**ARF-810** 

DRAINAGE DISTRICT AGENDA

Date: 07/06/2010

Cost Sharing Agreement City of Sugar Land, Oyster Creek Overflow to Bullhead Bayou

**Submitted For:** 

Mark Vogler, Director

RoseAnn Vargas, Drainage

District

**Department:** 

**Drainage District** 

Renewal Agreement/

No

**Appointment:** 

**Reviewed by County** 

Yes

**Attorney's Office:** 

Multiple Originals Y/N?: Yes

Information

**Submitted By:** 

**SUMMARY OF ITEM** 

Take all appropriate action on a Cost Sharing Interlocal Agreement, for Engineering Services for the Oyster Creek Overflow into Bullhead Bayou Study, with the City of Sugar Land, Precinct 4.

This study is to determine the best option for channelizing and controlling 100-year flood event overflows from Oyster Creek to Bullhead Slough.

SPECIAL HANDLING

Please return originals to Dwayne Grigar, Drainage District.

2-ret. 7-14-10

Fiscal Impact

ACCTG UNIT or GRANT/PROJ NAME:

160620888

ACCT NAME or GRANT/PROJ ACTIVITY: P620-96UPOYSTER

**BUDGETED Y/N:** 

No

**FISCAL SUMMARY:** 

This study is to determine the best option for channelizing and controlling 100-year flood event overflows from Oyster Creek to Bullhead Slough.

Attachments

Link: City of SL, Cost Sharing Agreement

COUNTY JUDGE RECEIVED

JUL 02 2010

THE STATE OF TEXAS

COUNTY OF FORT BEND §

## COST SHARING INTERLOCAL AGREEMENT FOR ENGINEERING SERVICES OYSTER CREEK OVERFLOW INTO BULLHEAD BAYOU STUDY

§

THIS COST SHARING INTERLOCAL AGREEMENT FOR ENGINEERING SERVICES FOR THE OYSTER CREEK OVERFLOW INTO BULLHEAD BAYOU STUDY ("Agreement") is entered into as the later date of the parties' signatures by and between Fort Bend County Drainage District ("District") and the City of Sugar Land, Texas ("City").

### **RECITALS**

WHEREAS, the District and City wish to cooperate with each other to obtain engineering services for the Oyster Creek Overflow into Bullhead Bayou Study ("Study") to be performed by Brown & Gay Engineers, Inc.; and

WHEREAS, this Agreement requires the City and the District to each fund one-half (1/2) the cost of the Study; and

WHEREAS, the governing bodies of the District and City have authorized this Agreement; and

WHEREAS, this Agreement is made pursuant to and under the provisions of Chapter 791 of the Texas Government Code.

NOW, THEREFORE, for and in consideration of the mutual promises, covenants, obligations, and benefits of this Agreement, the District and the City contract and agree as follows:

## Article 1 Selection of Engineer

1.01 The District and City have agreed to the selection of Brown & Gay Engineers, Inc. ("Brown & Gay") to perform the Study. The City shall be primarily responsible for entering into and administering an engineering contract with Brown & Gay for the Study consistent with the scope of services to which the parties to this Agreement have agreed and is attached to and incorporated into this Agreement as Exhibit "A".

- 1.02 During the work on the Study, the District may review all documents, models, maps, plats, records, photographs, reports, and drawings for the Study, provided, however, that in conducting the reviews, the District must not interfere with the work in progress.
- 1.03 The District may participate in all progress meetings and the final review of the Study. At that time, any deficiencies noted by the District will be promptly conveyed by the District to Brown & Gay.

## Article 2 Period of Agreement

This Agreement is not effective until executed by the City and the District and automatically terminates upon the completion and acceptance of the Study by the City and the District.

## Article 3 Cost to Each Party and Payment of Invoices

- 3.01 Brown & Gay has quoted a price not to exceed \$80,000 for the completion of the Study. Each party to this Agreement shall be responsible for paying one-half (1/2) of the cost of the Study. Services performed in addition to the scope listed in Exhibit A and all costs associated with the additional services must be approved by the City and District prior to the commencement of the additional services.
- 3.02 The District and City shall review and approve all invoices submitted for the Study. As invoices for the Study are received, the City will bill the District for one-half (1/2) of the cost of each invoice. The District must pay to the City the amounts due under each bill within 45 days of the receipt of the bill from the City.

# Article 4 Limit of Appropriation

- 4.01 Prior to the execution of this Agreement, the City has been advised by the District, and the City clearly understands and agrees, such understanding and agreement being of the absolute essence to this Agreement, that the District shall have available the amount of Forty Thousand Dollars (\$40,000.00) specifically allocated to fully discharge any and all liabilities that may be incurred by the District for the Study.
- 4.02 The City does further understand and agree, said understanding and agreement also being of the absolute essence of this Agreement, that the total maximum funding that the City may become entitled to hereunder and the total maximum amount that the District will reimburse the City hereunder will not under any condition, circumstance or interpretation hereof exceed the amount of Forty Thousand Dollars (\$40,000.00) for the Study.

# Article 5 Cooperation of the Parties

The parties agree to cooperate with each other and to execute and deliver all documents necessary to complete the transaction.

## Article 6 Power of Acceptance

This Agreement obligates both parties to pay a respective share of one-half (1/2) of the cost of the Study in the manner described in Article 3.

## Article 7 Counterparts

This Agreement may be executed in any number of counterparts each of which when executed and delivered shall be deemed to be an original, with all counterparts constituting but one and the same instrument. The execution of this Agreement by a party hereto will not become effective until counterparts hereof have been executed by all parties. The parties executing this Agreement hereby represent and warrant that they are properly authorized to bind their respective parties.

WHEREFORE, the District and the City have executed this Agreement by their authorized representatives.

By: Well Sellers
Robert E. Hebert, Chairman
7-6-2010
(Date)

FORT BEND COUNTY DRAINAGE DISTRICT

ATTEST:

By:

Diane Wilson, County Clerk

DIANNE

## Auditor's Certificate

I hereby certify that funds are available in the amount of \$40,000 to pay the Drainage District's obligation in the foregoing agreement.

Ed Sturdivant, Auditor

CITY OF SUGAR LAND

Allen Bogard, City Manager

Date

ATTEST:

Reviewed for Legal Compliance:

luginia A. Canr

Glenda Gundermann, City Secretary

## **EXHIBIT A**



May 28, 2010

Mr. Shashi Kumar, PE, CFM Drainage Engineer City of Sugar Land 2700 Town Center Blvd. N. Sugar Land, Texas 77479

Re:

Oyster Creek Overflow to Bullhead Bayou Study Proposal for Professional Engineering Services

Dear Mr. Kumar;

Brown & Gay Engineers, Inc. (BGE) is pleased to provide this proposal for professional engineering services as defined herein.

### Objective:

BGE will provide professional engineering services to develop a preliminary plan for the control of identified overflows from Oyster Creek just upstream of SH 6 to Bullhead Bayou. The subject overflows from Oyster Creek are identified as Overflow 2 and Overflow 3 in the "Preliminary Engineering Report, Ditch II Extension to Oyster Creek, Fort Bend County, Texas", Appendix A, Exhibit 1, dated January 2006. This report was based on the recommendations included in the "Upper Oyster Creek & Ditch "H" Drainage Study and Improvement Plan" dated October 2002. The modeling will improve the understanding of flood risk along Oyster Creek and Bullhead Bayou in the vicinity of the Sugar Land Regional Airport. A project (or projects) will be defined to manage overflow quantities from Oyster Creek to Bullhead Bayou that cross the Union Pacific Railroad and US 90A. The desired overflow location path will be determined in consultation with the City of Sugar Land (CoSL) and the Fort Bend County Drainage District (FBCDD).

### Scope of Work:

### A. General:

BGE will utilize data and information developed in our ongoing contract for the Ditch H Extension project, data provided by Michael J. Baker in their ongoing restudy of Oyster Creek for FEMA and any additional data provided by the CoSL or the FBCDD.

Mr. Shashi Kumar, PE, CFM City of Sugar Land May 28, 2010 Page 2

#### B. Approach:

The study will utilize the models and data developed for the Ditch H Extension project along with data and models available from the FEMA restudy of Oyster Creek. The quantity of the 100-year and 10-year overflows from Oyster Creek will be defined in sufficient detail to allow alternative management measures to be evaluated. It is anticipated that the proposed study will consist of the following objectives:

- 1. Provide limited topographic surveying for the bridge crossings of the Union Pacific Railroad and
- 2. Develop alternatives for an overflow channel from Oyster Creek to Bullhead Bayou to limit the overflow zone identified in the preliminary FEMA restudy. One alternative will be developed that places all proposed improvements on current CoSL property (the Airport) to the extent possible. Another alternative includes evaluating the option of placing the proposed improvements within Tract 2.
- 3. Provide conceptual design of a control structure at Oyster Creek that will maximize the overflow to Bullhead Bayou without creating an adverse downstream condition.
- 4. Define berm elevations along the south bank of Oyster Creek that will direct overflow to the control structure.
- 5. Confirm that bridge crossings of the Union Pacific Railroad and US 90A are adequate for the proposed Oyster Creek overflow.
- 6. Propose modifications to Bullhead Bayou, anticipated only in the reach between US 90A and the recently modified Bullhead Bayou channel on the north side of LID17.
- 7. Identify right-of-way requirements for the project.
- 8. Identify utility relocation requirements for the project.
- 9. Develop a preliminary plan and cost estimate for the preferred alternative.
- 10. Coordination with the City, FBCDD, and property owners that may dedicate easements to facilitate the proposed improvements.

Up to three alternative solutions (sizes and/or locations) will be evaluated and the preferred alternative will be evaluated in further detail including a preliminary plan cost estimate. The details of the preferred alternative will be developed after input from the CoSL and the FBCDD. All proposed work on airport property will be coordinated with the City's designated airport consultant. This study will not include detailed drainage analysis related to existing or future development of airport facilities.

### C. Results:

The assumptions, data, analysis methods and results for the Oyster Creek overflow analysis will be presented in a preliminary and final report. The final report will incorporate comments from the CoSL. and the FBCDD.

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A preliminary report will be prepared and submitted after the quantity and location of the projected overflow is confirmed. The report will document the assumptions, data, analysis methods and results for the initial study including the projected flooding of airport property. The results will be presented on work maps. The recommended alternatives will be described and shown in sufficient detail to facilitate comment and input. A review meeting will be conducted for appropriate individuals to facilitate understanding and review of the preliminary report. The selected alternative will be analyzed and the results presented on work maps. Another review meeting will be conducted to facilitate review and comment and all results presented in the preliminary report. The alternatives will be evaluated in sufficient detail to allow selection of a preferred alternative.

The final analysis phase will start when the appropriate parties have reviewed and accepted the initial analysis and selected a preferred alternative. It is anticipated that the final configuration of the preferred alternative that was selected for further analysis could be different from those presented in the preliminary report. Consequently, one additional review meeting will be scheduled toward the end of the final analysis phase. The assumptions, methods of analysis, result of the analysis and recommendations will be documented in a final report and copies provided to the CoSL and FBCDD for distribution.

Since the recommended improvements developed under this scope will probably not be constructed before the DFIRM Map Update is completed, the resulting FIRM will not reflect the proposed improvements. The preparation of a CLOMR and/or LOMR will be necessary to revise the FEMA Map but is not included in this proposal.

#### D. Schedule:

The proposed professional engineering services will be provided to address the tasks as described above. It is anticipated that these services will be completed in approximately 90 days including review time as shown in the following schedule.

Task	Description	Deliverable	Anticipated Duration (calendar days)
1	Topographic Surveying	Base Drawing	15
2	Preliminary Analysis	Preliminary Report	30
3	Review & Approval	Approval/Comments	5
4	Final Analysis	Work Maps	30
5	Reviews	Comments	5
6	Finalize Report	Final Report	5
		Total Study Duration	90

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### E. Proposed Fee:

We propose to provide the described scope of services on an hourly basis, using our current billing rates which are 2.50 times salary cost (actual salary plus 30% for fringe costs) of the people involved for the time actually spent on the work. The multiplier covers our overhead, general supervision and related costs so your time charges are for productive time only. Reimbursable expenses such as deliveries, printing, mileage and such are additional and will be invoiced at the cost plus 10%. Invoices will be mailed monthly and payable upon receipt. We estimate the fees for the above-described scope of services not to exceed \$80,000. The total estimated fee was developed based on a task breakdown as follows:

Task	Description	Estimated Fee
1	Topographic Surveying	\$3,100
	Utility Investigation	\$3,300
2	Preliminary Analysis	
	a. Overflow Weir & Channel	•
	alternative analysis	\$18,000
	b. Bullhead Bayou	
	modifications	\$11,000
	c. UPRR and US 90A Bridge	
	Analysis	\$11,800
3	Review & Approval (Including	
	Presentation / Meeting)	\$2,800
4	Final Analysis	\$18,800
5	Final Review	\$3,700
6	Finalize Report	\$7,500
Total		\$80,000

We look forward to our continued work on this important project and are ready to begin the work immediately. Should you have any questions, please give me a call.

Sincerely,

Lee C. Lennard, PE Director, Public Works