

**Indian River County
Purchasing Division
1800 27th Street
Vero Beach, FL 32960
Phone (772) 226-1416**



ADDENDUM NO. 1

Date: August 14, 2019

Project Name: SECTOR 5 BEACH AND DUNE RESTORATION PROJECT

Bid Number: 2019066

Bid Opening Date: Tuesday, August 20, 2019 at 2:00 p.m.

This addendum is released to provide clarification and permit updates. All information provided herein is hereby incorporated into the bid documents.

Comments, Questions, and Clarifications may be submitted no later than 8:00 a.m. Monday August 12, 2019

Questions and Clarifications:

Q: Please confirm that each plant cell must have three independent plants actively growing.

A: Please see amended Technical Specification 24.3 below.

Q: Is there any specific type of fertilizer and quantity per plant required?

A: Please refer to Technical Specification 30.4.3 for information on plant installation and initial fertilization. Technical specifications 30.5 provide additional information on irrigation and fertilization of plants to ensure the survival rates identified in D-1.

Q: Does the County have any water sources available for this project?

A: The County has not identified any water sources at this time. The Contractor will be responsible for the initial watering and supplemental watering as needed in the first 30 days to ensure the survival rates identified in D-1.

Q: Please clarify Section 24.3. Plant Size and Containers, which specifies "all plants shall be provided in four (4) inch containers." This conflicts with the "Planting Detail" on D-1 that lists sizing as 1-inch liners and 2-inch liners.

A: **Technical Specification 24.3** is amended as follows:

Plant Size and Containers. For commercially available plants, all plants shall be provided in ~~four (4)~~ one (1) inch containers or greater as to ensure the survival rates identified in D-1 of construction plans. The containers shall be square, rectangle, or round in shape and shall be individual containers, not molded trays or tray liners. Containers shall be at least ~~four (4) inches~~ one (1) inch (outside dimensions) across the top length and width, or diameter if round, ~~and a minimum of three and one half (3½) inches deep.~~ Containers shall be constructed of rigid plastics. Paper, Styrofoam, peats, or other biodegradable container materials are not acceptable. Each container shall have at least three (3) live and actively growing stems. Each of the stems shall have a stem height/length between eight (8) and sixteen (16) inches as measured from the stem-root interface to the stem (not leaf) tip.

Sheet D-1 – Planting Detail is amended as follows:

PLANTING DETAIL					
PLANT TYPE	SCIENTIFIC NAME	PERCENT DISTRIBUTION	QUANTITY (APPROX.)	SIZE (MIN.)	SPACING
Sea Oats	UNIOLA PANICULATA	80% TO 85%	103, 040	1" LINER	18" O.C.
Bitter Panicgrass	PANICUM AMARUM	10% TO 15%	12,880	1" LINER	18" O.C.
Railroad Vine	IPOMOEA PES-CAPRAE	4% TO 8% (RELATIVELY EQUAL ABUNDANCE OF EACH)	6,440	1" LINER	18" O.C.
Dune Sunflower	HELIANTHUS DEBILIS		6,440	1" LINER	18" O.C.

Permit Updates:

A minor permit modification to JCP No. 363427-001-JC had been approved by FDEP. The modification allows for seven (7) additional FDEP approved upland sand sources and one (1) additional beach construction access location at Riomar Dr... Although the permit modification has been approved by FDEP, the permit fee is still processing preventing FDEP from issuing the permit modification. An email from FDEP approving the proposed permit modification will be attached to this addendum.

Attachments:

1. Pre-Bid Conference Minutes
2. Pre-Bid Conference Sign-In Sheet
3. Permit Modification Email
4. FDEP Approved Upland Sand Sources – County Sand RFQ Report
5. Additional Permitted Construction Access
6. County Holidays

*******This Addendum must be acknowledged with submittal package and/or by return of this Acknowledgement with your submittal package *******

Company Name _____

Name: _____ **Title:** _____
(Type / Printed)

Authorized Signature: _____ **Date:** _____

Telephone: _____ **Email:** _____



Board of County Commissioners

***1801 27th Street
Vero Beach, Florida 32960-3365
Telephone: (772) 567-8000
Fax: (772) 778-9391***

PRE-BID MEETING MINUTES

July 26, 2019 at 3:00 PM

INDIAN RIVER COUNTY ADMINISTRATION BUILDING

Room A1-303 Building A

SECTOR 5 BEACH AND DUNE RESTORATION PROJECT

The following meeting notes set forth our understanding of the discussions and decisions made at the subject meeting. If no objections, questions, additions, or comments are received within three (3) working days from issuance of the meeting notes, we will assume that our understandings are correct. The project will move forward according to the bid plans and specifications and the understandings herein.

PROJECT NAME: Sector 5 Beach and Dune Restoration Project

PROJECT NUMBER: N/A

BID NUMBER: 2019066

INTRODUCTIONS/SIGN IN SHEET

This is a Pre-Bid Meeting; Attendance at this conference by all bidders is NOT MANDATORY. Everyone present during any part of the meeting please sign in.

PROJECT DESCRIPTION:

The project consists of restoring approximately 3.1 miles of coastline in the City of Vero Beach, Town of Indian River Shores, and unincorporated Indian River County by placing approximately 123,800 cubic yards of beach compatible sand to create a beach berm and dune. Salt-tolerant dune vegetation will be planted on the restored dunes. Beach compatible sand will be obtained from the Stewart Materials Fort Pierce mine, and shall meet the "Geotechnical Requirements" described in the Technical Specifications and Contract Documents. Upland staging and construction access areas are located at Tracking Station Park, Jaycee Park and Conn Beach, and Humiston Park.

CONTRACT DETAILS

Bid Opening: Tuesday, August 20, 2019 at 2:00 PM

Contract Time: 180 days to substantial completion
210 days to final completion

Engineer's Estimate: \$3,735,637.75 (Includes Force Account)

Liquidated Damages: \$2,712.00 per day

CONTACTS BIDDING PROCESS

All communications concerning this bid shall be directed to Indian River County Purchasing Division at purchasing@ircgov.com.

PROJECT CONSULTANT:

APTIM, Boca Raton, Florida – Jordon Cheifet, PE, CFM

PERMITS:

All permitting for the project has been completed by the County. The permits include:

Department of the Army Permit - SAJ-2018-01171(SP-AWP)

Florida Department of Environmental Protection – 0363427-001-JC

FDEP Permit Modification – ~~Under Review~~ Approved

Permit Modification approved by FDEP. Permit Modification for additional beach access at Riomar Drive and for additional sand mines will be available in an addendum.

City of Vero Beach – Right of Way Permit for Construction Access Points in Progress

Access Agreement for Ocean Grill (under the structure) is being presented to the IRC Board of County Commissioners for execution on August 13, 2019. This will be provided as an addendum after execution and recording.

PROJECT OVERVIEW DISCUSSION – KENDRA (IRC)

- Review and comment with questions and clarifications as soon as possible, no further comments 10 days prior to bid opening (Saturday, August 10, 2019).
- Anticipated Bid Award in September
- The Notice to Proceed tentative issuance is TBD
- Project must commence within 14 days of Notice to Proceed
- Contractor will need to comply with conditions and requirements of ALL permits
- Work hours – IRC work hours are from 7AM to 5PM. Night time operation will not be allowed, work on weekends or holidays will need approval from IRC.

James Ennis (IRC) emphasized any exceptions to this rule will be made on a case by case basis as to not impact public beaches and local businesses.

- Beach fill material – Permitted Material from Stewart Materials Fort Pierce Mine
 - Confirmed on 7/27/19 approx. 100,000 cy will be stock piled for project*Kendra (IRC) addressed the permit modification currently under review. The modification requested approval of multiple other FDEP approved IRC beach compatible sand sources identified through a County RFQ completed in 2018. If approved will be made available in an addendum.*
- None compliant fill material placed on beach must be removed at Contractor expense
- Driveway, business and road access shall be maintained at all times
- Due to businesses along this stretch the entire project area cannot be closed all at once. Contractor shall be required to phase work in such a manner to minimize impacts to local businesses and beach access. Regular communication between Contractor, County and Consultant will be necessary to ensure minimal closure time in front of businesses.
- Maintenance of Traffic:
 - Contractor shall submit a Maintenance of Traffic Plan to the Indian River County Traffic Division for approval
 - The Maintenance of Traffic Plan shall meet the FDOT Index 600, January 2018 Edition and shall be signed and sealed by a Florida P.E.
- Late Season Sea Turtle Nesting and Nest Relocation:

- Nests laid within the project area as of August 28th will be relocated to one of two locations (N or S of project area). Relocations will occur until nesting is complete.
- Late Season Nest Monitoring will occur until all nesting is complete. Regular coordination with the County's MTP is necessary nest evaluations are complete.

PROJECT TECHNICAL DISCUSSION – JORDON (APTIM)

- Project Construction Schedule
- Project Construction Access and Staging Areas (Map and Plans)
- Project Specifications (Surveys, Outfalls, Buildings, Limit of Fill, Daily Report)
Jordon (APTIM) emphasized the Pay Schedule outlined in the Project Specifications and that it will be based on pay profile and tonnage. There will be no acceptations to the pay schedule. Cubic Yards conversion is based off a 1:1.5 ratio of Tons:CY
- Project SOW (Bid Items)
- Sediment QA/QC Plan

PERMIT MODIFICATION

- Upland Sand Sources (Sand RFQ)
- Beach Access and Staging Locations (Map and Plans)

QUESTIONS AND COMMENTS

Questions & Answers

Q: Will there be an exception to opening multiple beach accesses at once?

A: It will be up to the contractor to coordinate with County staff, but the County will allow for the opening of 1 ½ beach accesses. This means one access can be used to move sand north and south and another access and move only one direction to meet up with sand being placed from the full opened access. It will be up to the contractor to do this in a way that minimizes impacts to local businesses and public beach accesses.

Q: If the crew is off the beach by 5pm can we still work after 5 to prepare for the next day?

A: If the Contractor would like to extend their work hours beyond 5pm to stockpile or prepare for work the next day, and allow any linger trucks stuck in traffic to drop their load, they will need to coordinate with the County and Project Manager (APTIM). All work shall cease by sunset. If a County inspector is needed for the work extension, the Contractor will be responsible for a pay rate of time and a half.

Q: Will a County inspector be on site at all times?

A: Yes, the County and/or an engineering consultant will be onsite.

Q: Will the County be responsible for public safety?

A: The Contractor is responsible for keeping the work site safe. The County will invite the police to the pre-construction meeting and will assist with public safety where feasible. The County will also assist with information dissemination to City officials, businesses and the public during construction.

Meeting adjourned at 3:45pm

**MANDATORY PRE-BID MEETING
SIGN-IN SHEET**

**INDIAN RIVER COUNTY ENGINEERING
INDIAN RIVER COUNTY ADMINISTRATION BUILDING**

Room A1-303 Building A

SECTOR 5 BEACH AND DUNE RESTORATION PROJECT

March 7, 2019 at 10:00 A.M.

NAME	COMPANY & ADDRESS	PHONE # / FAX # / CELL #	EMAIL ADDRESS
Sean Hennrich	Eastman Aggregates	954-328-0808	sean@eastmanagg.com
Bernie Eastman	" "	561-719-9146	Bernie@eastmanagg.com
Nick Stewart	Stewart Materials	772-971-1500	nick@stewartmaterials.com
MARK STEWART	Rio - BAK	561 791 9721	mark@rio-bak.com
BILL ENCK	SMT	772-360-8111	BILL STEWART MATERIALS.COM
JAMES W. ENRICH	IRC	772 226-1380	james@ircgo.com
Kendra Cope	IRC	1569	KCope
Quintin Bergman	IRC	772 1648	qbergman
Jennifer Hyde	IRC	772 226 1416	purchasing@ircgo.com

**MANDATORY PRE-BID MEETING
SIGN-IN SHEET
INDIAN RIVER COUNTY ENGINEERING
INDIAN RIVER COUNTY ADMINISTRATION BUILDING
Room A1-303 Building A
SECTOR 5 BEACH AND DUNE RESTORATION PROJECT
March 7, 2019 at 10:00 A.M.**

NAME	COMPANY & ADDRESS	PHONE # / FAX # / CELL #	EMAIL ADDRESS
Robbie McKeith	Aquatic Plants	863-430-8845	robbye@aqa.com
Moe Madrigal	Pickleson EIT Inc	772-429-4444	m.madrigal@pickleson.com
Bill Yoder	Ranger Construction Inc	772-464-6460	bill.yoder@rangerconstruction.com
Roy Luke	SIBONEY CONSTRUCTION CO	561-722-0857	R.Luke@siboneycc.com
Tom Winslow	Phillips & Jordan	813-539-0549	Estimate@PaulJ.com
Tommy King	Rio-Bak	561-718-8211	tommy@rio-bak.com
Robert Sweeney	Concrete America, Inc	305-670-7585	RSweeney@concreteamerica.com
Kenny Arrington	S D R	407-709-2504	KennyCarr@Gmail.com

**MANDATORY PRE-BID MEETING
SIGN-IN SHEET**

INDIAN RIVER COUNTY ENGINEERING

INDIAN RIVER COUNTY ADMINISTRATION BUILDING

Room A1-303 Building A

SECTOR 5 BEACH AND DUNE RESTORATION PROJECT

March 7, 2019 at 10:00 A.M.

NAME	COMPANY & ADDRESS	PHONE # / FAX # / CELL #	EMAIL ADDRESS
JORDON CHEIFET	APT ^m 2481 NW BOCA RATON BLVD BOCA RATON, FL 33431	561-361-3772	jordan.chiefet@aptm.com
Tom Pieno	APT ^m , Boca Raton, FL	561-756-2535	thomas-pieno@aptm.com
Tony Contreras	Siboney Contracting	(561) 236-4612	TContreras@siboney.com
Paul Suellestop	CHC	561 472 4145	psuellestop@CHCGovt.com
WHADE RILEY	FERRIS & CONSTRUCTION	772-284-3589	WRT@FERRIS&CONSTRUCTION.com
BUTCH MCGOVERN	EARTH TECH ENTERPRISES	239-274-1223 X114	butch@earthtechenterprises.com
Chris White	Cardno	574 249 8504	Chris.White@cardno.com
Mike Kalman	XGD Systems, LLC	772 286 3419	mkalman@xgd.systems
BEN GVENTER	Gventer Brothers Construction LLC	772-461-8345	ben@gventerconstruction.com

From: [Boudreau, William](#)
To: [Kendra Cope](#)
Subject: Permit Mod - Sector 5
Date: Tuesday, August 13, 2019 10:16:57 AM

Good morning Kendra,

The Department of Environmental Protection has reviewed your application for a minor modification to the Indian River County Sector 5 Beach and Dune Restoration permit, JCP No. 0363427-001-JC. The proposed modification, which will add 7 upland sand sources and an additional construction access corridor to the permit, has been approved, and no additional information is required. The required permit fee is currently processing. Once processing of the permit fee is complete, the modification will be issued.

Please let me know if you have any questions or concerns.



Zach Boudreau
Environmental Specialist III
Beaches Inlets and Ports Program
Division of Water Resource Management
Florida Department of Environmental Protection
(850) 245-7585



December 14, 2018

Kendra Cope, Environmental Specialist
Indian River County
1801 27th Street
Vero Beach, Florida 32960

Re: Indian River County RFQ #2019019
Beach Compatible Upland Sand Sources for Beach Erosion Control Projects

This letter is to recommend pre-qualification of upland sand sources in response to the County's Request for Qualifications RFQ #2019019. We recommend three (3) of the submitted four (4) upland sand suppliers (i) be accepted by the County as pre-qualified under the referenced RFQ, and (ii) to be submitted to the FDEP and USACE for acceptance, for the purpose of permitting. Below is a "Summary Table of Upland Sand Sources", which summarizes our assessment.

Potential Upland Sand Sources – Summary Table

Supplier	Sand Source	Granularmetrics				Composition (wt%)	Munsell Color	Passes Visual Examination	Recommended for	
		Size Class (wt%)		Descriptive Statistics					County Beaches	Sector 7 Project
		Gravel ⁽¹⁾	Fines ⁽²⁾	Mean (mm)	Median (mm)					
						Carbonate	Numeric	Y/N	Y/N	Y/N
Vulcan Materials	Diamond	0.00	0.06	0.40	0.41		10YR 8/1	Y	Y	Y
	Witherspoon	0.00	0.07	0.50	0.56	0.1	7.5YR 7/1	Y	Y	Y
	Sandland	0.00	0.03	0.38	0.36	0.2	10YR 8/2	Y	Y	N
Stewart Mining Industries	BCH450 - Processed	0.00	0.20	0.53	0.54	30.8	10YR 7/1	Y	Y	Y
	BCH320 - Processed	0.00	0.20	0.39	0.38	4.0	10YR 7/1	Y	Y	N
Jahna Industries	Independent - North	0.00	0.35	0.38	0.33	0.6	10YR 7/1	Y	Y	N
	Independent - South	0.00	0.56	0.46	0.45	1.6	10YR 7/1	Y	Y	Y
	Greenbay	0.00	0.29	0.44	0.47	0.2	10YR 7/1	Y	Y	Y
	Haines City	0.00	0.22	0.36	0.33	0.9	10YR 6/2	Y	Y	N
Babcock Coquina	Ditch Five	1.86	0.24	0.42	0.51	31.0	10YR 7/3	N	N	N
County Criteria		<2%	<2%	0.33 to 0.55	0.33 to 0.55	<50%	10YR, 2.5Y, or 5Y ≥ 7/≤ 2			
Sector 7 Criteria		<2%	<2%	0.33 to 0.55	≥ 0.43 mm	<50%	10YR, 2.5Y, or 5Y ≥ 7/≤ 2			
Footnotes:		(1) Gravel corresponds to percent retained on #4 sieve								
		(2) Fines corresponds to percent passing a #230 sieve								

Please note that four potential suppliers responded to the RFQ including:

1. Vulcan Materials Company – who offered three (3) sources: Diamond, Witherspoon, and Sandland;
2. Jahna Industries – who offered four (4) sources: Independent – South, Independent – North, Greenbay Sand, and Haines City;
3. Stewart Mining Industries – who offered two (2) sources: BCH450 and BCH320; and
4. Babcock Coquina Mine – who offered one (1) source: the Ditch Five.

Celebrating 30th Anniversary

Coastal • Engineering • Economics • Energy • Environmental • GIS • Planning • Transportation • Surveying

Note that:

- The location of each upland sand source is shown below in Figure 1.
 - Sources in **green** are (i) recommended as acceptable for all County beaches including the proposed Sector 7 Beach and Dune Restoration Project, and (ii) to be submitted to FDEP for approval.
 - Sources in **yellow** are recommended as acceptable for all County beaches including post-storm dune restoration in Sector 7, but not for the proposed Sector 7 Beach and Dune Restoration Project.
 - Sources in **red** are not recommended for any County beaches.
- We have evaluated the submitted responses based on the criteria cited in the RFP. The criteria include:
 - Granularmetrics
 - Composition of Carbonate,
 - Munsell Color, and
 - our visual/tactile Examination of the samples for compliance with 62B-41.007 F.A.C relative to provisions: "4. Construction debris, toxic material or other foreign matter"; and "5. not result in cementation of the beach."
- For each potential supplier and sand source, the Summary Table presents:
 - Granularmetric, Composition, and Munsell Color data provided by the responder,
 - a yes (Y) or no (N) characterization of whether:
 - the sample passed the Examination, and
 - we recommend County acceptance as pre-qualified for County-beaches and/or Sector 7.
- All responders indicated they have the production "capacity to provide at least 1,000 cy per day ready for delivery, on average, for a 100 day period".

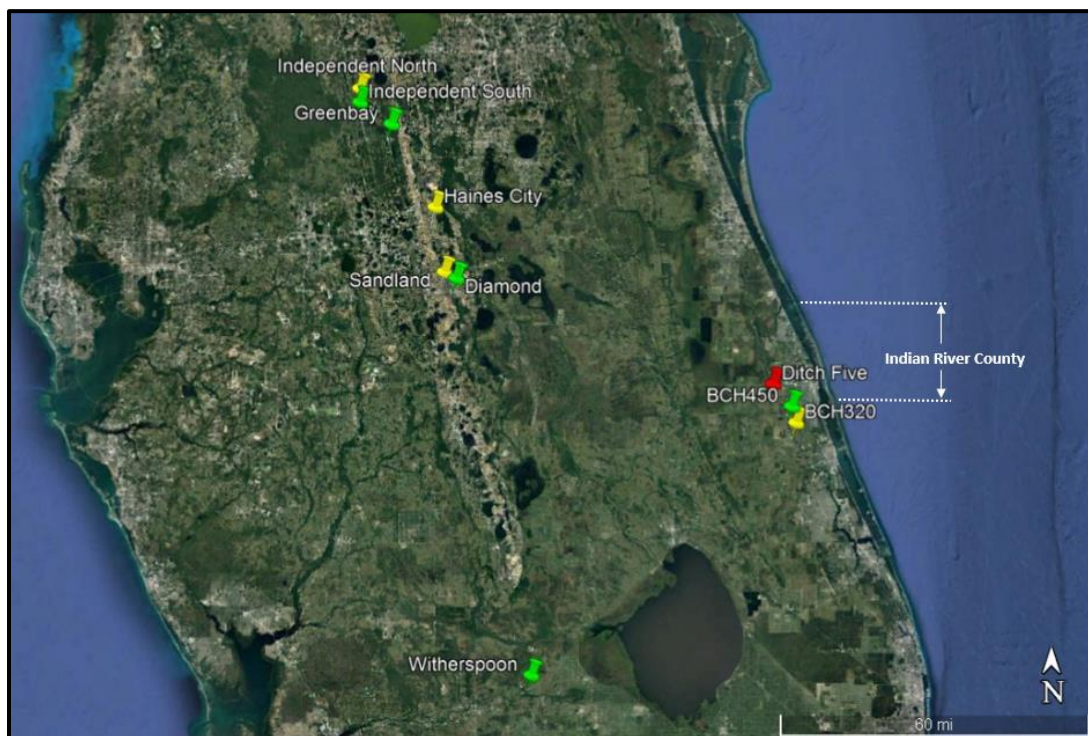


Figure 1 – Location of Upland Sand Sources
(From: Google Earth, 2018)

The following summarizes our evaluation of the samples:

1. Vulcan Materials

a) Diamond – recommended for all County beaches including Sector 7

- Granularmetrics: Sediment meets general County criteria but doesn't meet Sector 7 criteria for median grain size greater than or equal to 0.43 mm; however, sediment has median grain size of 0.41 mm which is sufficiently close to the criteria and is recommended as acceptable based on engineering judgement.
- Composition: Sediment meets criteria for carbonate composition.
- Color: The responder reported a Munsell color of 10YR 8/1, which meets the criteria, however our assessment suggests a slightly darker value of between 10YR 8/1 and 10YR 7/1, which is also acceptable.
- Capacity: The responder reported an available capacity of 50,000 tons, but did not report daily production rates.
- Visual Inspection: Visual inspection revealed sediment of good quality and no odor was detected relative to foreign matter.

b) Witherspoon – recommended for all County beaches including Sector 7

- Granularmetrics: Sediment does not meet criteria for the median grain size criteria for the maximum at 0.55 mm; but 0.56 mm is only 0.01 mm larger and is sufficiently close to the maximum to be recommended for all County beaches including Sector 7 - based on engineering judgement.
- Composition: Sediment meets criteria for carbonate composition.
- Color: The responder reported a Munsell color of 7.5YR 7/1, which is not an acceptable value, however our assessment suggests a different color hue of 10YR 7/1.
- Capacity: The responder reported an available capacity of 80,000 tons but did not report daily production rates.
- Visual Inspection: Visual inspection revealed sediment of good quality and no odor was detected relative to foreign matter.

c) Sandland – recommended for all County beaches except Sector 7

- Granularmetrics: Sediment meets general County criteria and is acceptable for County beaches except Sector 7; a median grain size of 0.36 mm is too fine for Sector 7 beaches.
- Composition: Sediment meets criteria for carbonate composition.
- Color: The responder reported a Munsell color of 10YR 8/2, which is acceptable per the requirements, however our assessment suggests a Munsell color between 10YR 7/1 and 10YR 8/1.
- Capacity: The responder reported an available capacity of 50,000 tons but did not report daily production rates.
- Visual Inspection: Tactile examination revealed sediment from this mine is of good quality and although it is too fine for Sector 7 beaches, it is recommended for other County beaches. No odor was detected relative to foreign matter.

2. Stewart Mining Industries

a) BCH450 Processed – recommended for all County beaches including Sector 7

- Granularmetrics: Sediment meets general County criteria and Sector 7 criteria with a median grain size of 0.54 mm, and is recommended for all County beaches.
- Composition: Sediment meets criteria for carbonate composition.
- Color: The responder reported a Munsell color of 10YR 7/1 which is acceptable per the requirements.
- Capacity: The responder reported an available capacity of greater than 1,404,000 cubic yards (cy) and a daily production rate of 3,210 cy/day.
- Visual Inspection: Visual inspection revealed sediment of good quality and no odor was detected relative to foreign matter.

b) BCH320 Processed - recommended for all County beaches except Sector 7

- Granularmetrics: Sediment meets general County criteria and is acceptable for County beaches except Sector 7; a median grain size of 0.38 mm is too fine for Sector 7 beaches.
- Composition: Sediment meets criteria for carbonate composition.
- Color: The responder reported a Munsell color of 10YR 7/1 which is acceptable per the requirements.
- Capacity: The responder reported an available capacity of greater than 7,123,000 cubic yards (cy) and a daily production rate of 3,210 cy/day.
- Visual Inspection: Tactile examination revealed sediment from this mine is of good quality and although it is too fine for Sector 7 beaches, it is recommended for other County beaches. No odor was detected relative to foreign matter.

3. Jahna Industries

a) Independent South - recommended for all County beaches including Sector 7

- Granularmetrics: Sediment meets general County criteria and Sector 7 criteria with a median grain size of 0.45 mm, and is therefore recommended for all County beaches.
- Composition: Sediment meets criteria for carbonate composition.
- Color: The responder reported a Munsell color of 10YR 7/1 which is acceptable per the requirements.
- Capacity: The responder reported an available capacity of greater than 100,000 cubic yards (cy) and a daily production rate of 2,700 cy/day.
- Visual Inspection: Visual inspection revealed sediment of good quality and no odor was detected relative to foreign matter.

b) Independent North - recommended for all County beaches except Sector 7

- Granularmetrics: Sediment meets general County criteria and is acceptable for County beaches except Sector 7; a median grain size of 0.33 mm is too fine for Sector 7 beaches.
- Composition: Sediment meets criteria for carbonate composition.
- Color: The responder reported a Munsell color of 10YR 7/1 which is acceptable per the requirements.

- Capacity: The responder reported an available capacity of greater than 100,000 cubic yards (cy) and a daily production rate of 2,700 cy/day.
 - Visual Inspection: Visual inspection revealed sediment of good quality and no odor was detected relative to foreign matter.
- c) Greenbay - recommended for all County beaches including Sector 7
- Granularmetrics: Sediment meets criteria with a median grain size of 0.47 mm, and is recommended for all County beaches.
 - Composition: Sediment meets criteria for carbonate composition.
 - Color: The responder reported a Munsell color of 10YR 7/1, which is acceptable per the requirements.
 - Capacity: The responder reported an available capacity of greater than 100,000 cubic yards (cy) and a daily production rate of 3,700 cy/day.
 - Visual Inspection: Visual inspection revealed sediment of good quality and no odor was detected relative to foreign matter.
- d) Haines City - recommended for all County beaches except Sector 7
- Granularmetrics: Sediment meets general County criteria but does not meet Sector 7 criteria with a median grain size of 0.33 mm; therefore the proposed sample is not recommended for Sector 7 beaches.
 - Composition: Sediment meets criteria for carbonate composition.
 - Color: The responder reported a Munsell color of 10YR 6/2, which is darker than the allowable standard, however tactile examination revealed a Munsell color of 10YR 7/1 which is acceptable per the requirements.
 - Capacity: The responder reported an available capacity of greater than 100,000 cubic yards (cy) and a daily production rate of 1,500 cy/day.
 - Visual Inspection: Tactile examination revealed sediment from this mine is of good quality and although it is too fine for Sector 7 beaches, it is recommended for other County beaches. No odor was detected relative to foreign matter.
4. Babcock Coquina Mine
- a) Ditch Five Sand Mine – not recommended for any County beaches
- Granularmetrics: Sediment meets County criteria and Sector 7 criteria.
 - Composition: Although carbonate composition of this sample is the greatest of all proposed samples (31%), it does meet the County criteria.
 - Color: The responder reported a Munsell color of 10YR 7/3, which is not an acceptable color Chroma per the requirements; however, our assessment indicates an acceptable Munsell color of between 10YR 7/1 and 10YR 7/2.
 - Visual Inspection: The proposed sediment from this responder meets all of the County's general criteria and specific Sector 7 criteria; however, tactile examination revealed sediment from this mine is of poor quality. Along with a high concentration of large shells, sediment from this mine apparently includes clay that could result in some "cementation of the beach". Figure 2 shows the relative sizes of shells and clumps of cemented sediment in the sample, which is not recommended for use on any County beaches; the sediment does not comply with Section 62B-33.0155(h) F.A.C.



Figure 2 – Grab Sample of Ditch Five Sand Mine

If you have any questions, please contact me or Hannah Walsh.

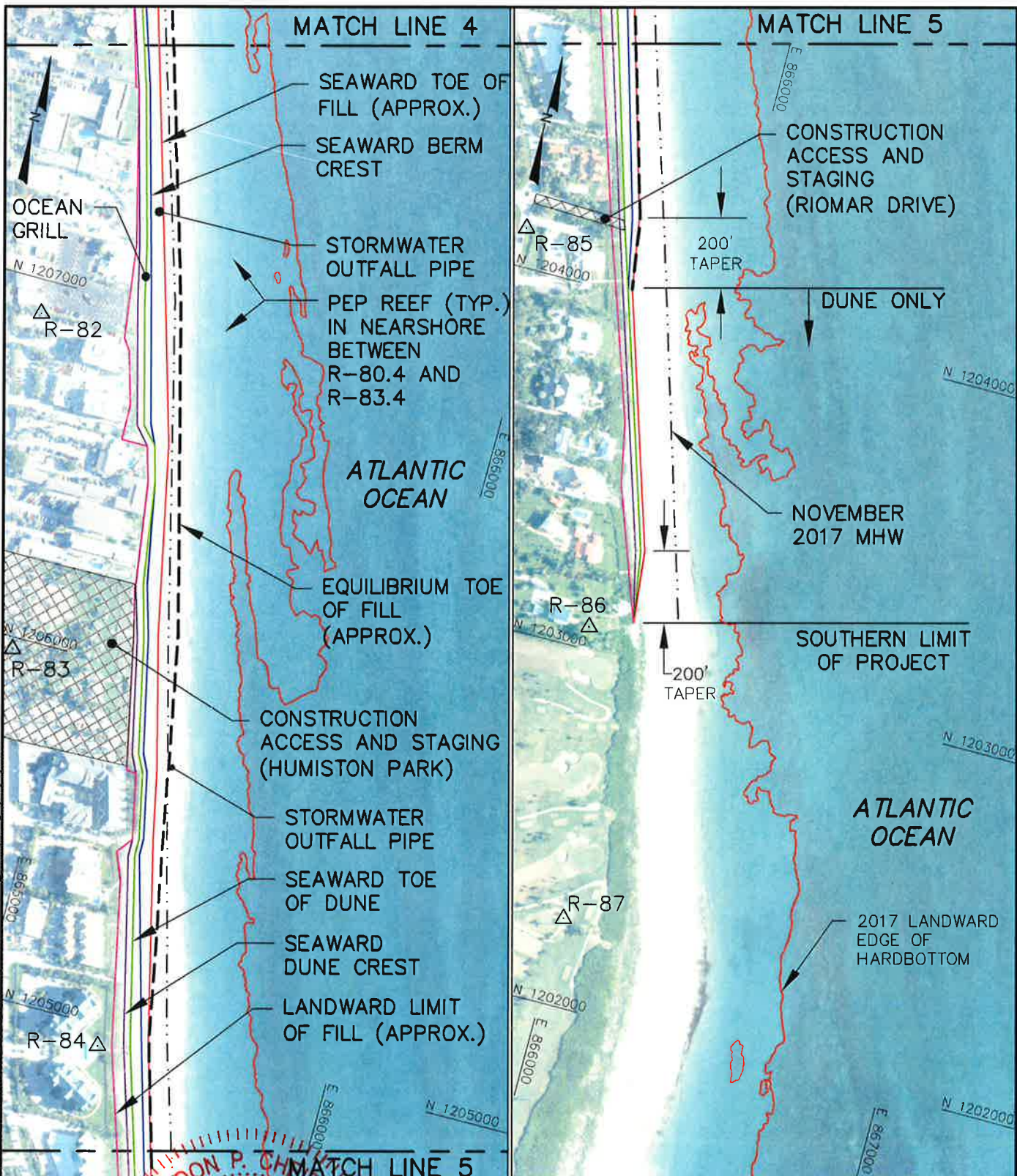
Sincerely,

Handwritten signature of Charles Tem Fontaine, III in blue ink.

Charles Tem Fontaine, III
Senior Coastal Engineer

cc: James Gray, James Ennis – Indian River County
Hannah Walsh, Michael Walther – Coastal Tech – G.E.C., Inc.

P:\Indian River\636208650.WC#12_Sector 5 Design\CAD\Permits\636208650P_PV.dwg - Jul 01, 2019 @ 1:35pm - gary.kryshniak



INDIAN RIVER COUNTY, FL
SECTOR 5 BEACH AND DUNE RESTORATION PROJECT
PLAN VIEW

Aptim Environmental & Infrastructure, Inc.

PH (561) 381-8103
FAX (561) 381-8116
C.O.A. FL 94028

2481 NW BOCA RATON BOULEVARD
BOCA RATON, FLORIDA 33431
www.aptim.com

DATE:

3/6/18

BY:

GK

COMM NO.:

636208650

SHEET:

5 of 15

NOTES:

1. AERIAL PHOTOGRAPHY JULY 28, 2017.
2. LANDWARD EDGE OF HARDBOTTOM DELINEATED BY APTIM USING JULY 28, 2017 AERIAL PHOTOGRAPHY.
3. COORDINATES ARE IN FEET REFERENCED TO THE FLORIDA STATE PLANE COORDINATE SYSTEM, EAST ZONE, NORTH AMERICAN DATUM OF 1983 (NAD83).



GRAPHIC SCALE IN FT

NOT FOR CONSTRUCTION
FOR REGULATORY REVIEW ONLY


JORDON P. CHEIFET P.E. NO. 72876

7/1/19
DATE

REVISIONS		
DATE	BY	DESCRIPTION
7/1/19	JPC	REVISED CONSTRUCTION ACCESS PER COUNTY COMMENTS

INDIAN RIVER COUNTY
INTER-OFFICE MEMORANDUM

TO: Jason Brown
County Administrator

FROM: Suzanne Boyll 
Human Resources Director

DATE: June 1, 2018

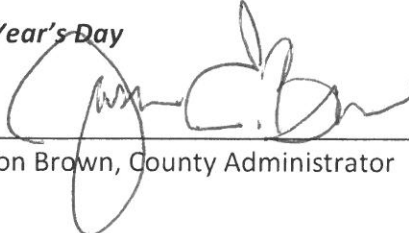
SUBJECT: 2019 Holiday Schedule

For consideration by the Board of County Commissioners, the following is the proposed schedule of holidays for Indian River County employees for 2019:

<u>Holiday</u>	<u>County Observance</u>
New Year's Day	Tuesday, January 1, 2019
Martin Luther King Jr. Day	Monday, January 21, 2019
Good Friday	Friday, April 19, 2019
Memorial Day	Monday, May 27, 2019
Independence Day	Thursday, July 4, 2019
Labor Day	Monday, September 2, 2019
Veterans Day	Monday, November 11, 2019
Thanksgiving Day	Thursday, November 28, 2019
Day after Thanksgiving	Friday, November 29, 2019
Christmas Eve	Tuesday, December 24, 2019
Christmas Day	Wednesday, December 25, 2019

New Year's Day

Wednesday, January 1, 2020

By: 
Jason Brown, County Administrator

6/21/18
Date