

TASK ORDER #08

REST BEACH JOINT COASTAL PERMIT

RESOLUTION NO. 11051

General

Rest Beach is located immediately east of the White Street Pier on Atlantic Boulevard in Key West, Florida. At \sim 643 feet long, Rest Beach represents the second longest segment of public beach managed by the City of Key West (City). The Florida Department of Environmental Protection (FDEP) and the U.S. Army Corps of Engineers (USACE) issued permit numbers 441670759 and 199300342 (IP-JG), respectively, to the City to restore the beach front. Under the authorization of these permits, Rest Beach was improved in 1995 with: (1) the placement of \sim 2,600 cubic yards of sand from upland sources, (2) removal of invasive species, and (3) construction of landscape improvements. These permits also authorized the addition of 140 cubic yards of sand to Rest Beach following the Ground Hog Day storm in February 1998. The FDEP permit expired on June 1, 1998 and the USACE permit expired on September 19, 1999. Another permit was issued to the City, authorizing the placement of \sim 654 tons of sand on Rest Beach from approved upland sources in early 2006, after four hurricanes (Hurricanes Dennis, Katrina, Rita, and Wilma) passed nearby. This permit also later expired.

The Joint Coastal Permit (JCP) application process was initiated for Rest Beach in July 2008 to conduct additional restoration activities; however, due to inactivity in the process, this application was withdrawn on March 2, 2012 by the City at the request of the FDEP Bureau of Beaches and Coastal Systems. In order to provide stability to Rest Beach and to ensure that it provides both upland protection and recreational quality, the City has requested Atkins assist with re-initiating the JCP application process which will allow for continued maintenance of Rest Beach. Atkins intends to request a 10-year maintenance permit for Rest Beach which will allow for multiple renourishment events during the permit period. The following items outline the tasks associated with the JCP application process for Rest Beach. The estimated labor hours and fees per task are provided on the attached spread sheet.

1.0 Project Scoping and Kick-Off

The Project Kick-off task includes both internal and external meetings for the Rest Beach JCP project (Task 1.1). Internal meetings will occur with representatives from Atkins and City management to discuss the overall JCP application process, the long and short term direction the City would like to take in managing the beach, and to obtain any relevant documents/literature from the City for the JCP application submittal. External coordination will occur between Atkins and governmental agencies including, but not limited to, the FDEP Bureau of Beaches and Coastal Systems and the USACE. Agency coordination will occur at the start of the JCP application process and throughout the length of the project.

2.0 <u>Baseline Biological and Hydrographic Data</u>

One of the items listed in the JCP application is a description and quantification of natural communities at the project site. This includes submerged aquatic vegetation and hardbottom communities that may exist offshore of the proposed construction activities. Biological assessments were conducted at Rest Beach from March-June 2007 and again in October 2010 for the 2008 JCP application; however, a more current survey may be required for a complete JCP application package.



The first step of the biological task is to obtain authorization from the Florida Keys National Marine Sanctuary (Sanctuary), as the project site is located within Sanctuary boundaries (Task 2.1.1). To obtain a permit, Atkins will submit a permit application detailing the location of the proposed project, the purpose of the Rest Beach renourishment project, the methods and protocols that will be utilized during the biological assessment, potential environmental impacts associated with construction activities, and the rationale for the project. Once authorization is received from the Sanctuary, Atkins biologists (i.e., certified divers with prior experience in coral and seagrass habitat evaluations) will conduct the biological assessment (Task 2.1.2). With the use of SCUBA and other supporting equipment, Atkins will document (qualitatively and quantitatively) the benthic habitats within the project site in compliance with the Sanctuary approved plan. Data collected during the biological assessment will be compiled, analyzed, and presented in a biological baseline monitoring report. The baseline report will be submitted to the FDEP Bureau of Beaches and Coastal Systems, the USACE, as well as the Sanctuary (Task 2.1.3).

It is possible the proposed design for Rest Beach (see Item 3 below) may have impacts to seagrass and/or benthic habitats within the project site which may require mitigation. The 2008 application package proposed the Keys Environmental Restoration Fund (KERF) site as mitigation for impacts at the project site; however, the KERF site is not a FDEP accepted mitigation bank (there are none in the Keys), and is not yet an approved regional offsite mitigation area (ROMA). A site specific mitigation plan may be required with the ICP application submittal to offset impacts to natural resources as a result of the project. While conducting the baseline biological assessment, Atkins biologists will assess up to three areas in close proximity to the project site to determine locations where it may be possible to conduct mitigation activities (Task 2.1.2). Atkins will negotiate with the agencies to agree on a mitigation plan that will appropriately compensate for any loss of ecological function as a result of the project (Task 2.1.4). Once the mitigation plan is decided, a more detailed monitoring plan (specific to the monitoring site) will be developed. The monitoring plan will be a stand-alone document presenting methodologies, monitoring schedule, reporting requirements, and relevant maps and figures (Task 2.1.5). This plan will provide a description of the biological monitoring survey area, methods utilized to qualitatively and quantitatively describe the benthic habitats within the biological monitoring survey area, the proposed monitoring schedule, and the reporting requirements.

The JCP application package also requires topographic and bathymetric survey drawings of the proposed project site, including profiles and a contour map that reflect conditions within the past six months. The most recent topographic/bathymetric survey completed at Rest Beach was conducted in March 2007, approximately 4 years ago, and therefore will require updating. The topographic/bathymetric task required for the JCP application involves the establishment of survey controls/monuments, topographic and bathymetric data collection, and the submission of survey maps signed and sealed by a certified land surveyor (Tasks 2.2.1 and 2.2.2).

The JCP application process may also require the establishment of an erosion control line (ECL) for Rest Beach to define the boundary between private upland property and submerged state owned lands (161.161 (5), F.S.). Field data on the location of the ECL will be collected in conjunction with the topographic and bathymetric survey data (Tasks 2.2.1) and a signed and sealed ECL map will be prepared for submission to the FDEP Bureau of Beaches and Coastal Systems (Tasks 2.2.3). Establishment of an ECL for Rest Beach was initiated during the 2008 JCP application process and the City approved the action in Resolution No. 11-156 (June 2011). Maps displaying the proposed ECL were submitted to the FDEP Bureau of Beaches and Coastal Systems and requests for



additional information (RAI) were issued by the agency but the process of public notification and recording of the ECL were not completed.

3.0 <u>Design</u>

Complete sets of engineering and construction drawings are required prior to submittal of the JCP application package. Construction drawings were submitted with the 2008 JCP application; however, after four requests for additional information, the construction plans were not sufficiently complete to satisfy the JCP process. To produce a complete set of construction plans, Atkins Coastal Engineers will need to coordinate with government agencies, the biological and survey teams, and conduct geotechnical analyses to design a beach template that could be used for multiple renourishment events (Tasks 3.1 and 3.2). The design will take into account project site topography, beach fill material, intended use of the dry sand and wet sand beach areas, ocean currents, and storm events. The signed and sealed deliverable will be submitted to FDEP and the USACE for approval and incorporation into the permit (Task 3.4).

Another component of the design task is geotechnical analysis of native sediment at Rest Beach (Task 3.3). Representative physical samples will be collected from Rest Beach and submitted to a laboratory to determine particle size, color, and carbonate content. A sediment QA/QC plan will also be prepared to ensure that the sediment to be used for beach nourishment meets the standards set forth in paragraph 62B-41.007(2)(j), F.A.C. This task was conducted in July 2010; however, this data needs to reflect conditions within the past six months at the proposed project site.

4.0 Environmental Permit Preparation

As briefly stated above, a JCP application was submitted for Rest Beach in 2008. Since this original submittal, four requests for RAI were submitted by the FDEP Bureau of Beaches and Coastal Systems dated October 15, 2008, July 1, 2010, September 10, 2010, and February 10, 2011, of which the first three were responded to. Due to project inactivity for one year, the FDEP Bureau of Beaches and Coastal Systems requested a withdrawal of the JCP application or the agency would deny the permit application. The City sent an email communication on March 2, 2012 withdrawing the application with the intent to continue the process within a few months. The FDEP Bureau of Beaches and Coastal Systems expressed a willingness to work with the City on the new application and would allow any relevant information from the 2008 application to augment information provided with the new application.

Atkins possesses a majority of the documents submitted with the 2008 JCP application submittal, as well as each RAI response, but a complete new application package will need to be compiled and submitted to the FDEP Bureau of Beaches and Coastal Systems (Task 4.1). In addition, a new Department of the Army (DA) permit application will need to be submitted to the USACE (Task 4.1). Atkins will coordinate responses to RAIs from both agencies as part of the permit application review process.

In addition to the survey tasks associated with establishing the ECL, a public process is required for recording the ECL (Task 4.2). This will include coordination with the FDEP Bureau of Beaches and Coastal Systems and coordination with the City communications department for setting up a public workshop and ECL hearing, notifying adjacent property owners, and publishing public notices in local newspapers and the Florida Administrative Weekly.

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	Rodperson	Instrument	Tech I	Tech II	Sr Toch I	Sr Tech II	III	Sr. Tech IV	Sr Tech V	PTP/Sr. Div Manager	Hours	Cost
Category		Operator I										
Task	\$29.00	\$47.00	\$55.00	\$75.00	\$90.00	\$110.00	\$125.00	\$150.00	\$175.00	\$200.00		
1.0 - Project Kick Off												
1.1 Project Scoping and Kick Off						12	24	2	4		<u>42</u>	<u>\$5,320.00</u>
										Subtotal	42	\$5,320.00
2.0 - Baseline Biological and Hydrographic Data												
2.1 Biological												
2.1.1 FKNMS Permitting				6	4		3	1			14	\$1,335.00
2.1.2 Baseline Biological and Mitigation Assessment				24	24		24	24			96	\$10,560.00
2.1.3 Baseline Biological Assessment Report				24	8		8	2			42	\$3,820.00
2.1.4 Mitigation Planning and Report Preparation				20	16		14	8			58	\$5,890.00
2.1.5 Monitoring Plan				20	16		32	4	2		74	\$7,890.00
2.2 Topographic/Bathymetric Survey												
2.2.1 Establish Survey Controls and Data Collection	23	23		23	23						92	\$5,543.00
2.2.2 Deliver DTM Map (signed and sealed)						28		10		8	46	\$6,180.00
2.2.3 Prepare ECL Map						16		5		2	<u>23</u>	\$2,910.00
										Subtotal	445	\$44,128.00
3.0 - Design												
3.1 Agency Coordination						16	10		1		27	\$3,185.00
3.2 Topographic Survey Coordination							8				8	\$1,000.00
3.3 Geotechnical Analysis					10	10	16		2		38	\$4,350.00
3.4 Design and 50% Plan Set (Permit Drawings)					40	16	20		3		<u>79</u>	\$8,385.00
										Subtotal	152	\$16,920.00
4.0 - Environmental Permit Preparation												
4.1 Prepare JCP/DA Application Package, RAI Responces					16		50	8	4		78	\$9,590.00
4.2 Public Process Recording of ECL							32		2		<u>34</u>	\$4,350.00
										Subtotal	112	\$13,940.00
										Total Labor	751	\$80,308.00
									Total Expenses			\$6,399.00
										Total		\$86,707.00

Notes:

- 1) The categories and rates are derived from Resolution 11-051
- 2) Fees will be billed on a time charge basis.
- 3) Permit fees will be paid for by the City.
- 4) Acronyms:

FKNMS - Florida Keys National Marine Sanctuary

ECL - Erosion Control Line

DTM - Digital Terrain Model

JCP - Joint Coastal Permit

DA - Department of the Army

RAI - Request for Additional Information



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Item	Unit	Unit Unit Price		Task 2	Task 3	Task 4	Task 5	Task 6
Per Diem	day	\$42.00	\$84.00	\$1,190.00				
Mileage	mile	\$0.49	\$305.00	\$610.00				
Plane	R/T	At cost						
Tolls	Each	at cost						
Accommodations	per/nite	\$175.00		\$1,750.00				
Jon Boat w/ outboard	day	\$50.00		\$100.00				
Boat to 20'	1/2 day	\$200.00						
Boat to 20'	day	\$350.00						
Boat greater than 20'	day	at cost						
Snorkel Gear	day	\$15.00						
SCUBA Equipment	day	\$40.00		\$360.00				
Geotech Sub	Samples	\$250.00			\$2,000.00			
Misc Field Supplies	each	\$100.00						
Subtotal			\$389.00	\$4,010.00	\$2,000.00	\$0.00	\$0.00	\$0.00

Total \$6,399.00

