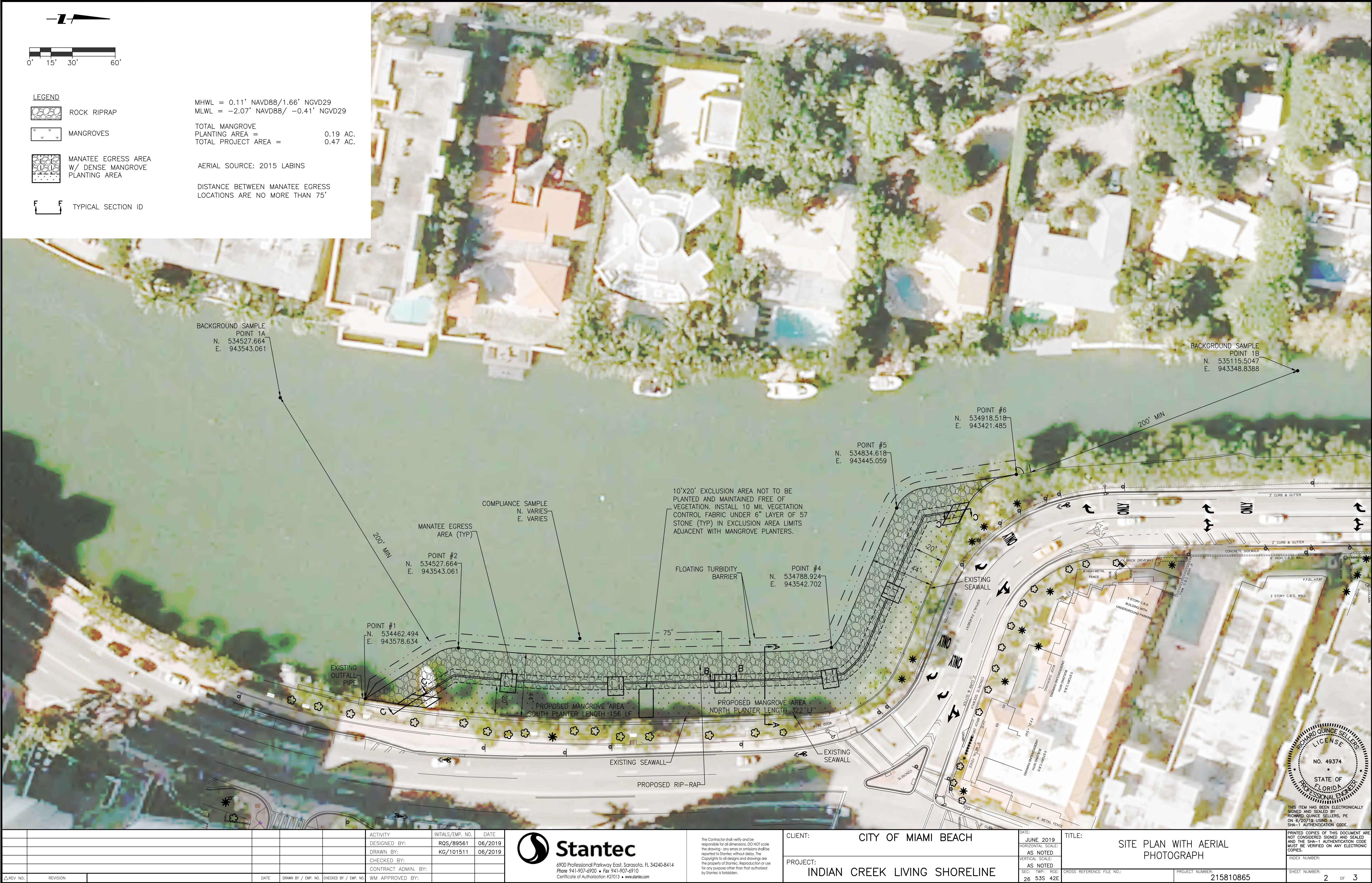


Attachment A – Conceptual Design



Attachment B – Final Permit Drawings



Saved: 6/17/2019 1:09:22 PM KALBRETH | Project: 6/20/2019 11:52:57 AM KALBRETH | \\US027-PPFSS01\shared_projects\2158\215810510\2019_mcd\215810580-01C-103SP-20190607.dwg

REV NO.	REVISION	DATE	DRAWN BY / EMP. NO.	CHECKED BY / EMP. NO.	WM APPROVED BY:	ACTIVITY	INITIALS/EMP. NO.	DATE
						DESIGNED BY:	RQS/89561	06/2019
						DRAWN BY:	KG/101511	06/2019
						CHECKED BY:		
						CONTRACT ADMIN. BY:		

**Stantec**

6900 Professional Parkway East, Sarasota, FL 34240-8414
Phone 941-907-6900 • Fax 941-907-6910
Certificate of Authorization #27013 • www.stantec.com

The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay. The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

CLIENT:	CITY OF MIAMI BEACH	DATE:	JUNE 2019
PROJECT:	INDIAN CREEK LIVING SHORELINE	HORIZONTAL SCALE:	AS NOTED
		VERTICAL SCALE:	AS NOTED
		SEC:	TWP: RGE:
		26	53S 42E

TITLE: SITE PLAN WITH AERIAL PHOTOGRAPH

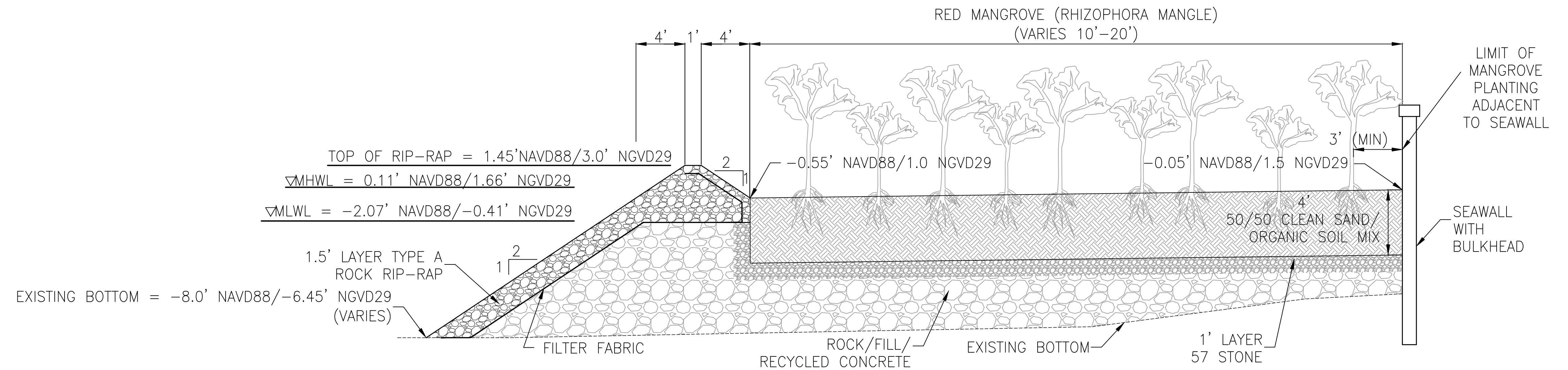
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PROJECT NUMBER: 215810865

INDEX NUMBER:
SHEET NUMBER: 2 OF 3

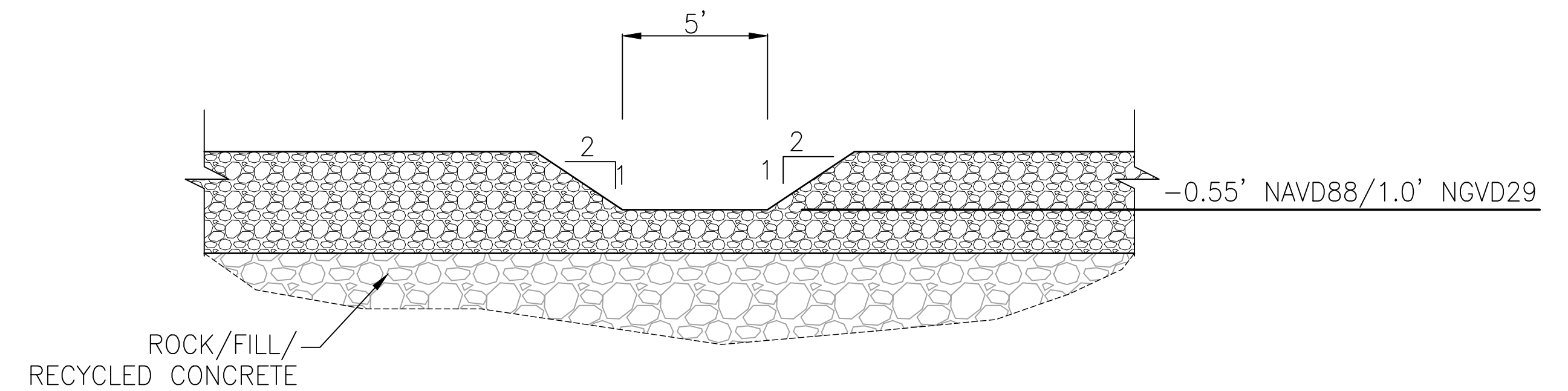


THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY RICHARD QUINCE SELLERS, PE ON 6/20/19 USING A SHA-1 AUTHENTICATION CODE.

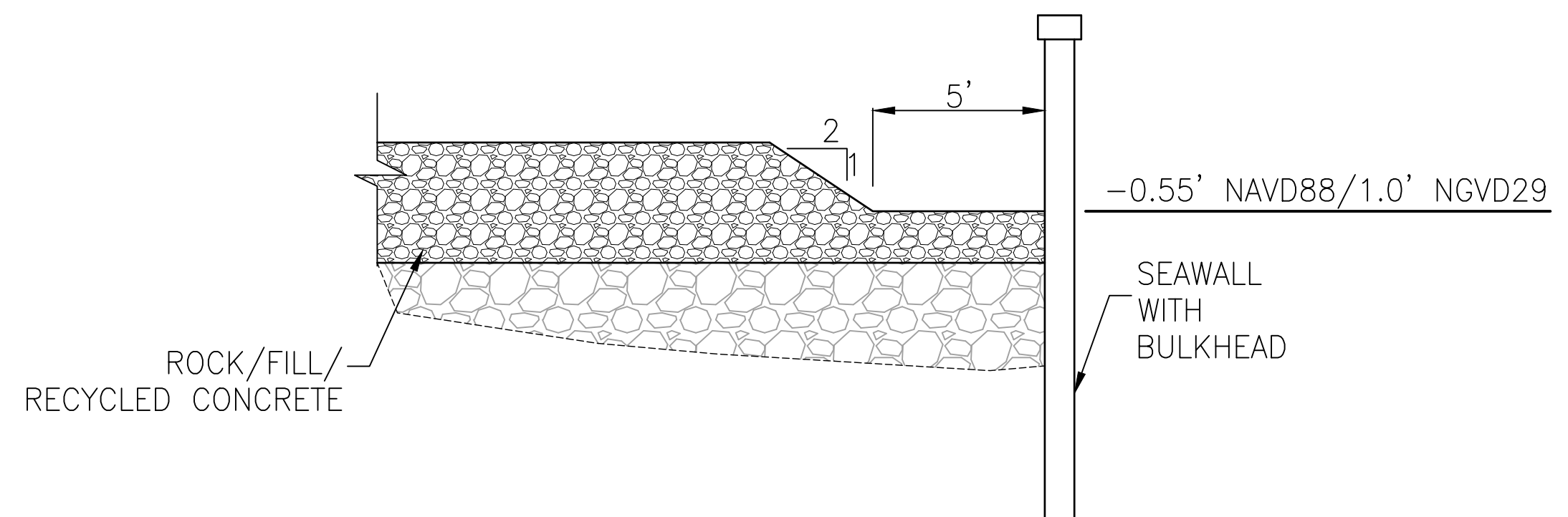
PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SHA-1 AUTHENTICATION CODE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.



RIP-RAP AND PLANTER
SECTION A-A
NTS



MANATEE EGRESS AREA
SECTION B-B
NTS

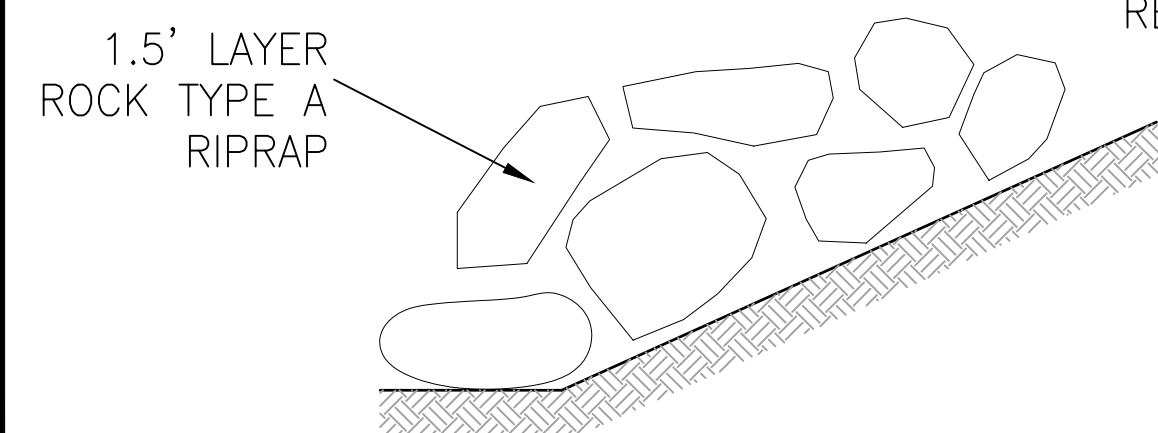


MANATEE EGRESS AREA AT SEAWALL
SECTION C-C
NTS

MANGROVE_ZONE PLANTING SPECIFICATIONS							
STRATUM	COMMON NAME	SCIENTIFIC NAME	ELEVATION RANGE (FT NAVD)	AREA (SF) WITHIN EL. RANGE	AVG SPACING (FT O.C.)	QUANTITY	SIZE (MINIMUM)
MANATEE EGRESS AREA	RED MANGROVE	RHIZOPHORA MANGLE	−0.50 TO 0.50	283	0.5	1,132	1–GAL
TREES	RED MANGROVE	RHIZOPHORA MANGLE	−0.50 TO 0.50	4,205	5	195	3–GAL
	RED MANGROVE	RHIZOPHORA MANGLE	−0.50 TO 0.50	4,205	1	4,500	1–GAL

NOTES:

1. USE SOUND, HARD, DURABLE RUBBLE, FREE OF OPEN OR INCIPIENT CRACKS, SOFT SEAMS, OR OTHER STRUCTURAL DEFECTS, CONSISTING OF BROKEN STONE WITH A BULK SPECIFIC GRAVITY OF AT LEAST 1.90.
2. ENSURE THAT STONES ARE ROUGH AND ANGULAR.
3. USE BROKEN STONE MEETING THE FOLLOWING GRADATION AND THICKNESS REQUIREMENTS:

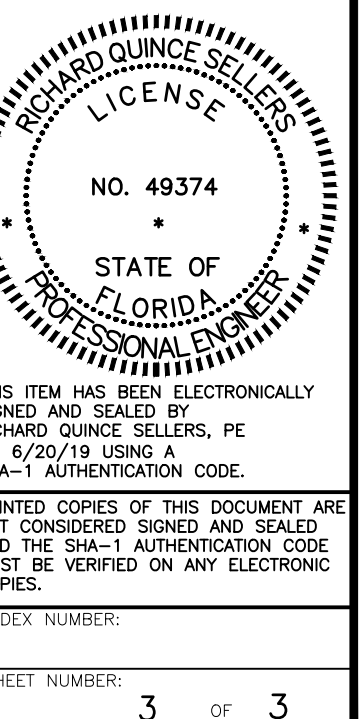


WEIGHT MAX. POUNDS	WEIGHT 50%. POUNDS	WEIGHT MIN. POUNDS	MIN. BLANKET THICKNESS IN FT.
75	30	4	1.5
ENSURE THAT AT LEAST 97% OF THE MATERIAL BY WEIGHT IS SMALLER THAN MAXIMUM POUNDS.	ENSURE THAT AT LEAST 50% OF THE MATERIAL BY WEIGHT IS GREATER THAN WEIGHT 50% POUNDS.		

4. SEE SECTION 530 RIPRAP FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION FOR ADDITIONAL INFORMATION.

TYPE A ROCK RIP-RAP TYPICAL DETAIL

										ACTIVITY										INITIALS/EMP. NO.										DATE										 Stantec 6900 Professional Parkway East, Sarasota, FL 34240-8414 Phone 941-907-6900 • Fax 941-907-6910 Certificate of Authorization #27013 • www.stantec.com The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay. The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.										CLIENT: CITY OF MIAMI BEACH										DATE: JUNE 2019										TITLE: TYPICAL SECTIONS AND DETAILS																																							
										DESIGNED BY: RQS/89561										06/2019										HORIZONTAL SCALE: AS NOTED																																																																															
										DRAWN BY: KG/101511										06/2019										VERTICAL SCALE: AS NOTED																																																																															
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Δ REV. NO.										REVISION																				DATE										DRAWN BY / EMP. NO.										CHECKED BY / EMP. NO.										WM APPROVED BY:																				PROJECT: INDIAN CREEK LIVING SHORELINE										CROSS REFERENCE FILE NO.: PROJECT NUMBER: 215810865										SHEET NUMBER: 3 OF 3									



Attachment C – Permit Application Packages

(1) Miami-Dade County Application Package



Stantec Consulting Services Inc.
901 Ponce de Leon Boulevard, Suite 900
Coral Gables FL 33134-3070
Tel: (305) 445-2900
Fax: (305) 445-3366

June 21, 2019

McKee Gray, MPS

Hand Delivery

Manager

Miami Dade County Department of Regulatory and Economic Resources - DERM

Coastal and Wetlands Resources Section

701 N.W. 1st Court 6th Floor

Miami, FL 33136

**RE: Lake Pancoast Living Shoreline, Class 1 Permit Application
City of Miami Beach, Miami-Dade County, Florida**

Dear Mrs. Gray,

On behalf of the City of Miami Beach Public Works Department, Stantec is pleased to submit this letter and attachments for a modification of the above referenced permit for the construction of a living shoreline along Collins Avenue between 25th Street and 26th Street in Miami Beach (see **Attachment A-Project Location Map**).

Background: Over the last decade the City of Miami Beach (hereinafter the City) has implemented an ambitious plan to confront recurring major flooding events. The master plan identifies the replacement of deteriorating seawalls and increasing their height to reduce flooding in the adjacent streets as an important component.

Replacement of the existing seawalls is anticipated to result in the loss of mangrove fringe habitat within City limits. The City has obtained the necessary permits/authorization for this work and provided mitigation to offset these impacts at a regional mitigation bank. However, the City is interested in creating living shorelines within City limits that will provide estuarine habitat for wildlife as well as an opportunity to showcase ecological restoration principles for the residents of the City of Miami Beach. The Lake Pancoast Living Shoreline is the first such project.

Existing Ecological Conditions: The area proposed for the living shoreline was surveyed for benthic resources on June 22, 2016 and again on January 26, 2017. The bottom sediment consisted on thick silt and trash. No seagrass or coral resources were identified during either survey. No impacts to



June 21, 2019

Mrs. McKee Gray, MPS

Page 2 of 3

mangrove or seagrass resources are proposed. Documentation associated with the Benthic Survey is included in **Attachment B**.

Proposed Living Shoreline: The proposed living shoreline will encompass approximately 0.47 acres, including 0.19 acres of created mangrove fringe, and 0.28 acres of perimeter rip rap. The mean high-water level (MHWL) and the mean low water level (MLWL) was documented at +0.11 feet and -2.07 feet respectively. The target elevation for the mangrove creation area will range between -0.5 feet to +0.5 feet. The creation area will be planted with a combination of 1 and 3-gallon red mangroves (*Rhizophora mangle*) planted on 5-foot centers and 10-foot centers respectively. Additionally, the mangrove creation area includes manatee egress areas, each installed 75 feet apart. Signed and sealed construction plans are included in **Attachment C**.

Functional Assessment and Mitigation: Based on previous coordination, it is our understanding that DERM staff has assessed the functional gains associated with the proposed living shoreline. Additionally, DERM staff has indicated that this gain may satisfy any mitigation required once the 0.26 credits from Everglades Mitigation Bank have been exhausted.

Sovereign Submerged Lands: Pursuant to 18-21.005(c) 15, Florida Administrative Code, the proposed activity qualifies for a letter of consent from South Florida Water Management District.

Construction Methodology and Resource Protection: Best management practices (BMPs) will be implemented during construction to prevent any potential adverse water quality impacts. Proposed BMPs include installation of turbidity control curtains prior to and during project construction. The curtain will be installed so that the weighted bottom of the curtain will extend to the bottom of the canal. The attached turbidity monitoring plan will be implemented during any in-water construction activity and reports will be submitted to DERM and the SFWMD. Barges are proposed to be utilized during the replacement of the seawalls. There will be a minimum of one foot of clearance between the deepest draft of any vessel used for the project and the bottom of the bay.

The curtains shall remain in place until turbidity levels within the construction area match background turbidity levels. A Turbidity Monitoring Plan including a map depicting the proposed locations of the turbidity screen and background monitoring stations is included in are shown in **Attachment D**.



June 21, 2019

Mrs. McKee Gray, MPS

Page 3 of 3

Additionally, the City of Miami Beach will abide by the standard manatee construction conditions (See **Attachment E**).

Supporting Documents: The following items are attached to this letter for your review:

- **Attachment A:** Project Location Map
- **Attachment B:** Benthic Survey
- **Attachment C:** Signed and Sealed Plan Set for the Living Shoreline
- **Attachment D:** Turbidity Monitoring Plan
- **Attachment E:** Endangered Species Construction Conditions
- **Attachment F:** Adjacent Property Ownership Map

We appreciate your continued effort to work with us on the multiple projects for the City of Miami Beach. Your assistance has been instrumental and is greatly appreciated. A permit application fee and mitigation bond will be submitted under separate cover. Should you have any questions, please call.

Regards,

STANTEC CONSULTING SERVICES INC.

Nicole Carter, MS

Principal

Office Phone: 305-445-2900 Ext. 2328

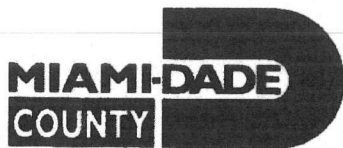
Nicole.Carter@stantec.com

Attachments A-F as described in the Letter

cc. Roy Coley, City of Miami Beach, Public Works Department

Margarita Kruffy, City of Miami Beach, Environment & Sustainability Department

Elizabeth Wheaton, City of Miami Beach, Environment & Sustainability Department



Class I Permit Application

FOR DEPARTMENTAL USE ONLY

Date Received:

Application Number:

Application Fee:

Application must be filled out in its entirety. Please indicate N/A for non-applicable fields.

1. Applicant Information:

Name: City of Miami Beach, Public Works Department

Address: 1700 Convention Center Drive

Miami Beach, FL

Zip Code: 33139

Phone #: (305) 673-7080

Fax #: (305) 673-7028

Email: publicworks@miamibeachfl.gov

* This should be the applicant's information for contact purposes.

2. Applicant's Authorized Permit Agent:

Agent is allowed to process the application, furnish supplemental information relating to the application and bind the applicant to all requirements of the application.

Name: Nicole Carter, Stantec Consulting Services, Inc.

Address: 901 Ponce De Leon Blvd

Coral Gables, FL

Zip Code: 33134

Phone #: (786) 437-6263

Fax #:

Email: Nicole.Carter@Stantec.com

3. Location where proposed activity exists or will occur (latitude and longitude are only necessary for properties without address or folio #):

Folio #(s): Lake Pancoast adjacent to 02-3226-001-0751

Latitude: 25.802100°

Longitude: -80.126442°

Street Address: Collins Ave Between 25th and 26th St

Section: 27

Township: 53

Range: 42

In City or Town: Miami Beach, FL

Near City or Town:

Name of waterway at location of the activity: Lake Pancoast

4. Describe the proposed activity (check all that apply):

☐ Seawall

☐ New/Replacement Seawall

☐ Seawall Cap

☐ Batter Piles

☐ King Piles

☐ Footer/Toe Wall

☒ Riprap

☐ Dock(s)

☐ Pier(s)

☐ Viewing Platform

☐ Boatlift

☐ Mooring Piles

☐ Fender Piles

☐ Davits

☐ Dredging

☐ Maintenance

☐ New

☐ Filling

☐ Mangrove Trimming

☐ Mangrove Removal

☒ Other: Living Shoreline

Estimated project cost = \$ 1,000,000.00

Are you seeking an after-the-fact approval (ATF)? ☐ Yes ☒ No If "Yes", describe the ATF work:

5. Proposed Use (check all that apply):

☐ Single Family

☐ Multi-Family

☐ Private

☒ Public

☐ Commercial

☐ Industrial

☐ Utility

6. If the proposed work relates to the mooring of vessels provide the following information (please also indicate if the applicant does not have a vessel):

Proposed Vessel Type (s):

Vessel Make/Model (If known):

Draft (s)(range in inches.): Length (s)(range in feet.):

Total Number of Slips:

7. List all permits or certifications that have been applied for or obtained for the above referenced work:

Issuing Agency	Type of Approval	Identification Number	Application Date	Approval Date
SFWMD	ERP	13-06496-P	1-30-2017	6-21-2017
USACE	NWP No. 54	Pending	Pending	Pending

8. Contractor Information (If known):

Name: _____ License # (County/State): _____
Address: _____ Zip Code: _____
Phone #: _____ Fax #: _____ E-mail: _____

9. IMPORTANT NOTICE TO APPLICANTS: The written consent of the property owner is required for all applications to be considered complete. Your application **WILL NOT BE PROCESSED** unless the Applicant and Owner Consent portion of the application is completed below. You have the obligation to apprise the Department of any changes to information provided in this application.

Application is hereby made for a Miami-Dade County Class I permit to authorize the activities described herein. I agree to or affirm the following:

- I possess the authority to authorize the proposed activities at the subject property, and
- I am familiar with the information, data and plans contained in this application, and
- To the best of my knowledge and belief, the information, data and plans submitted are true, complete and accurate, and
- I will provide any additional information, evidence or data necessary to provide reasonable assurance that the proposed project will comply with the applicable State and County water quality standards both during construction and after the project is completed, and
- I am authorizing the permit agent listed in Section 2 of this application to process the application, furnish supplemental information relating to this application and bind the applicant to all requirements of this application, and
- I agree to provide access and allow entry to the project site to inspectors and authorized representatives of Miami-Dade County for the purpose of making the preliminary analyses of the site and to monitor permitted activities and adherence to all permit conditions.

A. IF APPLICANT IS AN INDIVIDUAL

Signature of Applicant _____ Print Applicant's Name _____ Date _____

B. IF APPLICANT IS OTHER THAN AN INDIVIDUAL OR NATURAL PERSON
(Examples: Corporation, Partnership, Trust, LLC, LLP, etc.)

City of Miami Beach, Public Works Department _____ Municipality _____ Florida _____
Print Name of Applicant (Enter the complete name as registered) _____ Type (Corp, LLC, LLP, etc.) _____ State of _____
Registration/Incorporation _____

Under the penalty of perjury, I certify that I have the authority to sign this application on behalf of the Applicant, to bind the Applicant, and if so required to authorize the issuance of a bond on behalf of the Applicant. (If asked, you must provide proof of such authority to the Department). *****Please Note: If additional signatures are required, pursuant to your governing documents, operating agreements, or other applicable agreements or laws, you must attach additional signature pages. *****

Signature of Authorized Representative _____ Roy Coley _____ Director _____
Print Authorized Representative's Name _____ Title _____ Date _____

C. IF APPLICANT IS A JOINT VENTURE Each party must sign below (If more than two members, list on attached page)

Print Name of Applicant (Enter the complete name as registered) _____ Type (Corp, LLC, LLP, etc.) _____ State of _____
Registration/Incorporation _____

Print Name of Applicant (Enter the complete name as registered) _____ Type (Corp, LLC, LLP, etc.) _____ State of _____
Registration/Incorporation _____

Under the penalty of perjury, I certify that I have the authority to sign this application on behalf of the Applicant, to bind the Applicant, and if so required to authorize the issuance of a bond on behalf of the Applicant. (If asked, you must provide proof of such authority to the Department). *****Please Note: If additional signatures are required, pursuant to your governing documents, operating agreements, or other applicable agreements or laws, you must attach additional signature pages. *****

Signature of Authorized Representative _____ Roy Coley _____ Director _____
Print Authorized Representative's Name _____ Title _____ Date _____

Signature of Authorized Representative _____ Print Authorized Representative's Name _____ Title _____ Date _____

10. WRITTEN CONSENT OF THE PROPERTY OWNER OF THE AREA OF THE PROPOSED WORK

I/We are the fee simple owner(s) of the real property located at Lake Pancoast adjacent to 02-3226-001-0751 Miami-Dade County, Florida, otherwise identified in the public records of Miami-Dade County as Folio No. N/A

I am aware and familiar with the contents of this application for a Miami-Dade County Class I Permit to perform the work on or adjacent to the subject property, as described in Section 4 of this application. I possess the riparian rights to the area of the proposed work (if applicable) and hereby consent to the work identified in this Class I Permit application.

A. IF THE OWNER(S) IS AN INDIVIDUAL

Signature of Owner	Print Owner's Name	Date
--------------------	--------------------	------

Signature of Owner	Print Owner's Name	Date
--------------------	--------------------	------

B. IF THE OWNER IS OTHER THAN AN INDIVIDUAL OR NATURAL PERSON

(Examples: Corporation, Partnership, Joint Venture, Trust, LLC, LLP, etc.)

City of Miami Beach, Public Works Department

Municipality

Florida

Print Name of Owner (Enter the complete name as registered)

Type (Corp, LLC, LLP, etc.)

State of Registration/Incorporation

1700 Convention Center Drive, Miami Beach, FL 33139

Address of Owner

Under the penalty of perjury, I certify that I have the authority to sign this application on behalf of the Owner, to bind the Owner, and if so required to authorize the issuance of a bond on behalf of the Owner. (If asked, you must provide proof of such authority to the Department). *****Please Note: If additional signatures are required, pursuant to your governing documents, operating agreements, or other applicable agreements or laws, you must attach additional signature pages.*****

	Roy Coley	Director	
Signature of Authorized Representative	Print Authorized Representative's Name	Title	Date
Signature of Authorized Representative	Print Authorized Representative's Name	Title	Date

Please Review Above

Appropriate signature(s) must be included in:

Box 9: either A, B or C

AND

Box 10: either A or B

10. WRITTEN CONSENT OF THE PROPERTY OWNER OF THE AREA OF THE PROPOSED WORK

I/We are the fee simple owner(s) of the real property located at 2555 Collins Avenue Miami-Dade
County, Florida, otherwise identified in the public records of Miami-Dade County as Folio No. 02-3226-021-0001

I am aware and familiar with the contents of this application for a Miami-Dade County Class I Permit to perform the work on or adjacent to the subject property, as described in Section 4 of this application. I possess the riparian rights to the area of the proposed work (if applicable) and hereby consent to the work identified in this Class I Permit application.

A. IF THE OWNER(S) IS AN INDIVIDUAL

Signature of Owner _____ Print Owner's Name _____ Date _____

Signature of Owner _____ Print Owner's Name _____ Date _____

B. IF THE OWNER IS OTHER THAN AN INDIVIDUAL OR NATURAL PERSON

(Examples: Corporation, Partnership, Joint Venture, Trust, LLC, LLP, etc.)

Club Atlantis Condo Condo Association Florida

Print Name of Owner (Enter the complete name as registered) _____ Type (Corp, LLC, LLP, etc.) _____ State of Registration/Incorporation _____

2555 Collins Avenue, Miami Beach, FL 33140

Address of Owner _____

Under the penalty of perjury, I certify that I have the authority to sign this application on behalf of the Owner, to bind the Owner, and if so required to authorize the issuance of a bond on behalf of the Owner. (If asked, you must provide proof of such authority to the Department). *****Please Note: If additional signatures are required, pursuant to your governing documents, operating agreements, or other applicable agreements or laws, you must attach additional signature pages.*****

[Signature] OSCAR VAZQUEZ PRESIDENT 6/29/2018
Signature of Authorized Representative _____ Print Authorized Representative's Name _____ Title _____ Date _____

Signature of Authorized Representative _____ Print Authorized Representative's Name _____ Title _____ Date _____

Please Review Above

Appropriate signature(s) must be included in:

Box 9: either A, B or C

AND

Box 10: either A or B

Class I Permit Application Additional Signatures Page
(Please attach to Class I permit application)

Applicant Name: _____

Owner Name: _____

Project Location: _____

Additional signatures for: ☐ Applicant
☐ Owner

1. IF THE APPLICANT/OWNER IS AN INDIVIDUAL

Signature of Applicant/Owner _____ Print Name of Applicant/Owner _____ Date _____

Signature of Applicant/Owner _____ Print Name of Applicant/Owner _____ Date _____

2. IF THE APPLICANT/OWNER IS OTHER THAN AN INDIVIDUAL OR NATURAL PERSON
(Examples: Corporation, Partnership, Trust, LLC, LLP, etc.)

Print Name of Applicant/Owner (Enter the complete name as registered) _____ Type (Corp, LLC, LLP, etc.) _____ State of Registration/Incorporation _____

Under the penalty of perjury, we certify that we have the authority to sign this application on behalf of the Applicant/Owner, to bind the Applicant/Owner, and if so required to authorize the issuance of a bond on behalf of the Applicant/Owner. (If asked, you must provide proof of such authority to the Department). *Please Note: If additional signatures are required, pursuant to your governing documents, operating agreements, or other applicable agreements or laws, you must attach additional signature pages. *****

Signature _____	Print Name _____	Title _____	Date _____
Signature _____	Print Name _____	Title _____	Date _____
Signature _____	Print Name _____	Title _____	Date _____
Signature _____	Print Name _____	Title _____	Date _____
Signature _____	Print Name _____	Title _____	Date _____
Signature _____	Print Name _____	Title _____	Date _____
Signature _____	Print Name _____	Title _____	Date _____
Signature _____	Print Name _____	Title _____	Date _____
Signature _____	Print Name _____	Title _____	Date _____

Attachment A: Project Location Map



City of Miami Beach
Public Works Department
1700 Convention Center Dr
Miami Beach, FL 33139

Lake Pancoast Living Shoreline
From 25th St to 26th St
City of Miami Beach, FL
Sections 26-27, Township 53, Range 42

Legend



Limits of Proposed Living Shoreline

0 75 150 300 Feet

Project Location
Map

Attachment B: Benthic Survey

**Benthic Survey Memorandum for the
Living Shoreline Concept in Lake
Pancoast between 25th Street and 26th
Street**

Prepared for:

**City of Miami Beach
Public Works Department
1700 Convention Center Drive
Miami Beach, Florida 33139**

Prepared by:



**901 Ponce de Leon Blvd, Suite 900
Miami, FL 33133**

LAKE PANCOAST BENTHIC SURVEY BETWEEN 25th AND 26th STREETS, CITY OF MIAMI BEACH

Introduction

The City of Miami Beach is proposing to construct a living shoreline in Lake Pancoast adjacent to Collins Avenue between 25th Street and 26th Street. Lake Pancoast is considered a part of Biscayne Bay and is tidally-influenced. The living shoreline project is proposed in conjunction with the raising of the adjacent seawall and Indian Creek Drive between 25th and 41st Streets. This area of Miami Beach is very low and prone to increasing flooding from high tides.

The purpose of this technical memorandum is to augment the previous benthic survey done prior to the construction of the seawall. That survey was done on June 22, 2016 and covered the area from the old seawall to 30 feet. No resources were identified. This survey was performed the morning of January 26th, 2017, and ranged from the new seawall out 85 feet. **See Figure 1, Location Map.**

Background/Methods

The benthic survey was performed by two Stantec biologists via SCUBA diving to determine the limits and general abundance of marine resources located in the area of the proposed living shoreline concept (**See Figure 1**). The area surveyed began at the base of the newly constructed seawall and extended out 85 feet from this new seawall to encompass the area of the proposed living shoreline. Marine resources as well as water depths were noted during the survey.

Transects were conducted at 15-foot intervals within the limits of the survey area (**See Figure 2**). Any corals, seagrasses, other submerged aquatic vegetation (SAV), or any other benthic observations were recorded on underwater datasheets and through underwater photography. Any resources that were present were located using the Trimble GeoExplorer, Global Positioning System (GPS) handheld device. The limits of these resources were projected onto aerials using ESRI ArcGIS.

Results and Discussion

At the time of the survey (approximately one hour into the outgoing tide), water depths ranged from four (4) feet at the base of the new seawall to eight (8) feet, at 85 feet out into the lake. The benthic substrate was void of benthic resources and consisted of a nearly two-foot-thick, silty bottom. Water quality was notably poor and there was an approximate one (1) foot layer of muddy/turbid water directly on top of the silt bottom. Visibility was less than one foot on the bottom and this poor water quality limits the light penetration to the bottom. The only marine fauna observed during the survey were mullet (*Mugilidae*). No corals, seagrass, or any threatened or endangered species, including Johnson's seagrass, were observed during this survey.

Attachments: Figures
 Representative Photographs



Figure 1. The map shows the limits of the proposed living shoreline concept in the area adjacent to Collins Avenue in Lake Pancoast between 25th and 26th Streets.



Figure 2. The figure documents the results of the benthic survey performed January 26, 2017. No benthic resources, including but not limited to corals, seagrasses, and other submerged aquatic vegetation, were observed. The benthic substrate for the entirety of the survey area consisted of an approximately 2-foot-thick, loose silt bottom.

Representative Photographs



Photograph No.: 1

Date: January 26, 2017

Location: Lake Pancoast
between 25th St. and 26th St.

Notes: This photograph shows a portion of the newly constructed (raised) seawall, adjacent to an area where the seawall has not yet been rebuilt. This photo is of the corner of 26th St and Collins Avenue.



Representative Photographs

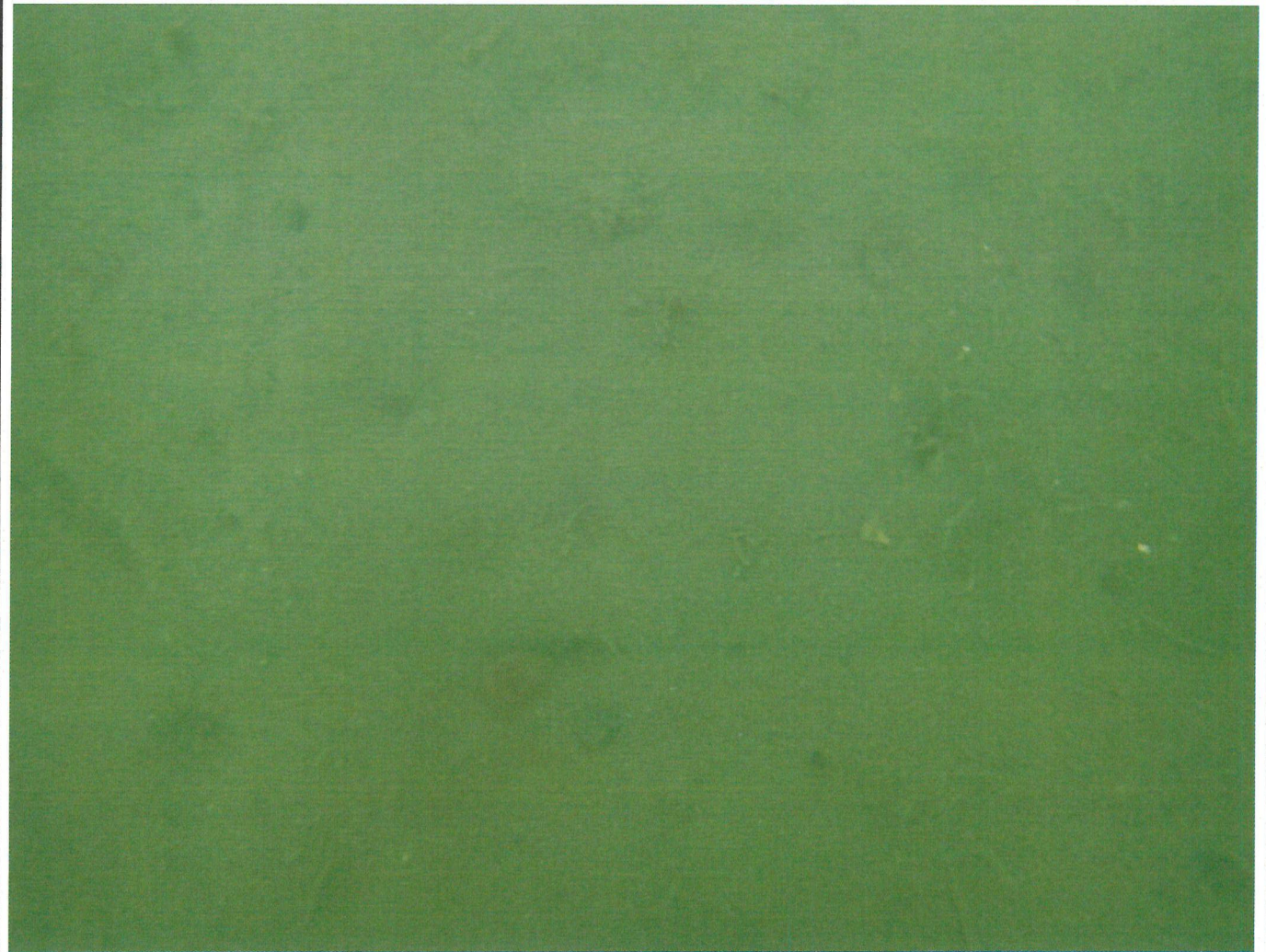


Photograph No.: 2

Date: January 26, 2017

Location: Lake Pancoast
between 25th St. and 26th St.

Notes: This photograph shows the bare, silty substrate that was found throughout the survey area. No benthic resources were observed and the water quality was notably poor, with little light penetration at the bottom.



Representative Photographs

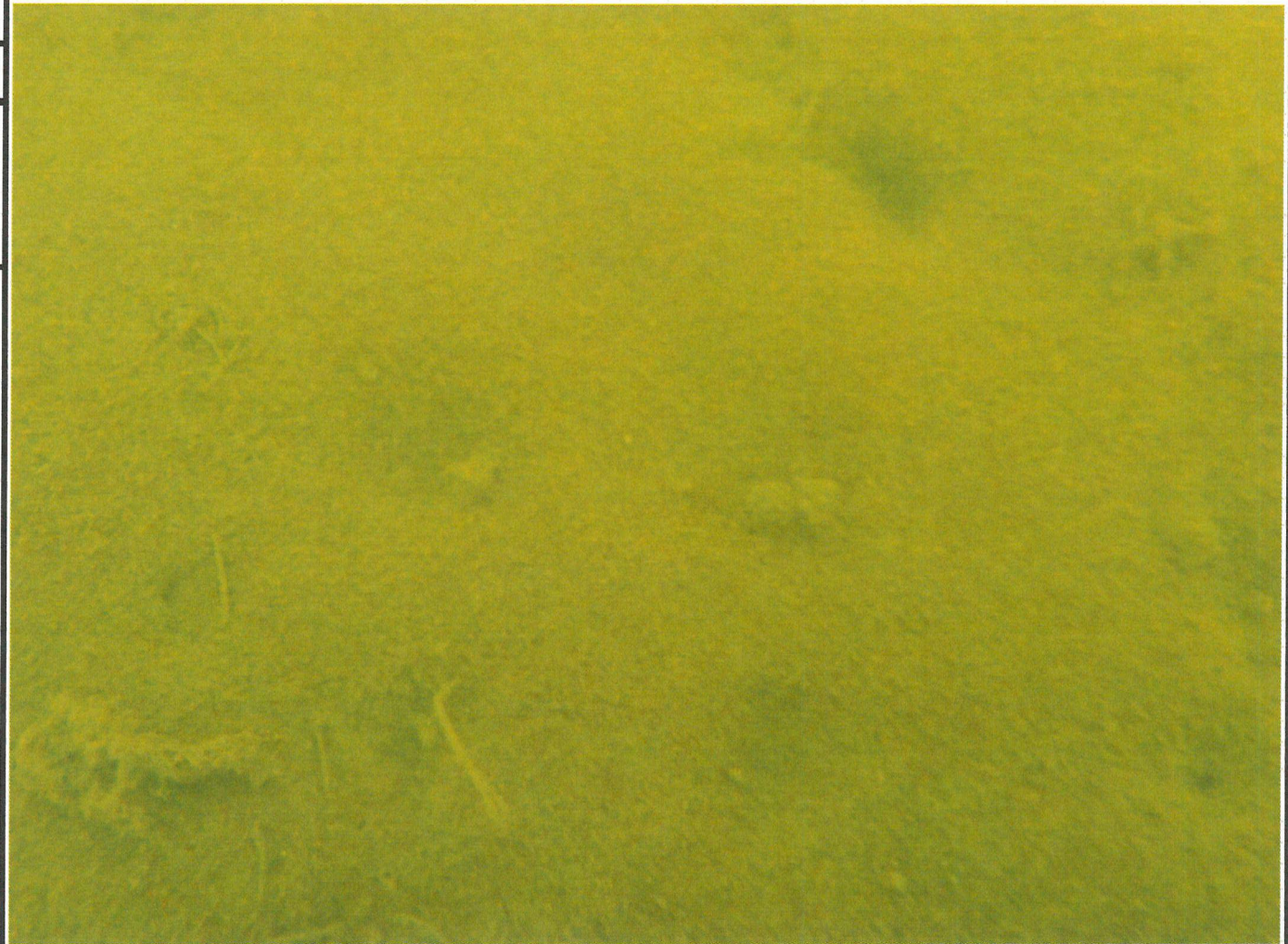


Photograph No.: 3

Date: January 26, 2017

Location: Lake Pancoast
between 25th St. and 26th St.

Notes: An additional
photograph showing the
silty substrate that was
observed throughout the
survey area.



Attachment C: Signed and Sealed Plans

MIAMI DADE COUNTY, FLORIDA

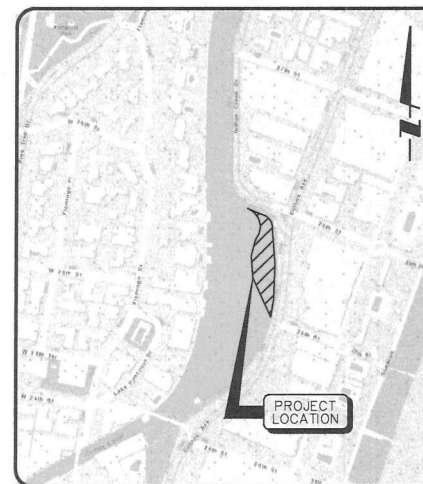
NOTES

GENERAL SITE CONSTRUCTION NOTES:

- THE PURPOSE OF THIS PROJECT IS ECOLOGICAL ENHANCEMENT. THE CONTRACTORS WORKING ON THIS SITE SHALL TAKE GREAT CARE IN AVOIDING UNNECESSARY IMPACTS TO WILDLIFE.
- THE INFORMATION PROVIDED IN THESE PLANS IS TO ASSIST THE CONTRACTOR IN ASSESSING THE NECESSITY OF CONDUCTING INVESTIGATIONS OF ENVIRONMENTAL CONCERNS PRIOR TO THE WORK. ALL CONTRACTORS ARE DIRECTED PRIOR TO BIDDING TO CONDUCT INVESTIGATIONS THEY DEEM NECESSARY TO PROTECT THEMSELVES FROM LITIGATION. THE ACTUAL CONDITIONS THAT MAY BE DISCOVERED AND UPON WHICH THEIR BIDS WILL BE BASED.
- PRIOR TO THE START OF CONSTRUCTION ACTIVITY IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY "SUNSHINE STATE ONE CALL (1-800-432-4270), MAAMI DCA COUNTY DEPARTMENT OF PUBLIC WORKS AND UTILITIES (305) 361-2222, AND THE FLORIDA POWER AND LIGHTS COMPANY (FPL, CABLE, ETC.), IF TO THE CONTRACTOR'S RESPONSIBILITY TO PROTECT EXISTING UTILITIES FROM DAMAGE.
- IF HUMAN REMAINS OR ARCHAEOLOGICAL ARTIFACTS ARE DISCOVERED DURING THE COURSE OF THE PROJECT, THE CONTRACTOR SHALL STOP WORK IMMEDIATELY AND NOTIFY THE MAAMI COUNTY PROJECT MANAGER AND FLORIDA DEPARTMENT OF STATE DIVISION OF HISTORICAL RESOURCES.
- ELEVATIONS SHOWN HEREON ARE RELATIVE TO NORTH AMERICAN VERTICAL DATUM 1988. MEAN HIGH WATER (MHW) IS 10.0 FEET ABOVE DATUM. MEAN LOW WATER (MLW) IS 7.0 FEET ABOVE DATUM. MEAN RISE IN INDIAN CREEK WATER MAY MEAN HIGH WATER LINE SURVEY (CERTIFICATION DATE: AUGUST 24, 2018) IS 10.5 FEET ABOVE DATUM.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO CALCULATE AND VERIFY ALL CUT AND FILL QUANTITIES OF EARTHWORK FOR THE PROJECT. A BUILDING/CORROSION FACTOR SHOULD BE TAKEN INTO ACCOUNT FOR ALL EARTHWORK.
- IMMEDIATELY BEFORE REQUESTING FINAL INSPECTIONS, THE CONTRACTOR SHALL CHECK ALL LINES AND DRESS TO THE PROPER GRADES/CONTOURS. ALL AREAS ARE TO BE STABILIZED AND MAINTAINED UNTIL THE PROJECT IS COMPLETED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ANY SPECIFIED. THE CONTRACTOR SHALL MAKE ALLOWANCES WHEN PLANTING HIGHER GRADED FOR THE FINISHED GRADE OF THE AREAS.
- POST GRADING SOIL CONDITIONS SHALL BE APPROPRIATE FOR PLANTING WITH LIMITED COMPACTION AS DETERMINED BY PROJECT GEOLOGIST.
- THE CONTRACTOR SHALL OBTAIN ALL APPLICABLE NOTICES STOPWORK IMMEDIATELY FOR CONSTRUCTION OF THE PROJECT. THE PROJECT IS SUBJECT TO ENFORCEMENT OF ENVIRONMENTAL PROTECTION. THE CONTRACTOR SHALL BEAR ALL RESPONSIBILITY AND COSTS FOR THE APPLICABLE PERMITTING APPLICATION AND FOR THE PROTECTION OF THE ENVIRONMENT.
- SEDIMENTS BEHIND THE PLANTER ARE COMPOSED OF MUCK AND SILT THAT EXCEEDS THREE FEET IN DEPTH. EXERCISE CARE TO CONTAIN ALL TURBIDITY WHEN INSTALLING PLANTER.
- SELECTED CONTRACTOR SHOULD HAVE DOCUMENTED PRIOR EXPERIENCE WORKING IN AQUATIC



LOCATION MAP



SITE MAP

INDEX TO SHEETS

[illegible]

STATUS : REVISIONS

ENGINEERING TECH -	PROJECT ECOLOGIST	PROJECT ENGINEER R. QUINCE SELLERS, P.E. FLORIDA LICENSE NO. 46074
DATE _____		CHECKED BY _____



Stantec

6900 Professional Parkway East, Sarasota, FL 34240-8414

Phone 941-907-6900 • Fax 941-907-6910

Certificate of Authorization #27013 • www.stantec.com

The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay. The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.



THIS ITEM HAS BEEN ELECTRONICALLY
SIGNED AND SEALED BY
RICHARD CLUNCE SELLERS, PC
ON 6/21/18 USING A
DIGITAL SIGNATURE.

PRINTED COPIES OF THIS DOCUMENT
NOT CONSIDERED SIGNED AND SEALED
AND THE SIGNATURE MUST BE VERIFIED

RESERVED FOR STATUS AND DATE STAMPS

PROJECT NUMBER
215810865

DATE
JUNE 2019

INDEX NUMBER
D-215810580-01C-001

Attachment D: Turbidity Monitoring Plan

TURBIDITY MONITORING PLAN

Collins Avenue from 25th to 26th Street, Living Shoreline Project in Lake Pancoast

All work required to complete the Living Shoreline Project is proposed to be performed from a combination of land-based operations and equipment mounted on a barge. Prior to the commencement of the Living Shoreline construction, turbidity control mechanisms, which will extend from the water's surface to the bottom of Lake Pancoast, shall be properly installed to contain any resulting turbidity inside the work area. The turbidity control mechanisms will be placed to enclose the construction area. The turbidity control mechanisms shall be properly maintained and shall remain in place until all construction is complete and turbidity levels in the Lake, adjacent to the construction area, return to background levels.

All turbidity control mechanisms are to be inspected daily and maintained in good working order so that there are no violations of state water quality standards outside of these control structures.

The following turbidity monitoring plan is proposed for the Living Shoreline construction site. Turbidity will be monitored a minimum of twice per day, at least 4 hours apart while the construction is occurring. A background sample shall be taken upcurrent from the construction area. The location of the background sample shall always be a minimum of 100 feet from the turbidity control mechanism and up-current of tidal flow. The compliance sample will be taken on the waterward side of the turbidity curtain at a location closest to the construction activities. During each monitoring event, sampling shall occur at the water's surface and one foot above the bottom. Turbidity shall be measured in Nephelometric Turbidity Units (NTU's). All water quality monitoring data shall be kept on site and shall contain the following information:

- a) Permit Number
- b) Date of sampling
- c) A statement describing the methods used in sample collection, handling, storage, and analysis of the samples
- d) A map indicating the sampling location
- e) A statement by the individual responsible for the implementation of the sampling program verifying the authenticity, precision, limits of detection and the accuracy of the data
- f) Time and day samples were taken
- g) Depth of monitoring location
- h) Depth of sample
- i) Antecedent weather conditions
- j) Tidal stage and direction of flow
- k) Wind direction and velocity

If any turbidity monitoring results indicate that State water quality standards have been exceeded (a turbidity reading above background levels), the South Florida Water Management District (SFWMD) shall be notified and all construction shall cease. Work will not commence until corrective actions are taken to properly contain construction-related turbidity and turbidity levels in adjacent waters again fall below the minimum water quality standards.



City of Miami Beach
Public Works Department
1700 Convention Center Dr
Miami Beach, FL 33139

Lake Pancoast Living Shoreline
From 25th St to 26th St
City of Miami Beach, FL
Sections 26-27, Township 53, Range 42

Legend



Limits of Proposed Living Shoreline

Turbidity Curtain



Turbidity Monitoring Station



Background Monitoring Station

0 75 150 300 Feet

Turbidity Monitoring Plan

Attachment E: Endangered Species Construction Conditions

STANDARD MANATEE CONDITIONS FOR IN-WATER WORK

2011

The permittee shall comply with the following conditions intended to protect manatees from direct project effects:

- a. All personnel associated with the project shall be instructed about the presence of manatees and manatee speed zones, and the need to avoid collisions with and injury to manatees. The permittee shall advise all construction personnel that there are civil and criminal penalties for harming, harassing, or killing manatees which are protected under the Marine Mammal Protection Act, the Endangered Species Act, and the Florida Manatee Sanctuary Act.
- b. All vessels associated with the construction project shall operate at "Idle Speed/No Wake" at all times while in the immediate area and while in water where the draft of the vessel provides less than a four-foot clearance from the bottom. All vessels will follow routes of deep water whenever possible.
- c. Siltation or turbidity barriers shall be made of material in which manatees cannot become entangled, shall be properly secured, and shall be regularly monitored to avoid manatee entanglement or entrapment. Barriers must not impede manatee movement.
- d. All on-site project personnel are responsible for observing water-related activities for the presence of manatee(s). All in-water operations, including vessels, must be shutdown if a manatee(s) comes within 50 feet of the operation. Activities will not resume until the manatee(s) has moved beyond the 50-foot radius of the project operation, or until 30 minutes elapses if the manatee(s) has not reappeared within 50 feet of the operation. Animals must not be herded away or harassed into leaving.
- e. Any collision with or injury to a manatee shall be reported immediately to the Florida Fish and Wildlife Conservation Commission (FWC) Hotline at 1-888-404-3922. Collision and/or injury should also be reported to the U.S. Fish and Wildlife Service in Jacksonville (1-904-731-3336) for north Florida or in Vero Beach (1-772-562-3909) for south Florida, and emailed to FWC at ImperiledSpecies@myFWC.com.
- f. Temporary signs concerning manatees shall be posted prior to and during all in-water project activities. All signs are to be removed by the permittee upon completion of the project. Temporary signs that have already been approved for this use by the FWC must be used. One sign which reads *Caution: Boaters* must be posted. A second sign measuring at least 8½" by 11" explaining the requirements for "Idle Speed/No Wake" and the shut down of in-water operations must be posted in a location prominently visible to all personnel engaged in water-related activities. These signs can be viewed at http://www.myfwc.com/WILDLIFEHABITATS/manatee_sign_vendors.htm. Questions concerning these signs can be forwarded to the email address listed above.

CAUTION: MANATEE HABITAT

All project vessels

IDLE SPEED / NO WAKE

When a manatee is within 50 feet of work
all in-water activities must

SHUT DOWN

Report any collision with or injury to a manatee:



Wildlife Alert:

1-888-404-FWCC(3922)

cell *FWC or #FWC



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southeast Regional Office
263 13th Avenue South
St. Petersburg, FL 33701

SEA TURTLE AND SMALLTOOTH SAWFISH CONSTRUCTION CONDITIONS

The permittee shall comply with the following protected species construction conditions:

- a. The permittee shall instruct all personnel associated with the project of the potential presence of these species and the need to avoid collisions with sea turtles and smalltooth sawfish. All construction personnel are responsible for observing water-related activities for the presence of these species.
- b. The permittee shall advise all construction personnel that there are civil and criminal penalties for harming, harassing, or killing sea turtles or smalltooth sawfish, which are protected under the Endangered Species Act of 1973.
- c. Siltation barriers shall be made of material in which a sea turtle or smalltooth sawfish cannot become entangled, be properly secured, and be regularly monitored to avoid protected species entrapment. Barriers may not block sea turtle or smalltooth sawfish entry to or exit from designated critical habitat without prior agreement from the National Marine Fisheries Service's Protected Resources Division, St. Petersburg, Florida.
- d. All vessels associated with the construction project shall operate at "no wake/idle" speeds at all times while in the construction area and while in water depths where the draft of the vessel provides less than a four-foot clearance from the bottom. All vessels will preferentially follow deep-water routes (e.g., marked channels) whenever possible.
- e. If a sea turtle or smalltooth sawfish is seen within 100 yards of the active daily construction/dredging operation or vessel movement, all appropriate precautions shall be implemented to ensure its protection. These precautions shall include cessation of operation of any moving equipment closer than 50 feet of a sea turtle or smalltooth sawfish. Operation of any mechanical construction equipment shall cease immediately if a sea turtle or smalltooth sawfish is seen within a 50-ft radius of the equipment. Activities may not resume until the protected species has departed the project area of its own volition.
- f. Any collision with and/or injury to a sea turtle or smalltooth sawfish shall be reported immediately to the National Marine Fisheries Service's Protected Resources Division (727-824-5312) and the local authorized sea turtle stranding/rescue organization.
- g. Any special construction conditions, required of your specific project, outside these general conditions, if applicable, will be addressed in the primary consultation.

Revised: March 23, 2006

O:\forms\Sea Turtle and Smalltooth Sawfish Construction Conditions.doc



Attachment F: Adjacent Property Ownership Map



City of Miami Beach
Public Works Department
1700 Convention Center Dr
Miami Beach, FL 33139

**Lake Pancoast Living Shoreline
From 25th St to 26th St
City of Miami Beach, FL
Sections 26-27, Township 53, Range 42**

Legend



Limits of Proposed Living Shoreline



Parcel Boundary (Folio No.)



**Adjacent Property
Owners Map**

Folio No.	Physical Address	Mailing Address	Owner
02-3226-033-0001	2600 Collins Ave, Miami Beach, FL 33140	2600 Collins Ave, Miami Beach, FL 33140	LAKE BEACH CLUB CONDO
02-3226-001-0660	2469 COLLINS AVE Miami Beach, FL 33140-4702	204 LAKE ST BRIGHTON, MA 02131	S TELLER & EFEKTA INSTITUTE FH EF SCHOOLS INC LESSEE
02-3227-021-0001	2455 Flamingo Dr, Miami Beach, FL 33140	2455 Flamingo Dr, Miami Beach, FL 33140	OCEAN LAKEVIEW CONDO
02-3227-012-0190	2545 FLAMINGO DR Miami Beach, FL 33140-4314	2545 FLAMINGO DR MIAMI BEACH, FL 33140-4314	DAVID MUHLRAD &W CANDACE
02-3226-024-0001	2457 COLLINS AVE Miami Beach, FL 33140-0000	2457 Collins Ave #100, Miami Beach, FL 33140	Royal Club Condominium Association
02-3227-012-0210	2515 FLAMINGO DR Miami Beach, FL 33140-4314	2515 FLAMINGO DR MIAMI BEACH, FL 33140-4314	NELSON GONZALEZ &W MARIELLA
02-3227-012-0200	2525 FLAMINGO DR Miami Beach, FL 33140-4314	2525 FLAMINGO DR MIAMI BEACH, FL 33140	RHONDA PEARL TRS
02-3227-012-0180	2575 FLAMINGO DR Miami Beach, FL 33140-4314	2575 FLAMINGO DR MIAMI BEACH, FL 33140	2575 FLAMINGO DRIVE LLC
02-3226-002-0140	2601 FLAMINGO DR Miami Beach, FL 33140-4316	2601 FLAMINGO DR MIAMI BEACH, FL 33140-4316	JOSEPH LENGYEL TRUSTEE
02-3226-021-0001	2555 COLLINS AVE Miami Beach, FL 33140-0000	2555 COLLINS AVE Miami Beach, FL 33140-0000	CLUB ATLANTIS CONDO
02-3226-041-0001	2615 COLLINS AVE Miami Beach, FL 33140-0000	2615 COLLINS AVE Miami Beach, FL 33140-0000	JASMINE CONDO
02-3227-012-0220	2505 FLAMINGO DR Miami Beach, FL 33140-4314	2505 FLAMINGO DR Miami Beach, FL 33140-4314	LANCE BURSTYN
02-3226-042-0001	2618 Collins Ave Miami Beach, FL 33140	2618 Collins Ave Miami Beach, FL 33140	PRINCE MICHAEL CONDO
02-3226-001-0740	2601 COLLINS AVE Miami Beach, FL 33140-4782	2450 NE MIAMI GARDENS DR 2ND FLR NORTH MIAMI BEACH, FL 33180	2601 COLLINS LLC
02-3227-024-0001	2421 LAKE PANCOAST DR Miami Beach, FL 33140-0000	2421 LAKE PANCOAST DR Miami Beach, FL 33140-0000	HELEN MAR CONDO
02-3226-013-0001	2625 COLLINS AVE Miami Beach, FL 33140-0000	2625 COLLINS AVE Miami Beach, FL 33140-0000	OCEANFRONT PLAZA CONDO
02-3226-001-0751	MIAMI BEACH IMPROVEMENT CO PB 5-7	1700 CONVENTION CENTER DR MIAMI BEACH, FL 33119	CITY OF MIAMI BEACH

**(2) South Florida Water Management District
Application Package**



Stantec Consulting Services Inc.
901 Ponce de Leon Boulevard, Suite 900
Coral Gables FL 33134-3070
Tel: (305) 445-2900
Fax: (305) 445-3366

June 27, 2019

Ms. Caroline Hanes
South Florida Water Management District
P.O. Box 24680
West Palm Beach, Florida 33406

Online submittal (e-permitting)

**RE: City of Miami Beach – Lake Pancoast Living Shoreline
SFWMD ERP No. 13-06496-P**

Dear Ms. Hanes,

On behalf of the City of Miami Beach Public Works Department, Stantec is pleased to submit this letter and attachments for a minor modification of the above referenced permit (13-06446-P) authorizing the construction of a living shoreline along Collins Avenue between 25th Street and 26th Street in Miami Beach (see **Attachment A**-Project Location Map). The proposed modification consists of the a few minor changes to the originally proposed plan. Specifically, the changes include the addition of a fifth manatee ingress/egress feature which decreases the spacing of these features from 75 to 100 ft. Additionally, in order to allow adjacent properties future access to the water way, the plan has been changed to allow such an access across the site, reducing the acreage of the mangrove creation/planter to 0.19-acres.

Background: Over the last decade the City of Miami Beach (hereinafter the City) has implemented an ambitious plan to confront recurring major flooding events. The master plan identifies the replacement of deteriorating seawalls and increasing their height to reduce flooding in the adjacent streets as an important component.

Replacement of the existing seawalls is anticipated to result in the loss of mangrove fringe habitat within City limits. The City has obtained the necessary permits/authorization for this work and provided mitigation to offset these impacts at a regional mitigation bank. However, the City is interested in creating living shorelines within City limits that will provide estuarine habitat for wildlife as well as an opportunity to showcase ecological restoration principles for the residence of the City of Miami Beach. The Indian Creek Living Shoreline is the first such project.



Existing Ecological Conditions: The area proposed for the living shoreline was surveyed for benthic resources on June 22, 2016 and again on January 26, 2017. The bottom sediment consisted on thick silt and trash. No seagrass or coral resources were identified during either survey. No impacts to mangrove or seagrass resources are proposed. Documentation associated with the Benthic Survey is included in **Attachment B**.

Proposed Living Shoreline: The proposed living shoreline will encompass approximately 0.47 acres, including 0.19 acres of created mangrove fringe, and 0.28 acres of perimeter rip rap. The mean high-water level (MHWL) and the mean low water level (MLWL) was documented at +0.11 feet and -2.07 feet respectively. The target elevation for the mangrove creation area will range between -0.5 feet to +0.5 feet. The creation area will be planted with a combination of 1 and 3-gallon red mangroves (*Rhizophora mangle*) planted on 5-foot centers and 10-foot centers respectively. Additionally, the mangrove creation area includes a manatee egress. Signed and sealed construction plans are included in **Attachment C**.

The target community for the creation area is a mangrove fringe, which are common along South Florida's low wave energy shorelines. Typical mangrove fringes are dominated by a mix of red (*Rhizophora mangle*), black (*Avicennia germinans*) and white (*Laguncularia racemosa*) mangroves. Despite their low diversity, mangrove fringe forests are highly productive ecosystems offer habitat and foraging opportunities to a wide range of species including birds, fish, reptiles, invertebrates and small mammals.

Functional Assessment and Mitigation: The City of Miami Beach is not seeking any mitigation credit for the construction of the proposed project.

Sovereign Submerged Lands: Pursuant to 18-21.005(c) 15, Florida Administrative Code, the proposed activity qualifies for a letter of consent from South Florida Water Management District.

Construction Methodology and Resource Protection: Best management practices (BMPs) will be implemented during construction to prevent any potential adverse water quality impacts. Proposed BMPs include installation of turbidity control curtains prior to and during project construction. The curtain will be installed so that the weighted bottom of the curtain will extend to the bottom of the canal. The attached turbidity monitoring plan will be



implemented during any in-water construction activity and reports will be submitted to DERM and the SFWMD. Barges are proposed to be utilized during the replacement of the seawalls. There will be a minimum of one foot of clearance between the deepest draft of any vessel used for the project and the bottom of the bay.

The curtains shall remain in place until turbidity levels within the construction area match background turbidity levels. A Turbidity Monitoring Plan including a map depicting the proposed locations of the turbidity screen and water quality monitoring stations is included in are shown in **Attachment D**.

During construction the City of Miami Beach and its contractors will abide by the Standard Manatee In-Water Construction Conditions (See **Attachment E**).

The success of the mitigation/creation area will depend on the establishment of a community that closely resembles a functioning mangrove fringe forest. For this purpose, the following short and long-term success criteria are proposed. The mitigation success criterion and monitoring methodology are included in **Attachment G: Mitigation Monitoring Plan**.

Supporting Documents: The following items are attached to this letter for your review:

- **Attachment A:** Project Location Map
- **Attachment B:** Benthic Survey
- **Attachment C:** Signed and Sealed Plan set for the Living Shoreline
- **Attachment D:** Turbidity Monitoring Plan
- **Attachment E:** Manatee conditions for in-water work
- **Attachment F:** Adjacent Property Ownership Map

We appreciate your continued to work with us on the multiple projects for the City of Miami Beach. Your assistance has been instrumental and is greatly appreciated. A permit application fee and mitigation bond will be submitted under separate cover. Should you have any questions, please call.



June 27, 2019
Caroline Hanes
Page 4 of 4

Regards,

STANTEC CONSULTING SERVICES INC.

Nicole Carter
Principal
Office Phone: 305-445-2900 Ext. 2328
nicole.carter@stantec.com

Attachments

cc. Roy Coley, City of Miami Beach Public Works Department
Margarita Wells, City of Miami Beach Public Works Department
Elizabeth Wheaton, City of Miami Beach Public Works Department

ENVIRONMENTAL RESOURCE PERMIT APPLICATION REPORT

Application #
190628-1

Submittal #
218162

Submittal Date
06/27/2019

FOR AGENCY USE ONLY

ACOE Application # _____
Date Application Received _____
Proposed Project Lat. _____
Proposed Project Long. _____

DEP/WMD Application # _____
Date Application Received _____
Fee Received\$ _____
Fee Receipt# _____

SECTION A

A. Type of Environmental Resource Permit Requested (Select One):

- ☐ General Permit
- ☐ Mitigation Bank (construction)
- ☐ Mitigation Bank (conceptual)
- ☐ Individual
- ☐ Conceptual
- ☐ Request for Exemption Verification
- ☐ Extension of Permit Duration
- ☐ Formal Wetland Determination
- ☐ Informal Wetland Determination
- ☒ Minor Modification
- ☐ Minor Modification w/Transfer

B. Type of authorization being requested (Select One):

- ☐ Construction or operation of new works, activities and/or a stormwater management system; or a new Conceptual Approval
- ☒ alteration, maintenance, or repair of previously permitted works, activities or Stormwater Management System
- ☐ Abandonment or removal of works, activities and/or stormwater management system
- ☐ Alteration or operation of an existing stormwater management system which was not previously permitted by the DEP or WMD
- ☐ Operation only permit
- ☐ Construction of additional phases of a permitted work, activity and/or stormwater management system
- ☐ Request for exemption
- ☐ Extension of permit duration
- ☐ New Wetland Determination
- ☐ Reissuance of Formal Wetland Determination

Provide previous permit number: 13-06496-P

C. How many components are being affected? : 0

Components include service area, credit assessment; success or release criteria; hydrologic structures or alterations; construction or mitigation design that does not increase the project area; elimination of lands; or monitoring or management plans.

D. Type of Activity you are applying (Check all that apply):

- ☐ For Activities in, on or over wetlands or other surface waters, or within 25 feet of a wetland or surface water. Wetlands and Surface waters are defined in [Chapter=62-340](#). Examples include dredging, filling, outfall structures, docks, piers, over-water structures, shoreline, stabilization, mitigation, reclamation, restoration/enhancement (Section C)
- ☐ Activities within navigable or flowing surface waters such as multi-slip dock or marina, dry storage facility, dredging, bridge, breakwaters, reefs, or other offshore structures (Section D)

☐ Construction or alteration of a stormwater management system serving residential, commercial, transportation, industrial, agricultural, or other land uses, or a solid waste facility (excluding mines that are regulated by DEP) (Section E)

☐ Activities that are (or may be) located within, on or over state-owned submerged lands (See Chapter 18-21). (Section F)

☐ Creation or Modification of Mitigation Bank (refer to Chapter=62-342). (Section G)

E. For activities in, on or over wetlands or other surface waters, check type of federal dredge and fill permit requested

☐ Individual ☐ Programmatic General ☐ Letter of Permission
☐ General ☒ Nationwide ☐ Not Applicable

F. Is this project part of a larger plan of development or sale?
☐ Yes ☒ No

G. Impervious or semi-impervious area excluding wetlands or other surface waters (if applicable): N/A

H. Volume of water the system is capable of impounding (if applicable): N/A

OWNER(S) OF LAND:	ENTITY TO RECEIVE PERMIT (IF OTHER THAN OWNER):
NAME:	NAME: <u>Coley, Roy</u>
ADDRESS:	ADDRESS: <u>1700 Convention Center Drive</u>
CITY, STATE, ZIP:	CITY, STATE, ZIP: <u>Miami Beach, FL 33139</u>
COMPANY AND TITLE	COMPANY AND TITLE: <u>City of Miami Beach Public Works</u>
TELEPHONE:	TELEPHONE: <u>305-673-6080</u>
FAX:	FAX:
AGENT AUTHORIZED TO SECURE PERMIT (IF AN AGENT IS USED):	CONSULTANT (IF DIFFERENT FROM AGENT):
NAME:	NAME: <u>Carter, Nicole</u>
COMPANY AND TITLE:	COMPANY AND TITLE: <u>Stantec</u>
ADDRESS:	ADDRESS: <u>901 Ponce De Leon Blvd, Ste 900</u>
CITY, STATE, ZIP:	CITY, STATE, ZIP: <u>Coral Gables, FL 33134</u>
TELEPHONE:	TELEPHONE: <u>305-445-2900</u>
FAX:	FAX:

Project Location Details

Project Name: <u>Lake Pancoast Living Shoreline</u>
Project Acreage: <u>0.47</u>
Irrigated Acreage: _____
Number of new or modified boat slips: _____
Total acres of work in, on or over wetlands or surface waters: <u>0.47</u>
Project Address: <u>Collins Avenue, between 26th and 27th Street</u>
City, Town or Village: <u>Miami Beach</u>
Zip: <u>33140</u>
Latitude: _____
Longitude: _____
Directions to site from nearest major intersection: _____

County: MIAMI-DADE			
Sections	Township	Range	Land Grant
26	53	42	

Applicant Signature / Owner Authorization

Erick Revuelta
CONSULTANT

06/27/2019
Date

Statement Of Agreement

By signing this application form, I am applying for, or I am applying on behalf of the applicant, for the permit and any proprietary authorizations identified above, according to the supporting data and other incidental information filed with this application. I am familiar with the information contained in this application and represent that such information is true, complete and accurate. I understand this is an application and not a permit, and that work prior to approval is a violation. I understand that this application and any permit issued or proprietary authorization issued pursuant thereto, does not relieve me of any obligation for obtaining any other required federal, state, water management district or local permit prior to commencement of construction. I agree, or I agree on behalf of my corporation, to operate and maintain the permitted system unless the permitting agency authorizes transfer of the permit to a responsible operation entity. I understand that knowingly making any false statement or representation in this application is a violation of Section 373.430, F.S. and 18 U.S.C. Section 1001. I either own the property described in this application or I have legal authority to allow access to the property, and I consent, after receiving prior notification, to any site visit on the property by agents or personnel from the Department of Environmental Protection, the Water Management District and the U.S. Army Corps of Engineers necessary for the review and inspection of the proposed project specified in this application. I authorize these agents or personnel to enter the property as many times as may be necessary to make such review and inspection. Further, I agree to provide entry to the project site for such agents or personnel to monitor permitted work if a permit is granted.

Prepared by:

Name: Erick Revuelta
Agency of Employment: Stantec
Position: Environmental Scientist
Email Address: erick.revuelta@stantec.com
Phone Number: 305-445-2900 2248
Signature Date: 06/27/2019

Existing or Proposed Permits

Describe in general terms the proposed project, system, or activity.

The initial permit authorized the filling of 0.47 acres of other surface waters within Lake Pancoast, a man-made body of water connected to Biscayne Bay. The proposed modification consists of the a few minor changes to the originally proposed plan. Specifically, the changes include the addition of a fifth manatee ingress/egress feature which decreases the spacing of these features from 75 to 100 ft. Additionally, in order to allow adjacent properties future access to the water way, the plan has been changed to allow such an access across the site, reducing the acreage of the mangrove creation/planter to 0.19-acres.

Please identify by number any MSSW/Wetland resource/ERP/ACOE Permits pending, issued or denied for projects at the location, and any related enforcement actions.

Agency	Date	No.Type of Application	Action Taken
--------	------	------------------------	--------------

Note:The following information is required **only** for projects proposed to occur in, on or over wetlands that need a federal dredge and fill permit and/or authorization to use state owned submerged lands and is not necessary when applying solely for an Environmental Resource Permit. Please provide the names, addresses and zip codes of property owners whose property directly adjoins the project (excluding applicant). Please attach a plan view showing the owner's names and adjoining property lines. Attach additional sheets if necessary.

1.	2.
3.	4.

Additional Existing Permit Information

Landuse	
NATURAL/UNDEVELOPED	
Supporting Documentation	
File Name	File Size
170130-11_permit_20170621.pdf	2 MB
attachment a- location_map.pdf	1 MB
sfwmd cover letter27jan2017.pdf	179 KB



**SOUTH FLORIDA WATER MANAGEMENT DISTRICT
ENVIRONMENTAL RESOURCE PERMIT NO. 13-06496-P**

DATE ISSUED: June 21, 2017

PERMITTEE: MIAMI BEACH, PUBLIC WORKS DEPARTMENT
1700 CONVENTION CENTER DRIVE
CITY OF MIAMI BEACH, FL 33139

PROJECT DESCRIPTION: Construction of a 0.47 acre mangrove planter for a project known as Indian Creek Living Shoreline. The authorization includes approval in the form of a Letter of Consent for use of sovereign submerged lands.

PROJECT LOCATION: MIAMI-DADE COUNTY, SEC 26 TWP 53S RGE 42E

PERMIT DURATION: See Special Condition No:1.

This is to notify you of the District's agency action for Permit Application No. 170130-11, dated January 30, 2017. This action is taken pursuant to the provisions of Chapter 373, Part IV, Florida Statutes (F.S).

Based on the information provided, District rules have been adhered to and an Environmental Resource Permit is in effect for this project subject to:

1. Not receiving a filed request for a Chapter 120, Florida Statutes, administrative hearing.
2. the attached 18 General Conditions (See Pages : 2 - 4 of 8),
3. the attached 16 Special Conditions (See Pages : 5 - 7 of 8),
4. the attached General Conditions for Authorizations for Use of Sovereign Submerged Lands (See Pages : 8 - 8 of 8) and
5. the attached 4 Exhibit(s)

Should you object to these conditions, please refer to the attached "Notice of Rights" which addresses the procedures to be followed if you desire a public hearing or other review of the proposed agency action. Please contact this office if you have any questions concerning this matter. If we do not hear from you in accordance with the "Notice of Rights," we will assume that you concur with the District's action.

CERTIFICATE OF SERVICE

I HEREBY CERTIFY THAT this written notice has been mailed or electronically transmitted to the Permittee (and the persons listed in the attached distribution list) this 21st day of June, 2017, in accordance with Section 120.60(3), F.S. Notice was also electronically posted on this date through a link on the home page of the District's website (my.sfwmd.gov/ePermitting).

BY: _____
Ricardo A. Valera, P.E.
Bureau Chief - Environmental Resource
Regulation Division

GENERAL CONDITIONS

1. All activities shall be implemented following the plans, specifications and performance criteria approved by this permit. Any deviations must be authorized in a permit modification in accordance with Rule 62-330.315, Florida Administrative Code (F.A.C.). Any deviations that are not so authorized shall subject the permittee to enforcement action and revocation of the permit under Chapter 373, F.S.
2. A complete copy of this permit shall be kept at the work site of the permitted activity during the construction phase, and shall be available for review at the work site upon request by the Agency staff. The permittee shall require the contractor to review the complete permit prior to beginning construction.
3. Activities shall be conducted in a manner that does not cause or contribute to violations of state water quality standards. Performance-based erosion and sediment control best management practices shall be installed immediately prior to, and be maintained during and after construction as needed, to prevent adverse impacts to the water resources and adjacent lands. Such practices shall be in accordance with the "State of Florida Erosion and Sediment Control Designer and Reviewer Manual" (Florida Department of Environmental Protection and Florida Department of Transportation June 2007), and the "Florida Stormwater Erosion and Sedimentation Control Inspector's Manual" (Florida Department of Environmental Protection, Nonpoint Source Management Section, Tallahassee, Florida, July 2008), unless a project-specific erosion and sediment control plan is approved or other water quality control measures are required as part of the permit.
4. At least 48 hours prior to beginning the authorized activities, the permittee shall submit to the Agency a fully executed Form 62-330.350(1), "Construction Commencement Notice" indicating the expected start and completion dates. If available, an Agency website that fulfills this notification requirement may be used in lieu of the form.
5. Unless the permit is transferred under Rule 62-330.340, F.A.C., or transferred to an operating entity under Rule 62-330.310, F.A.C., the permittee is liable to comply with the plans, terms and conditions of the permit for the life of the project or activity.
6. Within 30 days after completing construction of the entire project, or any independent portion of the project, the permittee shall provide the following to the Agency, as applicable:
 - a. For an individual, private single-family residential dwelling unit, duplex, triplex, or quadruplex- "Construction Completion and Inspection Certification for Activities Associated With a Private Single-Family Dwelling Unit"[Form 62-330.310(3)]; or
 - b. For all other activities- "As-Built Certification and Request for Conversion to Operational Phase" [Form 62-330.310(1)].
 - c. If available, an Agency website that fulfills this certification requirement may be used in lieu of the form.
7. If the final operation and maintenance entity is a third party:
 - a. Prior to sales of any lot or unit served by the activity and within one year of permit issuance, or within 30 days of as- built certification, whichever comes first, the permittee shall submit, as applicable, a copy of the operation and maintenance documents (see sections 12.3 thru 12.3.3 of Applicant's Handbook Volume I) as filed with the Department of State, Division of Corporations and a copy of any easement, plat, or deed restriction needed to operate or maintain the project, as recorded with the Clerk of the Court in the County in which the activity is located.
 - b. Within 30 days of submittal of the as- built certification, the permittee shall submit "Request for Transfer of Environmental Resource Permit to the Perpetual Operation Entity" [Form 62-330.310(2)] to transfer the permit to the operation and maintenance entity, along with the documentation requested in the form. If available, an Agency website that fulfills this transfer requirement may be used in lieu of the form.
8. The permittee shall notify the Agency in writing of changes required by any other regulatory agency that

GENERAL CONDITIONS

require changes to the permitted activity, and any required modification of this permit must be obtained prior to implementing the changes.

9. This permit does not:
 - a. Convey to the permittee any property rights or privileges, or any other rights or privileges other than those specified herein or in Chapter 62-330, F.A.C.;
 - b. Convey to the permittee or create in the permittee any interest in real property;
 - c. Relieve the permittee from the need to obtain and comply with any other required federal, state, and local authorization, law, rule, or ordinance; or
 - d. Authorize any entrance upon or work on property that is not owned, held in easement, or controlled by the permittee.
10. Prior to conducting any activities on state-owned submerged lands or other lands of the state, title to which is vested in the Board of Trustees of the Internal Improvement Trust Fund, the permittee must receive all necessary approvals and authorizations under Chapters 253 and 258, F.S. Written authorization that requires formal execution by the Board of Trustees of the Internal Improvement Trust Fund shall not be considered received until it has been fully executed.
11. The permittee shall hold and save the Agency harmless from any and all damages, claims, or liabilities that may arise by reason of the construction, alteration, operation, maintenance, removal, abandonment or use of any project authorized by the permit.
12. The permittee shall notify the Agency in writing:
 - a. Immediately if any previously submitted information is discovered to be inaccurate; and
 - b. Within 30 days of any conveyance or division of ownership or control of the property or the system, other than conveyance via a long-term lease, and the new owner shall request transfer of the permit in accordance with Rule 62-330.340, F.A.C. This does not apply to the sale of lots or units in residential or commercial subdivisions or condominiums where the stormwater management system has been completed and converted to the operation phase.
13. Upon reasonable notice to the permittee, Agency staff with proper identification shall have permission to enter, inspect, sample and test the project or activities to ensure conformity with the plans and specifications authorized in the permit.
14. If any prehistoric or historic artifacts, such as pottery or ceramics, stone tools or metal implements, dugout canoes, or any other physical remains that could be associated with Native American cultures, or early colonial or American settlement are encountered at any time within the project site area, work involving subsurface disturbance in the immediate vicinity of such discoveries shall cease. The permittee or other designee shall contact the Florida Department of State, Division of Historical Resources, Compliance and Review Section, at (850) 245-6333 or (800) 847-7278, as well as the appropriate permitting agency office. Such subsurface work shall not resume without verbal or written authorization from the Division of Historical Resources. If unmarked human remains are encountered, all work shall stop immediately and notification shall be provided in accordance with Section 872.05, F.S.
15. Any delineation of the extent of a wetland or other surface water submitted as part of the permit application, including plans or other supporting documentation, shall not be considered binding unless a specific condition of this permit or a formal determination under Rule 62-330.201, F.A.C., provides otherwise.
16. The permittee shall provide routine maintenance of all components of the stormwater management system to remove trapped sediments and debris. Removed materials shall be disposed of in a landfill or other

GENERAL CONDITIONS

uplands in a manner that does not require a permit under Chapter 62-330, F.A.C., or cause violations of state water quality standards.

17. This permit is issued based on the applicant's submitted information that reasonably demonstrates that adverse water resource-related impacts will not be caused by the completed permit activity. If any adverse impacts result, the Agency will require the permittee to eliminate the cause, obtain any necessary permit modification, and take any necessary corrective actions to resolve the adverse impacts.
18. A Recorded Notice of Environmental Resource Permit may be recorded in the county public records in accordance with Rule 62-330.090(7), F.A.C. Such notice is not an encumbrance upon the property.

SPECIAL CONDITIONS

1. The construction phase of this permit shall expire on June 21, 2022.
2. Operation and maintenance of the stormwater management system shall be the responsibility of the permittee.
3. A stable, permanent and accessible elevation reference shall be established on or within one hundred (100) feet of all permitted discharge structures no later than the submission of the certification report. The location of the elevation reference must be noted on or with the certification report.
4. The following are exhibits to this permit.
Exhibit No. 1 Location Map
Exhibit No. 2 Construction Plans, Pages 1 - 3
Exhibit No. 3 Construction and Turbidity Monitoring Plan, Pages 1-3
Exhibit No. 4 Work Schedule

5. Prior to initiating construction activities associated with this Environmental Resource Permit (ERP), the permittee is required to hold a pre-construction meeting with field representatives, consultants, contractors, District Environmental Resource Compliance (ERC) staff, and any other local government entities as necessary. Please provide at least two weeks' notice of the expected date of the meeting.

The purpose of the pre-construction meeting is to discuss construction methods, sequencing, best management practices, identify work areas, staking and roping of preserves where applicable, and to facilitate coordination and assistance amongst relevant parties.

To schedule a pre-construction meeting, please contact ERC staff from the West Palm Beach Office at (561) 686-8800 or via e-mail at: pre-con@sfwmd.gov. When sending a request for a pre-construction meeting, please include the application number, permit number, and contact name and phone number.

6. All barge activity shall occur only in areas where at least one-foot bottom clearance is maintained at all times.
7. All contractors must be provided with a copy of the staff report and permit conditions prior to the commencement of construction. The permittee is responsible for ensuring that all contractors adhere to the project construction details and methods indicated on the attached permit Exhibits and described herein.
8. The permittee and all designated contractors shall adhere to all project construction details and methodology indicated on the enclosed permit Exhibits and described herein.
9. Construction of the permitted activities shall be conducted in accordance with Exhibit No. 3, Construction and Turbidity Monitoring Plan.
10. Endangered species, threatened species and/or species of special concern have been observed onsite and/or the project contains suitable habitat for these species. It shall be the permittee's responsibility to coordinate with the Florida Fish and Wildlife Conservation Commission and/or the U.S. Fish and Wildlife Service for appropriate guidance, recommendations and/or necessary permits to avoid impacts to listed species.
11. Success of the planter proposed herein is heavily dependent on proper grading to achieve the design ground elevations necessary to support the expected vegetation and to sustain the proper hydrology. The permittee shall submit as-built topography of the planter top soil layer, schedule a site visit by District compliance staff and obtain approval prior to planting, in accordance with Exhibit 2 and before the deadlines in Exhibit 4 (Work Schedule). The permittee shall correct any deficiencies in the project grade

SPECIAL CONDITIONS

within 14 days of being notified of such deficiencies by District staff.

12. The permittee shall comply with the following conditions intended to protect manatees and marine turtles from direct project effects:
 - a. All personnel associated with the project shall be instructed about the presence of marine turtles, manatees and manatee speed zones, and the need to avoid collisions with and injuries to manatees. The permittee shall advise all construction personnel that there are civil and criminal penalties for harming, harassing, or killing manatees which are protected under the Marine Mammal Protection Act, the Endangered Species Act, and the Florida Manatee Sanctuary Act.
 - b. All vessels associated with the construction project shall operate at "Idle Speed/No Wake" at all times while in the immediate area and while in water where the draft of the vessel provides less than a four-foot clearance from the bottom. All vessels will follow routes of deep water whenever possible.
 - c. Siltation or turbidity barriers shall be made of material in which manatees and marine turtles cannot become entangled, shall be properly secured, and shall be regularly monitored to avoid manatee and marine turtle entanglement or entrapment. Barriers must not impede manatee movement.
 - d. All on-site project personnel are responsible for observing water-related activities for the presence of marine turtles and manatee(s). All in-water operations, including vessels, must be shutdown if a marine turtle or manatee(s) comes within 50 feet of the operation. Activities will not resume until the animal(s) have moved beyond the 50-foot radius of the project operation, or until 30 minutes elapses if the animal(s) has not reappeared within 50 feet of the operation. Animals must not be herded away or harassed into leaving.
 - e. Any collision with or injury to a marine turtle or manatee shall be reported immediately to the FWC Hotline at 1-888-404-3922. Collision and/or injury should also be reported to the U.S. Fish and Wildlife Service in Jacksonville (1-904-731-3336) for north Florida or Vero Beach (1-772-562-3909) for south Florida, and to FWC at ImperiledSpecies@myFWC.com.
 - f. Temporary signs concerning manatees shall be posted prior to and during all in-water project activities. All signs are to be removed by the permittee upon completion of the project. Awareness signs that have already been approved for this use by the Florida Fish and Wildlife Conservation Commission (FWC) must be used. One sign measuring at least 3 ft. by 4 ft. which reads Caution: Manatee Area must be posted. A second sign measuring at least 8 1/2" by 11" explaining the requirements for "Idle Speed/No Wake" and the shut down of in-water operations must be posted in a location prominently visible to all personnel engaged in water-related activities. These signs can be viewed at MyFWC.com/manatee. Questions concerning these signs can be sent to FWC at ImperiledSpecies@myFWC.com.
13. A turbidity control plan shall be implemented in accordance with Exhibit Nos. 2 and 3. Prior to the commencement of construction in Indian Creek, double floating turbidity curtains with weighted skirts that extend to the bottom of the waterbody shall be properly installed to isolate adjacent waters from the work area. The floating turbidity curtains shall be maintained and shall remain in place until all construction is complete and turbidity levels in the project area meet OFW standards (0 NTU's above background). The permittee shall be responsible for ensuring that turbidity control devices are inspected daily and maintained in good working order so that there are no violations of state water quality standards outside of the turbidity screens.

The planter area shall be planted in accordance with the plans in Exhibit 2. At the riprap gaps, smaller

SPECIAL CONDITIONS

planting material (e.g., 4-inch/1gallon size) shall be planted densely enough to provide better stability to the soil but plantings must not obstruct passage of fish and aquatic wildlife.

14. A water quality monitoring program shall be implemented as outlined below and in accordance with Exhibit 3:

Turbidity expressed in nephelometric turbidity units (ntu). Background samples shall be taken at least 200 feet upstream of any construction activity within adjacent surface waters. Compliance samples shall be taken on the waterward side of the turbidity curtain at the location nearest the construction activities. Samples shall be taken at least twice daily, at four-hour intervals, or shorter intervals as necessary, during all work authorized by this permit.

Monitoring shall begin on the first day of construction for all activities within or adjacent to surface waters. The monitoring data must demonstrate that turbidity at the compliance sample location meets OFW standards (0 NTU's above background). If monitoring shows such levels to be exceeded, construction shall cease and District compliance staff shall be notified immediately. Work shall not resume until District staff is satisfied that adequate corrective measures have been taken and turbidity has returned to acceptable levels.

All monitoring data shall be maintained on site and be available to District staff during regular business hours. The content of the data shall include:

1) permit and application number; (2) dates of sampling and analysis; (3) statement describing the methods used in collection, handling, storage and analysis of the samples; (4) a map indicating the sampling locations and (5) a statement by the individual responsible for implementation of the sampling program concerning the authenticity, precision, limits of detection and accuracy of the data.

Monitoring reports shall also include the following information for each sample that is taken:

- (a) time of day samples taken;
- (b) depth of water body;
- (c) depth of samples;
- (d) antecedent weather conditions;
- (e) wind direction and velocity;
- (f) direction of tide.

15. Navigational lighting, signage and other marking as necessary shall be installed and maintained at the structure in accordance with federal, state and local regulations.
16. If mangroves in the planter will be trimmed in the future, all mangrove trimming activities shall be accomplished by a certified professional mangrove trimmer and in accordance with the Mangrove Trimming and Preservation Act (Sections 403.9321-403.9333 Florida Statutes).

**GENERAL CONDITIONS FOR AUTHORIZATIONS FOR USE OF
SOVEREIGN SUBMERGED LANDS**

Project No. 170130-11

Chapter 18-21.004(7), F.A.C., provides that all authorizations granted by rule or in writing under Rule 18-21.005, F.A.C., except those for aquaculture activities and geophysical testing, shall be subject to the general conditions as set forth in paragraphs (a) through (i) below. The general conditions shall be part of all authorizations under this chapter, shall be binding upon the grantee, and shall be enforceable under Chapter 253 or Chapter 258, Part II, F.S.

Chapter 18-21.004(7), F.A.C., General Conditions for Authorizations:

(a) Authorizations are valid only for the specified activity or use. Any unauthorized deviation from the specified activity or use and the conditions for undertaking that activity or use shall constitute a violation. Violation of the authorization shall result in suspension or revocation of the grantee's use of the sovereignty submerged land unless cured to the satisfaction of the Board.

(b) Authorizations convey no title to sovereignty submerged land or water column, nor do they constitute recognition or acknowledgment of any other person's title to such land or water.

(c) Authorizations may be modified, suspended or revoked in accordance with their terms or the remedies provided in Sections 253.04 and 258.46, F.S., or Chapter 18-14, F.A.C.

(d) Structures or activities shall be constructed and used to avoid or minimize adverse impacts to sovereignty submerged lands and resources.

(e) Construction, use, or operation of the structure or activity shall not adversely affect any species which is endangered, threatened or of special concern, as listed in Rules 68A-27.003, 68A-27.004, and 68A-27.005, F.A.C.

(f) Structures or activities shall not unreasonably interfere with riparian rights. When a court of competent jurisdiction determines that riparian rights have been unlawfully affected, the structure or activity shall be modified in accordance with the court's decision.

(g) Structures or activities shall not create a navigational hazard.

(h) Structures shall be maintained in a functional condition and shall be repaired or removed if they become dilapidated to such an extent that they are no longer functional. This shall not be construed to prohibit the repair or replacement subject to the provisions of Rule 18-21.005, F.A.C., within one year, of a structure damaged in a discrete event such as a storm, flood, accident, or fire.

(i) Structures or activities shall be constructed, operated, and maintained solely for water dependent purposes, or for non-water dependent activities authorized under paragraph 18-21.004(1)(g), F.A.C., or any other applicable law.

NOTICE OF RIGHTS

As required by Sections 120.569 and 120.60(3), Fla. Stat., the following is notice of the opportunities which may be available for administrative hearing or judicial review when the substantial interests of a party are determined by an agency. Please note that this Notice of Rights is not intended to provide legal advice. Not all of the legal proceedings detailed below may be an applicable or appropriate remedy. You may wish to consult an attorney regarding your legal rights.

RIGHT TO REQUEST ADMINISTRATIVE HEARING

A person whose substantial interests are or may be affected by the South Florida Water Management District's (SFWMD or District) action has the right to request an administrative hearing on that action pursuant to Sections 120.569 and 120.57, Fla. Stat. Persons seeking a hearing on a SFWMD decision which affects or may affect their substantial interests shall file a petition for hearing with the Office of the District Clerk of the SFWMD, in accordance with the filing instructions set forth herein, within 21 days of receipt of written notice of the decision, unless one of the following shorter time periods apply: (1) within 14 days of the notice of consolidated intent to grant or deny concurrently reviewed applications for environmental resource permits and use of sovereign submerged lands pursuant to Section 373.427, Fla. Stat.; or (2) within 14 days of service of an Administrative Order pursuant to Section 373.119(1), Fla. Stat. "Receipt of written notice of agency decision" means receipt of written notice through mail, electronic mail, or posting that the SFWMD has or intends to take final agency action, or publication of notice that the SFWMD has or intends to take final agency action. Any person who receives written notice of a SFWMD decision and fails to file a written request for hearing within the timeframe described above waives the right to request a hearing on that decision.

If the District takes final agency action which materially differs from the noticed intended agency decision, persons who may be substantially affected shall, unless otherwise provided by law, have an additional Rule 28-106.111, Fla. Admin. Code, point of entry.

Any person to whom an emergency order is directed pursuant to Section 373.119(2), Fla. Stat., shall comply therewith immediately, but on petition to the board shall be afforded a hearing as soon as possible.

A person may file a request for an extension of time for filing a petition. The SFWMD may, for good cause, grant the request. Requests for extension of time must be filed with the SFWMD prior to the deadline for filing a petition for hearing. Such requests for extension shall contain a certificate that the moving party has consulted with all other parties concerning the extension and that the SFWMD and any other parties agree to or oppose the extension. A timely request for an extension of time shall toll the running of the time period for filing a petition until the request is acted upon.

FILING INSTRUCTIONS

A petition for administrative hearing must be filed with the Office of the District Clerk of the SFWMD. Filings with the Office of the District Clerk may be made by mail, hand-delivery, or e-mail. Filings by facsimile will not be accepted. A petition for administrative hearing or other document is deemed filed upon receipt during normal business hours by the Office of the District Clerk at SFWMD headquarters in West Palm Beach, Florida. The District's normal business hours are 8:00 a.m. – 5:00 p.m., excluding weekends and District holidays. Any document received by the Office of the District Clerk after 5:00 p.m. shall be deemed filed as of 8:00 a.m. on the next regular business day. Additional filing instructions are as follows:

- Filings by mail must be addressed to the Office of the District Clerk, 3301 Gun Club Road, West Palm Beach, Florida 33406.

- Filings by hand-delivery must be delivered to the Office of the District Clerk. Delivery of a petition to the SFWMD's security desk does not constitute filing. It will be necessary to request that the SFWMD's security officer contact the Office of the District Clerk. An employee of the SFWMD's Clerk's office will receive and file the petition.
- Filings by e-mail must be transmitted to the Office of the District Clerk at clerk@sfwmd.gov. The filing date for a document transmitted by electronic mail shall be the date the Office of the District Clerk receives the complete document. A party who files a document by e-mail shall (1) represent that the original physically signed document will be retained by that party for the duration of the proceeding and of any subsequent appeal or subsequent proceeding in that cause and that the party shall produce it upon the request of other parties; and (2) be responsible for any delay, disruption, or interruption of the electronic signals and accepts the full risk that the document may not be properly filed.

INITIATION OF AN ADMINISTRATIVE HEARING

Pursuant to Sections 120.54(5)(b)4. and 120.569(2)(c), Fla. Stat., and Rules 28-106.201 and 28-106.301, Fla. Admin. Code, initiation of an administrative hearing shall be made by written petition to the SFWMD in legible form and on 8 1/2 by 11 inch white paper. All petitions shall contain:

1. Identification of the action being contested, including the permit number, application number, SFWMD file number or any other SFWMD identification number, if known.
2. The name, address, any email address, any facsimile number, and telephone number of the petitioner and petitioner's representative, if any.
3. An explanation of how the petitioner's substantial interests will be affected by the agency determination.
4. A statement of when and how the petitioner received notice of the SFWMD's decision.
5. A statement of all disputed issues of material fact. If there are none, the petition must so indicate.
6. A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the SFWMD's proposed action.
7. A statement of the specific rules or statutes the petitioner contends require reversal or modification of the SFWMD's proposed action.
8. If disputed issues of material fact exist, the statement must also include an explanation of how the alleged facts relate to the specific rules or statutes.
9. A statement of the relief sought by the petitioner, stating precisely the action the petitioner wishes the SFWMD to take with respect to the SFWMD's proposed action.

MEDIATION

The procedures for pursuing mediation are set forth in Section 120.573, Fla. Stat., and Rules 28-106.111 and 28-106.401–.405, Fla. Admin. Code. The SFWMD is not proposing mediation for this agency action under Section 120.573, Fla. Stat., at this time.

RIGHT TO SEEK JUDICIAL REVIEW

Pursuant to Section 120.68, Fla. Stat., and in accordance with Florida Rule of Appellate Procedure 9.110, a party who is adversely affected by final SFWMD action may seek judicial review of the SFWMD's final decision by filing a notice of appeal with the Office of the District Clerk of the SFWMD in accordance with the filing instructions set forth herein within 30 days of rendition of the order to be reviewed, and by filing a copy of the notice with the clerk of the appropriate district court of appeal.

Last Date For Agency Action: August 15, 2017

INDIVIDUAL ENVIRONMENTAL RESOURCE PERMIT STAFF REPORT

Project Name: Indian Creek Living Shoreline

Permit No.: 13-06496-P

Application No.: 170130-11

Application Type: Environmental Resource (New Construction/Operation)

Location: Miami-Dade County, S26/T53S/R42E

Permittee : Miami Beach, Public Works Department

Operating Entity : Miami Beach, Public Works Department

Project Area: 0.47 acres

Permit Area: 0.47 acres

Project Land Use: Environmental Restoration

Drainage Basin: BISCAYNE BAY

Receiving Body: Indian Creek

Class: CLASS III
OFW

Special Drainage District: NA

Conservation Easement To District : No

Sovereign Submerged Lands: Yes

Type: Letter Of Consent

PROJECT SUMMARY:

This Environmental Resource Permit authorizes construction of a 0.47 acre mangrove planter. This authorization includes a Letter of Consent approving the use of sovereignty submerged lands (SSL)

The 0.47 acre site comprises 0.20 acres of planted mangroves bordered by a 0.27 acre sloped riprap revetment. The planter will be constructed of a rock or concrete rubble base underlying layers of filler stone and top soil mixture of organic material and sand. The riprap revetment will be configured with a peak extending 1.34 feet above the mean high water elevation in order to contain the soil, and will incorporate five-foot-wide gaps at the terminal ends (north and south) of the riprap and every 100' along its length, where the peak of the riprap will be at the level of the leading edge of the planter surface. These gaps will help create beneficial hydrodynamic flow and fish and wildlife passage corridors between the bay and the planter (Exhibit 2). The proposal includes a detailed construction sequence, turbidity control measures and water quality monitoring plan to provide reasonable assurance that water quality standards for Outstanding Florida Waters will be maintained during construction (Exhibit 3).

This permit is issued pursuant to the water quality net improvement provisions of Chapter 62-330.062, F.A.C.; therefore, the state water quality certification is waived.

PROJECT EVALUATION:**PROJECT SITE DESCRIPTION:**

The site is located along the eastern shoreline of Lake Pancoast, adjacent to Collins Avenue and Indian Creek Drive, between 25th Street and 26th Street in Miami Beach. Refer to Exhibit 1 for a location map.

The entire project will be constructed on the submerged bottom of Lake Pancoast, a tidal waterbody within the Biscayne Bay Aquatic Preserve, Outstanding Florida Waters (OFW). For information on the wetlands and surface waters within the project, please refer to the Wetlands and Surface Waters section of this staff report.

WATER QUALITY :

The planter will be installed in a location where a dense layer of fine sediments is suspended over the sand bottom. The project design, Exhibits 2 and 3, and Special Conditions 9 and 11-14 specifically address material and sediment settling, stabilization, turbidity control, and turbidity monitoring to provide reasonable assurance that water quality standards will be met during construction and operation of the project.

WETLANDS:**Wetlands And Other Surface Waters:**

The project area is located in tidal surface waters adjacent to a seawall in Miami Beach. The submerged bottom consists of fine sand overlain by a 2-3 foot layer of easily disturbed dark brown fine silty material, detritus and various refuse which is also floating at the surface and suspended in the water column. There are no seagrasses or mangroves in the work area, or in the immediate vicinity. The sediment provides substrate for burrowing organisms but no other significant resources were noted during staff's site inspection.

The project will result in filling within 0.47 acre of surface waters and submerged bottom that currently lacks diverse structural features and primary production resources. The mangrove planter and riprap revetment are expected to provide primary production and structural habitat to support a diverse community of marine organisms.

Fish And Wildlife Issues:

The project site is located in manatee habitat, and manatees are known to occur in this vicinity. To minimize the potential for manatees and other large aquatic species to become entrapped in the planter, the design incorporates five feet wide gaps spaced every 100 feet along the revetment portion of the planter, and at the terminal (north and south) ends of the structure.

Work will be constructed using land-based and barge-mounted equipment. The permittee proposes several measures to reduce or eliminate the potential for impacts to manatees. Special Condition 12 requires compliance with the Standard Manatee Construction Conditions.

This permit does not relieve the applicant from complying with all applicable rules and any other agencies' requirements if, in the future, endangered/threatened species or species of special concern are discovered on the site.

SPECIAL CONSIDERATIONS:**BISCAYNE BAY AQUATIC PRESERVE**

The District has determined that the activities are consistent with the provisions in subsection 258.397, Florida Statutes (F.S.), and Chapter 18-18, F.A.C., regarding protection and management of Biscayne Bay Aquatic Preserve.

CERTIFICATION, OPERATION, AND MAINTENANCE:

Pursuant to Chapter 62-330.310, F.A.C., Individual Permits will not be converted from the construction phase to the operation phase until construction completion certification of the project is submitted to and accepted by the District. This includes compliance with all permit conditions, except for any long term maintenance and monitoring requirements. It is suggested that the permittee retain the services of an appropriate professional registered in the State of Florida for periodic observation of construction of the project.

For projects permitted with an operating entity that is different from the permittee, it should be noted that until the construction completion certification is accepted by the District and the permit is transferred to an acceptable operating entity pursuant to Sections 12.1-12.3 of the Applicant's Handbook Volume I and Section 62-330.310, F.A.C., the permittee is liable for operation and maintenance in compliance with the terms and conditions of this permit.

In accordance with Section 373.416(2), F.S., unless revoked or abandoned, all SWM systems and works permitted under Part IV of Chapter 373, F.S., must be operated and maintained in perpetuity.

The efficiency of SWM systems, dams, impoundments, and most other project components will decrease over time without periodic maintenance. The operation and maintenance entity must perform periodic inspections to identify if there are any deficiencies in structural integrity, degradation due to insufficient maintenance, or improper operation of projects that may endanger public health, safety, or welfare, or the water resources. If deficiencies are found, the operation and maintenance entity will be responsible for correcting the deficiencies in a timely manner to prevent compromises to flood protection and water quality. See Section 12.4 of the Applicant's Handbook Volume I for Minimum Operation and Maintenance Standards.

SOVEREIGNTY SUBMERGED LANDS:

The mangrove planter is located on sovereignty submerged lands- lands owned by the State of Florida. Therefore, it also requires authorization from the Board of Trustees of the Internal Improvement Trust Fund (Board of Trustees), pursuant to Article X, Section 11 of the Florida Constitution, and Section 253.77, F.S. For this project, the District is delegated the authority to review and take final action on behalf of the Board of Trustees, pursuant to Rule 18-21.0051(2), F.A.C.

The District has determined that the activity qualifies for a Letter of Consent, as long as the work performed is located within the boundaries as described and is consistent with the conditions herein.

RELATED CONCERNS:**Water Use Permit Status:**

The applicant has indicated that dewatering is not required for construction of this project. In addition, the applicant does not anticipate needing to apply for and obtain a consumptive use permit for irrigation.

This permit does not release the permittee from obtaining all necessary Water Use authorization(s) prior to the commencement of activities which will require such authorization, including construction dewatering and irrigation.

CERP:

The proposed project is not located within or adjacent to a Comprehensive Everglades Restoration Project component.

Right-Of-Way Permit Status:

A District Right-of-Way Permit is not required for this project.

Historical/Archeological Resources:

The District has received correspondence from the Florida Department of State, Division of Historical Resources indicating that no significant archaeological or historical resources are recorded in the project area and the project is therefore unlikely to have an effect upon any such properties. This permit does not release the permittee from compliance with any other agencies' requirements in the event that historical and/or archaeological resources are found on the site.

DEO/CZM Consistency Review:

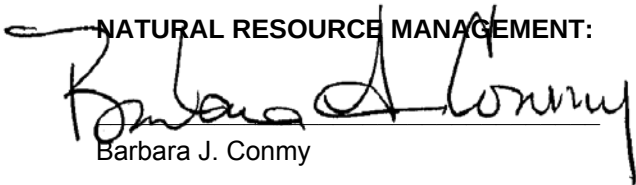
The issuance of this permit constitutes a finding of consistency with the Florida Coastal Management Program.

Third Party Interest:

No third party has contacted the District with concerns about this application.

Enforcement:

There has been no enforcement activity associated with this application.

STAFF REVIEW:**DIVISION APPROVAL:****NATURAL RESOURCE MANAGEMENT:**

Barbara J. Conmy

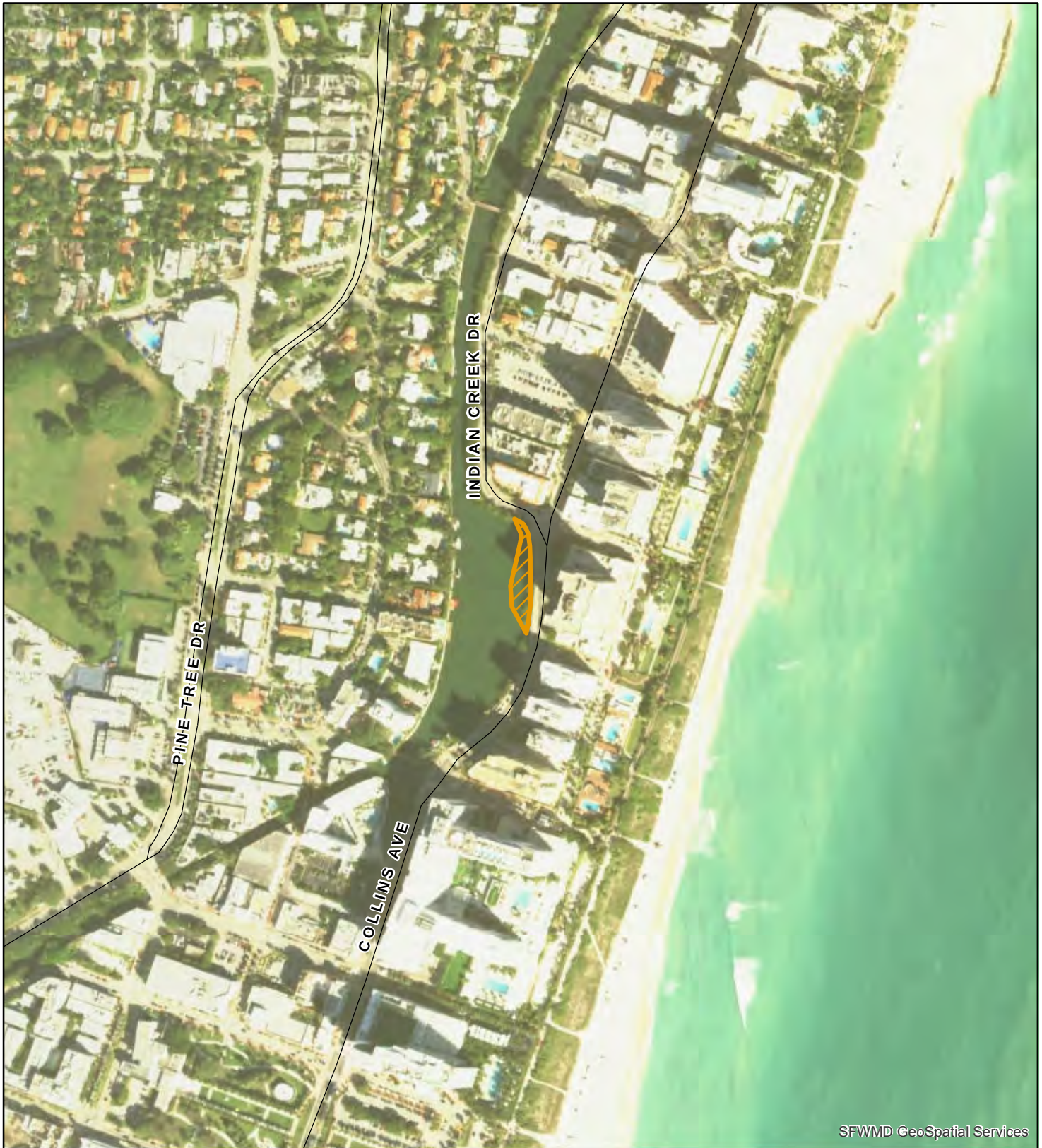
DATE: 21 Jun 2017

SURFACE WATER MANAGEMENT:



Carlos A. de Rojas, P.E.

DATE: 21-Jun-2017



SFWMD GeoSpatial Services

Exhibit No: 1	Exhibit Created On: 2017-01-31	MIAMI-DADE COUNTY, FL	 Application  Application Number: 170130-11	
 REGULATION DIVISION Project Name: INDIAN CREEK LIVING SHORELINE 0400800 Feet N 			 Created by Regulation GIS Section South Florida Water Management District	

MIAMI DADE COUNTY, FLORIDA

NOTES

CLIENT:

MIAMI BEACH, FL 33139

INDEX TO SHEETS

			
			
			
			
			
			
			
			
			
	04/27/17	REVISED SHEET NOS.	RQS/8956
NO.	DATE	DESCRIPTION	BY

STATUS : REVISION

ENGINEERING TECH -	PROJECT ECOLOGIST	PROJECT ENGINEER R. QUINCE SELLERS, P.E. FLORIDA LICENSE NO. 49374
-----------------------	-------------------	--

DATE _____ CHECKED BY _____

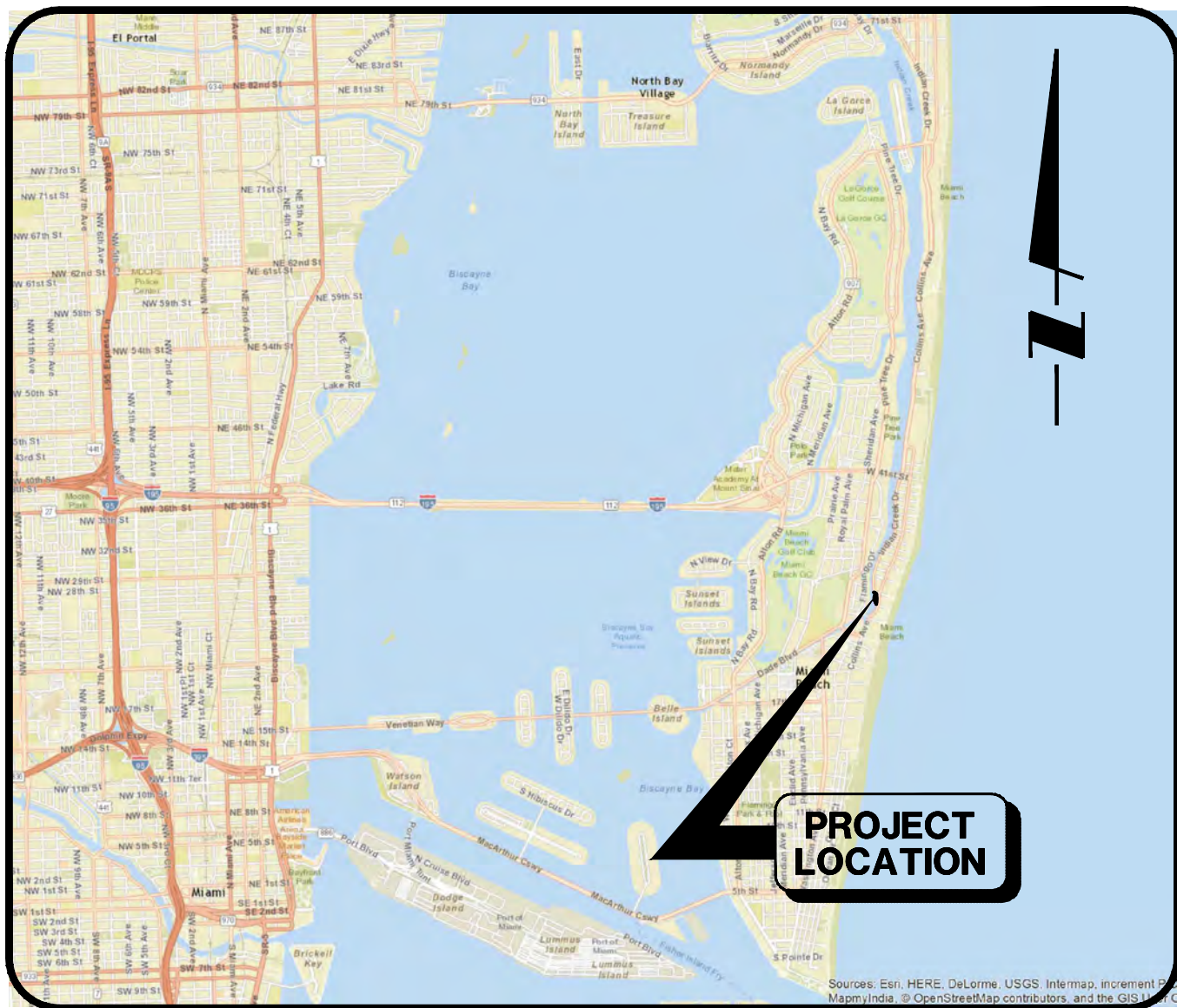
RESERVED FOR STATUS AND DATE STAMPS

PROJECT NUMBER
215810580

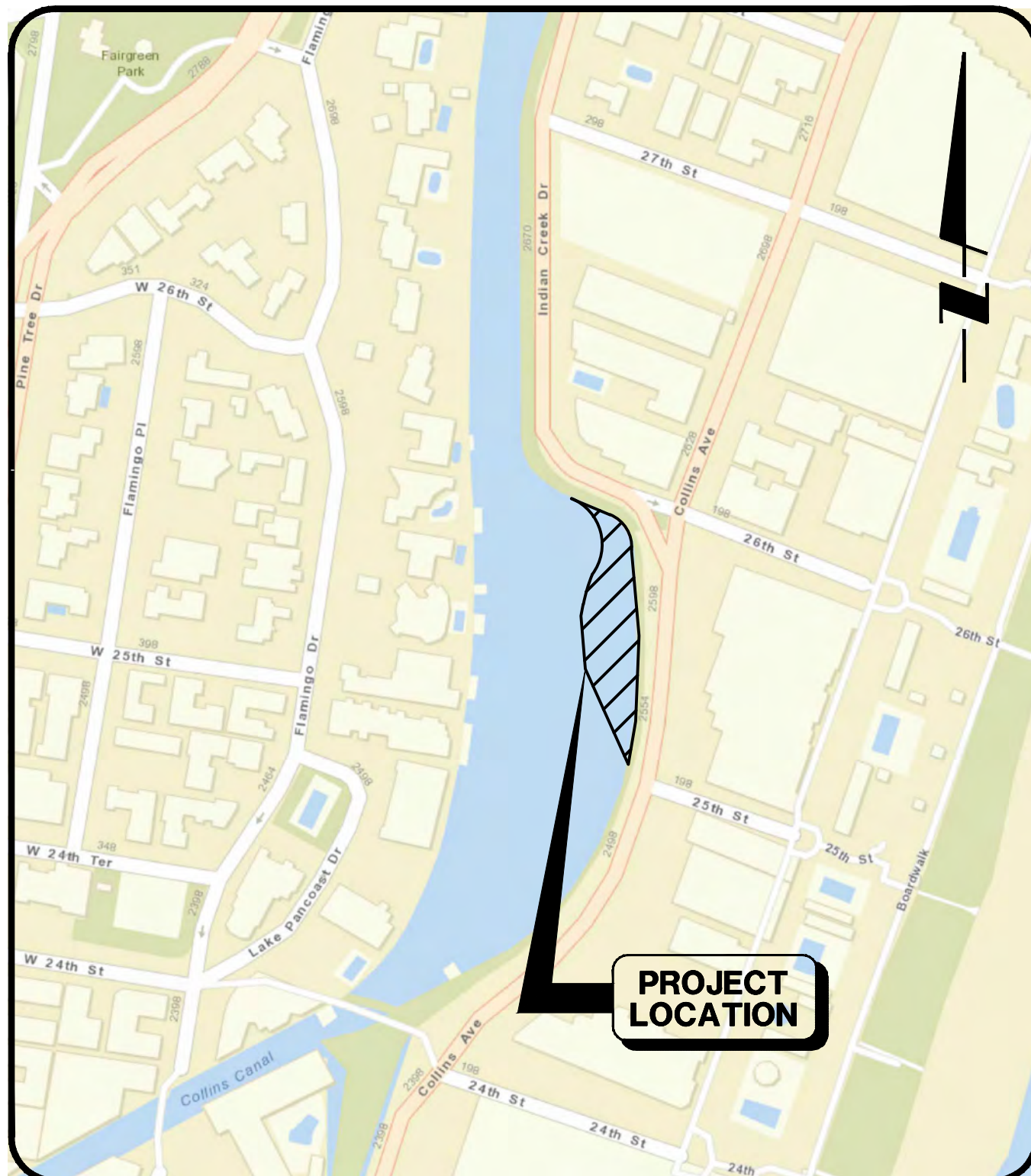
DATE
JANUARY 2017

INDEX NUMBER
D-215810580-01C-00

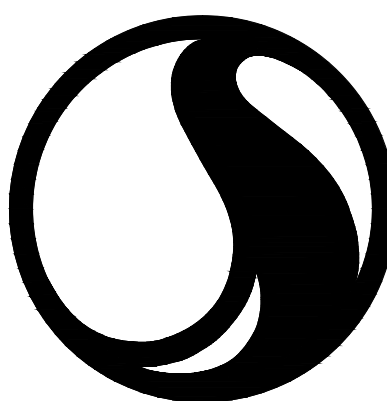
1. THE PURPOSE OF THIS PROJECT IS ECOLOGICAL ENHANCEMENT. THE CONTRACTORS WORKING ON THIS SITE SHALL TAKE GREAT CARE IN AVOIDING UNNECESSARY IMPACTS TO WILDLIFE.
2. THE INFORMATION PROVIDED IN THESE PLANS IS TO ASSIST THE CONTRACTOR IN ASSESSING THE NATURE AND EXTENT OF THE CONDITIONS WHICH MAY BE ENCOUNTERED DURING THE COURSE OF WORK. ALL CONTRACTORS ARE DIRECTED PRIOR TO BIDDING TO CONDUCT INVESTIGATIONS THEY DEEM NECESSARY TO ARRIVE AT THEIR OWN CONCLUSIONS REGARDING THE ACTUAL CONDITIONS THAT MAY BE ENCOUNTERED AND UPON WHICH THEIR BIDS WILL BE BASED.
3. PRIOR TO THE START OF CONSTRUCTION ACTIVITY IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY "SUNSHINE STATE ONE CALL (1-800-432-4770)", MIAMI DADE COUNTY DEPARTMENT OF REGULATORY & ECONOMICS RESOURCES (DERM), ANY OTHER UTILITIES (ELECTRIC, PHONE, GAS, CABLE ETC.). IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROTECT EXISTING UTILITIES FROM DAMAGE.
4. IF HUMAN REMAINS OR ARCHEOLOGICAL ARTIFACTS ARE DISCOVERED DURING THE COURSE OF CONSTRUCTION, THE CONTRACTOR MUST STOP WORK IMMEDIATELY AND PROMPTLY NOTIFY THE COUNTY PROJECT MANAGER AND FLORIDA DEPARTMENT OF STATE DIVISION OF HISTORICAL RESOURCES.
5. ELEVATIONS SHOWN HEREON ARE RELATIVE TO NORTH AMERICAN VERTICAL DATUM 1988. MEAN HIGH WATER (MHW) AND MEAN LOW WATER (MLW) ELEVATIONS SHOWN ON THESE DRAWINGS ARE BASED ON INDIAN CREEK WATER WAY MEAN HIGH WATER LINE SURVEY (CERTIFICATION DATE: AUGUST 24, 2016) PREPARED BY ATKINS NORTH AMERICA, INC., UNLESS OTHERWISE INDICATED.
6. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CALCULATE AND VERIFY ALL CUT AND FILL QUANTITIES OF EARTHWORK FOR THE PROJECT. A BULKING/COMPACTION FACTOR SHOULD BE TAKEN INTO ACCOUNT WHEN FIGURING VOLUMES OF FILL PLACEMENT.
7. IMMEDIATELY BEFORE REQUESTING FINAL INSPECTIONS, THE CONTRACTOR SHALL CHECK ALL LINES AND DRESS TO THE PROPER GRADES/CONTOURS. ALL AREAS ARE TO BE STABILIZED AND MAINTAINED UNTIL ACCEPTANCE. WHEN UPLAND AND WETLAND PLANTING AREAS ARE INDICATED ON DRAWINGS OR SPECIFIED, THE CONTRACTOR SHALL MAKE ALLOWANCES WHEN ROUGH GRADING FOR THE FINISHED GRADES IN THESE AREAS.
8. POST GRADING SOIL CONDITIONS SHALL BE APPROPRIATE FOR PLANTING WITH LIMITED COMPACTION AS DETERMINED BY PROJECT ECOLOGIST.
9. THE CONTRACTOR SHALL OBTAIN ALL APPLICABLE NPDES STORMWATER PERMITTING FOR CONSTRUCTION ACTIVITIES FROM THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP). THE CONTRACTOR SHALL BEAR ALL RESPONSIBILITY AND COSTS FOR THE APPLICABLE PERMITTING APPLICATION AND SUPPORTING DOCUMENTATION.
10. SEDIMENTS BENEATH THE PLANTER ARE COMPOSED OF MUCK AND SILT THAT EXCEED THREE FEET IN DEPTH. EXERCISE CARE TO CONTAIN ALL TURBIDITY WHEN INSTALLING PLANTER.
11. SELECTED CONTRACTOR SHOULD HAVE DOCUMENTED PRIOR EXPERIENCE WORKING INTO AQUATIC PRESERVE.



LOCATION MAP



SITE MA



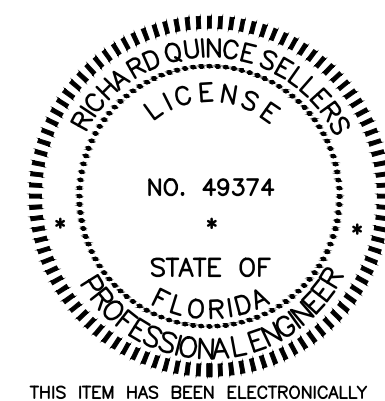
Stantec

Professional Awareness

[illegible]

certification information • www.stantec.com

The contractor shall enter and be responsible for all dimensions. The scale the drawing and errors omissions shall be reported to the architect with the details. The contractor is to add designs and drawings to the project of the architect. The reduction or increase of other than the original drawing of the architect is for the



THIS ITEM HAS BEEN ELECTRONICALLY
SIGNED AND SEALED BY
RICHARD QUINCE SELLERS, PE
ON 6/7/17 USING A
DIGITAL SIGNATURE.

PRINTED COPIES OF THIS DOCUMENT
NOT CONSIDERED SIGNED AND SEALED
AND THE SIGNATURE MUST BE VERIFIED
ON ANY ELECTRONIC COPIES.



6/7/2017 12:37:52 PM ASAJAZAR | Plotted: 6/7/2017 3:45:33 PM ASAJAZAR | U:\2158\215810510\2070807\signed\215810580-01C-101SP-20170605.dwg |

REV	NO.	REVISION	DATE	DRAWN BY / EMP. NO.	CHECKED BY / EMP. NO.	WM APPROVED BY:	ACTIVITY	INITIALS/EMP. NO.	DATE
4		REVISE MANGROVE AREA AND RIP-RAP	5/31/17	RQS/89561	RQS/89561		DESIGNED BY:	RQS/89561	01/2017
3		REVISE MANGROVE AREA AND RIP-RAP	4/27/17	RQS/89561	RQS/89561		DRAWN BY:	AS/102871	01/2017
2		ADD ADDITIONAL MANGROVE AREA, REMOVE OYSTER BAGS AND CHANNEL, REVISE ELS	4/17/17	RQS/89561	RQS/89561		CHECKED BY:		
1		ADD CONTOUR LINE	2/6/17	AS/102781	RQS/89561		CONTRACT ADMIN. BY:		



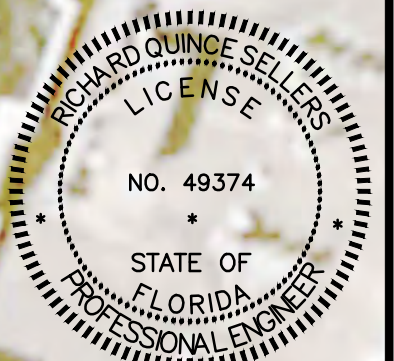
Stantec
6900 Professional Parkway East, Sarasota, FL 34240-9414
Phone 941-907-6900 • Fax 941-907-6910
Certificate of Authorization #27013 • www.stantec.com

The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay. The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

CLIENT:	CITY OF MIAMI BEACH
PROJECT:	INDIAN CREEK LIVING SHORELINE

DATE:	JAN. 2017	
HORIZONTAL SCALE:	AS NOTED	
VERTICAL SCALE:	AS NOTED	
SEC:	TWP:	RGE:
26	53S	42E

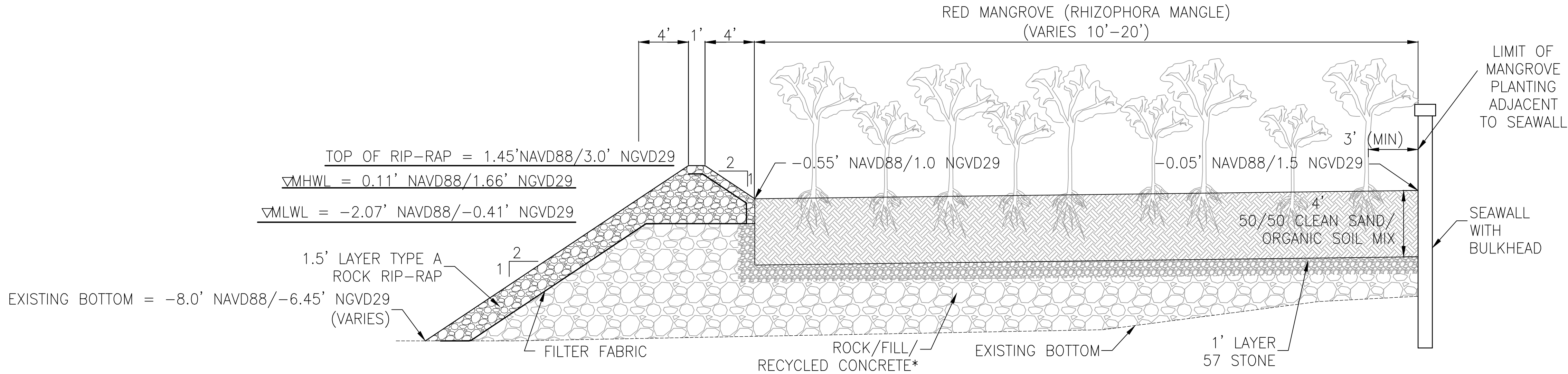
TITLE:	SITE PLAN WITH AERIAL PHOTOGRAPH
CROSS REFERENCE FILE NO.:	
PROJECT NUMBER:	215810580



THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY RICHARD QUINCE SELLERS, PE ON 6/7/17 USING A DIGITAL SIGNATURE.

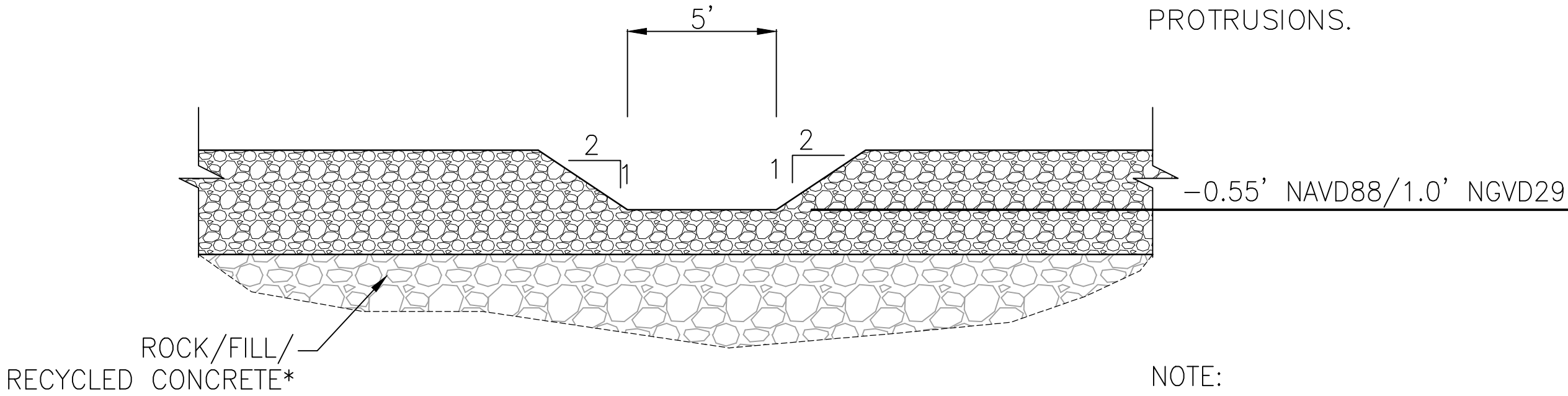
INDEX NUMBER:	
SHEET NUMBER:	2 OF 3

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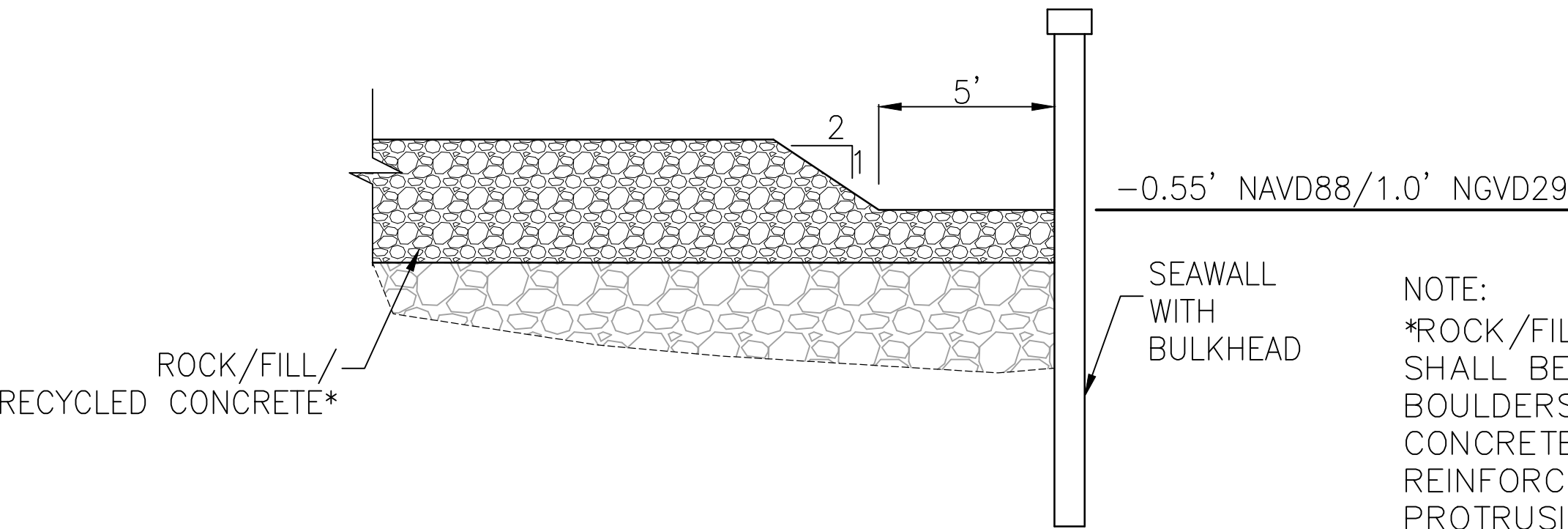
RIP-RAP AND PLANTER
SECTION A-A
NTS

NOTE:
*ROCK/FILL/RECYCLED CONCRETE SHALL BE UNCONSOLIDATED BOULDERS, ROCKS, OR CLEAN CONCRETE RUBBLE WITH NO REINFORCING RODS OR SIMILAR PROTRUSIONS.



MANATEE EGRESS AREA
SECTION B-B
NTS

NOTE:
*ROCK/FILL/RECYCLED CONCRETE SHALL BE UNCONSOLIDATED BOULDERS, ROCKS, OR CLEAN CONCRETE RUBBLE WITH NO REINFORCING RODS OR SIMILAR PROTRUSIONS.



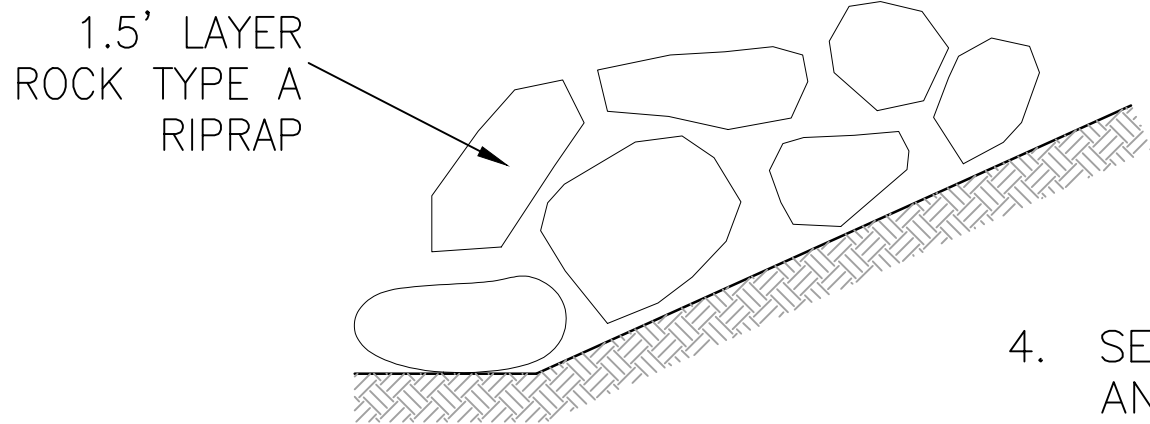
MANATEE EGRESS AREA AT SEAWALL
SECTION C-C
NTS

NOTE:
*ROCK/FILL/RECYCLED CONCRETE SHALL BE UNCONSOLIDATED BOULDERS, ROCKS, OR CLEAN CONCRETE RUBBLE WITH NO REINFORCING RODS OR SIMILAR PROTRUSIONS.

- NOTES:
1. USE SOUND, HARD, DURABLE RUBBLE, FREE OF OPEN OR INCIPENT CRACKS, SOFT SEAMS, OR OTHER STRUCTURAL DEFECTS, CONSISTING OF BROKEN STONE WITH A BULK SPECIFIC GRAVITY OF AT LEAST 1.90.
 2. ENSURE THAT STONES ARE ROUGH AND ANGULAR.
 3. USE BROKEN STONE MEETING THE FOLLOWING GRADATION AND THICKNESS REQUIREMENTS:

WEIGHT MAX. POUNDS	WEIGHT 50%. POUNDS	WEIGHT MIN. POUNDS	MIN. BLANKET THICKNESS IN FT.
75	30	4	1.5
ENSURE THAT AT LEAST 97% OF THE MATERIAL BY WEIGHT IS SMALLER THAN MAXIMUM POUNDS. ENSURE THAT AT LEAST 50% OF THE MATERIAL BY WEIGHT IS GREATER THAN WEIGHT 50% POUNDS.. ENSURE THAT AT LEAST 90% OF THE MATERIAL BY WEIGHT IS GREATER THAN WEIGHT MINIMUM POUNDS.			

4. SEE SECTION 530 RIPRAP FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION FOR ADDITIONAL INFORMATION.

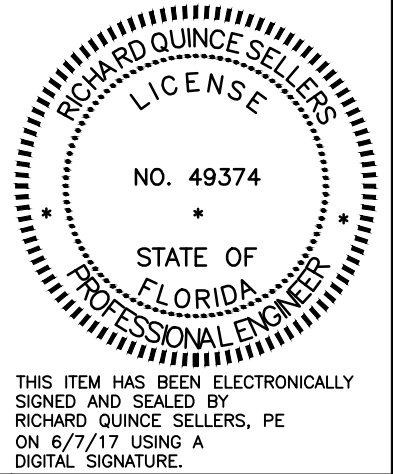


TYPE A ROCK RIP-RAP TYPICAL DETAIL

NO.	REVISION	DATE	DRAWN BY / EMP. NO.	CHECKED BY / EMP. NO.	WM APPROVED BY:	ACTIVITY	INITIALS/EMP. NO.	DATE	CLIENT:	DATE:	TITLE:	PROJECT:	SEC:	TWP:	RGE:	CROSS REFERENCE FILE NO.:	PROJECT NUMBER:	INDEX NUMBER:	SHEET NUMBER:
3	REVISE SECTIONS	5/31/17	RQS/89561	RQS/89561		DESIGNED BY:	RQS/89561	01/2017	CITY OF MIAMI BEACH	JAN. 2017	TYPICAL SECTIONS AND DETAILS	INDIAN CREEK LIVING SHORELINE	AS NOTED				215810580		3
2	REVISE SECTIONS & SHEET NO.	4/27/17	RQS/89561	RQS/89561		DRAWN BY:	AS/102871	01/2017					AS NOTED						
1	REVISE SECTIONS A-A & B-B	4/17/17	RQS/89561	RQS/89561		CHECKED BY:							AS NOTED						
Δ/REV NO.	REVISION	DATE	DRAWN BY / EMP. NO.	CHECKED BY / EMP. NO.	WM APPROVED BY:	ACTIVITY	INITIALS/EMP. NO.	DATE											



The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay. The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.



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CONSTRUCTION AND TURBIDITY MONITORING PLAN-Living Shoreline Project in Lake Pancoast

Construction Sequencing Plan

The construction of the project will be properly sequenced to allow for maximum water quality protection from sedimentation within Lake Pancoast. The City of Miami Beach understands that Lake Pancoast is within an Aquatic Preserve and as such turbidity above background levels is not permitted. The construction will occur in phases starting with the perimeter rip-rap wall, then the rock/fill bottom, No. 57 stone layer, sand/organic soil mix, and then plantings. For each phase, the contractor will wait until the water within the construction zone has recorded turbidity readings that are at or below background readings before moving to additional phases. It is anticipated that construction will take approximately four (4) months to construct. It is anticipated that the rip-rap wall and the rock/fill bed will each take a month to complete. The remaining three phases will take approximately three weeks each. The construction sequence is as follows:

1. Set limits of project with steel poles driven into the bottom of Lake Pancoast that are visible to construction personnel.
2. Install two floating turbidity curtains that encapsulate the entire work area. One of the turbidity curtains will be installed at the construction limits. The other curtain will be 5 feet waterward from the first curtain and separated by 5-foot-long pvc poles at the surface.
3. The contractor will build the planter from the "outside in" starting at the waterward extent and working landward installing the perimeter rip-rap revetment first with associated filter fabric.
4. Once the perimeter rip-rap and filter fabric are installed, settled, and the water within the construction zone (area encapsulated within the turbidity curtains) has recorded turbidity readings that are at or below background readings, the contractor will begin installing the base material.
5. Once the base material has been installed and settled, the contractor will wait until the recorded turbidity readings within the construction zone are at or below background readings, before installing the No. 57 stone.
6. Once the No. 57 stone has been installed and settled, the contractor will wait until the recorded turbidity readings within the construction zone are at or below background readings before installing the sand/organic planting material. As an added protection measure, the contractor will install this material when water levels within the planter are visibly beneath the lowest point in the rip-rap revetment.
7. Once the sand/organic planting material has been installed and settled, the contractor will verify (with survey) that the planting elevations are consistent with the plan and cross section elevations. Adjustments to the elevations will be made to address and discrepancies. Once all discrepancies have been resolved and the water within the construction zone has recorded turbidity readings that match background samples, the contractor will begin installing the planting material.
8. Turbidity curtains will be removed only after the planter has been completed, stabilized and there are no concerns for settlement issues.

Turbidity Monitoring Plan

All work required to complete the Living Shoreline Project is proposed to be performed from a combination of land-based operations and equipment mounted on a barge. There will be a minimum of one foot of clearance between the deepest draft of any vessel used for the project and the bottom of the bay. Since there is in-water construction activity proposed, the City of Miami Beach will abide by the standard manatee construction conditions.

Prior to the commencement of the Living Shoreline construction, turbidity control mechanisms, which will extend from the water's surface to the bottom of Lake Pancoast, shall be properly installed to contain any resulting turbidity inside the work area. The turbidity control mechanisms will be placed to enclose the construction area. The turbidity control mechanisms shall be properly maintained and shall remain in place until all construction is complete and turbidity levels in the Lake, adjacent to the construction area, return to background levels. For this project, two floating turbidity curtains will be utilized to separate the entire work area from the rest of Lake Pancoast. The two curtains will be a minimum of 5 feet apart to provide an additional zone of protection and allow any sediment that has escaped the first curtain to be captured. All turbidity control mechanisms are to be inspected daily and maintained in good working order so that there are no violations of state water quality standards outside of these control structures.

The following turbidity monitoring plan is proposed for the Living Shoreline construction site. Turbidity will be monitored a minimum of twice per day, a maximum of 4 hours apart while the construction is occurring. A background sample shall be taken upcurrent from the construction area. The location of the background sample shall always be a minimum of 200 feet from the turbidity control mechanism and up-current of tidal flow. The compliance sample will be taken on the waterward side of the turbidity curtain at a location closest to the construction activities. During each monitoring event, sampling shall occur at the water's surface and one foot above the bottom. Turbidity shall be measured in Nephelometric Turbidity Units (NTU's). All water quality monitoring data shall be kept on site and shall contain the following information:

- a) Permit Number
- b) Date of sampling
- c) A statement describing the methods used in sample collection, handling, storage, and analysis of the samples
- d) A map indicating the sampling location
- e) A statement by the individual responsible for the implementation of the sampling program verifying the authenticity, precision, limits of detection and the accuracy of the data
- f) Time and day samples were taken
- g) Depth of monitoring location
- h) Depth of sample
- i) Antecedent weather conditions
- j) Tidal stage and direction of flow
- k) Wind direction and velocity

If any turbidity monitoring results indicate that State water quality standards have been exceeded (a turbidity reading above background levels), the South Florida Water Management District (SFWMD) shall be notified and all construction shall cease. Work will not commence until corrective actions are taken to properly contain construction-related turbidity and turbidity levels in adjacent waters again fall below the minimum water quality standards.

South Florida Water Management District
Work Schedule Requirements

Application No : 170130-11

Page 1 of 1

Mitigation Plan ID: LIVING SHORELINE

Activity	Due Date
AS-BUILTS OF PLANTER ELEVATIONS AND SITE INSPECTION	23-SEP-17

Exhibit No :

STAFF REPORT DISTRIBUTION LIST

INDIAN CREEK LIVING SHORELINE

Application No: 170130-11

Permit No: 13-06496-P

INTERNAL DISTRIBUTION

- X Caroline Hanes
- X Eduardo J. Lopez
- X Carlos A. de Rojas, P.E.
- X Barbara J. Conmy
- X A. Waterhouse, P.E.
- X J. Markle, P.E.

EXTERNAL DISTRIBUTION

- X Permittee - Miami Beach, Public Works Department
- X Engr Consultant - Stantec Consulting Services, Inc.

GOVERNMENT AGENCIES

- X Department of Regulatory and Economic Resources
Lisa Spadafina
- X Department of Regulatory and Economic Resources
Mike Spinelli
- X Div of Recreation and Park - District 5 - Miranda
Cunningham, FDEP
- X Miami-Dade County - RER (Maria D. Molina, PE)

TURBIDITY MONITORING PLAN

Collins Avenue from 25th to 26th Street, Living Shoreline Project in Lake Pancoast

All work required to complete the Living Shoreline Project is proposed to be performed from a combination of land-based operations and equipment mounted on a barge. Prior to the commencement of the Living Shoreline construction, turbidity control mechanisms, which will extend from the water's surface to the bottom of Lake Pancoast, shall be properly installed to contain any resulting turbidity inside the work area. The turbidity control mechanisms will be placed to enclose the construction area. The turbidity control mechanisms shall be properly maintained and shall remain in place until all construction is complete and turbidity levels in the Lake, adjacent to the construction area, return to background levels.

All turbidity control mechanisms are to be inspected daily and maintained in good working order so that there are no violations of state water quality standards outside of these control structures.

The following turbidity monitoring plan is proposed for the Living Shoreline construction site. Turbidity will be monitored a minimum of twice per day, at least 4 hours apart while the construction is occurring. A background sample shall be taken upcurrent from the construction area. The location of the background sample shall always be a minimum of 100 feet from the turbidity control mechanism and up-current of tidal flow. The compliance sample will be taken on the waterward side of the turbidity curtain at a location closest to the construction activities. During each monitoring event, sampling shall occur at the water's surface and one foot above the bottom. Turbidity shall be measured in Nephelometric Turbidity Units (NTU's). All water quality monitoring data shall be kept on site and shall contain the following information:

- a) Permit Number
- b) Date of sampling
- c) A statement describing the methods used in sample collection, handling, storage, and analysis of the samples
- d) A map indicating the sampling location
- e) A statement by the individual responsible for the implementation of the sampling program verifying the authenticity, precision, limits of detection and the accuracy of the data
- f) Time and day samples were taken
- g) Depth of monitoring location
- h) Depth of sample
- i) Antecedent weather conditions
- j) Tidal stage and direction of flow
- k) Wind direction and velocity

If any turbidity monitoring results indicate that State water quality standards have been exceeded (a turbidity reading above background levels), the South Florida Water Management District (SFWMD) shall be notified and all construction shall cease. Work will not commence until corrective actions are taken to properly contain construction-related turbidity and turbidity levels in adjacent waters again fall below the minimum water quality standards.



Legend:

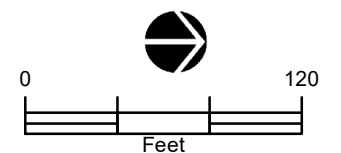
- Turbidity Monitoring Station
- Background Monitoring Stations
- ▨ Project Area
- Turbidity Curtain

MIAMI BEACH

PUBLIC WORKS DEPARTMENT
1700 Convention Center Drive
Miami Beach, Florida 33139

LAKE PANCOST MANGROVE PLANTER

TURBIDITY MONITORING



STANDARD MANATEE CONDITIONS FOR IN-WATER WORK

2011

The permittee shall comply with the following conditions intended to protect manatees from direct project effects:

- a. All personnel associated with the project shall be instructed about the presence of manatees and manatee speed zones, and the need to avoid collisions with and injury to manatees. The permittee shall advise all construction personnel that there are civil and criminal penalties for harming, harassing, or killing manatees which are protected under the Marine Mammal Protection Act, the Endangered Species Act, and the Florida Manatee Sanctuary Act.
- b. All vessels associated with the construction project shall operate at "Idle Speed/No Wake" at all times while in the immediate area and while in water where the draft of the vessel provides less than a four-foot clearance from the bottom. All vessels will follow routes of deep water whenever possible.
- c. Siltation or turbidity barriers shall be made of material in which manatees cannot become entangled, shall be properly secured, and shall be regularly monitored to avoid manatee entanglement or entrapment. Barriers must not impede manatee movement.
- d. All on-site project personnel are responsible for observing water-related activities for the presence of manatee(s). All in-water operations, including vessels, must be shutdown if a manatee(s) comes within 50 feet of the operation. Activities will not resume until the manatee(s) has moved beyond the 50-foot radius of the project operation, or until 30 minutes elapses if the manatee(s) has not reappeared within 50 feet of the operation. Animals must not be herded away or harassed into leaving.
- e. Any collision with or injury to a manatee shall be reported immediately to the Florida Fish and Wildlife Conservation Commission (FWC) Hotline at 1-888-404-3922. Collision and/or injury should also be reported to the U.S. Fish and Wildlife Service in Jacksonville (1-904-731-3336) for north Florida or Vero Beach (1-772-562-3909) for south Florida, and to FWC at ImperiledSpecies@myFWC.com
- f. Temporary signs concerning manatees shall be posted prior to and during all in-water project activities. All signs are to be removed by the permittee upon completion of the project. Temporary signs that have already been approved for this use by the FWC must be used. One sign which reads *Caution: Boaters* must be posted. A second sign measuring at least 8 ½" by 11" explaining the requirements for "Idle Speed/No Wake" and the shut down of in-water operations must be posted in a location prominently visible to all personnel engaged in water-related activities. These signs can be viewed at MyFWC.com/manatee. Questions concerning these signs can be sent to the email address listed above.

CAUTION: MANATEE HABITAT

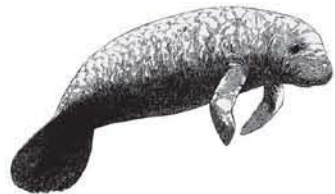
All project vessels

IDLE SPEED / NO WAKE

When a manatee is within 50 feet of work
all in-water activities must

SHUT DOWN

Report any collision with or injury to a manatee:



Wildlife Alert:

1-888-404-FWCC(3922)

cell *FWC or #FWC



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southeast Regional Office
263 13th Avenue South
St. Petersburg, FL 33701

SEA TURTLE AND SMALLTOOTH SAWFISH CONSTRUCTION CONDITIONS

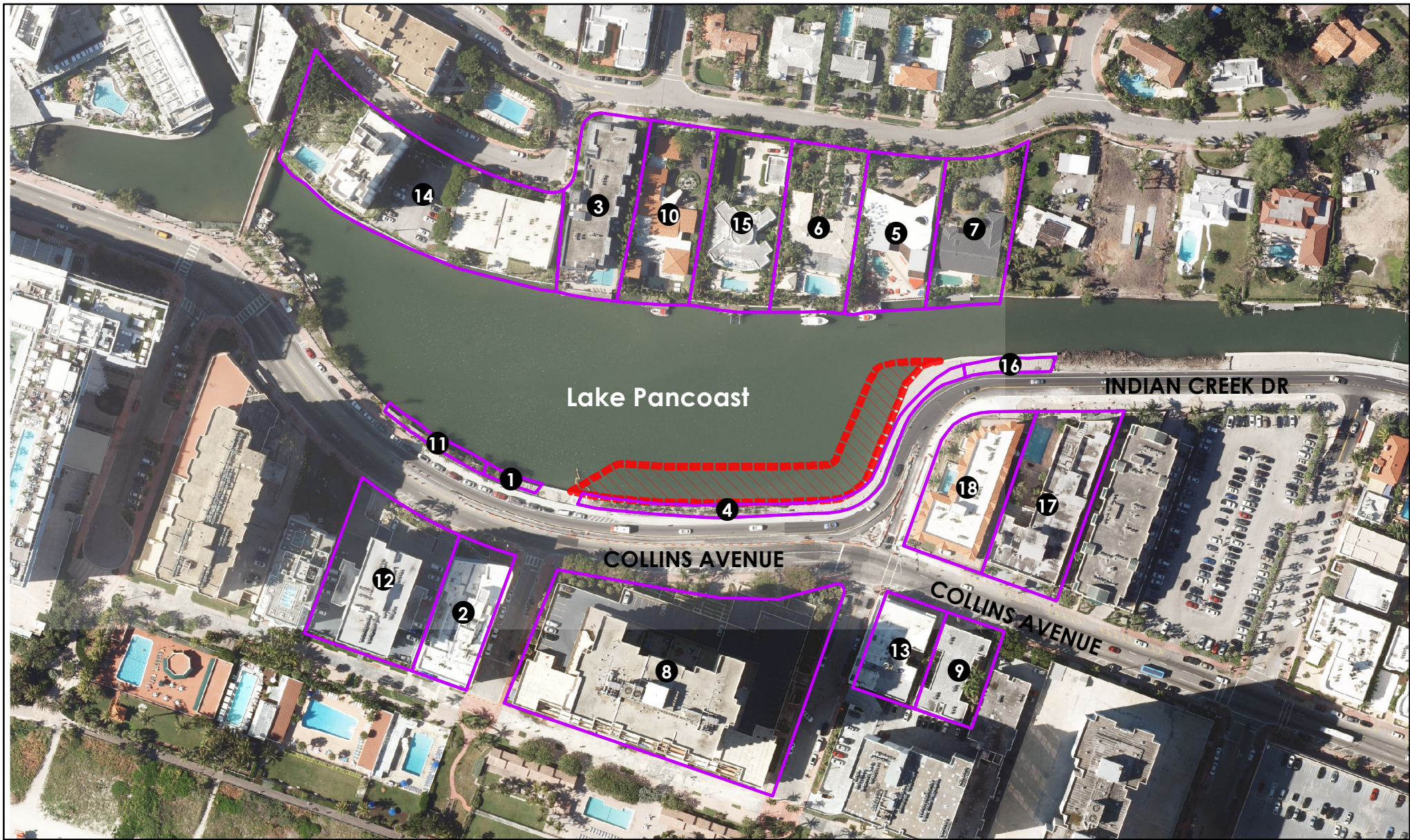
The permittee shall comply with the following protected species construction conditions:

- a. The permittee shall instruct all personnel associated with the project of the potential presence of these species and the need to avoid collisions with sea turtles and smalltooth sawfish. All construction personnel are responsible for observing water-related activities for the presence of these species.
- b. The permittee shall advise all construction personnel that there are civil and criminal penalties for harming, harassing, or killing sea turtles or smalltooth sawfish, which are protected under the Endangered Species Act of 1973.
- c. Siltation barriers shall be made of material in which a sea turtle or smalltooth sawfish cannot become entangled, be properly secured, and be regularly monitored to avoid protected species entrapment. Barriers may not block sea turtle or smalltooth sawfish entry to or exit from designated critical habitat without prior agreement from the National Marine Fisheries Service's Protected Resources Division, St. Petersburg, Florida.
- d. All vessels associated with the construction project shall operate at "no wake/idle" speeds at all times while in the construction area and while in water depths where the draft of the vessel provides less than a four-foot clearance from the bottom. All vessels will preferentially follow deep-water routes (e.g., marked channels) whenever possible.
- e. If a sea turtle or smalltooth sawfish is seen within 100 yards of the active daily construction/dredging operation or vessel movement, all appropriate precautions shall be implemented to ensure its protection. These precautions shall include cessation of operation of any moving equipment closer than 50 feet of a sea turtle or smalltooth sawfish. Operation of any mechanical construction equipment shall cease immediately if a sea turtle or smalltooth sawfish is seen within a 50-ft radius of the equipment. Activities may not resume until the protected species has departed the project area of its own volition.
- f. Any collision with and/or injury to a sea turtle or smalltooth sawfish shall be reported immediately to the National Marine Fisheries Service's Protected Resources Division (727-824-5312) and the local authorized sea turtle stranding/rescue organization.
- g. Any special construction conditions, required of your specific project, outside these general conditions, if applicable, will be addressed in the primary consultation.

Revised: March 23, 2006

O:\forms\Sea Turtle and Smalltooth Sawfish Construction Conditions.doc



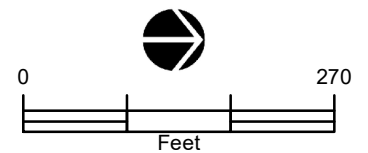


MIAMI BEACH

PUBLIC WORKS DEPARTMENT
1700 Convention Center Drive
Miami Beach, Florida 33139

LAKE PANCOST MANGROVE PLANTER

ADJACENT PROPERTIES



Id.	Folio	Physical Address	Owner	Mailing Address
1	02-3226-024-0001	2469 COLLINS AVE	S TELLER & EFEKTA INSTITUTE FH EF SCHOOLS INC LESSEE	204 LAKE ST BRIGHTON, MA 02131
2	02-3226-001-0660	2469 COLLINS AVE	S TELLER & EFEKTA INSTITUTE FH EF SCHOOLS INC LESSEE	204 LAKE ST BRIGHTON, MA 02131
3	02-3227-021-0001	2455 FLAMINGO DR	OCEAN VIEW LAKE CONDO	2455 FLAMINGO DR MIAMI BEACH, FL 33140
4	02-3226-001-0751	N/A	CITY OF MIAMI BEACH	1700 CONVENTION CENTER DR MIAMI BEACH FL 33139
5	02-3227-012-0190	2545 FLAMINGO DR	DAVID & CANDANCE MUHLRAD	2545 FLAMINGO DR MIAMI BEACH, FL 33140
6	02-3227-012-0200	2525 FLAMINGO DR	RHONDA PEARLS TRS	2525FLAMINGO DR MIAMI BEACH, FL 33140
7	02-3227-012-0180	2575 FLAMINGO DR	2575 FLAMINGO DR, LLC	2575 FLAMINGO DR MIAMI BEACH, FL 33140
8	02-3226-021-0001	2555 COLLINS AVE	CLUB ATLANTIS CONDO	2555 COLLINS AVE MIAMI BEACH FL 33140
9	02-3226-041-0001	2615 COLLINS AVE	JASMINE CONDO	2615 COLLINS AVE MIAMI BEACH FL 33140
10	02-3227-012-0220	2505 FLAMINGO DR	LANCE BURSTYN	2505 FLAMINGO DR MIAMI BEACH, FL 33140
11	02-3226-024-0001	2457 COLLINS AVE	ROYAL CLUB CONDO	2457 COLLINS AVE MIAMI BEACH FL 33140
12	02-3226-024-0001	2457 COLLINS AVE	ROYAL CLUB CONDO	2457 COLLINS AVE MIAMI BEACH FL 33140
13	02-3226-001-0740	2601 COLLINS AVENUE	2601 COLLINS LLC	2450 NE MIAMI GARDENS DR 2ND FLR NORTH MIAMI BEACH, FL 33180
14	02-3227-024-0001	2421 LAKE PANCOAST DR	HELEN MAR CONDO	2421 LAKE PANCOAST DR MIAMI BEACH, FL 33140
15	02-3227-012-0210	2515 FLAMINGO DR	NELSON & MARIELLA GONZALEZ	2515 FLAMINGO DR MIAMI BEACH, FL 33140
16	02-3226-033-0001	N/A	LAKE BEACH CONDO CLUB	2600 COLLINS AVENUE MIAMI BEACH FL 33140
17	02-3226-001-0760	2618 COLLINS AVE	2618 COLLINS CAPITAL HOLDINGS LLC	17070 COLLINS AVE 256 SUNNY ISLES BEACH, FL 33160
18	02-3226-033-0001	2600 COLLINS AVENUE	LAKE BEACH CONDO CLUB	2600 COLLINS AVENUE MIAMI BEACH FL 33140

(3) U.S. Army Corps of Engineers Application Package



Legal Entity
Stantec Consulting Services Inc.
300 Primera Boulevard, Suite 300
Lake Mary FL 32746-2129

June 27, 2019
File: 215810865

Attention: Meagan L. Clouser

U.S. Army Corps of Engineers Miami Regulatory Office
9900 SW 107th Avenue, Suite 203
Miami, Florida 33176

Submitted via email: Megan.L.Clouser@usace.army.mil

Dear Ms. Clouser,

Reference: Lake Pancoast Living Shoreline, Nationwide Permit 54

On behalf of the City of Miami Beach Public Works Department, Stantec is pleased to submit this letter and attachments supporting the above referenced Nationwide Permit (NWP) application for the construction of a living shoreline on Lake Pancoast, along Collins Avenue between 25th Street and 26th Street in Miami Beach (see **Attachment A: Project Location Map**).

Background: Over the last decade the City of Miami Beach (hereinafter the City) has implemented an ambitious plan to confront recurring major flooding events. The master plan identifies the replacement of deteriorating seawalls and increasing their height to reduce flooding in the adjacent streets as an important component. Shoreline resilience includes incorporating living shorelines whenever suitable conditions exist. The living shorelines will provide estuarine habitat for wildlife as well as an opportunity to showcase ecological restoration principles for the residence of the City of Miami Beach. The Lake Pancoast Living Shoreline is the first such project within the City.

Existing Ecological Conditions: The area proposed for the living shoreline was surveyed for benthic resources on June 22, 2016 and again on January 26, 2017. The bottom sediment consisted on thick silt and trash. No seagrass or coral resources were identified during either survey. No impacts to mangrove or seagrass resources are proposed. Documentation associated with the Benthic Survey is included in **Attachment B**.

Proposed Living Shoreline: The proposed living shoreline will encompass approximately 0.47 acres, including 0.19 acres of created mangrove fringe, and 0.28 acres of perimeter rip rap. The mean high-water level (MHWL) and the mean low water level (MLWL) was documented at +0.11 feet and -2.07 feet respectively. The target elevation for the mangrove creation area will range between -0.5 feet to +0.5 feet. The creation area will be planted with a combination of 1 and 3-gallon red mangroves (*Rhizophora mangle*) planted on 5-foot centers and 10-foot centers respectively.



June 27, 2019
Ms. Megan L. Clouser
Page 2 of 3

Through coordination with the Florida Fish and Wildlife (FWC) Imperiled Species section, Stantec has incorporated guidance on structural components recommended to reduce entrapment potential for manatees (and other organisms). As a result, the rip rap lip will include five 5-ft wide manatee ingress/egress breaks. These features will minimize potential entrapment of manatees or other species, increase tidal flushing and provide access to estuarine organisms. Signed and sealed construction plans are included in **Attachment C**.

Construction Methodology and Resource Protection: Best management practices (BMPs) will be implemented during construction to prevent any potential adverse water quality impacts. Proposed BMPs include installation of turbidity control curtains prior to and during project construction. The curtain will be installed so that the weighted bottom of the curtain will extend to the bottom of the canal. The attached turbidity monitoring plan will be implemented during any in-water construction activity and reports will be submitted to DERM and the SFWMD. Barges are proposed to be utilized during the replacement of the seawalls. There will be a minimum of one foot of clearance between the deepest draft of any vessel used for the project and the bottom of the bay.

The curtains shall remain in place until turbidity levels within the construction area match background turbidity levels. A Turbidity Monitoring Plan including a map depicting the proposed locations of the turbidity screen and background monitoring stations is included in are shown in **Attachment D**.

Since there is in-water construction activity proposed, the City of Miami Beach will abide by the standard construction conditions for the manatee, smalltooth sawfish and sea turtles. (See **Attachment E**).

An application form 4345 (including a list of adjacent property owners) is included in **Attachment F**.

Supporting Documents: The following items are attached to this letter for your review:

- **Attachment A:** Project Location Map
- **Attachment B:** Benthic Survey
- **Attachment C:** Signed and Sealed Plan set for the Living Shoreline
- **Attachment D:** Turbidity Monitoring Plan
- **Attachment E:** Manatee Standard Conditions for in-water Work
- **Attachment F:** Permit Application



June 27, 2019
Ms. Megan L. Clouser
Page 3 of 3

We appreciate your continued to work with us on the multiple projects for the City of Miami Beach. Your assistance has been instrumental and is greatly appreciated. A permit application fee and mitigation bond will be submitted under separate cover. Should you have any questions, please call.

Regards,

STANTEC CONSULTING SERVICES INC.

Nicole Carter
Principal
Office Phone: 305-445-2900 Ext. 2328
nicole.carter@stantec.com

Attachments

cc. Roy Coley, City of Miami Beach Public Works Department
Margarita Wells, City of Miami Beach Public Works Department
Elizabeth Wheaton, City of Miami Beach Public Works Department

U.S. Army Corps of Engineers (USACE) APPLICATION FOR DEPARTMENT OF THE ARMY PERMIT 33 CFR 325. The proponent agency is CECW-CO-R.		Form Approved - OMB No. 0710-0003 Expires: 01-08-2018	
The public reporting burden for this collection of information, OMB Control Number 0710-0003, is estimated to average 11 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or burden reduction suggestions to the Department of Defense, Washington Headquarters Services, at whs.mc-alex.esd.mbx.dd-dod-information-collections@mail.mil . Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. PLEASE DO NOT RETURN YOUR APPLICATION TO THE ABOVE EMAIL.			
PRIVACY ACT STATEMENT			
Authorities: Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Marine Protection, Research, and Sanctuaries Act, Section 103, 33 USC 1413; Regulatory Programs of the Corps of Engineers; Final Rule 33 CFR 320-332. Principal Purpose: Information provided on this form will be used in evaluating the application for a permit. Routine Uses: This information may be shared with the Department of Justice and other federal, state, and local government agencies, and the public and may be made available as part of a public notice as required by Federal law. Submission of requested information is voluntary, however, if information is not provided the permit application cannot be evaluated nor can a permit be issued. One set of original drawings or good reproducible copies which show the location and character of the proposed activity must be attached to this application (see sample drawings and/or instructions) and be submitted to the District Engineer having jurisdiction over the location of the proposed activity. An application that is not completed in full will be returned. System of Record Notice (SORN). The information received is entered into our permit tracking database and a SORN has been completed (SORN #A1145b) and may be accessed at the following website: http://dpcl.dod.mil/Privacy/SORNsIndex/DOD-wide-SORN-Article-View/Article/570115/a1145b-ce.aspx			
(ITEMS 1 THRU 4 TO BE FILLED BY THE CORPS)			
1. APPLICATION NO.	2. FIELD OFFICE CODE	3. DATE RECEIVED	4. DATE APPLICATION COMPLETE
(ITEMS BELOW TO BE FILLED BY APPLICANT)			
5. APPLICANT'S NAME First - ROY Middle - Last - CONLEY Company - CITY OF MIAMI BEACH PUBLIC WORKS DEPT E-mail Address - publicworks@miamibeachfl.gov		8. AUTHORIZED AGENT'S NAME AND TITLE (agent is not required) First - NICOLE Middle - Last - CARTER Company - STANTEC E-mail Address - nicole.carter@stantec.com	
6. APPLICANT'S ADDRESS: Address- 1700 CONVENTION CENTER DRIVE City - MIAMI BEACH State - FL Zip - 33139 Country - USA		9. AGENT'S ADDRESS: Address- 901 PONCE DE LEON BLVD STE 400 City - CORAL GABLE State - FL Zip - 33134 Country - USA	
7. APPLICANT'S PHONE NOS. w/AREA CODE a. Residence b. Business c. Fax N/A 305-673-7080		10. AGENTS PHONE NOS. w/AREA CODE a. Residence b. Business c. Fax N/A 305-445-2900	
STATEMENT OF AUTHORIZATION			
11. I hereby authorize, <u>NICOLE CARTER/STANTEC</u> to act in my behalf as my agent in the processing of this application and to furnish, upon request, supplemental information in support of this permit application.			
_____ SIGNATURE OF APPLICANT		_____ DATE	
NAME, LOCATION, AND DESCRIPTION OF PROJECT OR ACTIVITY			
12. PROJECT NAME OR TITLE (see instructions) LAKE PANCOAST LIVING SHORELINE			
13. NAME OF WATERBODY, IF KNOWN (if applicable) LAKE PANCOAST		14. PROJECT STREET ADDRESS (if applicable) Address COLLINS AVE,BETWEEN 25TH & 26TH STREETS	
15. LOCATION OF PROJECT Latitude: °N 25*48'6.9" Longitude: °W 80*7'34.7		City - MIAMI BEACH State- FL Zip- 33140	
16. OTHER LOCATION DESCRIPTIONS, IF KNOWN (see instructions) State Tax Parcel ID N/A Municipality CITY OF MIAMI BEACH Section - 26 Township - 53 Range - 42			

17. DIRECTIONS TO THE SITE

The site is located adjacent (west) to Collins Avenue between 25th and 26th Streets in Miami Beach Florida.

18. Nature of Activity (Description of project, include all features)

The project proposes the filling of 0.47 acres of surface waters within Lake Pancoast, a man-made water body that is connected to Biscayne Bay. The filled area is to be filled in an effort to create a living shoreline (fringing mangrove forest) and includes 0.19 acres of mangrove planter and 0.28-acres of rip-rap along the perimeter (waterside) of the planter. For a detailed description of the project, please see the attached cover letter.

19. Project Purpose (Describe the reason or purpose of the project, see instructions)

The purpose of this project is to enhance estuarine habitat within the City of Miami Beach through the creation of 0.19 acres of mangrove fringe forest. Mangrove forests are one of the most productive ecosystems in the world, providing foraging and nesting habitat to a wide range of marine wildlife and birds.

USE BLOCKS 20-23 IF DREDGED AND/OR FILL MATERIAL IS TO BE DISCHARGED

20. Reason(s) for Discharge

The fill material is required to increase bottom elevations to a level that will support a mangrove community.

21. Type(s) of Material Being Discharged and the Amount of Each Type in Cubic Yards:

Type Amount in Cubic Yards	Type Amount in Cubic Yards	Type Amount in Cubic Yards
Rip-Rap/Crushed cement/Sand & Soi	6,066cubic yards	

22. Surface Area in Acres of Wetlands or Other Waters Filled (see instructions)

Acres 0.47
or
Linear Feet

23. Description of Avoidance, Minimization, and Compensation (see instructions)

The City of Miami Beach is a densely populated urban center with virtually no undeveloped areas. As a result costs associated with the acquisition make wetland creation from uplands unfeasible. However, the City contains several man-made waterways that support support little or no benthic resources. These waterways (like Lake Pancoast) provide an opportunity to to convert barren, unconsolidated bottom to mangrove habitat. Mangrove forests are one of the most productive ecosystems in the world, providing foraging and nesting habitat to a wide range of marine wildlife and birds.

24. Is Any Portion of the Work Already Complete? ☐ Yes ☒ No IF YES, DESCRIBE THE COMPLETED WORK

n/a

25. Addresses of Adjoining Property Owners, Lessees, Etc., Whose Property Adjoins the Waterbody (if more than can be entered here, please attach a supplemental list).

a. Address- SEE ATTACHMENT

City - State - Zip -

b. Address-

City - State - Zip -

c. Address-

City - State - Zip -

d. Address-

City - State - Zip -

e. Address-

City - State - Zip -

26. List of Other Certificates or Approvals/Denials received from other Federal, State, or Local Agencies for Work Described in This Application.

AGENCY	TYPE APPROVAL*	IDENTIFICATION NUMBER	DATE APPLIED	DATE APPROVED	DATE DENIED

* Would include but is not restricted to zoning, building, and flood plain permits

27. Application is hereby made for permit or permits to authorize the work described in this application. I certify that this information in this application is complete and accurate. I further certify that I possess the authority to undertake the work described herein or am acting as the duly authorized agent of the applicant.

SIGNATURE OF APPLICANT

DATE

SIGNATURE OF AGENT

DATE

The Application must be signed by the person who desires to undertake the proposed activity (applicant) or it may be signed by a duly authorized agent if the statement in block 11 has been filled out and signed.

18 U.S.C. Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly and willfully falsifies, conceals, or covers up any trick, scheme, or disguises a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statements or entry, shall be fined not more than \$10,000 or imprisoned not more than five years or both.

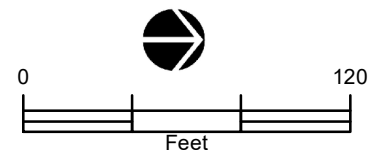


MIAMIBEACH

PUBLIC WORKS DEPARTMENT
1700 Convention Center Drive
Miami Beach, Florida 33139

LAKE PANCOST MANGROVE PLANTER

PROJECT LOCATION MAP



TURBIDITY MONITORING PLAN

Collins Avenue from 25th to 26th Street, Living Shoreline Project in Lake Pancoast

All work required to complete the Living Shoreline Project is proposed to be performed from a combination of land-based operations and equipment mounted on a barge. Prior to the commencement of the Living Shoreline construction, turbidity control mechanisms, which will extend from the water's surface to the bottom of Lake Pancoast, shall be properly installed to contain any resulting turbidity inside the work area. The turbidity control mechanisms will be placed to enclose the construction area. The turbidity control mechanisms shall be properly maintained and shall remain in place until all construction is complete and turbidity levels in the Lake, adjacent to the construction area, return to background levels.

All turbidity control mechanisms are to be inspected daily and maintained in good working order so that there are no violations of state water quality standards outside of these control structures.

The following turbidity monitoring plan is proposed for the Living Shoreline construction site. Turbidity will be monitored a minimum of twice per day, at least 4 hours apart while the construction is occurring. A background sample shall be taken upcurrent from the construction area. The location of the background sample shall always be a minimum of 100 feet from the turbidity control mechanism and up-current of tidal flow. The compliance sample will be taken on the waterward side of the turbidity curtain at a location closest to the construction activities. During each monitoring event, sampling shall occur at the water's surface and one foot above the bottom. Turbidity shall be measured in Nephelometric Turbidity Units (NTU's). All water quality monitoring data shall be kept on site and shall contain the following information:

- a) Permit Number
- b) Date of sampling
- c) A statement describing the methods used in sample collection, handling, storage, and analysis of the samples
- d) A map indicating the sampling location
- e) A statement by the individual responsible for the implementation of the sampling program verifying the authenticity, precision, limits of detection and the accuracy of the data
- f) Time and day samples were taken
- g) Depth of monitoring location
- h) Depth of sample
- i) Antecedent weather conditions
- j) Tidal stage and direction of flow
- k) Wind direction and velocity

If any turbidity monitoring results indicate that State water quality standards have been exceeded (a turbidity reading above background levels), the South Florida Water Management District (SFWMD) shall be notified and all construction shall cease. Work will not commence until corrective actions are taken to properly contain construction-related turbidity and turbidity levels in adjacent waters again fall below the minimum water quality standards.



Legend:

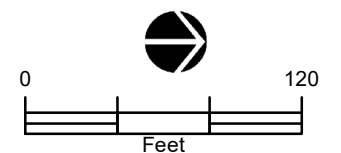
- Turbidity Monitoring Station
- Background Monitoring Stations
- ▨ Project Area
- Turbidity Curtain

MIAMI BEACH

PUBLIC WORKS DEPARTMENT
1700 Convention Center Drive
Miami Beach, Florida 33139

LAKE PANCOST MANGROVE PLANTER

TURBIDITY MONITORING



STANDARD MANATEE CONDITIONS FOR IN-WATER WORK

2011

The permittee shall comply with the following conditions intended to protect manatees from direct project effects:

- a. All personnel associated with the project shall be instructed about the presence of manatees and manatee speed zones, and the need to avoid collisions with and injury to manatees. The permittee shall advise all construction personnel that there are civil and criminal penalties for harming, harassing, or killing manatees which are protected under the Marine Mammal Protection Act, the Endangered Species Act, and the Florida Manatee Sanctuary Act.
- b. All vessels associated with the construction project shall operate at "Idle Speed/No Wake" at all times while in the immediate area and while in water where the draft of the vessel provides less than a four-foot clearance from the bottom. All vessels will follow routes of deep water whenever possible.
- c. Siltation or turbidity barriers shall be made of material in which manatees cannot become entangled, shall be properly secured, and shall be regularly monitored to avoid manatee entanglement or entrapment. Barriers must not impede manatee movement.
- d. All on-site project personnel are responsible for observing water-related activities for the presence of manatee(s). All in-water operations, including vessels, must be shutdown if a manatee(s) comes within 50 feet of the operation. Activities will not resume until the manatee(s) has moved beyond the 50-foot radius of the project operation, or until 30 minutes elapses if the manatee(s) has not reappeared within 50 feet of the operation. Animals must not be herded away or harassed into leaving.
- e. Any collision with or injury to a manatee shall be reported immediately to the Florida Fish and Wildlife Conservation Commission (FWC) Hotline at 1-888-404-3922. Collision and/or injury should also be reported to the U.S. Fish and Wildlife Service in Jacksonville (1-904-731-3336) for north Florida or Vero Beach (1-772-562-3909) for south Florida, and to FWC at ImperiledSpecies@myFWC.com
- f. Temporary signs concerning manatees shall be posted prior to and during all in-water project activities. All signs are to be removed by the permittee upon completion of the project. Temporary signs that have already been approved for this use by the FWC must be used. One sign which reads *Caution: Boaters* must be posted. A second sign measuring at least 8 ½" by 11" explaining the requirements for "Idle Speed/No Wake" and the shut down of in-water operations must be posted in a location prominently visible to all personnel engaged in water-related activities. These signs can be viewed at MyFWC.com/manatee. Questions concerning these signs can be sent to the email address listed above.

CAUTION: MANATEE HABITAT

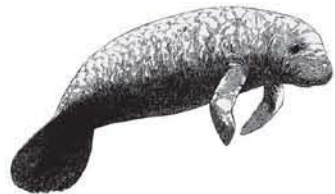
All project vessels

IDLE SPEED / NO WAKE

When a manatee is within 50 feet of work
all in-water activities must

SHUT DOWN

Report any collision with or injury to a manatee:



Wildlife Alert:

1-888-404-FWCC(3922)

cell *FWC or #FWC



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southeast Regional Office
263 13th Avenue South
St. Petersburg, FL 33701

SEA TURTLE AND SMALLTOOTH SAWFISH CONSTRUCTION CONDITIONS

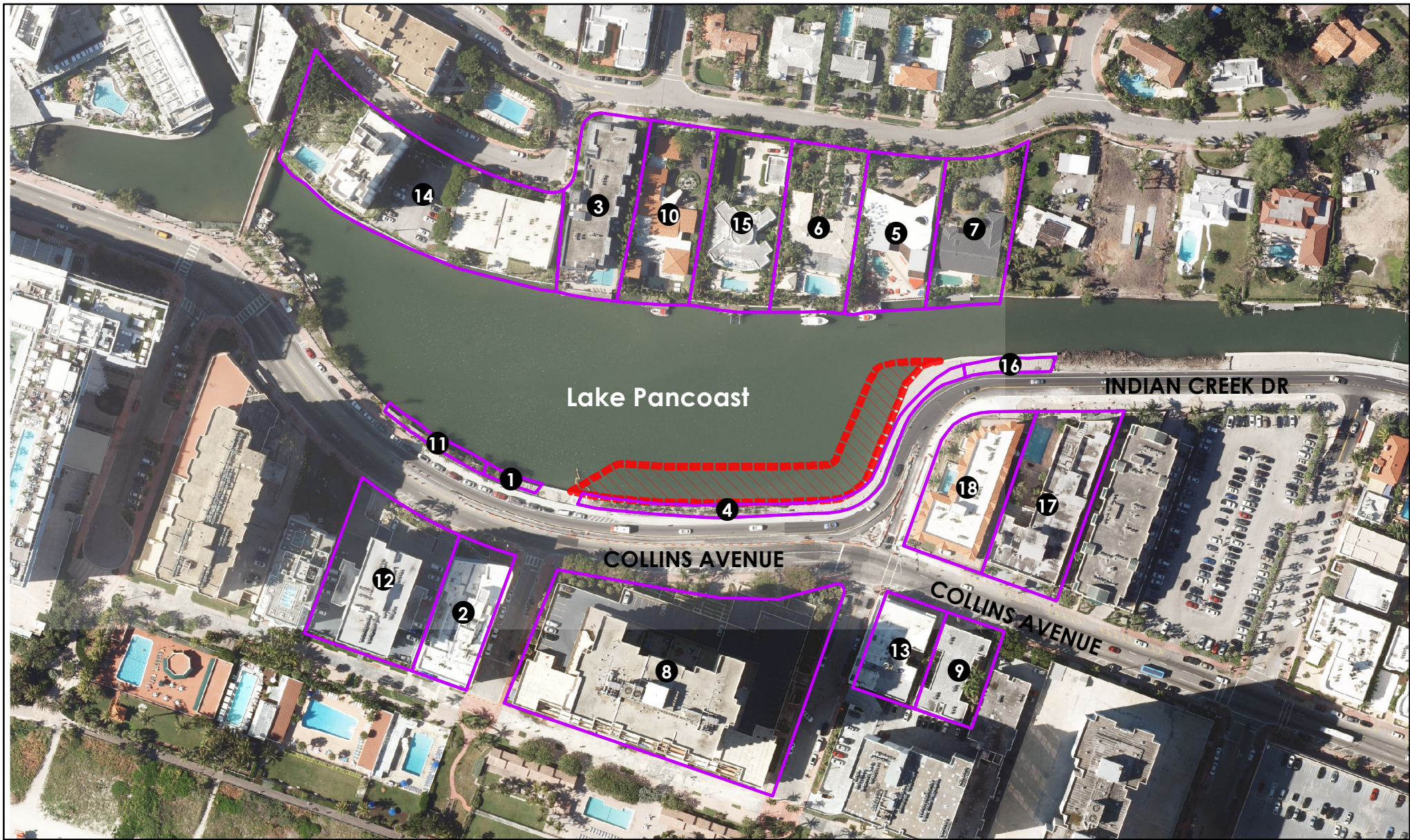
The permittee shall comply with the following protected species construction conditions:

- a. The permittee shall instruct all personnel associated with the project of the potential presence of these species and the need to avoid collisions with sea turtles and smalltooth sawfish. All construction personnel are responsible for observing water-related activities for the presence of these species.
- b. The permittee shall advise all construction personnel that there are civil and criminal penalties for harming, harassing, or killing sea turtles or smalltooth sawfish, which are protected under the Endangered Species Act of 1973.
- c. Siltation barriers shall be made of material in which a sea turtle or smalltooth sawfish cannot become entangled, be properly secured, and be regularly monitored to avoid protected species entrapment. Barriers may not block sea turtle or smalltooth sawfish entry to or exit from designated critical habitat without prior agreement from the National Marine Fisheries Service's Protected Resources Division, St. Petersburg, Florida.
- d. All vessels associated with the construction project shall operate at "no wake/idle" speeds at all times while in the construction area and while in water depths where the draft of the vessel provides less than a four-foot clearance from the bottom. All vessels will preferentially follow deep-water routes (e.g., marked channels) whenever possible.
- e. If a sea turtle or smalltooth sawfish is seen within 100 yards of the active daily construction/dredging operation or vessel movement, all appropriate precautions shall be implemented to ensure its protection. These precautions shall include cessation of operation of any moving equipment closer than 50 feet of a sea turtle or smalltooth sawfish. Operation of any mechanical construction equipment shall cease immediately if a sea turtle or smalltooth sawfish is seen within a 50-ft radius of the equipment. Activities may not resume until the protected species has departed the project area of its own volition.
- f. Any collision with and/or injury to a sea turtle or smalltooth sawfish shall be reported immediately to the National Marine Fisheries Service's Protected Resources Division (727-824-5312) and the local authorized sea turtle stranding/rescue organization.
- g. Any special construction conditions, required of your specific project, outside these general conditions, if applicable, will be addressed in the primary consultation.

Revised: March 23, 2006

O:\forms\Sea Turtle and Smalltooth Sawfish Construction Conditions.doc



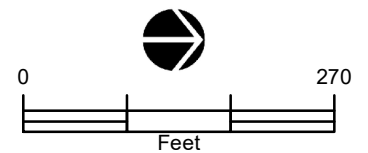


MIAMI BEACH

PUBLIC WORKS DEPARTMENT
1700 Convention Center Drive
Miami Beach, Florida 33139

LAKE PANCOST MANGROVE PLANTER

ADJACENT PROPERTIES



Id.	Folio	Physical Address	Owner	Mailing Address
1	02-3226-024-0001	2469 COLLINS AVE	S TELLER & EFEKTA INSTITUTE FH EF SCHOOLS INC LESSEE	204 LAKE ST BRIGHTON, MA 02131
2	02-3226-001-0660	2469 COLLINS AVE	S TELLER & EFEKTA INSTITUTE FH EF SCHOOLS INC LESSEE	204 LAKE ST BRIGHTON, MA 02131
3	02-3227-021-0001	2455 FLAMINGO DR	OCEAN VIEW LAKE CONDO	2455 FLAMINGO DR MIAMI BEACH, FL 33140
4	02-3226-001-0751	N/A	CITY OF MIAMI BEACH	1700 CONVENTION CENTER DR MIAMI BEACH FL 33139
5	02-3227-012-0190	2545 FLAMINGO DR	DAVID & CANDANCE MUHLRAD	2545 FLAMINGO DR MIAMI BEACH, FL 33140
6	02-3227-012-0200	2525 FLAMINGO DR	RHONDA PEARLS TRS	2525FLAMINGO DR MIAMI BEACH, FL 33140
7	02-3227-012-0180	2575 FLAMINGO DR	2575 FLAMINGO DR, LLC	2575 FLAMINGO DR MIAMI BEACH, FL 33140
8	02-3226-021-0001	2555 COLLINS AVE	CLUB ATLANTIS CONDO	2555 COLLINS AVE MIAMI BEACH FL 33140
9	02-3226-041-0001	2615 COLLINS AVE	JASMINE CONDO	2615 COLLINS AVE MIAMI BEACH FL 33140
10	02-3227-012-0220	2505 FLAMINGO DR	LANCE BURSTYN	2505 FLAMINGO DR MIAMI BEACH, FL 33140
11	02-3226-024-0001	2457 COLLINS AVE	ROYAL CLUB CONDO	2457 COLLINS AVE MIAMI BEACH FL 33140
12	02-3226-024-0001	2457 COLLINS AVE	ROYAL CLUB CONDO	2457 COLLINS AVE MIAMI BEACH FL 33140
13	02-3226-001-0740	2601 COLLINS AVENUE	2601 COLLINS LLC	2450 NE MIAMI GARDENS DR 2ND FLR NORTH MIAMI BEACH, FL 33180
14	02-3227-024-0001	2421 LAKE PANCOAST DR	HELEN MAR CONDO	2421 LAKE PANCOAST DR MIAMI BEACH, FL 33140
15	02-3227-012-0210	2515 FLAMINGO DR	NELSON & MARIELLA GONZALEZ	2515 FLAMINGO DR MIAMI BEACH, FL 33140
16	02-3226-033-0001	N/A	LAKE BEACH CONDO CLUB	2600 COLLINS AVENUE MIAMI BEACH FL 33140
17	02-3226-001-0760	2618 COLLINS AVE	2618 COLLINS CAPITAL HOLDINGS LLC	17070 COLLINS AVE 256 SUNNY ISLES BEACH, FL 33160
18	02-3226-033-0001	2600 COLLINS AVENUE	LAKE BEACH CONDO CLUB	2600 COLLINS AVENUE MIAMI BEACH FL 33140

Attachment D – Club Atlantis Condominium HOA Presentation

Living Shoreline Opportunity

Club Atlantis Condominium
Association Meeting

April 25, 2019



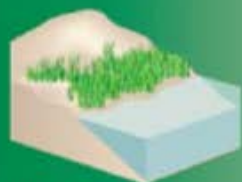
MIAMI BEACH
RISING
ABOVE

A living shoreline uses organic materials to stabilize the shoreline and provide other benefits.

GREEN - SOFTER TECHNIQUES

GRAY - HARDER TECHNIQUES

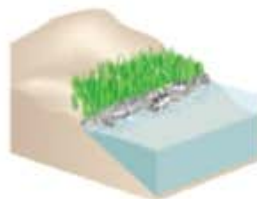
Living Shorelines



VEGETATION ONLY -
Provides a buffer to upland areas and breaks small waves. Suitable for low wave energy environments.



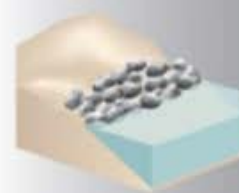
EDGING -
Added structure holds the toe of existing or vegetated slope in place. Suitable for most areas except high wave energy environments.



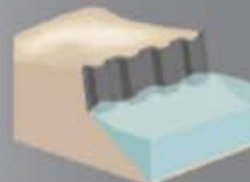
SILLS -
Parallel to vegetated shoreline, reduces wave energy, and prevents erosion. Suitable for most areas except high wave energy environments.



BREAKWATER -
(vegetation optional) - Offshore structures intended to break waves, reducing the force of wave action, and encourage sediment accretion. Suitable for most areas.



REVETMENT -
Lays over the slope of the shoreline and protects it from erosion and waves. Suitable for sites with existing hardened shoreline structures.



BULKHEAD -
Vertical wall parallel to the shoreline intended to hold soil in place. Suitable for high energy settings and sites with existing hard shoreline structures.



BEACHWALK (MID-BEACH) LIVING SHORELINE

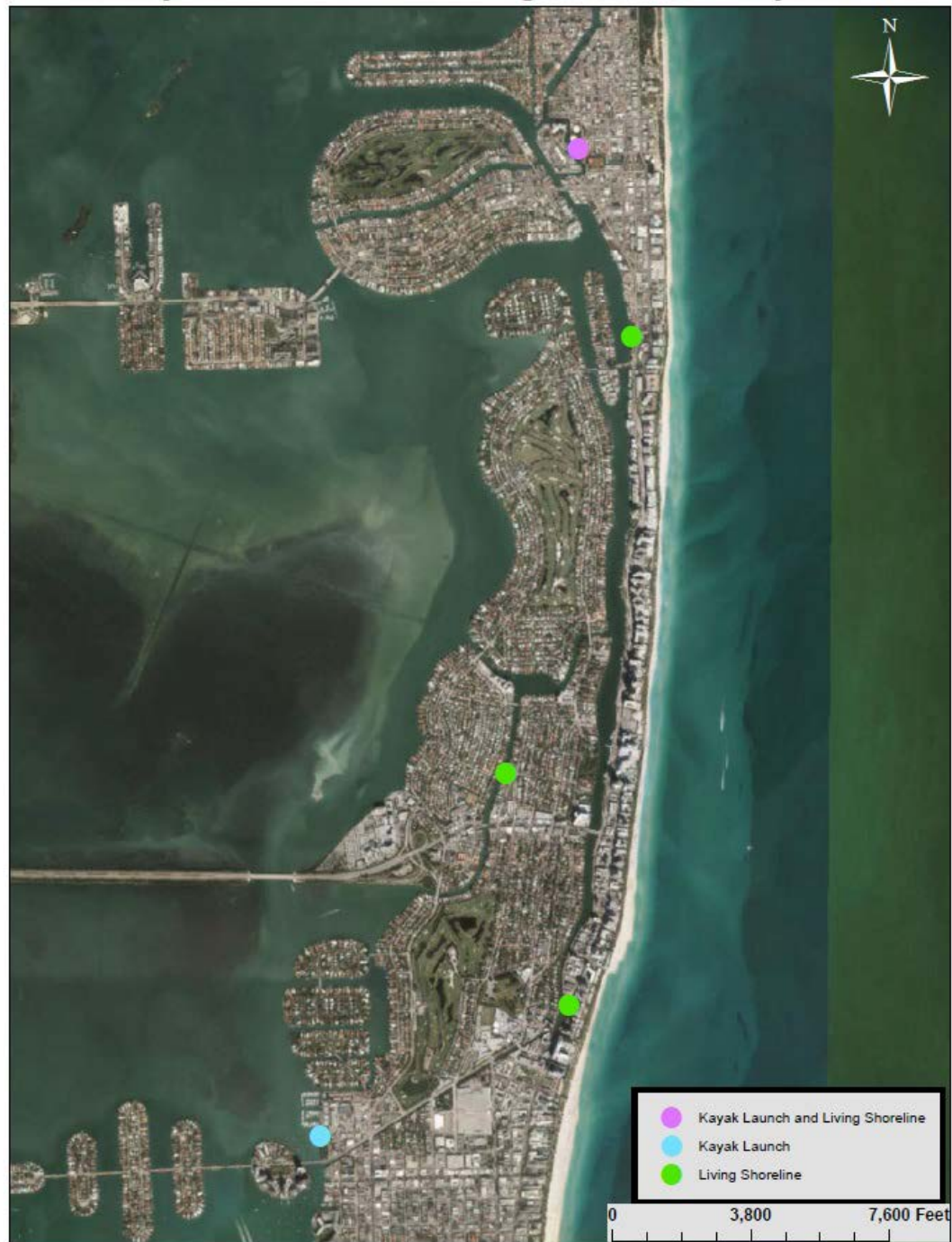


BEACHWALK (SOUTH BEACH) LIVING SHORELINE



PINE TREE PARK
LIVING SHORELINE

Kayak Launch and Living Shoreline Projects





PARK VIEW ISLAND
LIVING SHORELINE



PARK VIEW ISLAND
LIVING SHORELINE



BRITTANY BAY PARK



BRITTANY BAY PARK



BRITTANY BAY PARK LIVING SHORELINE CONCEPT



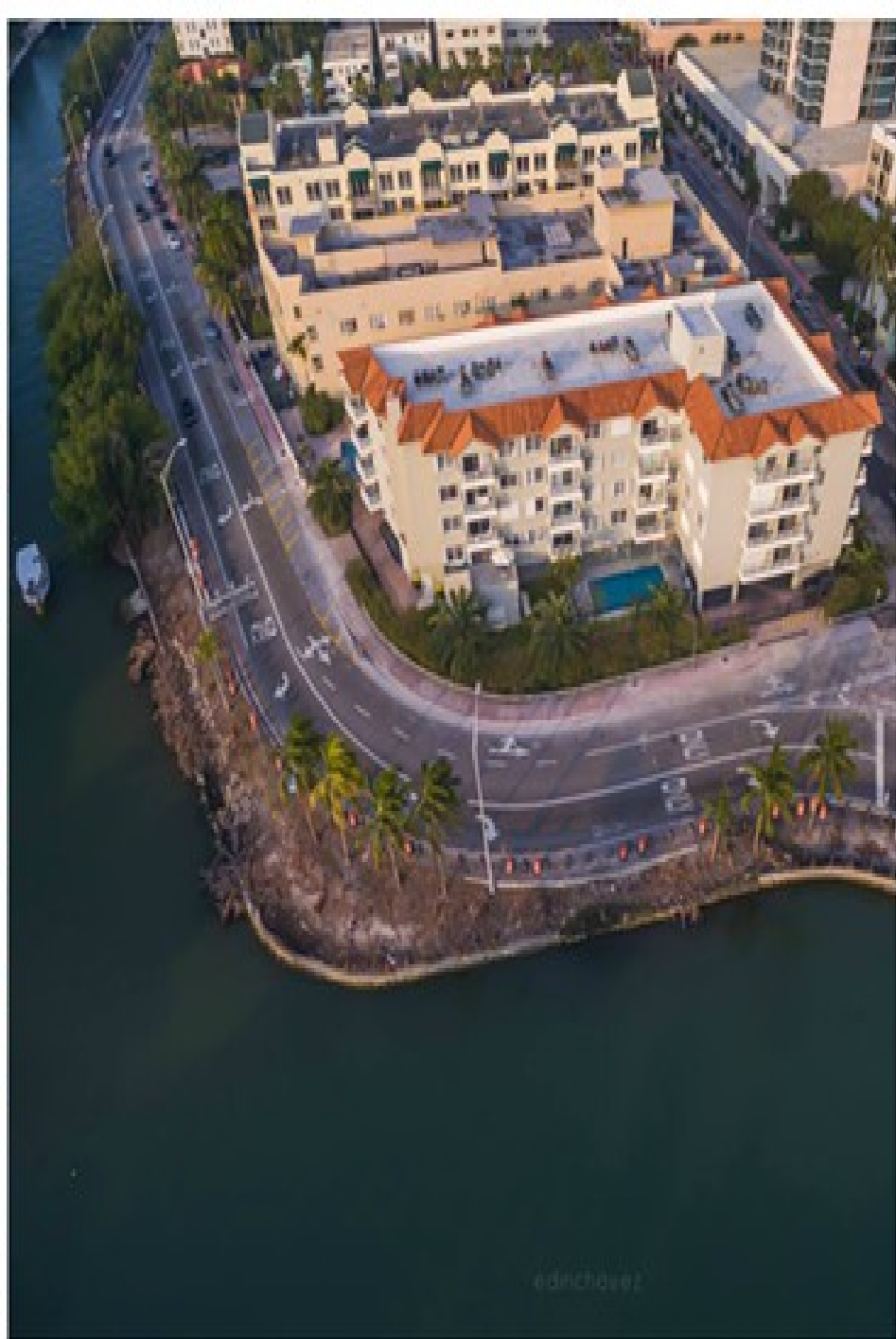
BRITTANY BAY PARK LIVING SHORELINE CONCEPT



INDIAN CREEK DR 2015

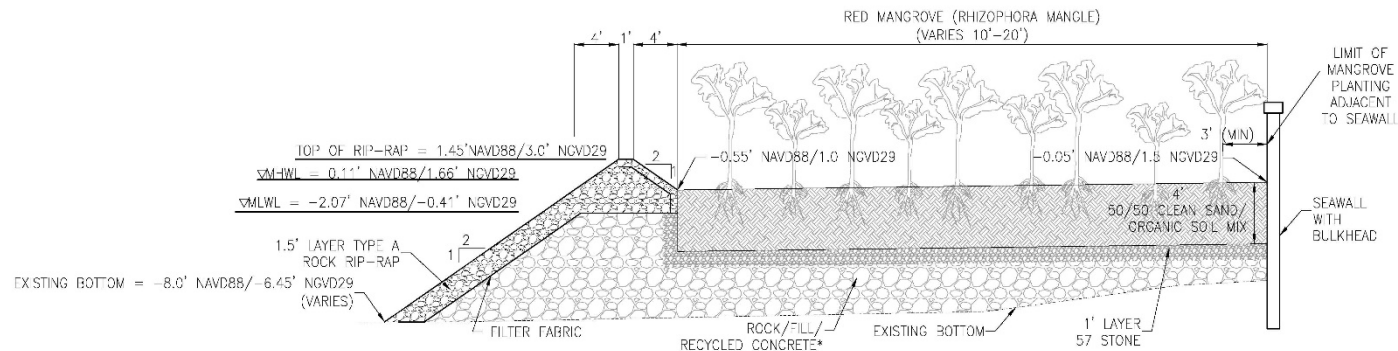


INDIAN CREEK DR 2015



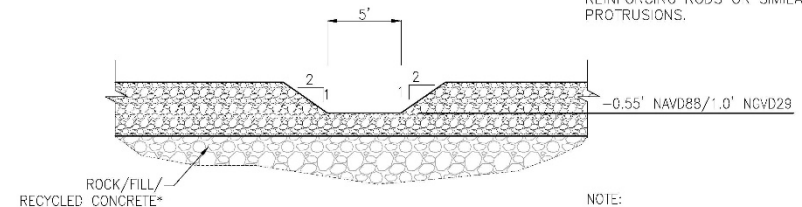


LAKE PANCOAST LIVING SHORELINE CONCEPT



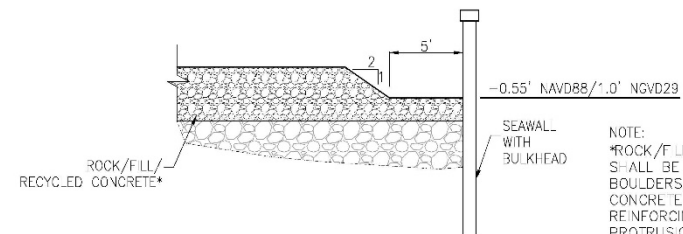
**RIP-RAIP AND PLANTER
SECTION A-A**
NTS

NOTE:
*ROCK/FILL/RECYCLED CONCRETE SHALL BE UNCONSOLIDATED BOULDERS, ROCKS, OR CLEAN CONCRETE RUBBLE WITH NO REINFORCING RODS OR SIMILAR PROTRUSIONS.



**MANATEE EGRESS AREA
SECTION B-B**
NTS

NOTE:
*ROCK/FILL/RECYCLED CONCRETE SHALL BE UNCONSOLIDATED BOULDERS, ROCKS, OR CLEAN CONCRETE RUBBLE WITH NO REINFORCING RODS OR SIMILAR PROTRUSIONS.



**MANATEE EGRESS AREA AT SEAWALL
SECTION C-C**
NTS

NOTE:
*ROCK/FILL/RECYCLED CONCRETE SHALL BE UNCONSOLIDATED BOULDERS, ROCKS, OR CLEAN CONCRETE RUBBLE WITH NO REINFORCING RODS OR SIMILAR PROTRUSIONS.

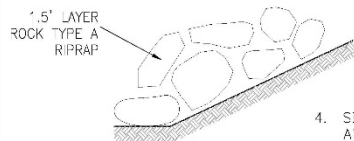
MANGROVE ZONE PLANTING SPECIFICATIONS							
STRATUM	COMMON NAME	SCIENTIFIC NAME	ELEVATION RANGE (FT NAVD)	AREA (SF) WITHIN EL. RANGE	AVG SPACING (FT O.C.)	QUANTITY	SIZE (MINIMUM)
MANATEE EGRESS AREA	RED MANGROVE	RHIZOPHORA MANGLE	-0.50 TO 0.50	283	0.5	1,132	1-GAL
TREES	RED MANGROVE	RHIZOPHORA MANGLE	-0.50 TO 0.50	4,205	5	195	3-GAL
	RED MANGROVE	RHIZOPHORA MANGLE	-0.50 TO 0.50	4,205	1	4,500	1-GAL

NOTES:

- USE SOUND, HARD, DURABLE RUBBLE, FREE OF OPEN OR INCIPENT CRACKS, SOFT SEAMS, OR OTHER STRUCTURAL DEFECTS, CONSISTING OF BROKEN STONE WITH A BULK SPECIFIC GRAVITY OF AT LEAST 1.90.
- ENSURE THAT STONES ARE ROUGH AND ANGULAR.
- USE BROKEN STONE MEETING THE FOLLOWING GRADATION AND THICKNESS REQUIREMENTS:

WEIGHT MAX. POUNDS	WEIGHT 50% POUNDS	WEIGHT MIN. POUNDS	MIN. BLANKET THICKNESS IN FT.
75	30	4	1.5
INSURE: THAT AT LEAST 92% OF THE MATERIAL IS WEIGHT IS SMALLER THAN MAXIMUM POUNDS. INSURE: THAT AT LEAST 50% OF THE MATERIAL IS WEIGHT IS GREATER THAN MAXIMUM POUNDS. INSURE: THAT AT LEAST 50% OF THE MATERIAL IS WEIGHT IS GREATER THAN MAXIMUM POUNDS.			

- SEE SECTION 530 RIPRAP FOOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION FOR ADDITIONAL INFORMATION.



TYPE A ROCK RIP-RAIP TYPICAL DETAIL

LAKE PANCOAST LIVING SHORELINE CONCEPT





SIMILAR CONCEPT
POST-CONSTRUCTION

SIMILAR CONCEPT POST-CONSTRUCTION



We have a rare opportunity to bring back mangroves to the area and we need your input to make it happen.



FUNDS FOR DESIGN & PERMITTING

- FDEP Coastal Resilience Grant - \$34,965 (6/30/19)
- Florida Inland Navigation District Grant - \$1,000,000 (9/30/19)
- City of Miami Beach - \$30,000 (9/30/19)

TOTAL: \$1,064,965



FUNDS FOR CONSTRUCTION

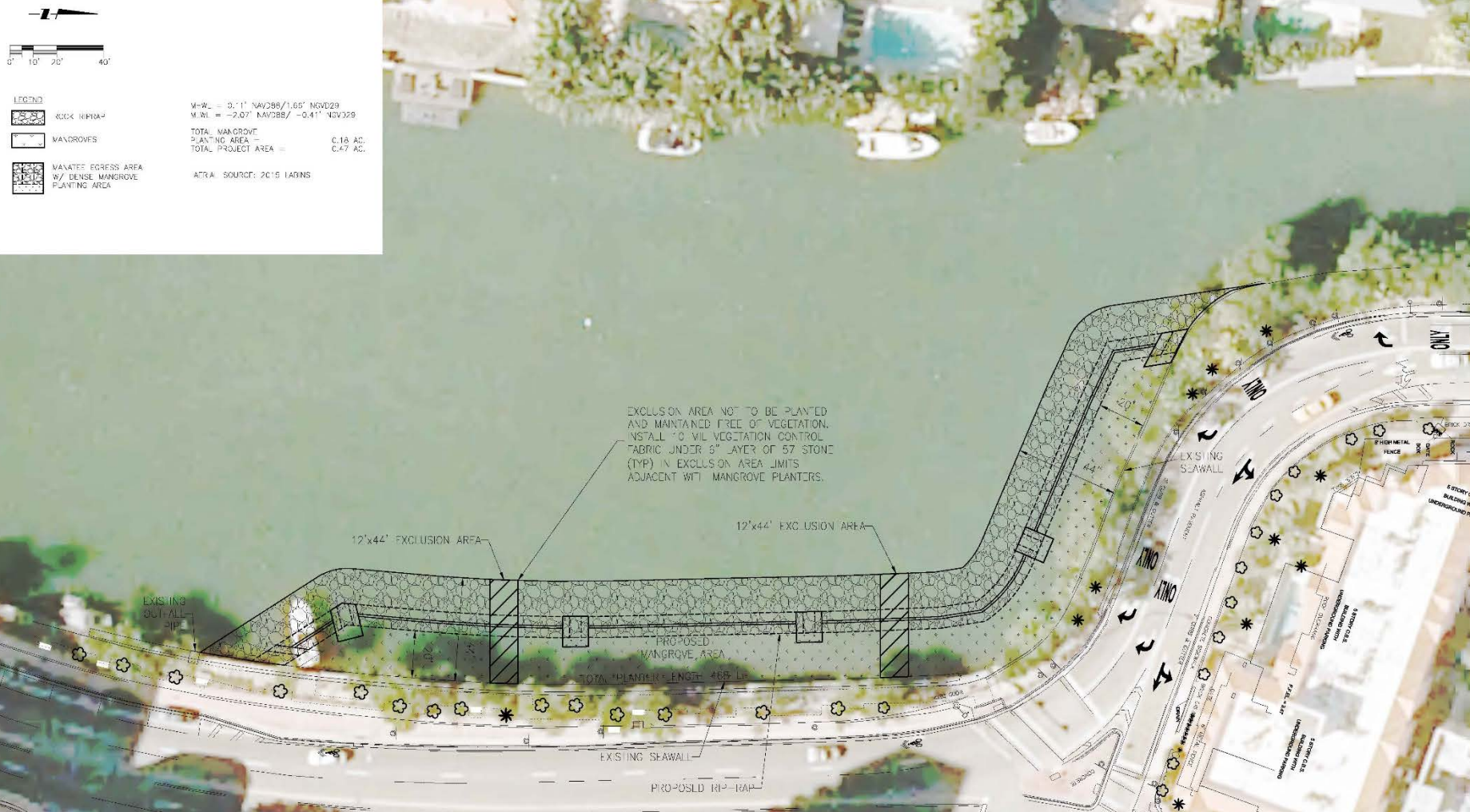
- City of Miami Beach – \$939,000 (FY 2019/20)
- Private Funder (Possible) – \$100,000 to \$225,000 (FY 2019/20)
- Florida Inland Navigation District Grant (Possible) – TBD

TOTAL: Approx. \$2,000,000

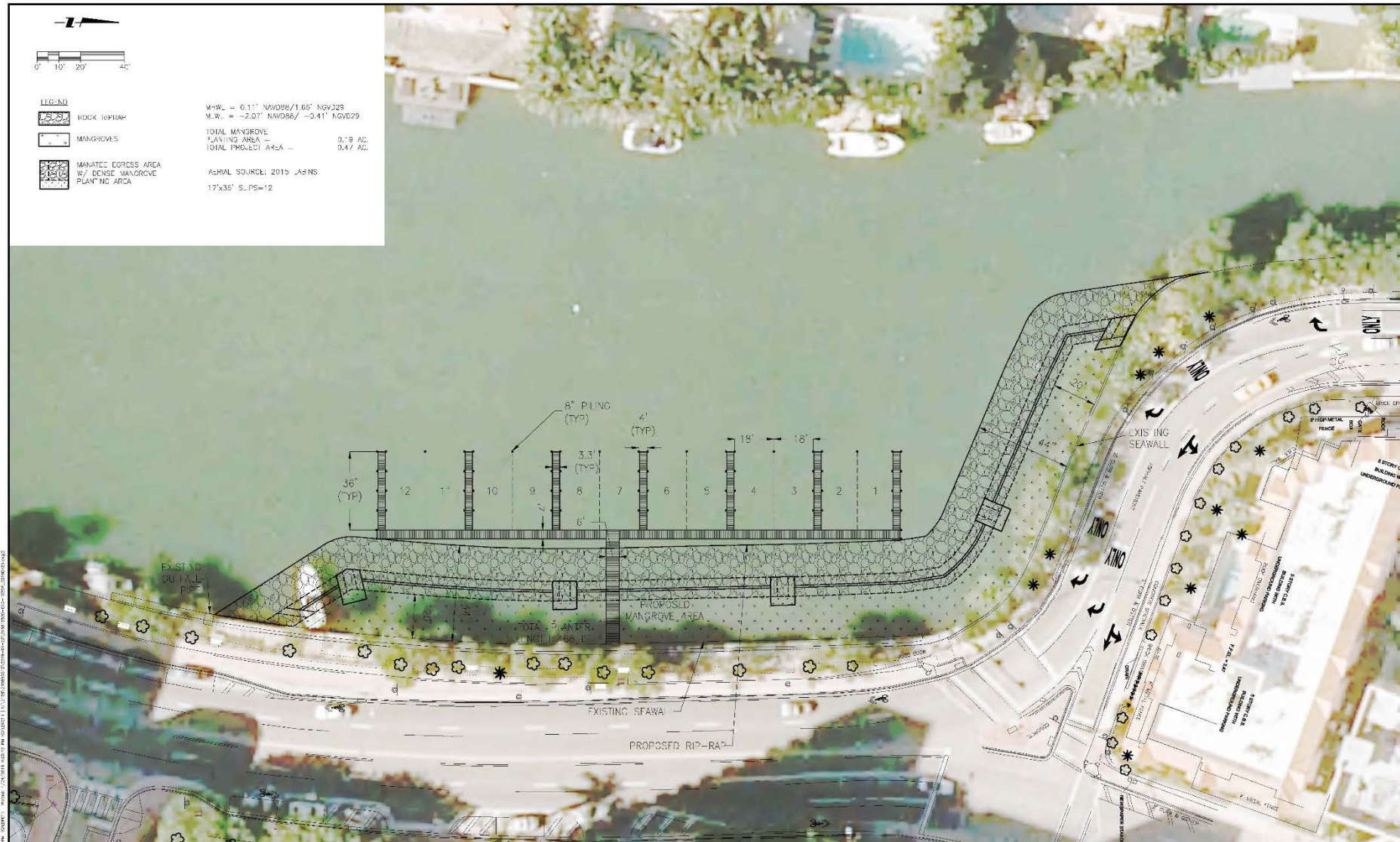
OPTION 1 – BUILD PLANTER AS-IS AT CITY'S EXPENSE



What are your riparian (in-water) needs?



**OPTION 2 - LEAVE SPACE(S)
FOR FUTURE DOCK(S) AT CONDO'S EXPENSE**



OPTION 2 (CON'T)

MAXIMUM DOCKING POTENTIAL B



MHWL = 0.11' NAVD88/1.66' NGVD29
 MLWL = -2.07' NAVD88/ -0.41' NGVD29
 TOTAL MANGROVE
 PLANTING AREA = 0.18 AC
 TOTAL PROJECT AREA = 0.47 AC
 AERIAL SOURCE: 2015 AERIALS



THANK YOU!



Margarita Kruyff, Assistant Director
Environment & Sustainability
mkruyff@miamibeachfl.gov

MIAMIBEACH
RISING
ABOVE



This presentation was funded in part, through a grant agreement from the Florida Department of Environmental Protection, Florida Resilient Coastlines Program, by a grant provided by the Florida Coastal Office. The views, statements, findings, conclusions and recommendations expressed herein are those of the author(s) and do not necessarily reflect the views of the State of Florida or any of its subagencies.

**Attachment E – Club Atlantis Condominium HOA
Informational Flyer**



Living Shoreline Opportunity in Lake Pancoast

The city has a rare opportunity to improve Lake Pancoast with an in-water living shoreline that will help clean and filter, as well as bring wildlife to the waterway. We need your help to finalize its design and maximize its ecological benefit, while taking into account your building's riparian (in-water) needs. If you have any questions or would like more information, please contact Margarita Kruffyff, Environment & Sustainability Assistant Director, at mkruyff@miamibeachfl.gov or (305) 673-7010.

What is a living shoreline?

- A living shoreline uses natural or organic elements, like plants and rocks, to stabilize and protect the shoreline, while providing other benefits such as habitat for birds and fish, a place for shallow water corals to grow, and the removal of pollutants from the water.

What makes this living shoreline such a rare opportunity?

- **Limited space citywide.** The city is surrounded by over 63 miles of shoreline of which we only control 3 miles. There are very limited areas available to protect and build habitat within our city. The area of Lake Pancoast between 25th Street and 26th Street is one of six known areas in the city where a living shoreline is feasible.
- **Strict environmental laws.** The waters surrounding our city are designated as an aquatic preserve, Outstanding Florida Waters, and critical habitat for endangered species, meaning they are protected with very strict regulations. The creation of new in-water habitat is not usually approved. In this case, the city worked collaboratively with the Federal, state, and local environmental agencies to develop a conceptual design with which they all feel comfortable and will continue to work with them to obtain all required permits once a final design is ready.
- **Grant funding available.** This project was awarded over \$1 million in grant funding, including one of the first-ever Florida Department of Environmental Protection (FDEP) Coastal Resilience grants, as well as Florida Inland Navigation District (FIND) grant for design and permitting. The project has interest from other public and private funders for construction. Any money not used for the living shoreline design and construction will be lost.

What will this living shoreline look like?

- **Option 1 – Living Shoreline Only.** This is the conceptual design developed with the environmental agencies. It consists of a continuous mangrove planter made of limerock boulders, clean sand/organic soil mix, and red mangroves. The design was created to maintain navigation and prevent wildlife impacts. For example, it has openings for manatees to swim out if they happen to swim in.
- **Option 2 – Living Shoreline with Room for Future Private Dock.** This option considers that your building may want to build a dock in the future. Because the permits will not allow the mangrove planter to be modified once it is built, we need to incorporate space for this future development in the project. Our consultants have included two “best case scenarios” showing the maximum docking potential across from your property (given site conditions) for your reference. Note that these conceptual designs are for your reference only and not guaranteed to be permitted. Additionally, any private docks must be designed and built at your condo’s expense.
- **Option 3 – Living Shoreline with Public Overlook(s).** This option considers that your building may want an amenity paid for by the city. In other living shoreline projects, we successfully permitted an outlook or wooden walkway that goes through the mangroves and into the water. The final design of the outlook will be determined during permitting, but it will be designed to be safe for users and allow our police officers to see into it from the roadway.

Who will pay for this project?

City and grant funds will pay for the design of the public elements of this project as follows:

- FDEP Coastal Resilience Grant - \$34,965, must be used before June 30, 2019
- FIND Grant - \$1,000,000, must be used before September 30, 2019
- City of Miami Beach - \$30,000, must be used before September 30, 2019

City funds will also pay for the construction of the public elements. If there are any funding gaps, the city will pursue additional grants for construction. The condo would only be responsible for design, permitting and construction of any future docks, if desired.

When will construction start?

Construction funding has been requested for next Fiscal Year 2019/20, which starts on September 1, 2019. Once we have permits, we will be able to provide an anticipated construction start date.

Who will maintain and assume liability once the project is built?

The city is required to maintain the public elements of the project and is responsible for the area.



This informational flyer was funded in part, through a grant agreement from the Florida Department of Environmental Protection, Florida Resilient Coastlines Program, by a grant provided by the Florida Coastal Office. The views, statements, findings, conclusions and recommendations expressed herein are those of the author(s) and do not necessarily reflect the views of the State of Florida or any of its subagencies.

Attachment F – Public Information Meeting Letter to Commission

MIAMIBEACH

OFFICE OF THE CITY MANAGER

NO. LTC# **310-2019**

LETTER TO COMMISSION

TO: Mayor Dan Gelber and Members of the City Commission

FROM: Jimmy L. Morales, City Manager

DATE: May 29, 2019

SUBJECT: **Lake Pancoast Mangrove Planter Public Information Meeting – Thursday, June 6 at 6 p.m.**

We are pleased to invite you to a public information meeting for the Lake Pancoast Mangrove Planter project on Thursday, June 6 at the Scott Rakow Youth Center Recreation Room (2700 Sheridan Avenue, Second Floor). The meeting will begin at 6 p.m. with a presentation on the history of the project, the mangrove planter design, and the next steps to finalize permitting, followed by an opportunity to talk to the project team one-on-one.

Lake Pancoast is the waterbody located between Collins Avenue and Flamingo Drive bounded by the Gates Hotel (2360 Collins Avenue) to its south and the 26th Street and Indian Creek Drive intersection to its north. In late 2016, mangroves, trees and other vegetation along the shoreline of Lake Pancoast and the Indian Creek Waterway were removed as part of the Indian Creek Drive Flood Mitigation project. As part of the permitting process, City staff worked with Miami-Dade County staff to include a condition for on-site mitigation in the project's coastal construction permit.

Over the last three years, City staff has been collaborating with permitting staff from the County, the State and different federal agencies to develop an on-site mitigation design that is permittable and yields maximum ecological benefit. The Lake Pancoast Mangrove Planter project emerged from these discussions and consists of an in-water mangrove planter that will be built along the northeastern edge of Lake Pancoast between 25th Street and 26th Street. The planter design and location were carefully selected to maintain navigation and prevent wildlife impacts. For example, it has openings to allow manatees to swim out if they happen to swim in.

The waters surrounding our city are designated as an aquatic preserve, Outstanding Florida Waters, and critical habitat for endangered species, meaning they are protected by very strict regulations that typically prohibit filling in the bay bottom. Therefore, in-water living shorelines like the one that will be created by this project are rarely permitted. However, City staff has been able to demonstrate that the area is currently in need of ecological restoration and that this planter will help clean and filter, as well as bring wildlife to the waterway. As such, it is viewed as a landmark opportunity and has advanced to the final stages of permitting. It also received one of the first ever Coastal Resilience Grants from the Florida Department of Environmental Protection in the amount of \$35,000.

We look forward to sharing more information about this project at the public information meeting next week. Should you have any questions, please contact Margarita Kruffy, Environment & Sustainability Assistant Director, at 305-673-7010 or via email at margaritakruffy@miamibeachfl.gov.

Attachments:

A – Public Information Meeting Flyer

PUBLIC MEETING

Lake Pancoast Mangrove Planter Project

MIAMIBEACH
RISING
ABOVE



Thursday, June 6, 2019
6PM - 8PM

Scott Rakow Youth Center - Second Floor
2700 Sheridan Avenue

Please join the City of Miami Beach for a community meeting to learn about the Lake Pancoast mangrove planter project. The city has a rare opportunity to improve Lake Pancoast with an in-water living shoreline that will help clean and filter, as well as bring wildlife to the waterway.

For more information contact:
Margarita Kruffy
mkruffy@miamibeachfl.gov

Project funded by



To learn more about this resiliency project and the city's other innovative initiatives, visit www.mbrisingabove.com

To request this material in alternate format, sign language interpreter (five-day notice required), information on access for persons with disabilities, and/or any accommodation to review any document or participate in any city-sponsored proceedings, call 305.604.2489 and select 1 for English or 2 for Spanish, then option 6; TTY users may call via 711 (Florida Relay Service).

MIAMIBEACH

Attachment G – Public Information Meeting Informational Flyer

PUBLIC MEETING

Lake Pancoast Mangrove Planter Project

MIAMI BEACH
RISING
ABOVE



Thursday, June 6, 2019
6PM - 8PM

Scott Rakow Youth Center - Second Floor
2700 Sheridan Avenue

Please join the City of Miami Beach for a community meeting to learn about the Lake Pancoast mangrove planter project. The city has a rare opportunity to improve Lake Pancoast with an in-water living shoreline that will help clean and filter, as well as bring wildlife to the waterway.

For more information contact:
Margarita Kruffy
mkruffy@miamibeachfl.gov

Project funded by



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MIAMI BEACH

Attachment H – Outreach Event Photos

CLUB ATLANTIS CONDOMINIUM ASSOCIATION, INC.
BOARD OF DIRECTORS MEETING HELD ON THURSDAY, APRIL 25, 2019

Unit	Name	Signature
1107	HELMUT G. JUCKEL	[Signature]
1000	Miriam Pastor	[Signature]
PH107	Luiz Bevilacqua	[Signature]
2011	JANE + ANA ODEA	[Signature]
2003	Jeanne Marie	[Signature]
609	Jeanne Marie	[Signature]
2114	MARAH KLEIN	[Signature]
1009	Bette Orlato	[Signature]
807	Jerry Boyarsky	[Signature]
909	Louise Boyarsky	[Signature]
PH201	Batricia Morale	[Signature]
1611	Janet Dunn	[Signature]
1600	GLORIA DE HOMBRE	[Signature]
1600	JAMES DE HOMBRE	[Signature]
1512	Cheli Shuman	[Signature]
309	Sandra Garcia	[Signature]
150	THE BUREAU	[Signature]
22A250	AL SASSI	[Signature]
118/119	AL SASSI	[Signature]
1201	J. Speirs	[Signature]
C-3	Scatena	[Signature]
1111	Irassema Yanes	[Signature]
711	Roberto & Inoue Perez	[Signature]
1402	Roberto & Inoue Perez	[Signature]



**Attachment I – Lake Pancoast Mangrove Planter Construction
Capital Budget Request FY19/20**

**CAPITAL BUDGET FUNDING REQUEST FY 2018/19**

Project Name:	Indian Creek Living Shoreline
----------------------	-------------------------------

Owner Department:	Environment and Sustainability
Project Manager:	Elizabeth Wheaton
Telephone Number:	305-673-7000 x6221

Project Location/Area Impacted:	Indian Creek at Collins Avenue and 25th Street
Program Area/Domain:	Environmental

Project Description:

Please provide a detailed description of the project and its components.

Complete design and permitting, as well as construct a living shoreline in Indian Creek that provides improved air and water quality, creates coastal habitat, and meets the on-site mangrove mitigation requirements of the Indian Creek Flood Mitigation project.

Commission Approved Plan:

Please indicate what Commission-approved plan this project is included in (i.e. Comprehensive Plan, Master Plan, Basis of Design Report, etc.)

Southeast Florida Regional Climate Change Compact Regional Climate Action Plan, Comprehensive Plan

Potential Funding Sources:

Please identify any potential funding sources you may know of to fund this project.

None at this time.

Matching Funds:

Please identify any matching funds that currently exist for this project, or are anticipated in the future. Please identify the source of the funds and what percentage of total project cost will be funded by matching funds.

We are in the process of applying for grants that could serve as matching funds for construction in the future.

Future Funding Requests:

Please identify what future funding requests may be generated as a result of this project's completion. For instance, if this is a study, is it possible that a future construction project will result? If so, please estimate a possible cost for the construction project, knowing that it is just an estimate at this time, and may never materialize.

Monitoring and maintenance of this living shoreline will be integrated into the operating budgets for Environment and Sustainability and Greenspace Management.

Mandates for Project:

Please identify any mandates requiring the City to fund and complete this project, such as the outcome of litigation, a decree, etc. by Federal, State, County, Local or other entity.

The Class I permit issued by Miami-Dade County for the construction of the Indian Creek Flood Mitigation project requires 0.57 acres of on-site mangrove mitigation.

Project Name (Continued):	Indian Creek Living Shoreline	Revision Date:	1/0/00
----------------------------------	-------------------------------	-----------------------	--------

Ability to Construct:

What Department will be constructing this project ("Builder" department)? Please describe the "Builder" department's ability to complete this project, taking into account existing workload and staffing. What additional resources will the "Builder" department need in order to complete this project, other than the funding for the project? The requesting department should consult with the "Builder" department in developing this response.

The project will be constructed by the Public Works Department.

Ability to Maintain:

Please describe the department or City ability to maintain the project once completed. In developing this response, the requesting department should consult with the department(s) that will maintain the project once completed.

The living shoreline will require periodic trimming once constructed. Public Works, Greenspace Management will maintain the project once completed. It will also require periodic waste management which is already conducted by the waterway maintenance contract overseen by Environment and Sustainability.

Justification:

Please provide a brief justification for funding and completing this project. Justification should include the value and public benefit of completing the project, how funding the project will create efficiency or streamline existing operations, an identified public need (and how that need was established/determined), and what revenue, if any, this project is estimated to generate, a description of how the revenue will be generated, and the time period over which it will be generated.

The completion of this living shoreline is a condition of the Class I permit issued by Miami-Dade County for the Indian Creek Flood Mitigation project and will restore mangrove habitat to the area. It is also the first on-site mitigation area approved in the city of Miami Beach and will open the door for additional on-site mitigation opportunities to prevent a net loss of habitat citywide.

Justification for Operating Costs:

Please provide an explanation of how the Operating Costs were derived. Include the number and cost of each FTE, estimated contract costs, etc.

Estimates were obtained using the actual costs from other similar shoreline stabilization projects that included riprap, mangroves, and other elements that will be a part of this project.

Other Considerations:

Please identify any other factors that should be considered in making a determination of whether or not to fund this project. Include any other positive impacts of funding and completing the project, or any negative impacts if funding and completion is not granted. Include social, environmental, life safety and health impacts.

The construction of the Indian Creek living shoreline will result in a net improvement of water quality in Indian Creek, help the city sequester carbon, and improve the city's overall environmental well-being.

Project Timeline:

Please provide an estimated timeline for each of the following components:

	Month/Year		Month/Year
A/E Request for Qualifications Start:		A/E Request for Qualifications Completion:	
A/E Agreement Award:			
Planning Start:		Planning Completion:	
Design Start:		Design Completion:	Mar-19
Bid Start:	May-19	Bid Completion:	Aug-19
Construction Contract Award:	Sep-19		
Construction Start:	Oct-19	Construction Completion:	Oct-20

Recommendations for Approval:

The following departments recommend this project for funding, and agree with the above information for consideration.

	Signature	Title
Building Department:		
CIP Office:		
Fire Department:		
Fleet Management:		
Information Technology Department:		
Parking Department:		
Parks and Recreation Department:		
Planning Department:		
Police Department:		
Property Management Division:		
Public Works Department:		
Tourism and Cultural Development (AiPP):		
Grants Management:		
Redevelopment Agency:		
Assistant City Manager (Owner Department):		
Assistant City Manager (Builder Department):		

CAPITAL BUDGET FUNDING REQUEST FY 2018/19

Capital Budget and Five-Year Capital Improvement Plan (CIP)

Date:

I. GENERAL									
Project Name:		Indian Creek Living Shoreline		Key Intended Outcome Supported by Project:					
Address:	Collins Avenue and 25th Street							OPERATING IMPACT	
Project Number									
Program:	Environmental							Operating Categories	
Category:								Personnel	
Section:								Operating and Maintenance	
Neighborhood:	South Beach							Miscellaneous	
Department:	Environment and Sustainability							TOTAL OPERATING COSTS	
Approval:								FFE	
Appropriation:									
Priority:									
Project Manager									
Project Description (Conceptual)									
II. COST SUMMARY									
Future Years									
Cost Categories		Prior Years	18-19	19-20	20-21	21-22	22-23	Future > 5 yrs	Total
Program Management (PM) Fee									-
Construction Management (CM) Fee									-
Architect/Engineering (A/E) Fee			40,000						40,000
Architect/Engineering (A/E) Contingency			4,000						4,000
Construction				750,000					750,000
Construction Contingency				75,000					75,000
Furniture/Fixtures/Equipment (FFE)									-
Information Technology (IT) Needs									-
Signage				5,000					5,000
Permitting/Fees				95,000					95,000
Art in Public Places (AiPP)									-
Land Acquisitions									-
Total Costs		-	139,000	830,000	-	-	-	-	969,000
III. FUNDING SUMMARY									
Funding Source(s)		Future Years							
		Prior Years	18-19	19-20	20-21	21-22	22-23	Future > 5 yrs	Total
									-
									-
Unfunded			139,000	830,000					969,000
									-
TOTAL		-	139,000	830,000	-	-	-	-	969,000

CAPITAL BUDGET FUNDING REQUEST FY 2018/19

Project Name (Continued): 0	Revision Date: 1/0/00
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Annual Incremental Cost (after project completion)	50,000
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Ability to Maintain:

Please describe the department or City ability to maintain the project once completed. In developing this response, the requesting department should consult with the department(s) that will maintain the project once completed.

The living shoreline will require periodic trimming once constructed. Public Works, Greenspace Management will maintain the project once completed. It will also require periodic waste management which is already conducted by the waterway maintenance contract overseen by Environment and Sustainability.

Operating Impact Justification:

Please provide a brief justification for funding and completing this project. Justification should include the value and public benefit of completing the project, how funding the project will create efficiency or streamline existing operations, an identified public need (and how that need was established/determined), and what revenue, if any, this project is estimated to generate, a description of how the revenue will be generated, and the time period over which it will be generated.

The completion of this living shoreline is a condition of the Class I permit issued by Miami-Dade County for the Indian Creek Flood Mitigation project and will restore mangrove habitat to the area. It is also the first on-site mitigation area approved in the city of Miami Beach and will open the door for additional on-site mitigation opportunities to prevent a net loss of habitat citywide.

Justification for Operating Costs:

Please provide an explanation of how the Operating Costs were derived. Include the number and cost of each FTE, estimated contract costs, etc.

Estimates were obtained using the actual costs from other similar shoreline stabilization projects that included riprap, mangroves, and other elements that will be a part of this project.

Other Considerations:

Please identify any other factors that should be considered in making a determination of whether or not to fund this project. Include any other positive impacts of funding and completing the project, or any negative impacts if funding and completion is not granted. Include social, environmental, life safety and health impacts.

The construction of the Indian Creek living shoreline will result in a net improvement of water quality in Indian Creek, help the city sequester carbon, and improve the city's overall environmental well-being.



FY 2018/19 Estimated Relocation Costs and FFE

Project Name:	Indian Creek Living Shoreline
Project Number:	

Owner Department:	Environment and Sustainability
Builder Department:	Public Works Department

Project Relocation Needs: N/A

Item/Account	Amount
Total (Must tie to Capital Project)	0

This form must be reviewed and signed off by all of the Departments listed below:

Owner Department:	
Assistance City Manager:	
Builder Department:	
Property Management:	
Information Technology Department:	
Asset Management	