

STATE OF TEXAS           §  
  §  
COUNTY OF FORT BEND §

**FIRST AMENDMENT TO PROFESSIONAL  
ENGINEERING SERVICES AGREEMENT  
PROJECT NO: 709 – GOLFVIEW DRIVE**

**THIS FIRST AMENDMENT** is made and entered into by and between FORT BEND COUNTY, TEXAS, a public body corporate and politic of the State of Texas acting by and through the Fort Bend County Commissioners Court (hereinafter referred to as “County”) and KELLY R. KALUZA & ASSOCIATES, INC., (hereinafter referred to as “Engineer,”) authorized to conduct business in the State of Texas.

RECITALS

WHEREAS, County and Engineer entered an agreement for the Project, Agreement for Professional Engineering & Surveying Services dated August 23, 2011, (collectively, the “Agreement”) attached hereto as Exhibit B, incorporated by reference as if set forth herein verbatim. County and Engineer desire to amend said Agreement as set forth in Exhibit A and incorporated herein by reference as if set forth verbatim.

NOW, THEREFORE, in consideration of the foregoing, the Agreement between County and Engineer is hereby amended to read:

- A. An additional amount not-to-exceed \$77,000.00 shall be available for additional services provided by Engineer in connection with the Project as described in Exhibit A.
- B. Engineer’s compensation for the Project shall not exceed \$677,000.00, which includes the original scope of work and the additional services described in Exhibit A.
- C. No additional funding shall be available for services provided under the Agreement without prior written consent of County.
- D. Except as modified herein, the Agreement remains in full force and effect and has not been modified or amended.
- E. If there is a conflict between this First Amendment and the Agreement, the provisions of this Amendment shall prevail.

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EXECUTION

This Agreement shall become effective upon execution by County.

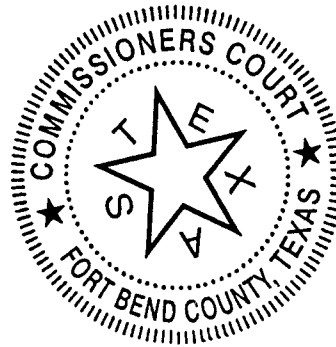
FORT BEND COUNTY:

*Robert E. Hebert*  
Robert E. Hebert, County Judge

5-8-2012  
Date

Attest:

*Dianne Wilson*  
Dianne Wilson, County Clerk



Approved: COUNTY PROJECT MANAGER

*Richard Stolleis*  
Richard Stolleis, Fort Bend County Engineer

ENGINEER: KELLY R. KALUZA & ASSOCIATES, INC.

*Kelly Kaluza*  
Kelly R. Kaluza, PE, President

5/3/12  
Date

Attest:

*Lori Olivero*

MER:Engineering Services Agreement.Kelly Kaluza.3791-709.AMEND

AUDITOR'S CERTIFICATE

I hereby certify that funds are available in the amount of \$677,000.<sup>00</sup> to accomplish and pay the obligation of the Fort Bend County under this contract.

*Ed Sturdivant*  
Ed Sturdivant, Fort Bend County Auditor

Exhibit A



April 24, 2012

Mr. D. Jesse Hegemier, P.E.  
County Engineer  
Fort Bend County  
124 Blume Road  
Rosenberg, Texas 77471

Re: Golfview Drive (FBC Project No. 769)  
Contract Amendment for Kelly R. Kaluza & Associates, Inc.

Project No. 300701.14

Dear Mr. Hegemier:

Several unanticipated tasks have become needed for the referenced project, which require extra work to complete. These tasks include: (1) increased design responsibilities for improvements to Rabbs Bayou, (2) separation of the Rabbs Bayou improvements from the Golfview project as its own stand-alone project, (3) additional design at the Golfview/F.M. 762 intersection, warranted by preliminary engineering conclusions and TxDOT requirements, and (4) additional environmental efforts required by recent changes in regulations. Kelly Kaluza has provided a level of effort and subconsultant backup for the final design efforts, which are enclosed for your review.

The current contract between the County and Kelly Kaluza includes funds for final design services. The difference between the original level of effort and the attached level of effort requires a **contract amendment in the amount of \$77,000.00**. We recommend your approval of such an amendment to their contract.

Please call me if you have any questions.

Sincerely,

A handwritten signature in black ink that reads 'Mark C. Dessens'.

Mark C. Dessens, P.E.  
Project Manager

MCD/md  
Enclosure

## EXHIBIT A

### WORK AUTHORIZATION #3 GOLFVIEW DRIVE IMPROVEMENTS PHASE 2 DESIGN SERVICES

#### Project Limits:

Roadway: Golfview Drive from 375 feet West of Par Lane to FM 762 (Thompsons Highway)

Drainage: Rabbs Bayou from Golfview to Hillcrest Drive

#### Scope of Work:

This project includes design of the second phase of Golfview Drive including a right turn-lane and intersection realignment on FM 762 at Golfview/FM 1640. Rabbs Bayou relocation and detention for the Justice Center, Young and a portion of the Mathis property are included in the project.

Phase 2 Design includes continuation of the first phase of construction up to FM 762. The Golfview project has been separated into two phases to facilitate the early construction of the storm sewer outfall from Williams Way. Right-of-way acquisition for Phase 2 is required from multiple landowners other than the City and County.

It is anticipated that the Drainage District will provide labor and equipment for the relocation of Rabbs Bayou and for construction of detention mitigation. Construction of box culverts and concrete lined channel as well as detention mitigation inlets and outfalls will be completed by contractor(s). Due to the anticipated schedule for approval of the Rabbs Bayou USACE permit, a bid package separate from Golfview Drive is proposed for Rabbs Bayou. Project deliverables will include construction plans for Golfview Drive Phase 2 and separately for Rabbs Bayou. Plans will be provided for a right turn-lane on FM 762 and a permit will be obtained on behalf of the County. Additionally, a USACE Individual Permit will be obtained for filling and relocation of Rabbs Bayou.

Exhibit B  
Work Authorization #1  
Labor Estimate

For: Hend County  
Golfview Drive

Description	Quantity	Professional \$/hr	Project Engineer \$/hr	Survey Tech \$/hr	C.A.S. (1/2012)	Survey Level (1)	Support Staff \$/hr
<b>Design Phase Services (Golfview Phase 2 &amp; Kabbs)</b>							
Golfview Drive - From 762 to 775 feet west of Paw Lane (Approximately 2,360 L.F.)							
Kabbs Bayou - Golfview to Hillcrest Drive							
<b>A Design and Project Management</b>							
1 Project Meetings (2 each)	28	\$6,800			0		1
2 Project Design Coordination	10	\$13,800	22	14	0		2
3 Coordinate Submittal Design	10	\$8,400	40	10	5		0
4 Project Administration	4	\$6,500					20
5 Project Plan Review 70%	14	\$3,300		14			4
6 Project Plan Review 95%	14	\$3,300		14			4
7 Coordination with Fort Bend County Facilities	14	\$2,300		14			4
8 Coordination with City of Richmond	7	\$3,100		7			4
9 Coordination with Utilities & Pipelines	11	\$2,500		11			1
	35	\$49,900	22	85	15	0	33
<b>B Storm System Design</b>							
1 Define Drainage Area	1	\$1,000					
2 Compute Runoff	1	\$1,000					
3 Layout Drainage System	1	\$900					
4 Size Drainage Components	1	\$400					
5 Prepare Drainage Calculations	1	\$1,000					
	5	\$4,300	3	20	0	0	1
<b>C Plan Preparation</b>							
1 Plan and Layout Improvements	5	\$4,500	5	10	0		
2 Title Sheet	1	\$300					
3 Sheet Layout	1	\$400					
4 Control & Benchmarks	1	\$200					
5 R.O.W. Map	1	\$1,400	1	3			
6 Horizontal Alignment	1	\$1,500	2	7			
7 Vertical Alignment	1	\$1,500	2	8			
8 Coordinate with adjacent ground elevations	1	\$1,000	1	12			
9 Intersection Layouts	1	\$1,500	4	4	10		
10 Roadway Sections	1	\$1,000	1	1	3		

**Exhibit B**  
**Work Authorization # 1**  
**Labor Estimate**

For Bend County  
 Golfview Drive

Description	Project	Project Engineer \$175	Project Manager \$225	Engineering Tech \$80	Survey Tech \$80	CAD Technician \$30	Survey Crew (4) \$150	Support Staff \$60
11 TxDOT Turn Lane	\$8,100	2	1	24	12	24		10
11 Storm Sewer	\$1,800	2		10				
12 Storm Water Control Plan	\$600	2		8				
13 Utility Adjustments	\$1,000	3		12				
14 Rabba Detention Plan	\$4,300	4		12		40		
15 Rabba Detention Control Structure	\$4,200	12		10		40		
16 Rabba Bayou Widening Plans	\$4,500	4		6		10		2
17 Plan Sheet Coordination	\$3,100	5		4				
18 Incorporate Subconsultant Plans	\$700	1		4				
19 Construction Notes	\$300	1		1				1
20 Construction Details	\$1,100	4		4				
21 Quantity Takeoff & Construction Cost Estimate	\$4,000	24		10				
	\$4,000	14	14	179	16	184	0	13
<b>D Quality Assurance / Quality Control</b>								
1 Identify critical design components from PER	\$200			1				
2 Submit Plans for 70% Review	\$1,700			5		7		
3 Submit Plans & Specifications for 65 % Review	\$1,900			5		7		
4 Coordinate Subconsultant Design Comments	\$1,100			3				
5 Review Construction Plans	\$1,800			10				
6 Review Technical Specifications	\$300			5				
7 Field Visit	\$1,100			17		12		
8 Review Documents	\$1,800			17				
9 Prepare Bid Form	\$2,100			6		3		
10 Finalize Plans and Specifications for Bidding Purposes	\$900			3				
	\$13,600	13	46	40	11	30	0	3
<b>E Subconsultants</b>								
1 Traffic Engineering, T.C.P. Markings & Signal	\$12,700							
2 Environmental - Individual Permit	\$66,000							
3 PM782PM1642 Intersection Realignment	\$3,200							
	\$81,900							
<b>Design Phase Services (Golfview Phase 2 &amp; Rabba) Total</b>	\$196,700	67	386	161	369	266	150	45

**Exhibit C**

**Golfview Drive - W.A. #3 (Design - Phase 2)**

Date: 3/30/2012

	7/9/2012	9/3/2012	10/29/2012	12/24/2012	2/18/2013	4/15/2013	6/10/2013	8/5/2013
Phase 2 Design Kickoff								
Sub-consultant authorization								
70% Traffic Control Plan	45							
70% Bridge Design	45							
70% complete plans & specifications	67							
County Comments on 70% submittal			14					
95% complete plans & specifications (GolView)			31					
County Comments on 95% submittal (GolView)			14					
Finalize Bid Documents (GolView)				18				
Individual Permit approval by USACE				79%				
95% complete plans & specifications (Rabbs)							48	
County Comments on 95% submittal (Rabbs)							15	
Finalize Bid Documents (Rabbs)								25

EXHIBIT C

**GOLFVIEW DRIVE - WORK AUTHORIZATION #3  
PROJECT SCHEDULE DATES**

Task	Start Date	Duration	Ending Date	Completed	Remaining
Finalize Bid Documents (Rabbs)	8/5/2013	25	8/30/2013	0	25
County Comments on 95% submittal (Rabbs)	7/21/2013	15	8/5/2013	0	15
95% complete plans & specifications (Rabbs)	6/3/2013	48	7/21/2013	0	48
Individual Permit approval by USACE	7/9/2017	796	5/1/2013	0	296
Finalize Bid Documents (Golfview)	11/12/2012	18	11/30/2012	0	18
County Comments on 95% submittal (Golfview)	10/29/2012	14	11/12/2012	0	14
95% complete plans & specifications (Golfview)	9/28/2012	31	10/29/2012	0	31
County Comments on 70% submittal	9/14/2012	14	9/28/2012	0	14
70% complete plans & specifications	7/9/2012	67	9/14/2012	0	67
70% Bridge Design	7/16/2012	45	8/30/2012	0	45
70% Traffic Control Plan	7/16/2012	45	8/30/2012	0	45
Sub-consultant authorization	7/9/2012	4	7/13/2012	0	4
Phase 2 Design Kickoff	7/9/2012	0	7/9/2012	0	0



March 27, 2012

Mr. Richard Stolleis  
Kelly Kaluza & Associates  
3014 Avenue I  
Rosenberg, Texas 77471

Dear Mr. Stolleis:

Re: Addendum to the Scope and Cost Estimate for Phase II  
Golfview Project  
Fort Bend County, Texas

BIO-WEST, Inc. (BIO-WEST) is pleased to present this addendum to the scope and cost estimate to provide Phase II environmental services for the proposed Golfview Project (Project) located near Richmond in Fort Bend County, Texas. Based on the information and research conducted in Phase I, BIO-WEST has identified the necessity to refine Phase II costs. The following proposal provides an amended project approach and cost estimate for Phase II as result of the current stream channel design and coordination with the U.S. Army Corps of Engineers (USACE).

#### **Project Understanding**

BIO-WEST understands the Project will consist of altering approximately 2,700 linear feet of Rabbs Bayou to increase flow capacity along with the construction of an off-channel mitigation basins and stormwater outfall structures. Currently the preferred design for the Project is to realign approximately 1,700 linear feet of the channel to the east along the private property boundary. The remaining length (1,000 linear feet) of Rabbs Bayou will be deepened and widened (Alternative 1). If the realignment is determined to not be the preferred design, Rabbs Bayou will be deepened and widened in the current location within the Project area (Alternative 2).

#### **Project Approach**

In order to meet the Project goals, a phased environmental approach was proposed. Phase I would identify environmental concerns, identify aspects of the Project not regulated by the USACE, and identify any regulatory permits that would be required. Moving forward, Phase II will consist of utilizing the preliminary information collected in Phase I and provide the level of effort anticipated to obtain a Nationwide Permit (NWP) and/or an Individual Permit (IP). As an overview, a flow chart summarizing the major components of these efforts is provided as an attachment (Attachment A).

1018 First Street • Rosenberg, Texas 77471 • Telephone 832-595-9364

### Phase I

Completed to date, the first phase consisted of conducting a background review, field investigation, and initiating agency coordination to determine constraints that may influence the timing and level of detail for permitting the Project. Results of Phase I identified that, effective July 2011 and implemented as of January 2012, the USACE will now require a Stream Condition Assessment (SCA) tool to quantify impacts to streams. This new approach has been implemented to replace/mitigate "in-kind" impacts. In this case, stream impacts to Rabbs Bayou will need to be mitigated for using similar hydrologic characteristics. This recent approach replaces the former option of mitigating stream impacts by using dissimilar features (i.e. emergent wetlands or non-similar mitigation credits). A detailed account of a meeting with the USACE discussing this project can be reviewed in a Memorandum dated January 13, 2012.

In addition to the SCA, it was discovered that additional cultural resource investigations and concurrence from the Texas Historical Commission (THC) will be required. This additional effort is necessary due to the close proximity of the San Gabriel Cemetery. THC enforces guidelines that recommend a 100-foot buffer to be maintained from any known burial sites. Any encroachment on this buffer will require additional coordination and investigations to prove cultural resources will not be impacted.

Results of the Phase I effort also determined that construction located entirely within uplands and outside of the ordinary high water marks (OHWM) of Rabbs Bayou may be initiated prior to any permit approval by the USACE. For activities that may result in minimal impacts at and/or below the OHWM, the USACE has a streamlined permitting process for common activities call a Nationwide Permit (NWP). This NWP process allows for an accelerated approval pending all general conditions of the permit are met.

### Phase II

BIO-WESI understands the Golfview Project will occur in two construction phases. The first phase will comprise of modifying drainage outside of Rabbs Bayou proper and the second phase will include the actual modification of Rabbs Bayou. In order to address the needs and schedule of the proposed project, Phase II has been refined into two subcategories: **Phase II-A; Nationwide Permit (NWP)** and **Phase II-B; Individual Permit**.

#### Phase II-A, Nationwide Permits

Phase II A will address environmental permitting related to the construction of detention basins and outfall structures associated with drainage features outside of Rabbs Bayou proper. Activities associated with this construction will likely be covered under a NWP as identified by the USACE. Based on preliminary discussions of details associated with the detention basin and Golfview stormwater outfalls, two types of Nationwide Permits (NWP) may be applicable.

A **NWP 7, Outfall Structures and Associated Intake Structures**, allows for the construction or modification of outfall structures and associated intake structures, where the effluent from the outfall is authorized, conditionally authorized, or specifically exempted by, or that are otherwise in compliance with regulations issued under the National Pollutant Discharge Elimination System Program (Section 402 of the Clean Water Act).

The construction of intake structures is not authorized by this NWP, unless they are directly associated with an authorized outfall structure. The permittee must submit a Pre-Construction

Notification (PCN) to the district engineer prior to commencing the activity. General conditions and guidelines apply for the submission and review process of the PCN.

A NWP 13, Bank Stabilization, allows for erosion prevention, provided the activity meets all of the following criteria:

- (a) No material is placed in excess of the minimum needed for erosion protection;
- (b) The activity is no more than 500 feet in length along the bank, unless this criterion is waived in writing by the district engineer;
- (c) The activity will not exceed an average of one cubic yard per running foot placed along the bank below the plane of the ordinary high water mark or the high tide line, unless this criterion is waived in writing by the district engineer;
- (d) The activity does not involve discharges of dredged or fill material into special aquatic sites, unless this criterion is waived in writing by the district engineer;
- (e) No material is of the type, or is placed in any location, or in any manner, to impair surface water flow into or out of any water of the United States;
- (f) No material is placed in a manner that will be eroded by normal or expected high flows (properly anchored trees and treetops may be used in low energy areas); and,
- (g) The activity is not a stream channelization activity.

With a NWP 13, the permittee must submit a PCN to the district engineer prior to commencing the activity if the bank stabilization activity: (1) involves discharges into special aquatic sites; (2) is in excess of 500 feet in length; or (3) will involve the discharge of greater than an average of one cubic yard per running foot along the bank below the plane of the ordinary high water mark or the high tide line. General conditions and guidelines apply for the submission and review process of the PCN.

Finalized engineered drawings and impact acreages and volumes will be required to complete the permit(s). The USACE permitting process for either of these NWP is then anticipated to be up to 90 days. This timing starts upon receiving the permit(s) yet is subjective to the USACE determination of completeness. The USACE occasionally will put the project on hold, request additional information, and resume the timing upon receiving the supplemental information. Modification to project details may result in the selection of alternative permits and thus possibly increase workloads. However, if a PCN is required, the USACE will ultimately determine which permit(s) is/are most appropriate for this specific situation.

#### Phase II-B, Individual Permit

Information collected on the project in Phase I will be used to initiate an IP application, as identified by the USACE, for construction activities occurring within Rabbs Bayou proper. In addition to environmental data, this process will also require specific project details including construction and engineered drawings to complete the IP. BIO-WEST would continue to work with Kelly Kaluza & Associates to provide project design drawings and proposed maps.

The SCA tool will be utilized on the existing stream to quantify its baseline ecological value (value) according to the USACE. Subsequent to establishing an existing stream value, this tool will be implemented on both proposed channel alternatives to determine conceptual post-construction values and identify any discrepancies. Any net loss in these values will require mitigation. At this time, it is believed that the proposed project design can be enhanced to simulate natural conditions and potentially result in a no net loss value. Some of these design concepts have been discussed with Kelly Kaluza & Associates and considered feasible at this time. If however, stream values cannot be reconciled, alternative mitigation will be required. It should be noted that the SCA tool is new, and USACE staff are currently being trained on its

implementation. Based on our previous experience, it is noted that the platform for this tool appears to derive from a similar hydrogeomorphic (HCM) model to assess wetlands.

For this project it will be necessary to demonstrate that construction will not affect any undocumented archaeological sites or burials located around the Project. Therefore, an intensive archaeological investigation will be necessary. This investigation would require an approved archaeological principal investigator to oversee scraping and trenching soils with an excavator at representative areas where construction will take place within the required 100-foot buffer. These efforts may be necessary for either alternative; however, since Alternative 2 parallels the cemetery for a greater distance, archaeological investigation efforts would increase. With selection of either alternative, it is understood that a backhoe or other similar type and size of machine will be provided by the County to conduct archaeological surveys by the Fort Bend County Drainage District.

Environmental construction oversight and mitigation monitoring may also be provided if the need is identified, however, these costs have not been provided at this time due to the uncertainty of the extent or duration of these needs. For previous wetland mitigation projects, periodic monitoring is required to document successful mitigation within a 5-year period.

#### Cost Estimate

Based on the regulations, information known and project understanding, BIO-WEST originally anticipated Phase II of the permitting process to be \$13,417.50 (July 2011). Since this time, the Rabbit Bayou has been proposed to be realigned from the natural channel and increase in length. Also, the SCA tool is now required by USACE (as of January 2012) and "in-kind" stream mitigation is required. In addition, it was discovered that due to the adjacent San Gabriel Cemetery, intense archaeological investigations would be required by the Texas Historical Commission. Much of the archaeological effort has been augmented by the proposed realignment traversing additional footage adjacent to the existing cemetery. The original cost provided did not include mitigation, which under this approach will likely now be incorporated during construction. Details of anticipated mitigation costs under the old regulations are provided in a letter to Kelly Kaluza & Associates dated March 25, 2012.

#### Phase II-A: Nationwide Permit

During the Phase I effort, it was identified that a NWP would be required for the addition of three outfall structures (1 detention basin outfall and 2 Golfview stormwater outfalls). Additional costs to obtain these NWPs would also occur. Efforts for these activities have been estimated at \$6,660 with details provided in Table 1.

Table 1. Phase II-A Nationwide Permit Support Cost

Phase II-A Environmental Support for Nationwide Permit						
Item	Labor Hours				Permit Application	Estimated Cost
	Engineer	Surveyor	Archaeologist	Technician		
NWP Application	4	0	0	0	1	\$6,660.00

#### Phase II-B: Individual Permit

Phase II-B permitting costs increased significantly due to new USACE regulations and efforts necessary to satisfy the Texas Historical Commission. For this, the IP costs increased to a total of \$66,000. Table 2 provides an effort detail.

Table 2. Phase II-B Individual Permit Support Cost Detail

Phase II-B Environmental Support for Individual Permit						
Item	Labor Hours				Permit Application	Estimated Cost
	Engineer	Surveyor	Archaeologist	Technician		
IP Application	4	14	10	10	129	\$66,000.00

Summary

The previously proposed budget (\$13,417.50) was increased by the amended Phase II-A and Phase II-B efforts (\$59,182 combined) and resulted in a revised project total of \$72,600. This significant increase from the original cost is resultant of USACE policy change and additional efforts required by the Texas Historical Commission for cultural resource clearance. Also contributing, is the proposed realignment of Rabbs Bayou out of its existing natural channel. A summary cost for this Phase II effort is provided in Table 3 below.

Table 3 Cost Estimate Summary for Phase II of the Golfview Project

Phase II-A Environmental Support for Nationwide Permit	\$6,000.00
Phase II-B Environmental Support for Individual Permit	\$53,182.00
<b>Total Phase II Effort</b>	<b>\$72,600.00</b>
Previously Proposed Budget	\$13,417.50
<b>REVISED AMOUNT</b>	<b>\$59,182.50</b>

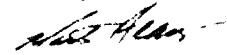
Based on the discussions of mitigation by enhancing the value of Rabbs Bayou with Kelly Kaluza & Associates, mitigation credit rates are not expected, nor included, in this estimate. If cultural resources are located within the Project, costs associated with avoiding or, if possible, mitigating would be provided within a supplemental scope of services.

Schedule

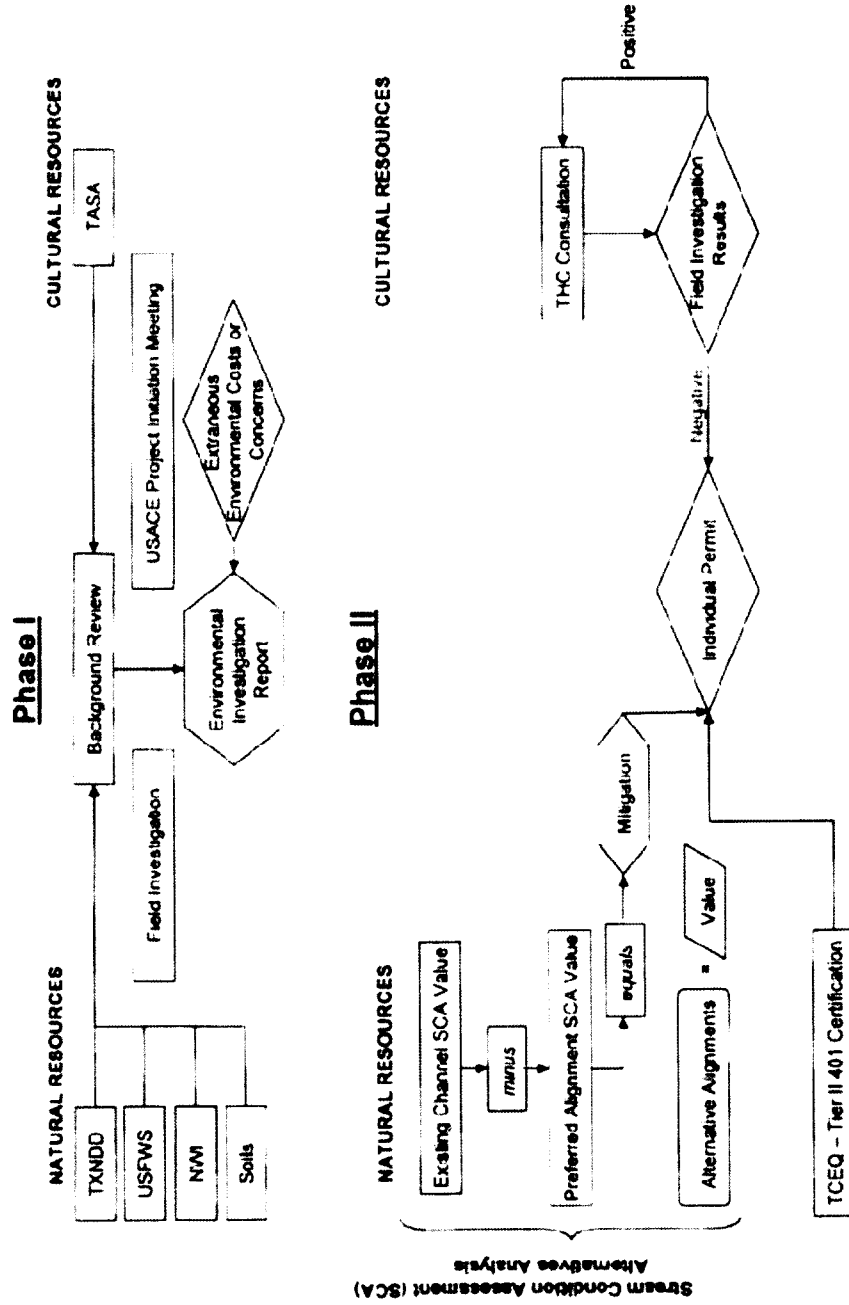
A schedule for the environmental components of this project has been prepared based on the information known at this time (Attachment B). It is recognized that the start date of this schedule is arbitrary and will reflect project approval and selection. In addition, it should be noted that the USACE does not specify a set schedule for an IP, so this component is estimated based on our experience and understanding of the current workload at the USACE. Many factors may influence this schedule including public comment and/or agency concerns. BIO-WEST will implement all resources to address project concerns and diligently correspond with the USACE. Once the permit has been submitted, BIO-WEST will retain a schedule and provide bi-weekly updates on progress to date.

BIO-WEST greatly appreciates the opportunity to present this addendum to the scope of work and cost estimate. If you have any questions or would like any additional information, please feel free to contact me any time at (832) 595-9064.

Sincerely,

  
Marty Heaney  
Project Manager

# Attachment A



0:8 Fruit Street • River City • Tel: 774.711 • Telefax: 632.595.9064

## Attachment B

