60.5%
Transfers out	46,200.00	46,200.00	,	·	5,533.74	38,380.75	146.82	97.12	64.53	69.70	13.49	29.48	0.01			44,335.64	1,864.36	96.0%
Total expenditures	196,300.00	353,165.81	67,510,11	,	5,533.74	45,780.75	8,556.82	(1,466.22)	10,354.21	246.07	31,463.68	6,646.98	55,195.01	76.75		162,387.79	123,267.91	65.1%
Budgeted reserves 991000-Reserve for contingencies					40			•					,	,		j	5 :	
998000-Reserve for cash														7		*		
Total reserves			П			-		1000001	*******	2000	20 477 60			25.35		100 200 40	********	/at 35
Total expenditures + reserves	196,300.00	353,165.81	67,510.11		5,533.74	45,780.75	8,556.82	(1,466.22)	10,354.21	749.07	31,463.68	6,646,98	22,195.01	16.75		154,387.73	163,691.31	62.476
EXCESS OF REVENUE OVER EXPENDITURES				358.23	75,247.02	28,709.14	15,149.48	6,580.57	(6,808.26)	3,539.07	(30,471.75)	(4,711.27)	(54,838.66)	(76.75)		32,676.82		

185,342.80 Projected carryforward as of 9/30/19 218,019.62 Fund balance as of 8/31/20

Clam Bay Update-September 2020

Clam Bay. Updates on mangrove monitoring, hand-dug channel maintenance, and a plan to begin the removal of scaevola, a type 1 exotic in the coastal scrub, are expected at the next Clam Bay Committee meeting.

In August Round-up was used on weeds in the riprap on the bank of the swale west of the berm. The run-off in this swale goes directly into Clam Bay. Attached are comments on this topic from Danette Kinaszczuk, Collier County's Pollution Control department manager.

Coastal Zone Management's preliminary plans for boater safety signage in Clam Bay (attached) do not include all the signs for which Clam Bay is eligible per FL statute, as illustrated on the attached exhibit prepared by Tim Hall and approved by the PBSD Board in 2014. The PBF will notify CZM that PBF approval for signage in Clam Bay is needed. It may be advantageous for the PBF and PBSD to agree on the boater safety signs that should be placed in Clam Bay and communicate this to CZM staff members to expedite the process.

Clam Pass. Tidal ratios for August at markers 4 and 14 are above .6, meaning tidal flow is very good. These tidal ratios are slightly better than they were in June and July.

Water Quality.

Total phosphorus and total nitrogen. The WQ report for April, May, and June 2020, is expected soon. In the WQ Report for January, February, and March 2020 all 27 samples for TN were within allowable limits and 20 of the 27 sample for TP were within allowable limits. These TP results are significantly better than previous quarters in the last two years.

Copper. Only three of 54 samples for January through June 2020 exceeded the allowable limit which is very good.

Other. The deadline for submitting public comments about the U.S. Army Corps of Engineers' Collier County Coastal Storm Risk Management Feasibility Study is September 14, 2020. Comments may be sent to Collier-CSRM@usace.army.mil.

Clam Bay Committee. The Clam Bay Committee will meet when an appropriate meeting location is available.

Prepared by Susan O'Brien September 4, 2020 From: Susan OBrien naplessusan@rcn.com

Subject: Fwd: Thanks!

Date: August 17, 2020 at 12:57 PM

To: ColemanChad Chad.Coleman@colliercountyfl.gov, JacobLisa Lisa.Jacob@colliercountyfl.gov



HI Chad and Lisa,

On my morning walk today, I saw PBSD spraying a product at the riprap along the swale on the west side of the south berm. Alex was nearby so I asked him what was being sprayed, and he responded Round-up. It sounded like some people were concerned about how the weeds in the riprap looked so PBSD was using Round-up. Given the concerns about WQ in Clam Bay, a recent observation made by a maintenance worker at the Grosvenor that he had seem a marked decrease in the amount of wild life along the berm, and the controversy over the use of glyphosate, I decided to reach out to Danette.

If I have this wrong and the Round-up we're using contains no glyphosate, please let me know. If there is glyphosate in the Round-up we're using in and around Clam Bay, I hope you will consider reviewing its use there.

Thanks,

Susan

Begin forwarded message:

From: Danette Kinaszczuk < Danette.Kinaszczuk@colliercountyfl.gov>

Subject: RE: Thanks!

Date: August 17, 2020 at 9:55:37 AM EDT To: Susan OBrien naplessusan@rcn.com

Hi Susan,

Hope all is well for you. Thanks for the question. Let me preface my response by saying that local governments are pre-empted from regulating anything pesticide related, therefore my opinion doesn't hold a lot of weight.

Reducing the amount of chemicals entering a waterbody is always a good thing.

A couple of things that you might find interesting:

 There is no criteria for the amount of glyphosate allowed in surface water, only in drinking water. The Collier County Water-Sewer District drinking water is tested once every 3 years, per state law, and has been undetected.

 The University of Florida IFAS extension has made this video, it was an interesting perspective so I thought I would share it. https://www.youtube.com/watch?

v=4EAQLNV48vQ&feature=youtu.be.

 There is also a study done that indicated that the surfactants were the issue with glyphosate, not the actual glyphosate, however, I haven't seen anything come from that.

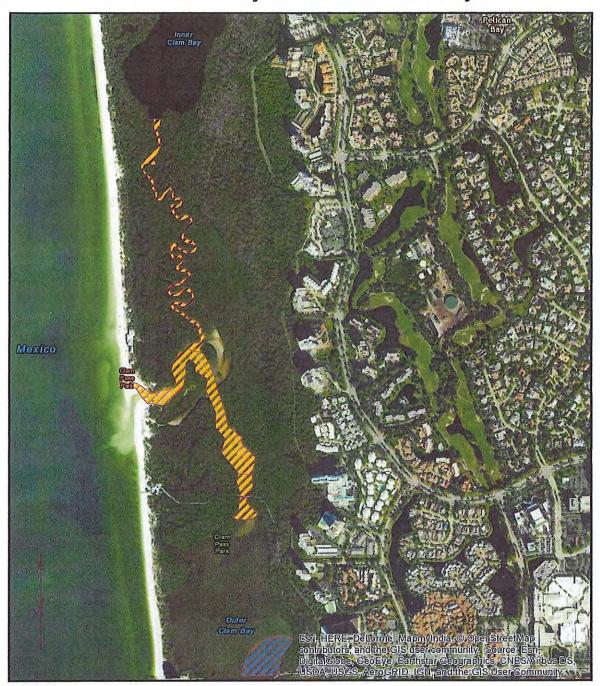
I don't know what site you are talking about but is it possible to have a littoral shelf instead of rip rap? Can something be planted in the riprap to out compete the weeds?

My recommendation is hand pulling the weeds if possible. Not only will this stop the glyphosate from going into the water it will remove the plant so when it decomposes it won't put nutrients in the water either.

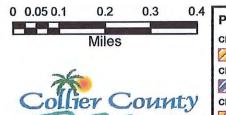
Thank you,

Danette Kinaszczuk. Pollution Control Manager

Collier County Coastal Waterways







Proposed Boater Safety Zones

Clam Pass

SSMW

Clam Pass Park Canoe Kayak Launch Site

Wind ISNW

Clam Pass Bridge





LANDSCAPE & SAFETY COMMITTEE REPORT

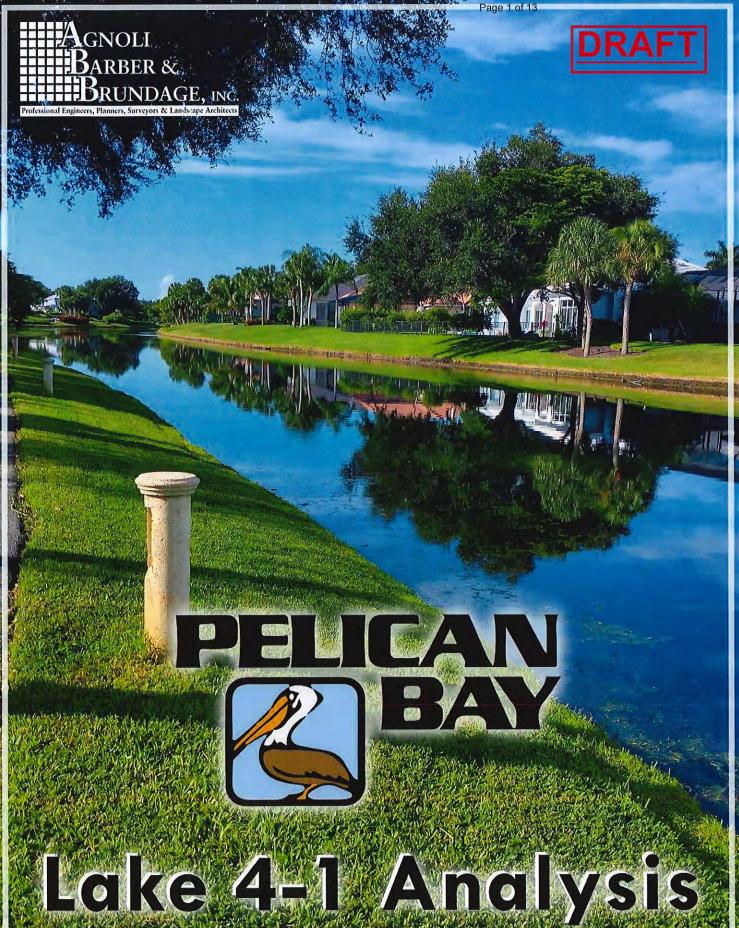
The Landscape & Safety Committee met on Sept. 2, 2020 at 1:00 PM in the Commissioners Chambers at the Collier County Gov't. Complex. The following items were discussed:

- 1. PBSD Board member, Denise McLaughlin, encouraged everyone to view Mohamed Dabees' video and the Army Corps of Engineers Coastal Storm Management Risk Study.
- 2. The Sidewalk Replacement Project:
 - a. Jim Carr, our civil engineer, provided an updated cost breakdown to the committee for the entire project (\$5,514,092.00). He also distributed updated and detailed plans for Phase I of the project. Timelines remain the same.
 - b. **Arborist:** A sample tree evaluation by Ian Orlikoff was presented and a more thorough evaluation was planned. That evaluation took place on Thursday, Sept. 3rd. (Ian Orlikoff; Jim Carr; Lisa Jacob; Chad Coleman; Alex Mumm; Brent Guillot; and Joe Chicurel attended) Hardwood trees were evaluated onsite for tree health, longevity potential, disease, and strategies to allow the project and trees to co-exist in health and harmony.
 - c. Various construction and resident communication concerns were discussed (i.e. low-profile curbs; ADA compliance; post construction restoration of utilities, sod, etc. and timely resident notification).
- 3. **Line of Sight** issues and solutions were discussed (landscape removal; better landscape maintenance and trimming; and traffic mirrors).
- 4. **Crosswalks:** Signage, request for Flashing warning lights at the San Marino crosswalk to the berm, establishing a 4-Way Stop at the intersection of Hammock Oak-The Crescent- and Pelican Bay Blvd. were all discussed.
- 5. Iguana Sightings: Sightings on the southern banks of

Oakmont Lake just below the picnic table were presented. Some proactive plan needs to be instituted either by the PBSD and/or by a joint effort with the PB Foundation to eradicate as much as possible the threat imposed by these invasive creatures. They are known to burrow, destroy, and undermine lake banks; spread Salmonella in their formidable feces and defoliate landscapes.

6. Peter Griffith, PBSD Board member, and Alex Mumm will review and evaluate cul-de-sac needs for trees and report back to the committee.

Submitted By: Joe Chicurel, L&S Committee Chairman







Background

Erosion can be defined as the gradual removal or movement of soil from one area to another caused by water, wind, or other natural causes. Lake bank erosion is very common is southwest Florida due to the variance in seasons it faces. It can be caused by strong winds that damage the shoreline such as in events like Hurricane Irma and overland runoff.

A site visit was conducted on August 6th, 2020 for lake 4-1 at Pelican Bay to measure erosion and assess the condition of the lake banks. Even though all indications of erosion are noted when conducting site visit, the primary form of analytical data that is taken to determine the degree of erosion are measurements of both escarpment height and slope. Escarpment height can be defined as any sudden drop-off that separates the lake bank from the elevation just inside the water's edge. It is important to note that drop-offs are common for any lake however anything over 9 inches exceeds the permitted threshold for the South Florida Water Management District (SFWMD) permit. The slope can be defined as the degree of inclination of the ground. The slope is an indicator of erosion because the slope determines the rate at which water flows over the top of lake banks, its action will accelerate the process of erosion. Like the escarpment height, there is a permitted limit of how steep the slope may be. Any slope greater than 4:1, meaning a length of four feet for every foot in depth, is considered out of compliance with the SFWMD permit.

Wind is a major factor in creating waves, fortunately for Lake 4-1 the longest distance from the east to the west side of the lake is about 260 linear feet however the length from north to south is quite significant. Approximately 2600 linear feet separates the north and south sides of the lake, leaving it prone to erosion. Incoming cold fronts and increased wind from storms can create waves that worsen the condition of the lake banks and create additional problems. The long fetch allows the waves to build up energy before crashing into the lake bank requiring a more robust and reinforced shoreline.







Analysis

Lake 4-1 is bound by Green Tree Drive to the west and Oakmont Parkway to the east. The lake is surrounded by residential properties and a greenway on the east side of the lake bank. The rooftops, roads, and greenway along the lake banks act as impervious surfaces that prevent runoff from percolating into the ground, producing runoff directed to the lowest point of elevation which is the lake. To reduce erosion, the optimal solution is to have a drain or structure to collect and control the flow of the water, however in this case, majority of rainfall flows directly into Lake 4-1. The consistent flowing of water over the lake bank runs down the surface weakening and deteriorating the soil allowing ledges and steep slopes to form.

Some of the depth found around the lake banks during inspection can be attributed to geo-tube put in place from previous erosion prevention effort. This geo-tube anchors much of the soil to the bank and holds the soil in place as water runs over it. This allows the part of the bank not held in place by the fabric sock to be pushed farther into the lake. The geo-tube then begins to fail and slide into the lake itself, no longer serving its purpose.













The pedestrian side has some steep side slopes abutting the lake bank that need to be remediated to meet the 4:1 slope requirement. Excess runoff produced by the roofs of the homes may contribute to this issue however the homes on the east side, abutting the pathway, should have downspouts connected into the storm water system along the roads in front of the homes.

The escarpment height around much of the lake was higher than the 9-inch limit for the SFWMD permit showing critical signs of erosion along the bank, reaching depths of up to 30 inches in some places. It was most critical along the east side of the lake where you can see exposed geo-tube from previous erosion prevention efforts. However, this fabric has begun to fail and is now sliding into the water no longer preventing erosion along the bank.

There is an outfall structure on the north side of the lake bank that showed signs of erosion behind the headwall. Typically, headwall is used to stabilize the soil around drainage structures to prevent the structure from falling into the water. In the picture below, the headwall has been exposed due to the receding lake bank. This presents not only a problem of erosion but may put the structure at risk in the long-term.







Financial Summary

Given the amount of lake bank Lake 4-1 provides, there are different restoration options depending on expenses and degree of erosion. Generally, there are two methods of restoration, installing a Geoweb system or simply regrading the existing lake bank to comply with the standards.

Geoweb is a three-dimensional system made up of interconnected cells that reinforces the lake bank due to the infill inside of these cells. The type of infill selected depends on the extent of the erosion, however in this case, compacted soil would be used. This will allow vegetation to grow through the cells keeping the aesthetic view of a natural lake. This would require minimal maintenance however it would out-weigh the cost of severe erosion. The other option is to re-grade the existing lake bank to restore it to the permitted conditions. This can also be done with the installation of additional fill. However, it must be noted that only regrading the lake bank will delay the critical erosion rather than prevent it. Without a prevention method in place, this issue will occur over time.

The field data collected in Appendix A, determines that there are areas that are more severe than others. Therefore, different options regarding the extent of restoration has been provided below. For further financial information, refer to the tables in Appendix B.

Option A

Throughout Lake 4-1, the most common form of erosion is the escarpment height which exceeds 9-inches failing to comply with the SFWMD permit. However, there are areas where slope and the escarpment height are both an issue, specifically the southeast corner of the lake. As seen in Appendix A, this would be the most minimal amount of restoration (approximately 550 linear feet).

Option B

Eventually, the entire lake will have to be restored so doing larger portions at a time will most likely work more efficiently and effectively. Comparing the east and west side of the lake,





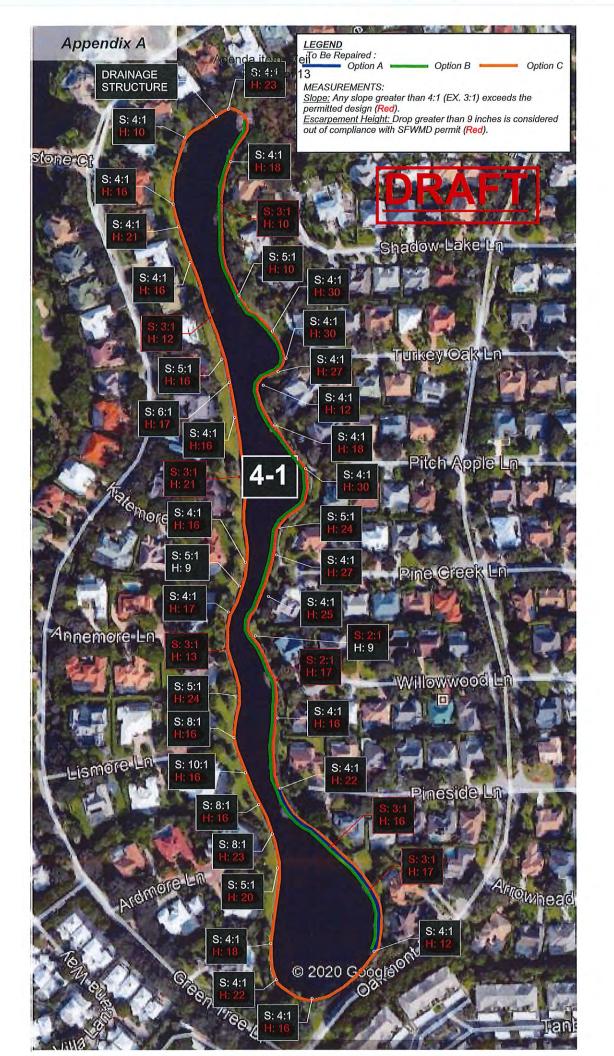


the east side has steeper slopes as well as deeper drops. Option B presents restoring the east side in its entirety which will be more expensive however will prevent problems in the future as well as avoid continuous construction.

Option C

Option C proposes restoring the entirety of Lake 4-1. While this may be beneficial in avoiding multiple periods of construction, this will require a significant cost which would most likely not appeal to the community.





GRAND TOTAL

GRAND TOTAL

652 \$

58,000

100 \$ 65,200

\$ 123,200

Item No.	Description	Unit	Quantity	Ur	nit Cost	To	otal Cost
	GEO-WEB SYSTEM						
1	Mobilization	LS	1	\$	3,000	\$	3,000
2	Landscape Replacement (Sod, Native Vegetation) (10' wide x 550 LF)	SF	5,500	\$	3	\$	16,500
3	Irrigation Replacement in impacted areas (10' wide x 550 LF)	SF	5,500	\$	2	\$	11,000
4	Littoral Plantings @ 2 per linear foot of modified lake bank	EA	1,100	\$	4	\$	4,400
5	In Place Compacted, Imported Fill ((550 LF x 2' x 8')x2)/27=652 CY	CY	652	\$	100	\$	65,200
6	Silt Fence	LF	550	\$	2	\$	1,100
7	Turbidity Barrier	LF	600	\$	30	\$	18,000
8	Yard Drain Connections @ approx. 2 per lot/home (includes ADS 12" Yard Drain)	EA	4	\$	1,000	\$	4,000
9	Sandy Top Soil with 10%-12% Organics (3" deep over impacted areas) (550 LF x 8' x 3")	CY	41	\$	100	\$	4,074
10	GeoWeb - GW 30V3 (12' wide) (Includes backfill, 57 stone, anchors, non-woven fabric)	SF	6,600	\$	15	\$	99,000
		CDA	ND TOTAL				226 27
		GRAI	NDTOTAL	_	=	\$	226,274
	RE-GRADE Without Additional Fill						
1	Mobilization	LS	1	\$	3,000	\$	3,000
2	Landscape Replacement (Sod, Native Vegetation) (10' wide x 550 LF)	SF	5,500	\$	3	\$	16,500
3	Irrigation Replacement in impacted areas (10' wide x 550 LF)	SF	5,500	\$	2	\$	11,000
4	Littoral Plantings @ 2 per linear foot of modified lake bank	EA	1,100	\$	4	\$	4,400
5	Silt Fence	LF	550	\$	2	\$	1,100
^	Turbidity Barrier	LF	600	\$	30	\$	18,000
6							

RE-GRADE OPTION With Additional Fill

Note: Estimated costs are pre-survey and are approximate. Cost estimates do not include survey, site permitting or design plans.

In Place Compacted, Imported Fill ((550 LF x 2' x 8')x2)/27=652 CY



GRAND TOTAL

\$ 585,900

OPTION B

Preliminary Budget Estimate

Item No.	Description	Unit	Quantity	Unit Cost		Total Cost
	GEO-WEB SYSTEM					
1	Mobilization	LS	1	\$ 3,00	0 :	\$ 3,000
2	Landscape Replacement (Sod, Native Vegetation) (10' wide x 2800 LF)	SF	28,000	\$	3 3	84,00
3	Irrigation Replacement in impacted areas (10' wide x 2800 LF)	SF	28,000	\$	2 3	56,00
4	Littoral Plantings @ 2 per linear foot of modified lake bank	EA	5,600	\$	4 3	\$ 22,40
5	In Place Compacted, Imported Fill ((2800 LF x 2' x 8')x2)/27=3319 CY	CY	3,319	\$ 10	0 3	331,90
6	Silt Fence	LF	2,800	\$	2 :	5,60
7	Turbidity Barrier	LF	100	\$ 3	0 3	3,00
8	Yard Drain Connections @ approx. 2 per lot/home (includes ADS 12" Yard Drain)	EA	80	\$ 1,00	0 3	80,00
9	Sandy Top Soil with 10%-12% Organics (3" deep over impacted areas) (2800 LF x 8' x 3")	CY	207	\$ 10	0 3	20,74
10	GeoWeb - GW 30V3 (12' wide) (Includes backfill, 57 stone, anchors, non-woven fabric)	SF	33,600	\$ 1	5 5	504,00
		GRA	ND TOTAL	=		
	RE-GRADE	GRA	ND TOTAL	-		
	Without Additional Fill					1,110,64
1	Mobilization Without Additional Fill	LS	1	\$ 3,00	0 :	\$ 1,110,64 \$ 3,00
2	Mobilization Landscape Replacement (Sod, Native Vegetation) (10' wide x 2800 LF)	LS SF	1 28,000	\$ 3,00	0 3	\$ 1,110,64 \$ 3,00 \$ 84,00
2	Mobilization Landscape Replacement (Sod, Native Vegetation) (10' wide x 2800 LF) Irrigation Replacement in impacted areas (10' wide x 2800 LF)	LS SF SF	1 28,000 28,000	\$ 3,00 \$	0 3 3 2 3	\$ 3,00 \$ 84,00 \$ 56,00
3 4	Mobilization Landscape Replacement (Sod, Native Vegetation) (10' wide x 2800 LF) Irrigation Replacement in impacted areas (10' wide x 2800 LF) Littoral Plantings @ 2 per linear foot of modified lake bank	LS SF SF EA	28,000 28,000 5,600	\$ 3,00 \$ \$	0 S 3 S 2 S 4 S	\$ 1,110,64 \$ 3,00 \$ 84,00 \$ 56,00 \$ 22,40
2 3 4 5	Mobilization Landscape Replacement (Sod, Native Vegetation) (10' wide x 2800 LF) Irrigation Replacement in impacted areas (10' wide x 2800 LF) Littoral Plantings @ 2 per linear foot of modified lake bank Silt Fence	LS SF SF EA LF	28,000 28,000 5,600 2,800	\$ 3,00 \$ \$ \$	0 : 3 : 2 : 4 : 2 :	\$ 1,110,64 \$ 3,00 \$ 84,00 \$ 56,00 \$ 22,40 \$ 5,60
2 3 4 5 6	Mobilization Landscape Replacement (Sod, Native Vegetation) (10' wide x 2800 LF) Irrigation Replacement in impacted areas (10' wide x 2800 LF) Littoral Plantings @ 2 per linear foot of modified lake bank Silt Fence Turbidity Barrier	LS SF SF EA LF	1 28,000 28,000 5,600 2,800	\$ 3,00 \$ \$ \$ \$ \$	0 S 3 S 2 S 4 S 2 S	\$ 1,110,64 \$ 3,00 \$ 84,00 \$ 56,00 \$ 22,40 \$ 5,60 \$ 3,00
2 3 4 5	Mobilization Landscape Replacement (Sod, Native Vegetation) (10' wide x 2800 LF) Irrigation Replacement in impacted areas (10' wide x 2800 LF) Littoral Plantings @ 2 per linear foot of modified lake bank Silt Fence	LS SF SF EA LF	28,000 28,000 5,600 2,800	\$ 3,00 \$ \$ \$	0 S 3 S 2 S 4 S 2 S	\$ 1,110,64 \$ 3,00 \$ 84,00 \$ 56,00 \$ 22,40 \$ 5,60 \$ 3,00
2 3 4 5 6	Mobilization Landscape Replacement (Sod, Native Vegetation) (10' wide x 2800 LF) Irrigation Replacement in impacted areas (10' wide x 2800 LF) Littoral Plantings @ 2 per linear foot of modified lake bank Silt Fence Turbidity Barrier	LS SF SF EA LF LF	1 28,000 28,000 5,600 2,800	\$ 3,00 \$ \$ \$ \$ \$	0 3 3 5 2 5 4 5 2 5 5 0 5 0 5 0 5	\$ 1,110,64 \$ 3,00 \$ 84,00 \$ 56,00 \$ 22,40 \$ 5,60 \$ 3,00
2 3 4 5 6	Mobilization Landscape Replacement (Sod, Native Vegetation) (10' wide x 2800 LF) Irrigation Replacement in impacted areas (10' wide x 2800 LF) Littoral Plantings @ 2 per linear foot of modified lake bank Silt Fence Turbidity Barrier	LS SF SF EA LF LF	28,000 28,000 5,600 2,800 100 80	\$ 3,00 \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0 3 3 5 2 5 4 5 2 5 5 0 5 0 5 0 5	\$ 1,110,64 \$ 3,000 \$ 84,000 \$ 56,000 \$ 22,40 \$ 5,600 \$ 80,000

Note: Estimated costs are pre-survey and are approximate. Cost estimates do not include survey, site permitting or design plans.



GRAND TOTAL

\$ 1,081,700

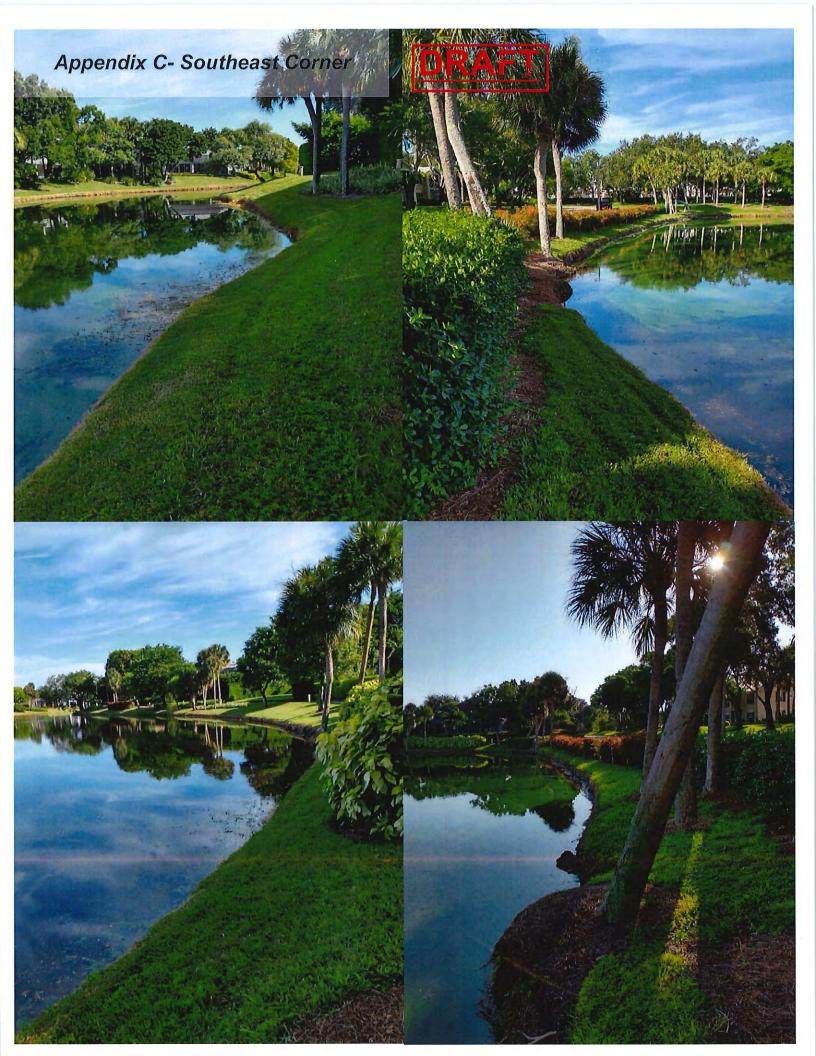
OPTION C

Preliminary Budget Estimate

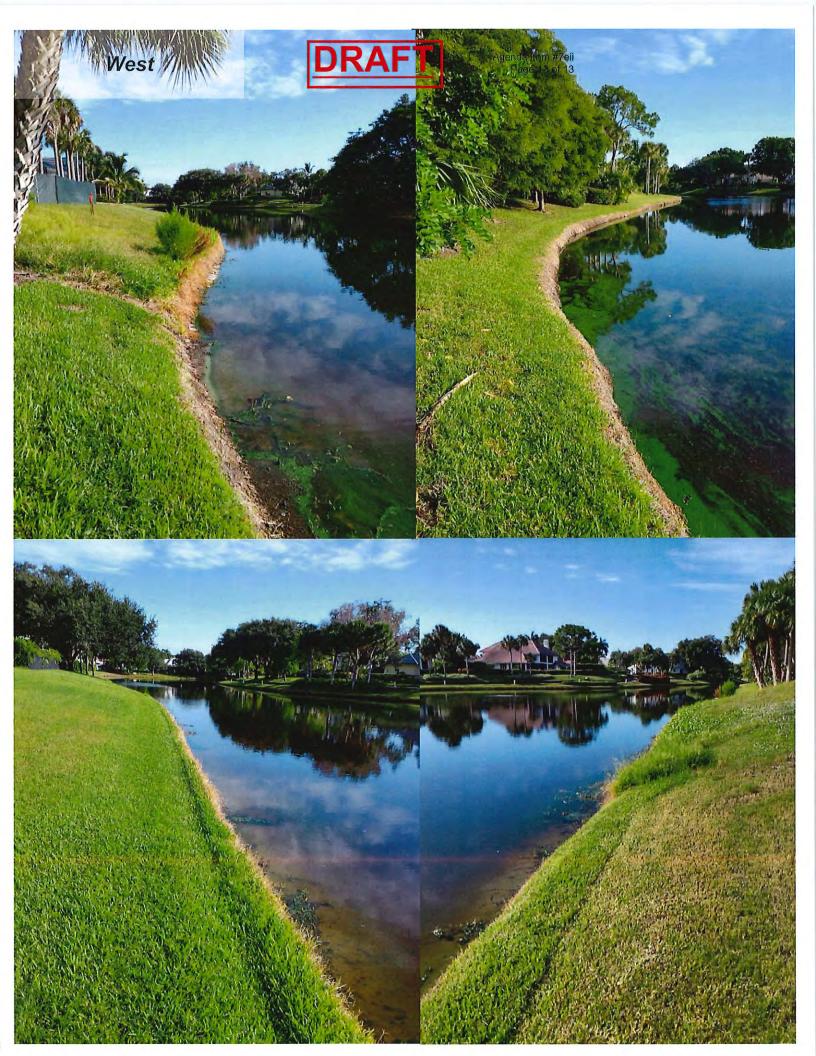
Item No	Description	Unit	Quantity	Unit Cost	Total Co
	GEO-WEB SYSTEM				
1	Mobilization	LS	1	\$ 3,000	\$ 3,0
2	Landscape Replacement (Sod, Native Vegetation) (10' wide x 5600 LF)	SF	56,000	\$ 3	\$ 168,0
3	Irrigation Replacement in impacted areas (10' wide x 5600 LF)	SF	56,000	\$ 2	\$ 112,0
4	Littoral Plantings @ 2 per linear foot of modified lake bank	EA	11,200	\$ 4	\$ 44,8
5	In Place Compacted, Imported Fill ((5600 LF x 2' x 8')x2)/27=6637 CY	CY	6,637	\$ 100	\$ 663,7
6	Silt Fence	LF	5,600	\$ 2	\$ 11,2
7	Turbidity Barrier	LF	100	\$ 30	\$ 3,0
8	Yard Drain Connections @ approx. 2 per lot/home (includes ADS 12" Yard Drain)	EA	76	\$ 1,000	\$ 76,0
9	Sandy Top Soil with 10%-12% Organics (3" deep over impacted areas) (5600 LF x 8' x 3")	CY	415	\$ 100	\$ 41,4
10	GeoWeb - GW 30V3 (12' wide) (Includes backfill, 57 stone, anchors, non-woven fabric)	SF	67,200	\$ 15	\$ 1,008,0
		GRAN	ND TOTAL	7.4	\$ 2,131,
	RE-GRADE	GRAN	ND TOTAL	14	\$ 2,131,
1	Without Additional Fill				
1 2	Mobilization Without Additional Fill	LS	1	\$ 3,000	\$ 3,0
2	Mobilization Landscape Replacement (Sod, Native Vegetation) (10' wide x 5600 LF)	LS SF	1 56,000	\$ 3,000 \$ 3	\$ 3,0 \$ 168,0
	Mobilization Landscape Replacement (Sod, Native Vegetation) (10' wide x 5600 LF) Irrigation Replacement in impacted areas (10' wide x 5600 LF)	LS SF SF	1 56,000 56,000	\$ 3,000 \$ 3 \$ 2	\$ 3,0 \$ 168,0 \$ 112,0
2	Mobilization Landscape Replacement (Sod, Native Vegetation) (10' wide x 5600 LF) Irrigation Replacement in impacted areas (10' wide x 5600 LF) Littoral Plantings @ 2 per linear foot of modified lake bank	LS SF SF EA	1 56,000 56,000 11,200	\$ 3,000 \$ 3 \$ 2 \$ 4	\$ 3,0 \$ 168,0 \$ 112,0 \$ 44,8
3 4	Mobilization Landscape Replacement (Sod, Native Vegetation) (10' wide x 5600 LF) Irrigation Replacement in impacted areas (10' wide x 5600 LF)	LS SF SF	1 56,000 56,000	\$ 3,000 \$ 3 \$ 2	\$ 3,0 \$ 168,0 \$ 112,0
2 3 4 5	Mobilization Landscape Replacement (Sod, Native Vegetation) (10' wide x 5600 LF) Irrigation Replacement in impacted areas (10' wide x 5600 LF) Littoral Plantings @ 2 per linear foot of modified lake bank Silt Fence	LS SF SF EA LF	56,000 56,000 11,200 5,600	\$ 3,000 \$ 3 \$ 2 \$ 4 \$ 2	\$ 3,0 \$ 168,0 \$ 112,0 \$ 44,8 \$ 11,2
2 3 4 5 6	Mobilization Landscape Replacement (Sod, Native Vegetation) (10' wide x 5600 LF) Irrigation Replacement in impacted areas (10' wide x 5600 LF) Littoral Plantings @ 2 per linear foot of modified lake bank Silt Fence Turbidity Barrier	LS SF SF EA LF LF	1 56,000 56,000 11,200 5,600	\$ 3,000 \$ 3 \$ 2 \$ 4 \$ 2 \$ 30	\$ 3,0 \$ 168,0 \$ 112,0 \$ 44,8 \$ 11,2 \$ 3,0
2 3 4 5 6	Mobilization Landscape Replacement (Sod, Native Vegetation) (10' wide x 5600 LF) Irrigation Replacement in impacted areas (10' wide x 5600 LF) Littoral Plantings @ 2 per linear foot of modified lake bank Silt Fence Turbidity Barrier	LS SF SF EA LF LF	1 56,000 56,000 11,200 5,600 100 76	\$ 3,000 \$ 3 \$ 2 \$ 4 \$ 2 \$ 30 \$ 1,000	\$ 3,0 \$ 168,0 \$ 112,0 \$ 44,8 \$ 11,2 \$ 3,0 \$ 76,0

Note: Estimated costs are pre-survey and are approximate. Cost estimates do not include survey, site permitting or design plans.







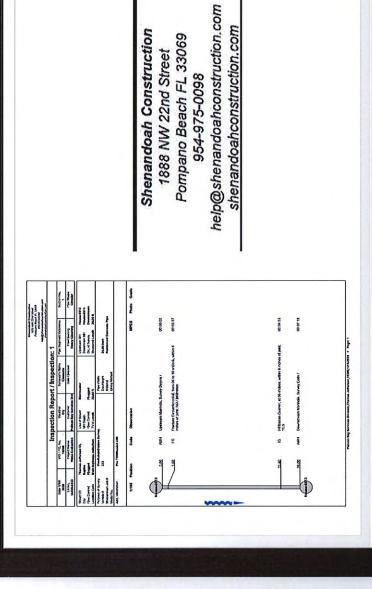


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Thomas Jefferson Ct

24" Stormwater RCP Evaluate/Repair 2020

01/2020 Inspection Shenandoah







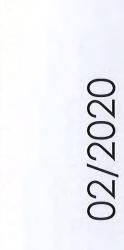
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Damaged 24' stormwater pipe

02/2020





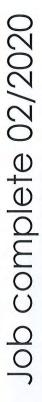
02/2020















Pelican Bay Services Division

2020/2021 Committees

Budget:

Fogg (Chair), Chicurel, Fabregas, McLaughlin,

Streckenbein

Clam Bay:

O'Brien (Chair), Swider, Weir, McLaughlin

Landscape and Safety:

Chicurel (Chair), Fabregas, Griffith, Swider,

Weir

Water Management:

McLaughlin (Chair), Cravens, O'Brien,

Streckenbein, Weir

AD Hoc Strategic

Planning:

Fogg (Chair), Chicurel, Fabregas