

St. Charles Parish

Introductions

St. Charles Parish Courthouse 15045 Highway 18 P.O. Box 302 Hahnville, LA 70057 985-783-5000 www.stcharlesparish-la.gov

Parish Council

Council Chairman Terrell D. Wilson
Councilmembers Wendy Benedetto, Paul J. Hogan,
Mary K. Clulee, Dick Gibbs, William Billy Woodruff,
Marilyn B. Bellock, Traci A. Fletcher, Julia Fisher-Perrier

Monday, September 18, 2017

6:00 PM

Council Chambers, Courthouse

Final

ORDINANCES / RESOLUTIONS INTRODUCED FOR PUBLICATION / PUBLIC HEARING

Monday, October 2, 2017, 6:00 pm, Council Chambers, Courthouse, Hahnville

2017-0299

An ordinance to amend the St. Charles Parish Zoning Ordinance of

1981, to change the zoning classification from C-2, General

Commercial-Retail Sales to M-2, Heavy Manufacturing and Industry on Lots 1 and 26-A, Almedia Plantation Subdivision, municipal address 10511 Airline Drive, St. Rose as requested by MHI Investments, LLC.

Sponsors:

Mr. Cochran and Department of Planning & Zoning

2017-0300

An ordinance approving PZSPU 2017-04, for expansion of the Type III Construction and Demolition Debris landfill at 5900 LA 3127, Killona onto Parcel H2, approximately 70 acres, as requested by KV

Enterprises, LLC.

Sponsors:

Mr. Cochran and Department of Planning & Zoning

S* 2017-0306

An ordinance approving and authorizing the execution of Change Order No. 1 (Balancing) for Parish Project No. S141201, Ellington Levee Force Main Relocation, to balance the contract quantities with actual quantities resulting in a decrease of \$1,585.22 and a decrease in time

of thirty six (36) days.

Sponsors:

Mr. Cochran and Department of Wastewater

S* 2017-0308

An ordinance to approve and authorize the execution of a contract with Tullier Services, LLC, for Parish Project No. S080503-4; Upgrades to Anna and Ama Lift Stations, with a Base Bid in the amount of

\$203,000.00 and Alternate Bid in the amount of \$11,000.

Sponsors:

Mr. Cochran and Department of Wastewater

S*	2017-0309 Sponsors:	An ordinance to approve and authorize the Parish President to execute a Lease agreement with Raven Land, LLC for the County Agent's office in St. Charles Parish. Mr. Cochran and Chief Administrative Officer
S*	<u>2017-0310</u>	An ordinance to approve and authorize the Parish President to execute a Lease agreement with D.J.V., LLC for the River Parishes Workforce Development Board Office in St. Charles Parish.
	Sponsors:	Mr. Cochran and Workforce Innovations and Opportunity Act Program
~	<u>2017-0311</u>	An ordinance approving the cancellation of Lease Agreement between St. Charles Parish and Gator Cove Marina II, LLC for a Westbank Boat Launch.
	Sponsors:	Mr. Cochran and Department of Parks and Recreation
~	<u>2017-0312</u>	An ordinance to approve and authorize the execution of an agreement to make irrevocable donation between St. Charles Parish and RNW Community, LLC and Normandy Associates for property upon which to construct the Des Allemands Boat Launch located off LA 632 in Des Allemands.
	Sponsors:	Mr. Hogan
~	<u>2017-0313</u>	An ordinance authorizing and accepting a Professional Services Agreement for St. Charles Parish to conduct modeling and a flood insurance map appeal for the west bank of St. Charles Parish, LAMP FEMA Challenge SCP Project # LAMP-OO1.
	<u>Sponsors:</u>	Mr. Cochran, Coastal Zone Management Section, Ms. Benedetto, Mr. Hogan, Mr. Wilson, Ms. Cluiee, Mr. Gibbs, Mr. Woodruff, Ms. Bellock, Ms. Fletcher and Ms. Fisher-Perrier

Accommodations for Disabled

St. Charles Parish will upon request and with three (3) days advanced notice provide reasonable accommodation to any disabled individual wishing to attend the meeting. Anyone requiring reasonable accommodation is requested to contact the Office of the Council Secretary at (985) 783-5000 to discuss the particular accommodations needed.

<u>2017-0311</u> INTRODUCE	D BY: LARRY COCHRAN, PARISH PRESIDENT
ORDINANCE	(DEPARTMENT OF PARKS & RECREATION)
OKDINANCI	An ordinance approving the cancellation of Lease Agreement between St. Charles Parish and Gator Cove Marina II, LLC for a Westbank Boat Launch.
WHEREAS,	the citizens of St. Charles Parish have expressed a need for a public boat launch on the Westbank of St. Charles Parish; and,
WHEREAS,	in an attempt to satisfy this public need for a boat launch, a lease agreement for land suitable for a boat launch was presented to the St. Charles Parish Council, as File No. 2017-0263; and,
WHEREAS,	on August 28, 2017, after proper advertisement and satisfaction of all legal requirements including the conducting of a public hearing, File No. 2017-0263 was duly voted on and enacted as Ordinance No. 17-8-14; and,
WHEREAS,	the St. Charles Parish Council desires that the Lease Agreement entered pursuant to Ordinance No. 17-8-14 for a Public Boat Launch be formally cancelled.
SECT	ARLES PARISH COUNCIL HEREBY ORDAINS: ION I. That the Lease Agreement between St. Charles Parish and Gator
which was exhereby autho	II, LLC for a Westbank Boat Launch authorized to have been entered, and secuted by the Parish President, be cancelled and that the Parish President is rized to take the necessary steps to cancel said Lease Agreement. bregoing ordinance having been submitted to a vote, the vote thereon was as
follows:	pregoting ordinance having been submitted to a vote, the vote thereon was as
	ne ordinance was declared adopted this day of, 2017, fective (5) days after publication in the Official Journal.
CHAIRMAN:	
DLVD/PARISH P	PRESIDENT:
APPROVED:	DISAPPROVED:
PARISH PRESID	DENT:
RETD/SECRETA	ARY:

AT:_____ RECD BY: _____



PARISH PRESIDENT

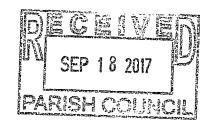
St. Charles Parish

Office Of The Parish President

P.O. BOX 302 • HAHNVILLE, LOUISIANA 70057 (985) 783-5000• FAX: (985) 308-1933

Website: www.stcharlesparish-la.gov • lcochran@stcharlesgov.net

September 13, 2017



Gator Cove Marina II, LLC 16124 Highway 3235 CutOff, LA 70345

Re:

Lease Agreement between St. Charles Parish

and Gator Cove II, LLC

Gentlemen:

Please be advised that St. Charles Parish hereby exercises its right to cancel the referenced lease in accordance with Paragraph 6(b) thereof.

We trust that GATOR COVE MARINA II, LLC will forego any lease payments which may be due it in accordance with said lease.

RLR:dhh

Sincer

2017-0312
INTRODUCED BY: PAUL J. HOGAN, PE, COUNCILMAN-AT-LARGE, DIVISION B ORDINANCE NO
An ordinance to approve and authorize the execution of
an agreement to make irrevocable donation between
St. Charles Parish and RNW Community, LLC and
Normandy Associates for property upon which to
construct the Des Allemands Boat Launch located off
LA 632 in Des Allemands.
WHEREAS, it has been the desire of the Parish to relocate the existing problematic
Des Allemands Boat launch from its current location beneath the Highway
90 Bridge; and,
WHEREAS, RNW Community, LLC and Normandy Associates have offered to donate
property located off LA 632 for the relocation of the Des Allemands Boat
Launch upon the Parish securing funds for its construction; and,
WHEREAS, the Parish desires to construct a boat launch at this location and wishes to
accept the property offered for donation upon the Parish securing the
necessary funding to construct the boat launch.
THE ST. CHARLES PARISH COUNCIL HEREBY ORDAINS:
SECTION I. That the agreement to make irrevocable donation between
St. Charles Parish and RNW Community, LLC and Normandy Associates for property

SECTION I. That the agreement to make irrevocable donation between St. Charles Parish and RNW Community, LLC and Normandy Associates for property upon which to construct the Des Allemands Boat Launch located off LA 632 in Des Allemands is hereby approved and accepted.

SECTION II. That the Parish President is hereby authorized to execute said Agreement to Make Irrevocable Donation on behalf of St. Charles Parish.

The foregoing ordinance having been submitted to a vote, the vote thereon was as follows:

	ordinance was declared adopted thisective five (5) days after publication in the	, 2017,
CHAIRMAN:		
SECRETARY:		•
DLVD/PARISH PRE	ESIDENT:	
APPROVED:	DISAPPROVED:	
PARISH PRESIDE	NT:	•
RETD/SECRETAR	Y:	
AT:	RECD BY:	

AGREEMENT TO MAKE IRREVOCABLE DONATION

The undersigned RNW COMMUNITY, LLC and NORMANDY ASSOCIATES, owner and mortgagee, respectively, (collectively, Grantors) of that certain property located in the Parish of St. Charles, State of Louisiana (Parish), known as Lot 338-A containing 15.038 acres and a 60-foot wide access to said Lot 338-A from the WPA Road connecting with Louisiana Highway 632 containing 3.283 acres all in accordance with a survey by Lucien C. Gassen, P.L.S., dated February 24, 2994 revised April 8, 1994 (collectively Property).

The Property was acquired from Texaco, Inc. by Theriot Shipbuildings, LLC and transferred by merger 16 December 2005 into Manchac Marine, LLC, which company issued a mortgage in favor of First National Bank USA. On 22 May 2008 the said bank sold the note and assigned the mortgage to RNW Community, LLC. On 9 March 2009, Manchac Marine, LLC issued a *Dation en Paiement* to RNW Community LLC, which was recorded on 4 May 2009 in St. Charles Parish Book 1321 Page 279. Normandy Associates currently holds a multiple indebtedness mortgage on the Property recorded 4 May 2009 in St. Charles Parish Book 1321 Page 285. RIVERBEND CORPORATION – RW2 is the Manager of RNW Community, LLC and the General Partner of Normandy Associates. Robert Wiegand II is the President of RIVERBEND CORPORATION.

Grantors agree, under the terms and conditions set out herein, to donate to the Parish a site out of Lot 338-A in the south East corner of said lot, which site is to measure along the easterly side from the SE corner approximately 575 feet northerly to the northern line of the 60-foot wide access, thence westerly approximately 250 feet along a line extending the northern line of the 60 foot wide access, and thence southerly to the southern property line of Lot 338-A, containing approximately 3.01 acres (Boat Launch Site).

Grantors further agree, under the terms and conditions set out herein, to donate to the Parish the 60 foot wide access from WPA Road containing 3.283 acres.

Grantors further agree that this described property shall not be alienated or encumbered in a manner as would in any way forestall this donation until after the 3rd anniversary of the execution of this agreement after which this agreement shall expire unless agreed otherwise in writing by both parties. During the 3 year period, the Parish shall seek funding for the boat launch and access roadway. Upon securing the funding source, the Parish will prepare all documentation needed for the Parish council to accept the donation and will accept the same.

The donation will be subject to the following conditions:

1. The donation is to be a charitable donation to the Parish to be used exclusively for the development of a public boat launch containing no commercial activities and an access roadway. This development shall be known as "the project."

18 September 2017 Page 1 of 3

- 2. The donation is to be made with a reservation of a utilities easement for the bringing of water, sewer (future), gas, telephone, and cable (and additional utilities) as may be necessary to service the remainder of Lot 338-A. When speaking of "servicing the remainder of Lot 338-A", it is understood that the said balance may be used for industrial, commercial, or multiple residential uses or a combination of same.
- 3. The Parish will construct a minimum 25 foot wide hard surface access roadway within the 60 foot wide access, which roadway must extend from the WPA Road to the western edge of the Boat Launch Site for access to the Boat Launch and to the remainder of Lot 338-A. Said road is to be built to Parish standards for public commercial streets on Parish-owned rights-of-way. However, funding is not immediately available for construction and maintenance of this project. Upon the Parish securing funding for the project, the Parish agrees to construct the project within three (3) years from the date of the donation. Under no circumstances is the Parish obligated to construct the project until such time as a firm commitment for funding is received by the Parish.
- 4. The Parish must install overhead electrical utilities and street lighting along the access roadway and around the Boat Launch Site in conjunction with construction of the project. All such lighting is to be so designed as to minimize the ambient lighting "spilled" outside of the site donated to the Parish and onto the remainder of Lot 338-A. The electrical lines servicing the Boat Launch Site will be of sufficient capacity as to service the remainder of Lot 338-A.
- 5. If Grantor is timely in installing any Additional Utilities, the construction of same and the construction of the road will be coordinated so that so that neither the installation of Additional Utilities nor the construction of the road is unreasonably hampered. Any delays in the construction of the road or the Boat Launch facility caused by Grantor's installation of Additional utilities will increase the time allowed in Paragraph 6 for completion of construction.
- 6. The Parish shall complete construction of the boat launch and access roadway within 3 years of the date of the donation.
- 7. All material excavated from the construction of the roadway and the Boat Launch (and parking) site and not used elsewhere therein must be "deposited and spread" in the borrow canal across remainder of Lot 338-A and in the hole located to the North of donated site.

In my capacity as President of RIVERBEND CORPORATION – RW2, which is, itself, Manager for RNW COMMUNITY, LLC and General Partner of NORMANDY ASSOCIATES, I bind the said companies to the above and foregoing Agreement.

WITNESSES	RIVERBEND CORPORATION – RW2
	By:Robert Wiegand II – President Date:
,	St. Charles Parish By:
	Larry Cochran – President Date:

2017-0313	
INTRODUCE	ED BY: LARRY COCHRAN, PARISH PRESIDENT
	(DEPARTMENT OF CZM) ST. CHARLES PARISH COUNCIL
ORDINANCI	
	An ordinance authorizing and accepting a Professional
	Services Agreement for St. Charles Parish to conduct
	modeling and a flood insurance map appeal for the
	west bank of St. Charles Parish, LAMP FEMA Challenge SCP Project # LAMP-OO1.
WHEREAS,	in an effort to recognize levees, flood control structures, and other
	topographic features to produce accurate flood maps that maintain
	affordable flood insurance, St. Charles Parish was selected as a PILOT
	jurisdiction by FEMA to participate in the Levees Analysis and Mapping Procedures (LAMP) program; and,
WHEREAS.	the agreement with Lonnie G. Harper & Associates, Inc. was authorized
•	by the St. Charles Parish Council in Ordinance #15-9-9 expired on June
	30, 2017; and,
WHEREAS,	FEMA does not have a contractor in place and has not had one for nearly
WHEREAS	one year to evaluate and advise our modelling efforts; and, without a FEMA contractor the project has taken longer than originally
	anticipated; and,
WHEREAS,	the Parish wishes to sign a new contract Lonnie G. Harper & Associates,
	Inc. for one year at the same price with the same conditions to complete
THE ST CH	the originally contracted work. ARLES PARISH COUNCIL HEREBY ORDAINS:
	ION I. That the Professional services agreement for St. Charles Parish to
	deling and a flood insurance map appeal for the west bank of St. Charles
	eby authorized and accepted.
	pregoing ordinance having been submitted to a vote, the vote thereon was
as follows:	

And the ordinand to become effective five	ce was declared adopte (5) days after publicati		, 2017
CHAIRMAN:		<u>-</u>	
SECRETARY:		~~	
DLVD/PARISH PRESIDENT:		_	
APPROVED : DIS	SAPPROVED:	_	•
•			
PARISH PRESIDENT:		_	
RETD/SECRETARY:		 .	
AT: RECD BY:			



ST. CHARLES PARISH

DEPARTMENT OF COASTAL ZONE MANAGEMENT

PROFESSIONAL SERVICES AGREEMENT

This AGREEMENT made and entered into the _	day of	, 2017, by a	nd between ST.
CHARLES PARISH acting herein by and through	its President, w	vho is duly authorized	to act on behalf
of the Parish, hereinafter called the OWNER and I	LONNIE G HA	ARPER & ASSOCIA	TES herein and
through its President, hereinafter called the CONS	SULTANT. Wh	nereas the OWNER de	esires to employ
the CONSULTANT to perform the services described	ribed herein for	Parish Project Leve	e Analysis and
Mapping Procedures, LAMP001.			

1. GENERAL

a. The OWNER engages the CONSULTANT to perform modeling necessary to successfully participate in the LAMP pilot program and Flood Insurance Rate Map Appeal under the consultation of Dr. Joseph Suhayda (LAMP Coordinator) identified and described in the Scope of Services. CONSULTANT services shall conform to the requirements of the OWNER and all participating regulating agencies.

2. SERVICES OF THE CONSULTANT

a. The services consist of the work defined in the following Scope of Services.

b. SCOPE OF SERVICES:

• Complete those tasks included in EXHIBIT A assigned through the OWNER determined to be necessary for the successful participation by St. Charles Parish in the LAMP pilot program and Flood Insurance Rate Map Appeal

3. PERIOD OF SERVICE

- a. The CONSULTANT shall complete and produce all tasks assigned by the OWNER within the time frame and task orders established by the LAMP Coordinator.
- b. In the event that delays are experienced beyond the control of the CONSULTANT, the schedule may be revised as mutually agreed upon by the OWNER and the CONSULTANT.
- c. The contract shall expire on June 30, 2018 unless extended by mutual written agreement by both parties.

4. CONSULTANT'S COMPENSATION

- a) The method of payment for this AGREEMENT is <u>HOURLY</u> based on the Not to Exceed amounts for each task order for services listed in EXHIBIT A or a lower negotiated amount. Fees for the Services shall be charged to Client at an hourly rate charge according to the schedule in EXHIBIT A. Client agrees to pay CONSULTANT for all services that CONSULTANT performs. If the not to exceed sum is exceeded, it will be considered outside the scope of services and upon approval by the OWNER will be billed as additional billable at the appropriate rates.
- b) Reimbursable expenses shall be approved prior to expenditure, fully documented and reimbursed at cost. Mileage reimbursement will be billed at the appropriate IRS Standard Mileage Rate.
- c) Such payment to be made to CONSULTANT within thirty (30) days after receipt of CONSULTANT'S invoice by OWNER.

5. SERVICES OF THE OWNER

- a. OWNER shall assist CONSULTANT in carrying out the Scope of Services by placing at his disposal all existing relevant data and records in its possession.
- b. CONSULTANT shall be responsible for searching said data and records provided and shall request specific clarification of the information as needed.
- c. OWNER guarantees CONSULTANT access to all public property as required in order to complete the Scope of Services.
- d. CONSULTANT shall work with other consultants working on the PROJECT under the direction of the OWNER.

6. TERMINATION

- a. This AGREEMENT may be terminated without cause by either party upon ten (10) days written notice.
- b. Immediately after receiving such notice, the CONSULTANT shall discontinue advancing the services under this AGREEMENT.
- c. CONSULTANT shall invoice an ascertainable sum proportionate to the lump sum fee amount described in Section 4. The percentage of services completed shall be based upon the Scope of Services set forth in Section 2B.
- d. In no event shall the fee exceed what is set forth in Section 4E of the AGREEMENT.
- e. OWNER, upon receiving the completed or partially completed deliverables, and after the final fee is mutually agreed upon, shall make payment within thirty (30) days.
- f. In the event that this contract is terminated, OWNER shall have the option of completing the Scope of Services in house or entering into an AGREEMENT with another party to complete the work.

7. COMPLIANCE WITH LAWS AND ORDINANCES

a. The CONSULTANT hereby agrees to comply with all Federal, State, and Local Laws and Ordinances applicable to the Scope of Services under this AGREEMENT.

8. SUCCESSORS AND ASSIGNS

a. This AGREEMENT is not assignable.

9. INSURANCE

- a. The CONSULTANT shall secure and maintain at his expense such General Liability insurance that will protect him and the OWNER, from claims under the Workmen's Compensation Acts and from claims for bodily injury, death or property damage which may arise from performance of services under this AGREEMENT.
- b. Insurance for bodily injury or death shall be in the <u>unencumbered</u> amount of FIVE HUNDRED THOUSAND DOLLARS (\$500,000.00) for one person and not less than ONE MILLION DOLLARS (\$1,000,000.00) for all injuries and/or deaths resulting from any one occurrence.
- c. The insurance for property damage shall be in the <u>unencumbered</u> amount of FIVE HUNDRED THOUSAND DOLLARS (\$500,000.00) for each accident and not less than ONE MILLION DOLLARS (\$1,000,000.00) aggregate.
- d. CONSULTANT shall also secure and maintain at his own expense professional liability insurance in the <u>unencumbered</u> sum of ONE MILLION DOLLARS (\$1,000,000.00).
- e. All certificates of insurance shall be furnished to the OWNER within five (5) days after execution of the AGREEMENT and shall provide that insurance not be cancelled without ten (10) days prior written notice to the OWNER.

- f. St. Charles Parish shall be named as additional insured on general liability insurance policies.
- g. OWNER may examine all insurance policies.
- h. For all purposes under Louisiana law, the principals of this AGREEMENT shall be recognized as the statutory employer of all contract employees as provided in LSA-R.S. 23:1061.

10. OTHER

- a. CONSULTANT shall indemnify and save harmless the OWNER against any and all claims, demands, suits or judgments for sums of money to any party for loss of life or injury or damages to person or property growing out of, resulting from or by reason of any negligent act by the CONSULTANT, its agents, servants or employees, while engaged upon or in connection with the services required or performed hereunder.
- b. This AGREEMENT constitutes the entire agreement between the parties. There are no understandings, agreements, or representations, oral or written, not specified within this AGREEMENT. This AGREEMENT may not be modified, supplemented or amended, in any manner, except by written agreement signed by both parties.

11. EXCLUSIVE JURISDICTION AND VENUE

a. For all claims arising out of or related to this agreement, CONSULTANT hereby consents and yields to the exclusive jurisdiction and venue of the Twenty-Ninth Judicial District Court for the Parish of St. Charles and expressly waives any (a) pleas of jurisdiction based upon CONSULTANT'S residence and (b) right of removal to Federal Court based upon diversity of citizenship.

IN WITNESS WHEREOF, the parties hereto have executed this AGREEMENT the day, month and year first above mentioned,

ATTEST	ST. CHARLES PARISH		
	By: Mr. Larry Cochran Parish President		
ATTEST	Lonnie G. Harper & Associates		
- A STATE OF THE S	By: Lonnie Harper, President		

Contract Evaluation Levee Analysis and Mapping Procedures, LAMP001 Lonnie G. Harper & Associates

9/18/2017

	Task	Budget	% Complete	Balance
Task 1	Flood Threat Assessment	\$237,240.00	100	\$0.00
Task 2	Surge Modeling	\$387,380.00	85	\$58,107.00
Task 3	WHAFIS Modeling	\$107,683.00	40	\$64,609.80
Task 4	Reporting	\$84,968.00	7	\$79,020.24
	Total	\$817,271.00		\$201,737.04
	Invoice #	Amount		
	7499	\$109,859.55		
	7523	\$90,574.65		
	7660	\$210,128.30		
	7752	\$204,971.41		
	Total	\$615,533.91		
	Total Budget	\$817,271.00		
	Remaining	\$201,737.09		

Scope of Work For St. Charles Parish BFE and LAMP Modeling Analysis St. Charles Parish, Louisiana

Project Team: Lonnie G. Harper & Associates, Woods Hole Group, Ransom Consulting

Control of the Annual A	Firm	Staff	Hours .	Rate/hr	Cost
	LGH	Sr. Principal	4	\$213.40	\$853.60
1 Specify engineering and technical procedures that	LGH	Sr. Project Coordinator	8	\$187.10	\$1,496.80
	LGH	Engineering Intern II	0	\$114.00	\$0.00
	WHG	Project Mgr	16	\$175.00	\$2,800.00
s and modeling approach	WHG	Coastal Engr/Modeler IV	16	\$135.00	\$2,160.00
		Total A	Inticipated Co	st for Task 1.1:	\$7,310.40
	I CH	Cr. Dringing!	2	\$212.40	\$426.80
	LGH	Sr. Principal Sr. Project Coordinator	12	\$213.40	\$2,245.20
	LGH		16	\$187.10 \$114.00	\$1,824.00
Analyze causes of historic flooding including storm	WHG	Engineering Intern II	8		\$1,400.00
ge, backwater, and rainfall		Project Mgr	40	\$175.00	
	WHG	Coastal Engr/Modeler IV	40	\$135.00	\$5,400.00
		Total A	Inticipated Co	st for Task 1.2:	\$11,296.00
rm surge modeling, the WHAFIS modeling and the ermination of the DFIRM zones and elevations. e Sub-task Breakdown, Below)	Total Anticipated Cost for Task 1.3: \$218,633.60				
1.3 Sub-Task Manhour Estimates	l	Total A	Anticipated Co	st for Task 1.3:	\$218,633.6
1.3 Sub-Task Manhour Estimates 1.3.1 Collect and review all engineering data	reports u		Anticipated Co	st for Task 1.3:	\$218,633.6
	.,	sed in developing the DFIRMs.			
	LGH	sed in developing the DFIRMs. Sr. Principal	0	\$213.40	\$0.00
	LGH LGH	sed in developing the DFIRMs. Sr. Principal Sr. Project Coordinator	0 2	\$213.40 \$187.10	\$0.00 \$374.20
1.3.1 Collect and review all engineering data	LGH LGH LGH	sed in developing the DFIRMs. Sr. Principal Sr. Project Coordinator Engineering Intern II	0 2 2 2	\$213.40 \$187.10 \$114.00	\$0.00 \$374.20 \$228.00
1.3.1 Collect and review all engineering data 1.3.1.1 Intermediate Data Submission Report	LGH LGH LGH LGH	sed in developing the DFIRMs. Sr. Principal Sr. Project Coordinator Engineering Intern II CAD Technician III	0 2 2 2	\$213.40 \$187.10 \$114.00 \$0.00	\$0.00 \$374.20 \$228.00 \$0.00
1.3.1 Collect and review all engineering data	LGH LGH LGH LGH WHG	sed in developing the DFIRMs. Sr. Principal Sr. Project Coordinator Engineering Intern II CAD Technician III Project Mgr	0 2 2 0 8	\$213.40 \$187.10 \$114.00 \$0.00 \$175.00	\$0.00 \$374.20 \$228.00 \$0.00 \$1,400.00
1.3.1 Collect and review all engineering data 1.3.1.1 Intermediate Data Submission Report	LGH LGH LGH WHG	sed in developing the DFIRMs. Sr. Principal Sr. Project Coordinator Engineering Intern II CAD Technician III Project Mgr Coastal Engr/Modeler III	0 2 2 0 8 8	\$213.40 \$187.10 \$114.00 \$0.00 \$175.00 \$135.00	\$0.00 \$374.20 \$228.00 \$0.00 \$1,400.00 \$1,080.00
1.3.1 Collect and review all engineering data 1.3.1.1 Intermediate Data Submission Report	LGH LGH LGH LGH WHG	sed in developing the DFIRMs. Sr. Principal Sr. Project Coordinator Engineering Intern II CAD Technician III Project Mgr	0 2 2 0 8	\$213.40 \$187.10 \$114.00 \$0.00 \$175.00	\$0.00 \$374.20 \$228.00 \$0.00 \$1,400.00
1.3.1 Collect and review all engineering data 1.3.1.1 Intermediate Data Submission Report	LGH LGH LGH WHG WHG	sed in developing the DFIRMs. Sr. Principal Sr. Project Coordinator Engineering Intern II CAD Technician III Project Mgr Coastal Engr/Modeler III Coastal Engr/Modeler IV	0 2 2 0 8 8 8 4	\$213.40 \$187.10 \$114.00 \$0.00 \$175.00 \$135.00 \$110.00	\$0.00 \$374.20 \$228.00 \$0.00 \$1,400.00 \$1,080.00 \$440.00
1.3.1 Collect and review all engineering data 1.3.1.1 Intermediate Data Submission Report	LGH LGH LGH WHG WHG	sed in developing the DFIRMs. Sr. Principal Sr. Project Coordinator Engineering Intern II CAD Technician III Project Mgr Coastal Engr/Modeler III Coastal Engr/Modeler IV Sr. Principal	0 2 2 0 8 8 8 4	\$213.40 \$187.10 \$114.00 \$0.00 \$175.00 \$135.00 \$110.00	\$0.00 \$374.20 \$228.00 \$0.00 \$1,400.00 \$1,080.00 \$440.00
1.3.1 Collect and review all engineering data 1.3.1.1 Intermediate Data Submission Report	LGH LGH LGH WHG WHG WHG	Sed in developing the DFIRMS. Sr. Principal Sr. Project Coordinator Engineering Intern II CAD Technician III Project Mgr Coastal Engr/Modeler III Coastal Engr/Modeler IV Sr. Principal Sr. Project Coordinator	0 2 2 0 8 8 8 4	\$213.40 \$187.10 \$114.00 \$0.00 \$175.00 \$135.00 \$110.00	\$0.00 \$374.20 \$228.00 \$0.00 \$1,400.00 \$440.00 \$213.40 \$748.40
1.3.1 Collect and review all engineering data 1.3.1.1 Intermediate Data Submission Report	LGH LGH LGH WHG WHG WHG LGH LGH LGH LGH LGH	sed in developing the DFIRMs. Sr. Principal Sr. Project Coordinator Engineering Intern II CAD Technician III Project Mgr Coastal Engr/Modeler III Coastal Engr/Modeler IV Sr. Principal Sr. Project Coordinator Engineering Intern II	0 2 2 0 8 8 8 4 4 1 1 4 4 1 1 1 1 1 1 1 1 1 1 1	\$213.40 \$187.10 \$114.00 \$0.00 \$175.00 \$135.00 \$110.00 \$213.40 \$187.10 \$114.00	\$0.00 \$374.20 \$228.00 \$0.00 \$1,400.00 \$1,080.00 \$440.00 \$748.40 \$748.40
1.3.1 Collect and review all engineering data 1.3.1.1 Intermediate Data Submission Report	LGH LGH LGH WHG WHG WHG LGH LGH LGH LGH LGH LGH	sed in developing the DFIRMs. Sr. Principal Sr. Project Coordinator Engineering Intern II CAD Technician III Project Mgr Coastal Engr/Modeler III Coastal Engr/Modeler IV Sr. Principal Sr. Project Coordinator Engineering Intern II CAD Technician III	0 2 2 0 8 8 8 4 4 1 4 16 2	\$213.40 \$187.10 \$114.00 \$0.00 \$175.00 \$135.00 \$110.00 \$213.40 \$187.10 \$114.00 \$0.00	\$0.00 \$374.20 \$228.00 \$0.00 \$1,400.00 \$1,080.00 \$440.00 \$213.40 \$748.40 \$1,824.00 \$0.00
1.3.1 Collect and review all engineering data 1.3.1.1 Intermediate Data Submission Report (IDS) I and II	LGH LGH LGH WHG WHG WHG LGH LGH LGH LGH LGH LGH LGH LGH LGH L	sed in developing the DFIRMs. Sr. Principal Sr. Project Coordinator Engineering Intern II CAD Technician III Project Mgr Coastal Engr/Modeler III Coastal Engr/Modeler IV Sr. Principal Sr. Project Coordinator Engineering Intern II CAD Technician III Project Mgr	0 2 2 0 8 8 8 4 4 16 2 8	\$213.40 \$187.10 \$114.00 \$0.00 \$175.00 \$135.00 \$110.00 \$213.40 \$187.10 \$114.00 \$0.00 \$175.00	\$0.00 \$374.20 \$228.00 \$0.00 \$1,400.00 \$1,080.00 \$440.00 \$213.40 \$748.40 \$1,824.00 \$1,400.00
1.3.1 Collect and review all engineering data 1.3.1.1 Intermediate Data Submission Report (IDS) I and II	LGH LGH WHG WHG WHG WHG WHG WHG WHG	sed in developing the DFIRMs. Sr. Principal Sr. Project Coordinator Engineering Intern II CAD Technician III Project Mgr Coastal Engr/Modeler III Coastal Engr/Modeler IV Sr. Principal Sr. Project Coordinator Engineering Intern II CAD Technician III Project Mgr Coastal Engr/Modeler III	0 2 2 0 8 8 8 4 4 16 2 8 8 32	\$213.40 \$187.10 \$114.00 \$0.00 \$175.00 \$135.00 \$110.00 \$213.40 \$187.10 \$114.00 \$0.00 \$175.00 \$135.00	\$0.00 \$374.20 \$228.00 \$0.00 \$1,400.00 \$1,080.00 \$440.00 \$213.40 \$748.40 \$1,824.00 \$0.00 \$1,400.00 \$4,320.00
1.3.1 Collect and review all engineering data 1.3.1.1 Intermediate Data Submission Report (IDS) I and II	LGH LGH LGH WHG WHG WHG LGH LGH LGH LGH LGH LGH LGH LGH LGH L	sed in developing the DFIRMs. Sr. Principal Sr. Project Coordinator Engineering Intern II CAD Technician III Project Mgr Coastal Engr/Modeler III Coastal Engr/Modeler IV Sr. Principal Sr. Project Coordinator Engineering Intern II CAD Technician III Project Mgr	0 2 2 0 8 8 8 4 4 16 2 8	\$213.40 \$187.10 \$114.00 \$0.00 \$175.00 \$135.00 \$110.00 \$213.40 \$187.10 \$114.00 \$0.00 \$175.00	\$0.00 \$374.20 \$228.00 \$0.00 \$1,400.00 \$1,080.00 \$440.00 \$213.40 \$748.40 \$1,824.00 \$0.00 \$1,400.00
1.3.1 Collect and review all engineering data 1.3.1.1 Intermediate Data Submission Report (IDS) I and II	LGH LGH LGH LGH WHG WHG WHG WHG WHG WHG WHG WHG WHG W	Sr. Principal Sr. Project Coordinator Engineering Intern II CAD Technician III Project Mgr Coastal Engr/Modeler III Coastal Engr/Modeler IV Sr. Principal Sr. Project Coordinator Engineering Intern II CAD Technician III Project Mgr Coastal Engr/Modeler IV	0 2 2 0 8 8 8 4 1 4 16 2 8 32 8	\$213.40 \$187.10 \$114.00 \$0.00 \$175.00 \$135.00 \$110.00 \$213.40 \$187.10 \$114.00 \$0.00 \$175.00 \$135.00 \$110.00	\$0.00 \$374.20 \$228.00 \$0.00 \$1,400.00 \$1,080.00 \$440.00 \$748.40 \$1,824.00 \$0.00 \$1,400.00 \$4,320.00
1.3.1 Collect and review all engineering data 1.3.1.1 Intermediate Data Submission Report (IDS) I and II	LGH LGH LGH WHG WHG WHG WHG WHG WHG LGH LGH LGH WHG WHG	Sr. Principal Sr. Project Coordinator Engineering Intern II CAD Technician III Project Mgr Coastal Engr/Modeler III Coastal Engr/Modeler IV Sr. Principal Sr. Project Coordinator Engineering Intern II CAD Technician III Project Mgr Coastal Engr/Modeler III CAD Technician III Project Mgr Coastal Engr/Modeler III Coastal Engr/Modeler III Coastal Engr/Modeler III Coastal Engr/Modeler IV Sr. Principal	0 2 2 2 0 8 8 8 4 4 15 2 8 8 32 8 8	\$213.40 \$187.10 \$114.00 \$0.00 \$175.00 \$135.00 \$110.00 \$213.40 \$187.10 \$114.00 \$0.00 \$175.00 \$110.00	\$0.00 \$374.20 \$228.00 \$0.00 \$1,400.00 \$1,080.00 \$440.00 \$748.40 \$1,824.00 \$0.00 \$1,400.00 \$4,320.00 \$426.80
1.3.1 Collect and review all engineering data 1.3.1.1 Intermediate Data Submission Report (IDS) I and II	LGH LGH WHG WHG WHG WHG WHG WHG LGH LGH LGH WHG WHG	sed in developing the DFIRMs. Sr. Principal Sr. Project Coordinator Engineering Intern II CAD Technician III Project Mgr Coastal Engr/Modeler III Coastal Engr/Modeler IV Sr. Principal Sr. Project Coordinator Engineering Intern II CAD Technician III Project Mgr Coastal Engr/Modeler III Coastal Engr/Modeler III Coastal Engr/Modeler III Coastal Engr/Modeler III Coastal Engr/Modeler IV Sr. Principal Sr. Principal Sr. Project Coordinator	0 2 2 2 0 8 8 8 4 4 16 2 8 8 32 8 8	\$213.40 \$187.10 \$114.00 \$0.00 \$175.00 \$135.00 \$110.00 \$213.40 \$187.10 \$114.00 \$0.00 \$175.00 \$110.00	\$0.00 \$374.20 \$228.00 \$0.00 \$1,400.00 \$1,080.00 \$440.00 \$748.40 \$1,824.00 \$0.00 \$1,400.00 \$4,320.00 \$880.00
1.3.1 Collect and review all engineering data 1.3.1.1 Intermediate Data Submission Report (IDS) I and II	LGH LGH WHG WHG WHG WHG WHG LGH LGH LGH LGH LGH LGH LGH LGH LGH L	sed in developing the DFIRMs. Sr. Principal Sr. Project Coordinator Engineering Intern II CAD Technician III Project Mgr Coastal Engr/Modeler III Coastal Engr/Modeler IV Sr. Principal Sr. Project Coordinator Engineering Intern II CAD Technician III Project Mgr Coastal Engr/Modeler III Coastal Engr/Modeler III Sr. Project Mgr Coastal Engr/Modeler III Coastal Engr/Modeler III Sr. Principal Sr. Principal Sr. Principal Sr. Project Coordinator Engineering Intern II	0 2 2 0 0 8 8 8 4 4 16 2 8 8 32 8 8 2 8 0 0	\$213.40 \$187.10 \$114.00 \$0.00 \$175.00 \$135.00 \$110.00 \$213.40 \$187.10 \$114.00 \$0.00 \$175.00 \$135.00 \$114.00 \$14.00 \$175.00 \$135.00 \$110.00	\$0.00 \$374.20 \$228.00 \$0.00 \$1,400.00 \$1,080.00 \$440.00 \$748.40 \$1,824.00 \$0.00 \$4,320.00 \$4,320.00 \$4,320.00 \$1,496.80 \$0.00
1.3.1 Collect and review all engineering data 1.3.1.1 Intermediate Data Submission Report (IDS) I and II 1.3.1.2 Technical Support Data Notebook	LGH LGH WHG WHG WHG WHG WHG WHG WHG LGH LGH LGH LGH LGH LGH LGH LGH LGH L	sed in developing the DFIRMs. Sr. Principal Sr. Project Coordinator Engineering Intern II CAD Technician III Project Mgr Coastal Engr/Modeler III Coastal Engr/Modeler IV Sr. Principal Sr. Project Coordinator Engineering Intern II CAD Technician III Project Mgr Coastal Engr/Modeler III Coastal Engr/Modeler III CAD Technician III Project Mgr Coastal Engr/Modeler III Coastal Engr/Modeler IV Sr. Principal Sr. Project Coordinator Engineering Intern II CAD Technician III CAD Technician III	0 2 2 2 0 0 8 8 8 4 4 16 2 8 8 32 8 8 0 0 0 0	\$213.40 \$187.10 \$114.00 \$0.00 \$175.00 \$135.00 \$110.00 \$187.10 \$114.00 \$0.00 \$175.00 \$114.00 \$114.00 \$114.00 \$114.00 \$114.00 \$114.00 \$114.00 \$114.00 \$114.00 \$114.00 \$114.00 \$114.00 \$114.00 \$114.00 \$114.00	\$0.00 \$374.20 \$228.00 \$0.00 \$1,400.00 \$1,080.00 \$440.00 \$213.40 \$748.40 \$1,824.00 \$1,400.00 \$4,320.00 \$4,320.00 \$1,496.80 \$0.00 \$0.00 \$0.00
1.3.1 Collect and review all engineering data 1.3.1.1 Intermediate Data Submission Report (IDS) I and II	LGH LGH LGH WHG WHG WHG WHG WHG WHG LGH LGH LGH LGH LGH LGH LGH LGH LGH L	sed in developing the DFIRMs. Sr. Principal Sr. Project Coordinator Engineering Intern II CAD Technician III Project Mgr Coastal Engr/Modeler III Coastal Engr/Modeler IV Sr. Principal Sr. Project Coordinator Engineering Intern II CAD Technician III Project Mgr Coastal Engr/Modeler IVI Sr. Principal Sr. Project Coordinator Engineering Intern II CAD Technician III Project Mgr Coastal Engr/Modeler IVI Sr. Principal Sr. Principal Sr. Project Coordinator Engineering Intern II CAD Technician III Project Mgr	0 2 2 2 0 0 8 8 8 4 4 16 2 8 8 32 8 8 0 0 0 8 8	\$213.40 \$187.10 \$114.00 \$0.00 \$175.00 \$135.00 \$110.00 \$187.10 \$114.00 \$0.00 \$175.00 \$114.00 \$114.00 \$114.00 \$114.00 \$114.00 \$114.00 \$114.00 \$114.00 \$114.00 \$114.00 \$114.00 \$114.00 \$114.00 \$114.00 \$114.00 \$115.00	\$0.00 \$374.20 \$228.00 \$0.00 \$1,400.00 \$1,080.00 \$440.00 \$748.40 \$1,824.00 \$1,400.00 \$4,320.00 \$4,320.00 \$1,496.80 \$0.00 \$1,496.80 \$0.00 \$1,400.00
1.3.1 Collect and review all engineering data 1.3.1.1 Intermediate Data Submission Report (IDS) I and II 1.3.1.2 Technical Support Data Notebook	LGH LGH WHG WHG WHG WHG WHG WHG WHG LGH LGH LGH LGH LGH LGH LGH LGH LGH L	sed in developing the DFIRMs. Sr. Principal Sr. Project Coordinator Engineering Intern II CAD Technician III Project Mgr Coastal Engr/Modeler III Coastal Engr/Modeler IV Sr. Principal Sr. Project Coordinator Engineering Intern II CAD Technician III Project Mgr Coastal Engr/Modeler III Coastal Engr/Modeler III CAD Technician III Project Mgr Coastal Engr/Modeler III Coastal Engr/Modeler IV Sr. Principal Sr. Project Coordinator Engineering Intern II CAD Technician III CAD Technician III	0 2 2 2 0 0 8 8 8 4 4 16 2 8 8 32 8 8 0 0 0 0	\$213.40 \$187.10 \$114.00 \$0.00 \$175.00 \$135.00 \$110.00 \$187.10 \$114.00 \$0.00 \$175.00 \$114.00 \$114.00 \$114.00 \$114.00 \$114.00 \$114.00 \$114.00 \$114.00 \$114.00 \$114.00 \$114.00 \$114.00 \$114.00 \$114.00 \$114.00	\$0.00 \$374.20 \$228.00 \$0.00 \$1,400.00 \$1,080.00 \$440.00 \$213.40 \$748.40 \$1,824.00 \$1,400.00 \$4,320.00 \$4,320.00 \$1,496.80 \$0.00 \$0.00 \$0.00

	LGH	Sr. Principal	1	\$213.40	\$213.40
	LGH	Sr. Project Coordinator	4	\$187.10	\$748.40
	LGH	Engineering Intern II	4	\$114.00	\$456.00
1.3.1.4 DFIRM Map Panels	LGH	CAD Technician III	8	\$0.00	\$0.00
1.3.1.4 OF MY Wap Patiets	WHG	Project Mgr	1	\$175.00	\$175.00
<i>;</i>	WHG	Coastal Engr/Modeler III	4	\$110.00	\$440.00
	WHG	Coastal Engr/Modeler IV	16	\$135.00	\$2,160.00
	L			·····	
	LGH	Sr. Principal	0	\$213.40	\$0.00
	LGH	Sr. Project Coordinator	2	\$187.10	\$374.20
	LGH	Engineering Intern II	0	\$114.00	\$0.00
1.3.1.5 ADCIRC Computer Files	LGH	CAD Technician III	0	\$0.00	\$0.00
1.5.1.5 ADCING Costiputer Files	WHG	Project Mgr	2	\$135.00	\$270.00
	WHG	Coastal Engr/Modeler III	12	\$110.00	\$1,320.00
	WHG	Coastal Engr/Modeler IV	8	\$135.00	\$1,080.00
	<u> </u>				
	LGH	Sr. Principal	0	\$213.40	\$0.00
	LGH	Sr. Project Coordinator	2	\$187.10	\$374.20
	LGH	Engineering Intern II	0	\$114.00	\$0.00
4.2.4.5.CTMANE Community (C)	LGH	CAD Technician III	0	\$0.00	\$0.00
1.3.1.6 STWAVE Computer Files	WHG	Project Mgr	2	\$175.00	\$350.00
	WHG	Coastal Engr/Modeler III	8	\$110.00	\$880.00
	WHG	Coastal Engr/Modeler IV	4	\$135.00	\$540.00
	<u> </u>				
	LGH	Sr. Principal	2	\$213.40	\$426.80
	LGH	Sr. Project Coordinator	24	\$187.10	\$4,490.40
	LGH	Engineering Intern II	8	\$114.00	\$912.00
	LGH	CAD Technician III	24	\$0.00	\$0.00
1.3.1.7 WHAFIS Computer Files	WHG	Project Mgr	4	\$175.00	\$700.00
	WHG	Coastal Engr/Modeler IV	40	\$135.00	\$5,400.00
	WHG	Coastal Engr/Modeler III	16	\$110.00	\$1,760.00
	<u> </u>				
	LGH	Sr. Principal	2	\$213.40	\$426.80
	LGH	Sr. Project Coordinator	4	\$187.10	\$748.40
	LGH	Engineering Intern II	4	\$114.00	\$456.00
	LGH	CAD Technician III	0	\$0.00	\$0.00
1.3.1.8 FEMA guidelines, manuals, reports	WHG	Project Mgr	4	\$175.00	\$700.00
	WHG	Coastal Engr/Modeler III	8	\$110.00	\$880.00
	WHG	Coastal Engr/Modeler IV	8	\$135.00	\$1,080.00
	<u></u>				
W-11-3-14-1	LGH	Sr. Principal	0	\$213.40	\$0.00
	LGH	Sr. Project Coordinator	2	\$187.10	\$374,20
	LGH	Engineering Intern II	4	\$114.00	\$456.00
1.2.1.0 Deview all evieting	LGH	CAD Technician III	8	\$0.00	\$0.00
1.3.1.9 Review all existing survey data	WHG	Project Mgr	8	\$175.00	\$1,400.00
	WHG	Coastal Engr/Modeler III	16	\$110.00	\$1,760.00
	WHG	Coastal Engr/Modeler IV	16	\$135.00	\$2,160.00
	J	<u> </u>		Fau Tank 1 3 1	fr4 702 40
				for Task 1.3.1:	\$51,703.40
1.3.2 Collect and review the data used in the and locations.	FIS includ	ing bathymetry, topography, l	and cover, a	nd roadway ar	ia ievee elevatioi
	Firm	Staff	Hours	Rate/hr	Cost
	LGH	Sr. Principal		\$213.40	\$0.00
annan e e e e e e e e e e e e e e e e e	LGH	Sr. Project Coordinator	2	\$187.10	\$374.20
1.3.2.1 Review the DEM used in preparing the				\$175.00	\$175.00
	WHG	Project Mgr	1	1	Ψ±1, 2100
1.3.2.1 Review the DEM used in preparing the DFIRMs (does is meet the FEMA mapping criteria requirements for use in a FIS.)	WHG WHG	Project Mgr Coastal Engr/Modeler IV	4	\$135.00	\$540.00

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2.2.2. Varify the accuracy of the DEM (statewid	LGH							
2.2.2 Marifutha accuracy of the DEM (statewid		Sr. Principal	4 16	\$213.40 \$187.10	\$853.60			
1.3.2.2 Verify the accuracy of the DEM (statewide	e LGH	Sr. Project Coordinator			\$2,993.60			
enchmarks were unreliable).	LGH	Engineering Intern II	24	\$114.00	\$2,736.00			
,	LGH	CAD Technician III	24	\$89.20	\$2,140.80			
	LGH	Sr. Project Coordinator	1	\$187.10	\$187.10			
1.3.2.3 Verify that the ADCIRC topography	WHG	Project Mgr	2	\$175.00	\$350.00			
	WHG	Coastal Engr/Modeler IV	8	\$135.00	\$1,080.00			
natches the DEM.	WHG	Coastal Engr/Modeler III	8	\$110.00	\$880.00			
	LGH	Sr. Principal	4	\$213.40	\$853.60			
1.3.2.4 Verify that the WHAFIS topography matches the DEM.	LGH	Sr. Project Coordinator	24	\$187.10	\$4,490.40			
	LGH	Engineering Intern II	32	\$114.00	\$3,648.00			
	LGH	CAD Technician III	32	\$89.20	\$2,854.40			
				L				
	LGH	Sr. Project Coordinator	8	\$187.10	\$1,496.80			
	LGH	Engineering Intern II	24	\$114.00	\$2,736.00			
1.3.2.5 Verify that the WHAFIS topography matches the ADCIRC topography.	LGH	CAD Technician III	12	\$89.20	\$1,070.40			
	WHG	Project Mgr	8	\$175.00	\$1,400.00			
	WHG	Coastal Engr/Modeler IV	16	\$135.00	\$2,160.00			
	WHG	Coastal Engr/Modeler III	16	\$135.00	\$1,760.00			
	Ticu	C. Dincinal		6313.40	¢052.60			
1.3.2.6 Check validity of the bathyetry used in the	LGH	Sr. Principal	4	\$213.40	\$853.60			
		Sr. Project Coordinator	16	\$187.10	\$2,993.60			
ADCIRC model (many source data are decades	LGH	Engineering Intern II	8	\$114.00	\$912.00			
old).	LGH	CAD Technician III	24	\$89.20	\$2,140.80			
1.3.3 Review the set-up of the ADCIRC and S	TWAVE ca			or Task 1.3.2:	\$41,679.90			
1.3.3 Review the set-up of the ADCIRC and S		omputer models used in the FIS						
1.3.3 Review the set-up of the ADCIRC and S	Firm	omputer models used in the FIS		Rate/hr	Cost			
	Firm LGH	omputer models used in the FIS Staff Sr. Principal	Hours	Rate/hr \$213.40	Cost \$0.00			
L.3.3.1 Check to see if ADCIRC and STWAVE	Firm LGH LGH	omputer models used in the FIS Staff Sr. Principal Sr. Project Coordinator	Hours 2	Rate/hr \$213.40 \$187.10	Cost \$0.00 \$374.20			
	Firm LGH LGH WHG	Staff Sr. Principal Sr. Project Coordinator Project Mgr	Hours	Rate/hr \$213.40	Cost \$0.00 \$374.20 \$1,400.00			
L.3.3.1 Check to see if ADCIRC and STWAVE	Firm LGH LGH	omputer models used in the FIS Staff Sr. Principal Sr. Project Coordinator	Hours 2	Rate/hr \$213.40 \$187.10	Cost \$0.00 \$374.20			
1.3.3.1 Check to see if ADCIRC and STWAVE model topographic grids omitted key manmade	Firm LGH LGH WHG	Staff Sr. Principal Sr. Project Coordinator Project Mgr	Hours 2 8	Rate/hr \$213.40 \$187.10 \$175.00	Cost \$0.00 \$374.20 \$1,400.00			
I.3.3.1 Check to see if ADCIRC and STWAVE model topographic grids omitted key manmade and natural levee/ridge structures (do grids	Firm LGH LGH WHG	Staff Sr. Principal Sr. Project Coordinator Project Mgr Coastal Engr/Modeler IV	Hours 2 8 32	Rate/hr \$213.40 \$187.10 \$175.00 \$135.00	Cost \$0.00 \$374.20 \$1,400.00 \$4,320.00			
I.3.3.1 Check to see if ADCIRC and STWAVE model topographic grids omitted key manmade and natural levee/ridge structures (do grids	Firm LGH LGH WHG	Staff Sr. Principal Sr. Project Coordinator Project Mgr Coastal Engr/Modeler IV	Hours 2 8 32	Rate/hr \$213.40 \$187.10 \$175.00 \$135.00	Cost \$0.00 \$374.20 \$1,400.00 \$4,320.00			
1.3.3.1 Check to see if ADCIRC and STWAVE model topographic grids omitted key manmade and natural levee/ridge structures (do grids properly represent the actual field conditions).	Firm LGH LGH WHG WHG	Staff Sr. Principal Sr. Project Coordinator Project Mgr Coastal Engr/Modeler IV Coastal Engr/Modeler III	Hours 2 8 32	Rate/hr \$213.40 \$187.10 \$175.00 \$135.00 \$110.00	Cost \$0.00 \$374.20 \$1,400.00 \$4,320.00 \$880.00			
1.3.3.1 Check to see if ADCIRC and STWAVE model topographic grids omitted key manmade and natural levee/ridge structures (do grids properly represent the actual field conditions).	Firm LGH LGH WHG WHG WHG WHG	Staff Sr. Principal Sr. Project Coordinator Project Mgr Coastal Engr/Modeler IV Coastal Engr/Modeler III Sr. Principal Sr. Principal Sr. Project Coordinator	Hours 2 8 32 8	Rate/hr \$213.40 \$187.10 \$175.00 \$135.00 \$110.00 \$213.40 \$187.10	Cost \$0.00 \$374.20 \$1,400.00 \$4,320.00 \$880.00			
1.3.3.1 Check to see if ADCIRC and STWAVE model topographic grids omitted key manmade and natural levee/ridge structures (do grids properly represent the actual field conditions).	Firm LGH LGH WHG WHG WHG WHG	Staff Sr. Principal Sr. Project Coordinator Project Mgr Coastal Engr/Modeler IV Coastal Engr/Modeler III Sr. Principal Sr. Principal Sr. Project Coordinator Project Mgr	Hours 2 8 32 8 32 8	Rate/hr \$213.40 \$187.10 \$175.00 \$135.00 \$110.00 \$213.40 \$187.10 \$175.00	Cost \$0.00 \$374.20 \$1,400.00 \$4,320.00 \$880.00 \$0.00 \$374.20 \$700.00			
1.3.3.1 Check to see if ADCIRC and STWAVE model topographic grids omitted key manmade and natural levee/ridge structures (do grids properly represent the actual field conditions).	Firm LGH LGH WHG WHG WHG WHG	Staff Sr. Principal Sr. Project Coordinator Project Mgr Coastal Engr/Modeler IV Coastal Engr/Modeler III Sr. Principal Sr. Principal Sr. Project Coordinator	Hours 2 8 32 8	Rate/hr \$213.40 \$187.10 \$175.00 \$135.00 \$110.00 \$213.40 \$187.10	\$0.00 \$374.20 \$1,400.00 \$4,320.00 \$880.00 \$0.00 \$374.20			
1.3.3.1 Check to see if ADCIRC and STWAVE model topographic grids omitted key manmade and natural levee/ridge structures (do grids properly represent the actual field conditions). 1.3.3.2 Verify that inland water features are modeled according to actual dimensions of widtless.	Firm LGH LGH WHG WHG WHG WHG	Staff Sr. Principal Sr. Project Coordinator Project Mgr Coastal Engr/Modeler IV Coastal Engr/Modeler III Sr. Principal Sr. Principal Sr. Project Coordinator Project Mgr Coastal Engr/Modeler IV	Hours 2 8 32 8 2 4 4 8	Rate/hr \$213.40 \$187.10 \$175.00 \$135.00 \$110.00 \$213.40 \$187.10 \$175.00 \$135.00	Cost \$0.00 \$374.20 \$1,400.00 \$4,320.00 \$880.00 \$0.00 \$374.20 \$700.00 \$1,080.00			
1.3.3.1 Check to see if ADCIRC and STWAVE model topographic grids omitted key manmade and natural levee/ridge structures (do grids properly represent the actual field conditions). 1.3.3.2 Verify that inland water features are modeled according to actual dimensions of widtless.	Firm LGH WHG WHG WHG WHG WHG WHG	Staff Sr. Principal Sr. Project Coordinator Project Mgr Coastal Engr/Modeler IV Coastal Engr/Modeler III Sr. Principal Sr. Project Coordinator Project Mgr Coastal Engr/Modeler IV Coastal Engr/Modeler IV	Hours 2 8 32 8 2 4 4 8	Rate/hr \$213.40 \$187.10 \$175.00 \$135.00 \$110.00 \$213.40 \$187.10 \$175.00 \$135.00 \$110.00	Cost \$0.00 \$374.20 \$1,400.00 \$4,320.00 \$880.00 \$0.00 \$374.20 \$700.00 \$1,080.00			
1.3.3.1 Check to see if ADCIRC and STWAVE model topographic grids omitted key manmade and natural levee/ridge structures (do grids properly represent the actual field conditions). 1.3.3.2 Verify that inland water features are modeled according to actual dimensions of widtless.	Firm LGH LGH WHG WHG WHG WHG WHG WHG LGH WHG WHG	Staff Sr. Principal Sr. Project Coordinator Project Mgr Coastal Engr/Modeler IV Coastal Engr/Modeler III Sr. Principal Sr. Principal Sr. Project Coordinator Project Mgr Coastal Engr/Modeler IV Coastal Engr/Modeler IV Coastal Engr/Modeler III	Hours 2 8 32 8 2 4 8 16	Rate/hr \$213.40 \$187.10 \$175.00 \$135.00 \$110.00 \$213.40 \$187.10 \$175.00 \$135.00 \$110.00	Cost \$0.00 \$374.20 \$1,400.00 \$4,320.00 \$880.00 \$374.20 \$700.00 \$1,080.00 \$1,760.00			
1.3.3.1 Check to see if ADCIRC and STWAVE model topographic grids omitted key manmade and natural levee/ridge structures (do grids properly represent the actual field conditions). 1.3.3.2 Verify that inland water features are modeled according to actual dimensions of widtless.	Firm LGH LGH WHG WHG WHG WHG WHG LGH WHG WHG	Staff Sr. Principal Sr. Principal Sr. Project Coordinator Project Mgr Coastal Engr/Modeler IV Coastal Engr/Modeler III Sr. Principal Sr. Project Coordinator Project Mgr Coastal Engr/Modeler IV Coastal Engr/Modeler IV Coastal Engr/Modeler IV Coastal Engr/Modeler III Sr. Principal Sr. Project Coordinator	Hours 2 8 32 8 2 4 4 8 16 1	\$213.40 \$187.10 \$175.00 \$135.00 \$110.00 \$135.00 \$110.00 \$213.40 \$187.10 \$175.00 \$110.00	Cost \$0.00 \$374.20 \$1,400.00 \$4,320.00 \$880.00 \$0.00 \$700.00 \$1,080.00 \$1,760.00 \$1,760.00			
L.3.3.1 Check to see if ADCIRC and STWAVE model topographic grids omitted key manmade and natural levee/ridge structures (do grids properly represent the actual field conditions). L.3.3.2 Verify that inland water features are modeled according to actual dimensions of width and depth. L.3.3.3 Verify that grid resolution is detailed	Firm LGH WHG WHG WHG WHG WHG WHG LGH LGH WHG WHG WHG WHG WHG	Staff Sr. Principal Sr. Project Coordinator Project Mgr Coastal Engr/Modeler IV Coastal Engr/Modeler III Sr. Principal Sr. Project Coordinator Project Mgr Coastal Engr/Modeler IV Sr. Principal Sr. Project Coordinator Project Mgr Coastal Engr/Modeler IV Coastal Engr/Modeler III Sr. Principal Sr. Project Coordinator Project Mgr	Hours 2 8 32 8 2 4 4 8 16 1 1 2	\$213.40 \$187.10 \$175.00 \$135.00 \$110.00 \$135.00 \$110.00 \$213.40 \$187.10 \$175.00 \$110.00	Cost \$0.00 \$374.20 \$1,400.00 \$4,320.00 \$880.00 \$700.00 \$1,080.00 \$1,760.00 \$1,760.00 \$1,760.00			
1.3.3.1 Check to see if ADCIRC and STWAVE model topographic grids omitted key manmade and natural levee/ridge structures (do grids properly represent the actual field conditions). 1.3.3.2 Verify that inland water features are modeled according to actual dimensions of width and depth. 1.3.3.3 Verify that grid resolution is detailed enough to accurately model storm surge over	Firm LGH WHG WHG WHG WHG WHG WHG LGH WHG WHG WHG WHG WHG WHG	Staff Sr. Principal Sr. Project Coordinator Project Mgr Coastal Engr/Modeler IV Coastal Engr/Modeler III Sr. Principal Sr. Project Coordinator Project Mgr Coastal Engr/Modeler IV Coastal Engr/Modeler IV Coastal Engr/Modeler IV Coastal Engr/Modeler III Sr. Principal Sr. Project Coordinator Project Mgr Coastal Engr/Modeler III Coastal Engr/Modeler III Sr. Principal Sr. Project Coordinator Project Mgr Coastal Engr/Modeler IV	Hours 2 8 32 8 2 4 8 16	\$213.40 \$187.10 \$175.00 \$135.00 \$110.00 \$213.40 \$187.10 \$175.00 \$110.00 \$213.40 \$187.10 \$175.00 \$110.00	Cost \$0.00 \$374.20 \$1,400.00 \$4,320.00 \$880.00 \$374.20 \$700.00 \$1,760.00 \$1,760.00 \$1,80.00 \$1,760.00 \$1,760.00			
L.3.3.1 Check to see if ADCIRC and STWAVE model topographic grids omitted key manmade and natural levee/ridge structures (do grids properly represent the actual field conditions). L.3.3.2 Verify that inland water features are modeled according to actual dimensions of width and depth. L.3.3.3 Verify that grid resolution is detailed	Firm LGH WHG WHG WHG WHG WHG WHG LGH LGH WHG WHG WHG WHG	Staff Sr. Principal Sr. Project Coordinator Project Mgr Coastal Engr/Modeler IV Coastal Engr/Modeler III Sr. Principal Sr. Project Coordinator Project Mgr Coastal Engr/Modeler IV Sr. Principal Sr. Project Coordinator Project Mgr Coastal Engr/Modeler IV Coastal Engr/Modeler III Sr. Principal Sr. Project Coordinator Project Mgr	Hours 2 8 32 8 2 4 4 8 16 1 1 2	\$213.40 \$187.10 \$175.00 \$135.00 \$110.00 \$135.00 \$110.00 \$213.40 \$187.10 \$175.00 \$110.00	Cost \$0.00 \$374.20 \$1,400.00 \$4,320.00 \$880.00 \$374.20 \$700.00 \$1,080.00 \$1,760.00			
1.3.3.1 Check to see if ADCIRC and STWAVE model topographic grids omitted key manmade and natural levee/ridge structures (do grids properly represent the actual field conditions). 1.3.3.2 Verify that inland water features are modeled according to actual dimensions of width and depth. 1.3.3.3 Verify that grid resolution is detailed enough to accurately model storm surge over	Firm LGH WHG WHG WHG WHG WHG WHG LGH WHG WHG WHG WHG WHG WHG	Staff Sr. Principal Sr. Project Coordinator Project Mgr Coastal Engr/Modeler IV Coastal Engr/Modeler III Sr. Principal Sr. Project Coordinator Project Mgr Coastal Engr/Modeler IV Coastal Engr/Modeler IV Coastal Engr/Modeler IV Coastal Engr/Modeler III Sr. Principal Sr. Project Coordinator Project Mgr Coastal Engr/Modeler III Coastal Engr/Modeler III Sr. Principal Sr. Project Coordinator Project Mgr Coastal Engr/Modeler IV	Hours 2 8 32 8 2 4 8 16	\$213.40 \$187.10 \$175.00 \$135.00 \$110.00 \$213.40 \$187.10 \$175.00 \$110.00 \$213.40 \$187.10 \$175.00 \$110.00	Cost \$0.00 \$374.20 \$1,400.00 \$4,320.00 \$880.00 \$700.00 \$1,760.00 \$1,760.00 \$1,760.00 \$1,760.00 \$1,760.00			
1.3.3.1 Check to see if ADCIRC and STWAVE model topographic grids omitted key manmade and natural levee/ridge structures (do grids properly represent the actual field conditions). 1.3.3.2 Verify that inland water features are modeled according to actual dimensions of width and depth. 1.3.3.3 Verify that grid resolution is detailed enough to accurately model storm surge over	Firm LGH WHG WHG WHG WHG WHG WHG WHG WHG WHG W	Staff Sr. Principal Sr. Project Coordinator Project Mgr Coastal Engr/Modeler IV Coastal Engr/Modeler III Sr. Principal Sr. Project Coordinator Project Mgr Coastal Engr/Modeler IV Coastal Engr/Modeler IV Coastal Engr/Modeler IV Coastal Engr/Modeler III Sr. Principal Sr. Project Coordinator Project Mgr Coastal Engr/Modeler III Coastal Engr/Modeler III Sr. Project Mgr Coastal Engr/Modeler IV Coastal Engr/Modeler IV Coastal Engr/Modeler IV	Hours 2 8 32 8 2 4 8 16	Rate/hr \$213.40 \$187.10 \$175.00 \$135.00 \$110.00 \$135.00 \$110.00 \$135.00 \$135.00 \$135.00 \$110.00 \$135.00 \$110.00 \$135.00 \$110.00 \$135.00 \$110.00 \$135.00 \$110.00 \$110.00	Cost \$0.00 \$374.20 \$1,400.00 \$4,320.00 \$880.00 \$700.00 \$1,760.00 \$1,760.00 \$1,760.00 \$1,760.00 \$1,760.00			
1.3.3.1 Check to see if ADCIRC and STWAVE model topographic grids omitted key manmade and natural levee/ridge structures (do grids properly represent the actual field conditions). 1.3.3.2 Verify that inland water features are modeled according to actual dimensions of width and depth. 1.3.3.3 Verify that grid resolution is detailed enough to accurately model storm surge over small scale topographic features.	Firm LGH WHG WHG WHG WHG WHG WHG WHG WHG WHG W	Staff Sr. Principal Sr. Principal Sr. Project Coordinator Project Mgr Coastal Engr/Modeler IV Coastal Engr/Modeler III Sr. Principal Sr. Project Coordinator Project Mgr Coastal Engr/Modeler IV Coastal Engr/Modeler IV Coastal Engr/Modeler III Sr. Principal Sr. Project Coordinator Project Mgr Coastal Engr/Modeler III Sr. Principal Sr. Project Coordinator Project Mgr Coastal Engr/Modeler IV Coastal Engr/Modeler III	Hours 2 8 32 8 32 4 8 16	Rate/hr \$213.40 \$187.10 \$175.00 \$135.00 \$110.00 \$213.40 \$175.00 \$135.00 \$135.00 \$135.00 \$135.00 \$135.00 \$135.00 \$135.00 \$135.00 \$135.00 \$135.00 \$135.00 \$135.00 \$135.00 \$135.00 \$135.00 \$135.00	Cost \$0.00 \$374.20 \$1,400.00 \$4,320.00 \$880.00 \$374.20 \$700.00 \$1,760.00 \$1,760.00 \$1,760.00 \$1,760.00 \$1,760.00			
1.3.3.1 Check to see if ADCIRC and STWAVE model topographic grids omitted key manmade and natural levee/ridge structures (do grids properly represent the actual field conditions). 1.3.3.2 Verify that inland water features are modeled according to actual dimensions of widtland depth. 1.3.3.3 Verify that grid resolution is detailed enough to accurately model storm surge over small scale topographic features.	LGH LGH WHG WHG WHG WHG WHG WHG WHG WHG WHG W	Staff Sr. Principal Sr. Principal Sr. Principal Sr. Project Coordinator Project Mgr Coastal Engr/Modeler IV Coastal Engr/Modeler III Sr. Principal Sr. Project Coordinator Project Mgr Coastal Engr/Modeler IV Coastal Engr/Modeler IV Coastal Engr/Modeler III Sr. Principal Sr. Project Coordinator Project Mgr Coastal Engr/Modeler IV Coastal Engr/Modeler IV Coastal Engr/Modeler IV Sr. Principal Sr. Project Coordinator	Hours 2 8 32 8 32 4 8 16 1 2 8 16 2 2	\$213.40 \$187.10 \$175.00 \$135.00 \$110.00 \$110.00 \$213.40 \$187.10 \$175.00 \$110.00 \$135.00 \$110.00 \$135.00 \$110.00	Cost \$0.00 \$374.20 \$1,400.00 \$4,320.00 \$880.00 \$374.20 \$700.00 \$1,080.00 \$1,760.00 \$1,760.00 \$1,760.00 \$1,760.00			
1.3.3.1 Check to see if ADCIRC and STWAVE model topographic grids omitted key manmade and natural levee/ridge structures (do grids properly represent the actual field conditions). 1.3.3.2 Verify that inland water features are modeled according to actual dimensions of width and depth. 1.3.3.3 Verify that grid resolution is detailed enough to accurately model storm surge over small scale topographic features.	Firm LGH WHG WHG WHG WHG WHG WHG WHG WHG WHG W	Staff Sr. Principal Sr. Project Coordinator Project Mgr Coastal Engr/Modeler IV Coastal Engr/Modeler III Sr. Principal Sr. Project Coordinator Project Mgr Coastal Engr/Modeler IV Coastal Engr/Modeler IV Coastal Engr/Modeler IV Coastal Engr/Modeler III Sr. Principal Sr. Project Coordinator Project Mgr Coastal Engr/Modeler III Sr. Principal Sr. Project Coordinator Project Mgr Coastal Engr/Modeler IV Coastal Engr/Modeler III Sr. Principal Sr. Principal Sr. Project Coordinator Project Mgr	Hours 2 8 32 8 32 4 8 16 1 2 8 16 2 2 2 2 2 2	\$213.40 \$187.10 \$187.10 \$175.00 \$135.00 \$110.00 \$110.00 \$213.40 \$187.10 \$175.00 \$110.00 \$135.00 \$110.00 \$135.00 \$110.00 \$135.00 \$135.00 \$135.00 \$135.00 \$135.00 \$135.00 \$135.00 \$135.00	Cost \$0.00 \$374.20 \$1,400.00 \$4,320.00 \$880.00 \$374.20 \$700.00 \$1,760.00 \$1,760.00 \$1,760.00 \$1,760.00 \$1,760.00 \$1,760.00			
1.3.3.1 Check to see if ADCIRC and STWAVE model topographic grids omitted key manmade and natural levee/ridge structures (do grids properly represent the actual field conditions). 1.3.3.2 Verify that inland water features are modeled according to actual dimensions of widtland depth. 1.3.3.3 Verify that grid resolution is detailed enough to accurately model storm surge over small scale topographic features.	LGH LGH WHG WHG WHG WHG WHG WHG WHG WHG WHG W	Staff Sr. Principal Sr. Principal Sr. Principal Sr. Project Coordinator Project Mgr Coastal Engr/Modeler IV Coastal Engr/Modeler III Sr. Principal Sr. Project Coordinator Project Mgr Coastal Engr/Modeler IV Coastal Engr/Modeler IV Coastal Engr/Modeler III Sr. Principal Sr. Project Coordinator Project Mgr Coastal Engr/Modeler IV Coastal Engr/Modeler IV Coastal Engr/Modeler IV Sr. Principal Sr. Project Coordinator	Hours 2 8 32 8 32 4 8 16 1 2 8 16 2 2	\$213.40 \$187.10 \$175.00 \$135.00 \$110.00 \$110.00 \$213.40 \$187.10 \$175.00 \$110.00 \$135.00 \$110.00 \$135.00 \$110.00	Cost \$0.00 \$374.20 \$1,400.00 \$4,320.00 \$880.00 \$374.20 \$700.00 \$1,080.00 \$1,760.00 \$1,760.00 \$1,760.00 \$1,760.00			

irm GH GH	Sr. Principal Sr. Project Coordinator Project Mgr Coastal Engr/Modeler IV Coastal Engr/Modeler III Total Antic racks used in the FIS surge mo Staff Sr. Principal	del.	\$213.40 \$187.10 \$175.00 \$135.00 \$110.00	\$0.00 \$374.20 \$700.00 \$1,080.00 \$2,640.00 \$22,623.90
NHG NHG NHG storm tr Firm GH	Project Mgr Coastal Engr/Modeler IV Coastal Engr/Modeler III Total Antic racks used in the FIS surge mo	4 8 24 cipated Cost f	\$175.00 \$135.00 \$110.00	\$700.00 \$1,080.00 \$2,640.00
orm tr Storm tr Sirm GH GH	Coastal Engr/Modeler IV Coastal Engr/Modeler III Total Antic racks used in the FIS surge mo	8 24 cipated Cost f	\$135.00 \$110.00	\$1,080.00 \$2,640.00
storm tr Firm GH GH	Coastal Engr/Modeler III Total Anticoracks used in the FIS surge mo	ipated Cost f	\$110.00	\$2,640.00
irm GH GH	acks used in the FIS surge mo	del.	or Task 1.3.3:	\$22,623.90
irm GH GH	Staff			
GH GH				
GH GH		Hours	Rate/hr	Cost
.GH		2	\$213.40	\$426.80
	Sr. Project Coordinator	1 2 1	\$187.10	\$374.20
VHG	Project Mgr	4	\$175.00	\$700.00
VHG	Coastal Engr/Modeler IV	8	\$135.00	\$1,080.00
.GH	Sr. Principal	1 2 1	\$213.40	\$426.80
.GH				\$374.20
VHG				\$700.00
VHG	Coastal Engr/Modeler IV	8	\$135.00	\$1,080.00
GH	Sr. Principal	2	\$213.40	\$426.80
GH				\$374.20
VHG				\$1,400.00
VHG	Coastal Engr/Modeler IV	16	\$135.00	\$2,160.00
recastin	g computer model used in the	: FIS including	the treatment	of levees and
irm	Staff	Hours	Rate/hr	Cost
GH	Sr. Principal	4		\$853.60
GH		24	\$187.10	\$4,490.40
GH		24		\$2,736.00
GH	CAD Technician III	24	\$89.20	\$2,140.80
GH	Sr. Project Coordinator	2	\$187.10	\$374.20
GH	Engineering Intern II	16	\$114.00	\$1,824.00
GH	CAD Technician III	4	\$89.20	\$356.80
GH	Sr. Principal	4	\$213.40	\$853.60
GH	Sr. Project Coordinator	24	\$187.10	\$4,490.40
GH	Engineering Intern II	16	\$114.00	\$1,824.00
GH	CAD Technician III	24	\$89.20	\$2,140.80
	<u> </u>			
GH	Sr. Principal	2	\$213.40	\$426.80
GH	Sr. Project Coordinator	8	\$187.10	\$1,496.80
IUC	0 1 124	, ,	4	6700.00
VHG	Project Mgr	4	\$175.00	\$700.00
VHG VHG	Project Mgr Coastal Engr/Modeler IV	4	\$175.00 \$135.00	\$700.00 \$540.00
				
	GH /HG /HG /HG GH /HG /HG /HG /HG GH GH GH GH GH GH	SH Sr. Project Coordinator /HG Project Mgr /HG Coastal Engr/Modeler IV St. Principal St. Project Coordinator /HG Project Mgr /HG Project Mgr /HG Coastal Engr/Modeler IV Total Antic recasting computer model used in the staff SH Sr. Principal St. Principal SH Sr. Project Coordinator SH Engineering Intern II SH CAD Technician III SH ST. Project Coordinator SH Engineering Intern II SH CAD Technician III SH CAD Technician III SH CAD Technician III SH Sr. Project Coordinator SH Engineering Intern II SH CAD Technician III SH CAD Technician III SH Sr. Project Coordinator SH Engineering Intern II SH CAD Technician III SH Sr. Project Coordinator	Sr. Project Coordinator 2	Sr. Project Coordinator 2 \$187.10

	7=-				
	Firm	Staff	Hours	Rate/hr	Cost
•	LGH	Sr. Principal	4	\$213.40	\$853.60
	LGH	Sr. Project Coordinator	16	\$187.10	\$2,993.60
1.3.6.1 Verify BFE elevations were mapped	LGH	Engineering Intern il	24	\$114.00	\$2,736.00
properly.	LGH	CAD Technician III	32	\$89.20	\$2,854.40
	WHG	Project Mgr Coastal Engr/Modeler IV	24	\$175.00	\$700.00
	WHG	Coastal Engr/Modeler IV	24	\$135.00	\$3,240.00
	LGH	Sr. Principal	4	\$213.40	\$853.60
	LGH	Sr. Project Coordinator	24	\$187.10	\$4,490,40
1.3.6.2 Verify Flood Hazard Zones were mapped properly.	LGH	Engineering Intern II	30	\$114.00	\$3,420.00
	LGH	CAD Technician III	24 ·	\$89.20	\$2,140.80
	WHG	Project Mgr	4	\$175.00	\$700.00
	WHG	Coastal Engr/Modeler IV	24	\$135.00	\$3,240.00
	<u> </u>	Total Antic	ipated Cost	for Task 1.3.6:	\$28,222.40
			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	101 1001 210101	Q20,222.10
1.3.7 Identify the scientific and technical defi	ciencies c	of the FIS work			
	Firm	Staff	Hours	Rate/hr	Cost
	LGH	Sr. Principal	16	\$213.40	\$3,414.40
	LGH	Sr. Project Coordinator	32	\$187.10	\$5,987.20
	LGH	Engineering Intern II	16	\$114.00	\$1,824.00
1.3.7.1 Prepare text, tables and figures to	LGH	CAD Technician III	24	\$89.20	\$2,140.80
Illustrate the deficiencies revealed during the	LGH	Administrative/Clerical II	24	\$48.20	\$1,156.80
review.	WHG	Project Mgr	48	\$175.00	\$8,400.00
	WHG	Coastal Engr/Modeler IV	32	\$135.00	\$4,320.00
	WHG	Coastal Engr/Modeler III	32	\$110.00	\$3,520.00
	<u> </u>				
	LGH	Sr. Principal	8	\$213.40	\$1,707.20
	LGH	Sr. Project Coordinator	16	\$187.10	\$2,993.60
1.3.7.2 Present results of review to the parish.	LGH	Engineering Intern II	4	\$114.00	\$456.00
•	LGH	Administrative/Clerical II	4	\$48.20	\$192.80
	I		ipated Cost	for Task 1.3.7:	\$36,112.80
		Total A	nticipated C	ost for Task 1:	\$237,240.0
	Tas	sk 2. Surge Modeling			
	T			,	
Obtain new environmental data from the parish to	, ·	See Attached Summary			es
sed for remapping BFEs including topography,		Woods Ho	ole Group/Rai	nsom	
ymetry, vegetation, cultural features, landscape					
ires, non-levee barriers, and levees.					
		•			
		Total /	Anticipated Co	ost for Task 2.1:	\$78,600.00
	1	Warter .			
				•	
		See Attached Summary	for Sub-task	manhour estimat	es
et-up new model grids for existing (2014) and			ole Group/Rai		
re conditions (2064).		11030511			
		Total	Anticipated C	ost for Task 2.2:	\$29,240.00

ncluding Katrina, Rita, Gustav, and Issac.	See Attached Summary for Sub-task manhour estimates Woods Hole Group/Ransom						
		Total /	Inticinated Co	st for Task 2.3:	\$14,840.00		
		Totali	unicipated co	3C JUI TUSK 2.3.	\$14,640.00		
Compute new 1% still water elevations (SWELs) for sting and future conditions.	See Attached Summary for Sub-task manhour estimates Woods Hole Group/Ransom						
		Total /	Inticinated Co	st for Task 2.4:	\$43,900.00		
		TOLAT	иплератеи со	51 JUL 1USK 2.4. [\$43,900.00		
Model Calibration and Verification		See Attached Summary Woods Ho	for Sub-task n lle Group/Ran		es .		
		Total A	Inticipated Co.	st for Task 2.5:	\$65,900.00		
5 Production Simulations and Statistical Model evelopment		See Attached Summary Woods Ho	for Sub-task n lle Group/Ran		es		
		Total A	Anticipated Co.	st for Task 2.6:	\$154,900.00		
				1			
		Total Ar	nticipated Co	ost for Task 2:	\$387,380.00		
	Task 3	Total Ar	nticipated Co	ost for Task 2:	\$387,380.00		
	Firm	. WHAFIS Modeling	Hours	Rate/hr	Cost		
	Firm LGH	. WHAFIS Modeling Staff Sr. Principal	Hours 8	Rate/hr \$213.40	Cost \$1,707.20		
	Firm LGH LGH	. WHAFIS Modeling Staff Sr. Principal Sr. Project Coordinator	Hours 8 24	Rate/hr \$213.40 \$187.10	Cost \$1,707.20 \$4,490.40		
Determine number and location of wave transects	Firm LGH LGH LGH	. WHAFIS Modeling Staff Sr. Principal Sr. Project Coordinator Engineering Intern II	Hours 8 24 32	Rate/hr \$213.40 \$187.10 \$114.00	Cost \$1,707.20 \$4,490.40 \$3,648.00		
Determine number and location of wave transects ded and identify topography, bathymetry,	Firm LGH LGH LGH LGH	. WHAFIS Modeling Staff Sr. Principal Sr. Project Coordinator Engineering Intern II CAD Technician III	Hours 8 24 32 40	Rate/hr \$213.40 \$187.10 \$114.00 \$89.20	Cost \$1,707.20 \$4,490.40 \$3,648.00 \$3,568.00		
Determine number and location of wave transects ided and identify topography, bathymetry, etation, cultural features, landscape features, and	Firm LGH LGH LGH LGH WHG	. WHAFIS Modeling Staff Sr. Principal Sr. Project Coordinator Engineering Intern II CAD Technician III Project Mgr	Hours 8 24 32 40 16	Rate/hr \$213.40 \$187.10 \$114.00	Cost \$1,707.20 \$4,490.40 \$3,648.00 \$3,568.00 \$2,800.00		
Determine number and location of wave transects ded and identify topography, bathymetry, etation, cultural features, landscape features, and	Firm LGH LGH LGH LGH	. WHAFIS Modeling Staff Sr. Principal Sr. Project Coordinator Engineering Intern II CAD Technician III	Hours 8 24 32 40	Rate/hr \$213.40 \$187.10 \$114.00 \$89.20 \$175.00	Cost \$1,707.20 \$4,490.40 \$3,648.00 \$3,568.00		
Determine number and location of wave transects ded and identify topography, bathymetry, etation, cultural features, landscape features, and	Firm LGH LGH LGH LGH WHG	. WHAFIS Modeling Staff Sr. Principal Sr. Project Coordinator Engineering Intern II CAD Technician III Project Mgr Coastal Engr/Modeler IV	Hours 8 24 32 40 16 0	Rate/hr \$213.40 \$187.10 \$114.00 \$89.20 \$175.00	Cost \$1,707.20 \$4,490.40 \$3,648.00 \$3,568.00 \$2,800.00		
Determine number and location of wave transects eded and identify topography, bathymetry, getation, cultural features, landscape features, and	Firm LGH LGH LGH LGH WHG WHG	. WHAFIS Modeling Staff Sr. Principal Sr. Project Coordinator Engineering Intern II CAD Technician III Project Mgr Coastal Engr/Modeler IV	Hours 8 24 32 40 16 0	Rate/hr \$2.13.40 \$187.10 \$114.00 \$89.20 \$175.00 \$135.00 st for Task 3.1:	Cost \$1,707.20 \$4,490.40 \$3,648.00 \$3,568.00 \$2,800.00 \$0.00		
Determine number and location of wave transects eded and identify topography, bathymetry, getation, cultural features, landscape features, and	Firm LGH LGH LGH LGH WHG WHG	. WHAFIS Modeling Staff Sr. Principal Sr. Project Coordinator Engineering Intern II CAD Technician III Project Mgr Coastal Engr/Modeler IV Total A Sr. Principal	Hours 8 24 32 40 16 0	Rate/hr \$213.40 \$187.10 \$114.00 \$89.20 \$175.00 \$135.00 st for Task 3.1:	Cost \$1,707.20 \$4,490.40 \$3,648.00 \$3,568.00 \$2,800.00 \$0.00		
Determine number and location of wave transects eded and identify topography, bathymetry, getation, cultural features, landscape features, and	Firm LGH LGH LGH LGH WHG WHG	Staff Sr. Principal Sr. Project Coordinator Engineering Intern II CAD Technician III Project Mgr Coastal Engr/Modeler IV Total A Sr. Principal Sr. Principal Sr. Project Coordinator	Hours 8 24 32 40 16 0 Anticipated Co	Rate/hr \$2.13.40 \$187.10 \$114.00 \$89.20 \$175.00 \$135.00 st for Task 3.1:	Cost \$1,707.20 \$4,490.40 \$3,648.00 \$3,568.00 \$2,800.00 \$0.00 \$16,213.60 \$3,414.40		
Determine number and location of wave transects ded and identify topography, bathymetry, etation, cultural features, landscape features, and levee barriers to be included in the WHAFIS runs.	Firm LGH LGH LGH LGH WHG WHG	. WHAFIS Modeling Staff Sr. Principal Sr. Project Coordinator Engineering Intern II CAD Technician III Project Mgr Coastal Engr/Modeler IV Total A Sr. Principal	Hours 8 24 32 40 16 0	Rate/hr \$213.40 \$187.10 \$114.00 \$89.20 \$175.00 \$135.00 set for Task 3.1: \$213.40 \$187.10	Cost \$1,707.20 \$4,490.40 \$3,648.00 \$3,568.00 \$2,800.00 \$0.00 \$16,213.60 \$3,414.40 \$14,968.00		
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Prepare final report describing results of modeling and re-mapping work containing the new BFE and Special Flood Hazard Areas maps, and compare the results with the preliminary DFIRMs.	LGH	Sr. Principal	20	\$213.40	\$4,268.00
	LGH	Sr. Project Coordinator	120	\$187.10	\$22,452.00
	LGH	Engineering Intern II	120	\$114.00	\$13,680.00
	LGH	CAD Technician III	40	\$89.20	\$3,568.00
	LGH	Administrative/Clerical II	80	\$175.00	\$14,000.00
	WHG	Project Mgr	80	\$135.00	\$10,800.00
	WHG	Coastal Engr/Modeler IV	120	\$135.00	\$16,200.00

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Woods Hole Group/Ransom Modeler Project Manager 2.1.1 obtain storm set \$790.00 \$790.00 2.1.2 validate stats 32 8 \$4,920.00 \$4,920.00 2.1.3 eval uncertainty 4 8 \$1,580.00 \$1,580.00 2.1.4 future climate set 2 1 \$395.00 \$395.00 2.1.5 obtain hindcast met 2 4 \$920.00 \$920.00 task 2.1 total 48 19 \$8,605.00 \$8,605.00 \$78,605.00 task2.2 2.2.1 obtain review topobathy 16 8 \$3,160.00 \$3,160.00 2.2.2 identify topobathy gaps 4 12 \$2,020.00 \$2,020.00 \$2,900.00 2.2.3 draw topo polylines 20 4 \$2,900.00 2.2.4 draw bathy polylines 20 4 \$2,900.00 \$2,900.00 2.2.5 prep DEMs 40 16 \$7,200.00 \$7,200.00 2.2.6 control structures \$3,160.00 \$3,160.00 16 8 2.2.7 modify 4 future 40 20 \$7,900.00 \$7,900.00 task 2.2 total 164 64 \$29,240.00 \$29,240.00 \$29,240.00 task 2.3 2.3.1 obtain veg data 16 8 \$3,160.00 \$3,160.00 2.3.2 identify veg gaps 12 4 \$2,020.00 \$2,020.00 \$4,920.00 32 8 \$4,920.00 2.3.3 prep grids 2.3.4 mod 4 future 24 12 \$4,740.00 \$4,740.00 task 2.3 total 84 32 \$14,840.00 \$14,840.00 \$14,840.00 2.4.1 develop Coarse Grid 40 20 \$7,900.00 task 2.4 \$7,900.00 2.4.2 develop Fine Grid 140 60 \$25,900.00 \$25,900.00 2.4.3 modify 4 future 60 20 \$10,100.00 \$10,100.00 task 2.4 total 240 100 \$43,900.00 \$43,900.00 \$43,900.00 2.5.1 Obtain/review WL obs. 12 \$1,670.00 \$1,670.00 task 2.5 2 \$1,670.00 12 2 \$1,670.00 2.5.2 obtain/review wave obs. 2.5.3 Coarse sensitivity/stability 20 10 \$3,950.00 \$3,950.00 2.5.4 Validate Coarse 20 4 \$2,900.00 \$2,900.00 2.5.5 Fine sensitivity/stability 100 40 \$18,000.00 \$18,000.00 100 40 \$18,000.00 \$18,000.00 2.5.6 calibrate Fine \$4,040.00 2.5.7 verify Fine 24 8 \$4,040.00 2.5.8 Fine parametric error 24 8 \$4,040.00 \$4,040.00 \$65,902.50 312 114 \$54<u>,</u>270.00 \$54,270.00 task 2.5 total \$2,540.00 \$2,540.00 2.6.1.1 Coarse initial screen 12 task 2.6 4 24 \$5,440.00 2.6.1.2 sims 16 \$5,440.00 20 8 \$3,600.00 \$3,600.00 2.6.1.3 check 2.6.1.4 Coarse CDF 4 \$1,140.00 4 \$1,140.00 24 16 \$5,440.00 \$5,440.00 2.6.1.5-6 select & verify 2.6.2.1 50 sims 40 20 \$7,900.00 \$7,900.00 20 80 \$16,200.00 \$16,200.00 2.6.2.2 rsm 2.6.2.3 1st eval 32 16 \$6,320.00 \$6,320.00 50 80 \$19,500.00 \$19,500.00 2.6.2.4 50 more sims re-eval 16 \$3,680.00 \$3,680.00 2.6.2.5 full response 24 16 \$5,440.00 \$5,440.00 2.6.2.6 Fine CDF 60 \$23,700.00 2.6.3 Future 120 \$23,700.00 \$100,900.00 \$100,900.00 \$154,900.00 370 344 task 2.6 total

