AGENDA
DRAINAGE DISTRICT
BOARD OF DIRECTORS
December 20, 2013
9:00 A.M.

NOTICE is hereby given in accordance with Chapter 551, Texas Government Code, that a SPECIAL MEETING of the Drainage District #1 Board of Directors will be held at the Edinburg Council Chambers, 415 W. University Drive, Edinburg, Hidalgo County, Texas. Discussion and possible action relating to the following business will be transacted:

1. **Roll Call**

2. **Open Forum**

3. **Approval of Consent Agenda**

4. **AI-42117** Approval of Interlocal Cooperation Agreement Between Hidalgo County Drainage District No.1 and Hidalgo County Regional Mobility Authority as per meeting discussion of October 2, 2013.

5. **AI-42220** 2013 Bond Series
Approval of Work Authorization No. 4 with L&G Engineering, as it relates to Mission Inlet Recertification project including Phase IA - Easement, Phase II Proposed Impro. Analysis and Phase III -CLOMAR, in the amount of $923,427.60.

6. **AI-42223** A.) Requesting approval to accept appraisal from Leonel Garza Jr. & Associates as it relates to Mission Inlet Recertification Property Evaluation.

B.) Requesting approval to advertise for RFB No.: 14-002-01-29 Hidalgo County Drainage District No.1-"Professional Engineering Services-Pool".

2008 BOND SERIES

C.) Requesting approval of Supplemental Agreement No. 1 to Work Authorization No.1 under SH 68-TxDOT Roadway Watershed Study Agreement.

2013 BOND SERIES

D.) Requesting approval of Supplemental Agreement No. 2 to La Joya Watershed Improvement Project Agreement.

E.) Requesting approval of final negotiated agreement for Professional Engineering Services with Entech Civil Engineers as it relates the Rehabilitation of North Main Drain Weir No. 3 and South Main Drain Weir

No. 5. Approved for negotiations by the Hidalgo County Drainage District No.1 Board of Director's on January 15, 2013.

F.) Pursuant to the Boards approval of Agreement with Entech Civil Engineers; requesting approval of the following work authorizations:

1.) Work Authorization No. 1 as it relates to Survey Services for North Main Drain Weir No. 3 in the amount of $6,600.00.
2.) Work Authorization No. 2 as it relates to Survey Services for South Main Drain Weir No. 5 in the amount of $6,600.00.
3.) Work Authorization No. 3 as it relates to Geotechnical Services for North Main Drain Weir No. 3 in the amount of$10,436.25.
4.) Work Authorization No. 4 as it relates to Geotechnical Services for South Main Drain Weir No. 5 in the amount of$10,436.25.
5.) Work Authorization No. 5 as it relates to Engineering Services for North Main Drain Weir No. 3 in the amount of $30,724.22.
6.) Work Authorization No. 6 as it relates to Engineering Services for South Main Drain Weir No. 5 in the amount of $28,955.98

7. **Closed Session:**
Board of Directors may go into Closed Session pursuant to Chapter 551, Texas Government Code, Sections 551.071 & 551.072 to discuss the following:

A. **Real Estate Acquisition**

B. **Pending and/or Potential Litigation**

8. **Open Session:**

A. **Real Estate Acquisition**

B. **Pending and/or Potential Litigation**

9. **Closed Session:**
Board of Directors may reconvene into Closed Session for the discussion regarding the agenda items listed

10. **Open Session:**
Board of Directors may reconvene into Open Session for the discussion regarding the agenda items listed

11. **Adjourn**

AI-42117 **4.**

DRAINAGE DISTRICT

Meeting Date: 12/20/2013

Submitted By: Sylvia Sanchez, DRAINAGE DISTRICT

Department: DRAINAGE DISTRICT

Information

CAPTION

Approval of Interlocal Cooperation Agreement Between Hidalgo County Drainage District No.1 and Hidalgo County Regional Mobility Authority as per meeting discussion of October 2, 2013.

BACKGROUND

Form Review

Inbox	Reviewed By	Date
Budget & Management	Debbie Tamez	12/06/2013 09:08 AM
Final Approval	Monica Badillo	12/16/2013 05:32 PM

Form Started By: Sylvia Sanchez Started On: 12/05/2013 11:10 AM

Final Approval Date: 12/16/2013

AI-42220 **5.**

DRAINAGE DISTRICT

Meeting Date: 12/20/2013

Submitted By: Sylvia Sanchez, DRAINAGE DISTRICT

Department: DRAINAGE DISTRICT

Information

CAPTION

2013 Bond Series
Approval of Work Authorization No. 4 with L&G Engineering, as it relates to Mission Inlet Recertification project including Phase IA - Easement, Phase II Proposed Impro. Analysis and Phase III -CLOMAR, in the amount of $923,427.60.

BACKGROUND

Form Review

Inbox	Reviewed By	Date
Budget & Management	Debbie Tamez	12/11/2013 09:14 AM
Final Approval	Monica Badillo	12/16/2013 05:32 PM

Form Started By: Sylvia Sanchez Started On: 12/11/2013 07:40 AM

Final Approval Date: 12/16/2013

AI-42223 **6.**

DRAINAGE DISTRICT

Meeting Date: 12/20/2013

Submitted By: Jaime Salazar, DRAINAGE DISTRICT

Department: DRAINAGE DISTRICT

Information

CAPTION

A.) Requesting approval to accept appraisal from Leonel Garza Jr. & Associates as it relates to Mission Inlet Recertification Property Evaluation.

B.) Requesting approval to advertise for RFB No.: 14-002-01-29 Hidalgo County Drainage District No.1-"Professional Engineering Services-Pool".

2008 BOND SERIES

C.) Requesting approval of Supplemental Agreement No. 1 to Work Authorization No.1 under SH 68-TxDOT Roadway Watershed Study Agreement.

2013 BOND SERIES

D.) Requesting approval of Supplemental Agreement No. 2 to La Joya Watershed Improvement Project Agreement.

E.) Requesting approval of final negotiated agreement for Professional Engineering Services with Entech Civil Engineers as it relates the Rehabilitation of North Main Drain Weir No. 3 and South Main Drain Weir No. 5. Approved for negotiations by the Hidalgo County Drainage District No.1 Board of Director's on January 15, 2013.

F.) Pursuant to the Boards approval of Agreement with Entech Civil Engineers; requesting approval of the following work authorizations:

1.) Work Authorization No. 1 as it relates to Survey Services for North Main Drain Weir No. 3 in the amount of $6,600.00.
2.) Work Authorization No. 2 as it relates to Survey Services for South Main Drain Weir No. 5 in the amount of $6,600.00.
3.) Work Authorization No. 3 as it relates to Geotechnical Services for North Main Drain Weir No. 3 in the amount of$10,436.25.
4.) Work Authorization No. 4 as it relates to Geotechnical Services for South Main Drain Weir No. 5 in the amount of$10,436.25.
5.) Work Authorization No. 5 as it relates to Engineering Services for North Main Drain Weir No. 3 in the amount of $30,724.22.
6.) Work Authorization No. 6 as it relates to Engineering Services for South Main Drain Weir No. 5 in the amount of $28,955.98

BACKGROUND

Attachments

Work Auth. No. 1 NMDW3
Work Auth. No. 2 SMDW5
Work Auth. No. 3 NMDW3
Work Auth. No. 4 SMDW5
Work Auth. No. 5 NMDW3
Work Auth. No. 6 SMDW5
Supplemental Agreement No.1
Supplemental Agreement No.2
agreement

Form Review

Inbox	Reviewed By	Date
Budget & Management	Debbie Tamez	12/12/2013 02:10 PM
Final Approval	Monica Badillo	12/16/2013 05:32 PM

Form Started By: Jaime Salazar Started On: 12/11/2013 11:31 AM

Final Approval Date: 12/16/2013

EXHIBIT "E"

PROFESSIONAL ENGINEERING SERVICES CONTRACT # _____
WORK AUTHORIZATION FORM

WORK AUTHORIZATION NO. 1

THIS WORK AUTHORIZATIO is made pursuant to the terms and conditions of Section I.A. of the Agreement made by and between HIDALGO COUNTY DRAINAGE DISTRICT 1 hereinafter called the "Owner", and ENTECH CIVIL ENGINEERS, Professional Engineers hereinafter called "Engineer".

PART 1. SCOPE OF WORK

The scope of services to be provided by the Owner is identified in EXHIBIT "A"- Scope of Services to be Provided by the Owner attached hereto.

The scope of services to be provided by the Engineer is identified in EXHIBIT "B" – Scope of Services to be Provided by the Engineer attached hereto.

PART 2. ESTIMATED COST

The estimated cost for services under this Work Authorization is $ 6,600.00. This amount is based upon the costs outlined in the Estimated Cost Proposal attached hereto as EXHIBIT "D".

PART 3. PAYMENT

Compensation and payment to the Engineer for the services established under this Work Authorization shall be made in accordance with Article/Part/Section _____ of the Agreement.

PART 4. FUNDING

This Work Authorization No. 1 shall be funded through funding source:
Account No. _____
Requisition Number_____

PART 5. PERIOD OF SERVICE
This Work Authorization shall become effective on the date of final acceptance of the parties hereto, and terminate upon completion of scopes of the work authorization.

PART 6. RESPONSIBILITIES AND OBLIGATIONS
This Authorization does not waive the parties' responsibilities and obligations provided under the Agreement.

This Authorization does not waive the parties' responsibilities and obligations provided under the Agreement.

PART 7. ACKNOWLEDGEMENT AND CONFIRMATION

Acknowledgement and confirmation by _____ as to content and detail of this Work Authorization No.___.

BY: _____

PART 8. ACCEPTANCE AND APPROVAL

This Work Authorization is hereby accepted, approved by the Hidalgo County Drainage District No. 1 and Entech Civil Engineers, Inc as indicated below and effective as of _____ day of _____, 20__.

THE ENGINEER:

By: Ovidio Alanis
Vice President
Entech Civil Engineers

THE OWNER:

_____
By

EXHIBIT "A"

Services to be provided by the Owner

The following provides an outline of the services to be provided by the **OWNER** in the development of the **"Project"**.

The **OWNER** will provide to the **ENGINEER** the following:

(1) Authorization to the **ENGINEER** to begin work in accordance with Section 3 of this Agreement.

(2) Payment for work performed by the **ENGINEER**, and accepted by the **OWNER** in accordance with Section 6 of the Agreement.

(3) Assistance to the **ENGINEER**, as necessary, to obtain the required data and information from other local, regional, State and Federal agencies that the **ENGINEER** cannot easily obtain.

(4) Provide any available relevant data the **OWNER** may have on file concerning the **"Project"**.

(5) Provide timely review and decisions in response to the **ENGINEER'S** request for information and/or required submittals and deliverables, in order for the **ENGINEER** to maintain the agreed-upon work schedule prepared in accordance with Exhibit C of this Agreement.

(6) Attend and participate in progress meetings as required and as coordinated and conducted by the **ENGINEER**.

(7) Review and approve the **"Project"** design criteria.

(8) Provide timely reviews and comments to submitted construction packages.

(9) Review and approve change orders as required and prepared by the **ENGINEER**.

EXHIBIT "B"

SERVICES TO BE PROVIDED BY THE ENGINEER

WORK AUTHORIZATION NO 2

SURVEY SERVICES

1. Perform 5 cross sections upstream and downstream of Weir SMD-WR5
2. Locate 2 geotechnical borings
3. Provide survey data in an acceptable format to HCDD1
4. Locate and detail existing SMD-WR5 weir
5. Locate existing riprap

HIDALGO COUNTY DRAINAGE DISTRICT # 1
WEIR # 3
HIDALGO COUNTY, TEXAS
FEE SCHEDULE

TASK DESCRIPTION	COST	Entech Fee	Sub Fee
PHASE I (BASIC SERVICES)	$ -	$ -	$ -
PHASE I (ADDITIONAL SERVICES)	$ -	$ -	$ -
PHASE II FINAL DESIGN (BASIC SERVICES)	$6,000.00		$6,000.00
PHASE II FINAL DESIGN (ADDITIONAL SERVICES)			
PHASE III CONSTRUCTION SERVICES (TOTAL)			
SUBTOTAL CONTRACT AMOUNT	$6,000.00		$6,000.00
Total Sub Fees	$6,000.00		
Sub percentage	10%		$ 600.00
	$ -		
	$ -		
TOTAL CONTRACT AMOUNT			$6,600.00

EXHIBIT "E"

PROFESSIONAL ENGINEERING SERVICES CONTRACT # _____
WORK AUTHORIZATION FORM

WORK AUTHORIZATION NO. 2

THIS WORK AUTHORIZATIO is made pursuant to the terms and conditions of Section I.A. of the Agreement made by and between HIDALGO COUNTY DRAINAGE DISTRICT 1 hereinafter called the "Owner", and ENTECH CIVIL ENGINEERS, Professional Engineers hereinafter called "Engineer".

PART 1. SCOPE OF WORK

The scope of services to be provided by the Owner is identified in EXHIBIT "A"- Scope of Services to be Provided by the Owner attached hereto.

The scope of services to be provided by the Engineer is identified in EXHIBIT "B" – Scope of Services to be Provided by the Engineer attached hereto.

PART 2. ESTIMATED COST

The estimated cost for services under this Work Authorization is $ 6,600.00. This amount is based upon the costs outlined in the Estimated Cost Proposal attached hereto as EXHIBIT "D".

PART 3. PAYMENT

Compensation and payment to the Engineer for the services established under this Work Authorization shall be made in accordance with Article/Part/Section _____ of the Agreement.

PART 4. FUNDING

This Work Authorization No. 2 shall be funded through funding source:
Account No. _____
Requisition Number_____

PART 5. PERIOD OF SERVICE
This Work Authorization shall become effective on the date of final acceptance of the parties hereto, and terminate upon completion of scopes of the work authorization.

PART 6. RESPONSIBILITIES AND OBLIGATIONS
This Authorization does not waive the parties' responsibilities and obligations provided under the Agreement.

This Authorization does not waive the parties' responsibilities and obligations provided under the Agreement.

PART 7. ACKNOWLEDGEMENT AND CONFIRMATION

Acknowledgement and confirmation by _____ as to content and detail of this Work Authorization No.___.

BY: _____

PART 8. ACCEPTANCE AND APPROVAL

This Work Authorization is hereby accepted, approved by the Hidalgo County Drainage District No. 1 and Entech Civil Engineers, Inc as indicated below and effective as of _____ day of _____, 20__.

THE ENGINEER:

By: Ovidio Alanis
Vice President
Entech Civil Engineers

THE OWNER:

_____
By

EXHIBIT "A"

Services to be provided by the Owner

The following provides an outline of the services to be provided by the **OWNER** in the development of the **"Project"**.

The **OWNER** will provide to the **ENGINEER** the following:

(1) Authorization to the **ENGINEER** to begin work in accordance with Section 3 of this Agreement.

(2) Payment for work performed by the **ENGINEER**, and accepted by the **OWNER** in accordance with Section 6 of the Agreement.

(3) Assistance to the **ENGINEER**, as necessary, to obtain the required data and information from other local, regional, State and Federal agencies that the **ENGINEER** cannot easily obtain.

(4) Provide any available relevant data the **OWNER** may have on file concerning the **"Project"**.

(5) Provide timely review and decisions in response to the **ENGINEER'S** request for information and/or required submittals and deliverables, in order for the **ENGINEER** to maintain the agreed-upon work schedule prepared in accordance with Exhibit C of this Agreement.

(6) Attend and participate in progress meetings as required and as coordinated and conducted by the **ENGINEER**.

(7) Review and approve the **"Project"** design criteria.

(8) Provide timely reviews and comments to submitted construction packages.

(9) Review and approve change orders as required and prepared by the **ENGINEER**.

EXHIBIT "B"

SERVICES TO BE PROVIDED BY THE ENGINEER

WORK AUTHORIZATION NO 1

SURVEY SERVICES

1. Perform 5 cross sections upstream and downstream of Weir NMD-WR3
2. Locate 2 geotechnical borings
3. Provide survey data in an acceptable format to HCDD1
4. Locate and detail existing NMD-WR3 weir
5. Locate existing riprap

HIDALGO COUNTY DRAINAGE DISTRICT # 1
WEIR # 5
HIDALGO COUNTY, TEXAS
FEE SCHEDULE

TASK DESCRIPTION	COST	Entech Fee	Sub Fee
PHASE I (BASIC SERVICES)	$ -	$ -	$ -
PHASE I (ADDITIONAL SERVICES)	$ -	$ -	$ -
PHASE II FINAL DESIGN (BASIC SERVICES)	$6,000.00		$6,000.00
PHASE II FINAL DESIGN (ADDITIONAL SERVICES)			
PHASE III CONSTRUCTION SERVICES (TOTAL)			
SUBTOTAL CONTRACT AMOUNT	$6,000.00		$6,000.00
Total Sub Fees	$6,000.00		
Sub percentage	10%		$ 600.00
	$ -		
	$ -		
TOTAL CONTRACT AMOUNT			$6,600.00

EXHIBIT "E"

PROFESSIONAL ENGINEERING SERVICES CONTRACT # _____
WORK AUTHORIZATION FORM

WORK AUTHORIZATION NO. 3

THIS WORK AUTHORIZATIO is made pursuant to the terms and conditions of Section I.A. of the Agreement made by and between HIDALGO COUNTY DRAINAGE DISTRICT 1 hereinafter called the "Owner", and ENTECH CIVIL ENGINEERS, Professional Engineers hereinafter called "Engineer".

PART 1. SCOPE OF WORK

The scope of services to be provided by the Owner is identified in EXHIBIT "A"- Scope of Services to be Provided by the Owner attached hereto.

The scope of services to be provided by the Engineer is identified in EXHIBIT "B" – Scope of Services to be Provided by the Engineer attached hereto.

PART 2. ESTIMATED COST

The estimated cost for services under this Work Authorization is $ 10,436.25. This amount is based upon the costs outlined in the Estimated Cost Proposal attached hereto as EXHIBIT "D".

PART 3. PAYMENT

Compensation and payment to the Engineer for the services established under this Work Authorization shall be made in accordance with Article/Part/Section _____ of the Agreement.

PART 4. FUNDING

This Work Authorization No. _3_ shall be funded through funding source:
Account No. _____
Requisition Number_____

PART 5. PERIOD OF SERVICE
This Work Authorization shall become effective on the date of final acceptance of the parties hereto, and terminate upon completion of scopes of the work authorization.

PART 6. RESPONSIBILITIES AND OBLIGATIONS
This Authorization does not waive the parties' responsibilities and obligations provided under the Agreement.

This Authorization does not waive the parties' responsibilities and obligations provided under the Agreement.

PART 7. ACKNOWLEDGEMENT AND CONFIRMATION

Acknowledgement and confirmation by _____ as to content and detail of this Work Authorization No.___.

BY: _____

PART 8. ACCEPTANCE AND APPROVAL

This Work Authorization is hereby accepted, approved by the Hidalgo County Drainage District No. 1 and Entech Civil Engineers, Inc as indicated below and effective as of _____ day of _____, 20__.

THE ENGINEER:

_____

By: Ovidio Alanis
Vice President
Entech Civil Engineers

THE OWNER:

_____

By

EXHIBIT "A"

Services to be provided by the Owner

The following provides an outline of the services to be provided by the **OWNER** in the development of the **"Project"**.

The **OWNER** will provide to the **ENGINEER** the following:

(1) Authorization to the **ENGINEER** to begin work in accordance with Section 3 of this Agreement.

(2) Payment for work performed by the **ENGINEER**, and accepted by the **OWNER** in accordance with Section 6 of the Agreement.

(3) Assistance to the **ENGINEER**, as necessary, to obtain the required data and information from other local, regional, State and Federal agencies that the **ENGINEER** cannot easily obtain.

(4) Provide any available relevant data the **OWNER** may have on file concerning the **"Project"**.

(5) Provide timely review and decisions in response to the **ENGINEER'S** request for information and/or required submittals and deliverables, in order for the **ENGINEER** to maintain the agreed-upon work schedule prepared in accordance with Exhibit C of this Agreement.

(6) Attend and participate in progress meetings as required and as coordinated and conducted by the **ENGINEER**.

(7) Review and approve the **"Project"** design criteria.

(8) Provide timely reviews and comments to submitted construction packages.

(9) Review and approve change orders as required and prepared by the **ENGINEER**.

EXHIBIT "B"

SERVICES TO BE PROVIDED BY THE ENGINEER

WORK AUTHORIZATION NO 3

GEOTECHNICAL SERVICES

1. Perform 2 borings at Weir NMD-WR3
2. Cement bentonite grouting of borings
3. Laboratory testing for each boring
4. Engineering analyses
5. Engineering reports

RABA KISTNER
CONSULTANTS

Proposal No. PMA13-024-00
March 13, 2013

Raba Kistner
Consultants, Inc.
800 E. Hackberry
McAllen, TX 78501
www.rkci.com

P 956 :: 682 :: 5332
F 956 :: 682 :: 5487
TBPE Firm F-3257

Mr. Nick Alanis, Vice President
Entech Civil Engineers, Inc.
16360 Park Ten Place, Suite 230
Houston, Texas 77084

Re: **Proposal for Geotechnical Engineering Services**
Proposed North Main Channel Weir Slope Repair Project
Along the North Main Channel
South of Lake Edinburg
Edinburg, Hidalgo County, Texas

Dear Mr. Alanis:

On the basis of the information provided to us via electronic-mail attachment on Friday, March 8, 2013 by Mr. Mike Spiegel, P.E., with Entech Civil Engineers, Inc., the project's consulting engineering firm, **Raba Kistner Consultants, Inc. (RKCI)** is thankful for being selected to provide Geotechnical Engineering Services to Entech Civil Engineers, Inc. (CLIENT) for the above-referenced project. The broad objectives of our study will be to determine subsurface conditions along a section of the existing north main channel located in close proximity to the subject weir structure, to perform slope stability analyses, and to provide guidelines for the design of the proposed repair and reconstruction of a section of the existing north main channel's east bank located north of the weir structure. Described in this letter are:

- our understanding of currently perceived project characteristics;
- our proposed scope for field and laboratory study;
- our proposed scope for engineering evaluation and reporting;
- our tentative project schedule; and
- our project lump sum fee.

PROJECT DESCRIPTION

Based on the documents received by our office via electronic-mail attachment, provided by Mr. Spiegel on Friday, March 8, 2013, we understand that the proposed project consists of the repair and reconstruction of a failed section of the existing north main channel's east bank located north of the concrete riprap and in close proximity to the weir structure. The existing weir structure is located along the North Main Channel about 0.2 miles south of Lake Edinburg in Edinburg, Hidalgo County, Texas.

FIELD STUDY

On the basis of geologic evidence and our past experience with subsurface conditions in the vicinity of this site, we propose to conduct the following drilling scheme along the existing north main channel:

Structure	Number of Borings	Depth, ft. *
Main Channel – East Bank	1	40
Main Channel – West Bank	1	40

* below the existing ground surface elevation, or auger refusal, whichever occurs first.

Borings will be located in the field utilizing tape and right angle measurements from existing benchmarks. Our scope of services does not include surveying of the boring locations. However, RKCI recommends that the final boring locations be surveyed in the field by the CLIENT.

Samples will be taken using conventional split-spoon and/or Shelby tube sampling techniques in general accordance with applicable American Society for Testing and Materials (ASTM) standards. Representative portions of the samples will be sealed, identified, packaged, and transported to our laboratory for subsequent testing and classification.

Upon completion of drilling activities, water level readings, if applicable, will be recorded in the open boreholes and the boreholes will be backfilled using the auger cuttings generated during the drilling operations, and grouted with a cement-bentonite mixture and flushed with the adjacent ground surface elevation.

LABORATORY STUDY

Upon completion of the subsurface exploration, a general testing program will be designed to define the classification and shrink/swell characteristics of the subsurface conditions. The testing program is anticipated to include moisture content determinations, Atterberg limits (plasticity) tests, unconfined compressive strength tests, dry unit weight determinations, grain size analyses to include D50 and D95 computations, percent passing a No. 200 sieve tests, a permeability test, and consolidated undrained (CU-bar) triaxial shear strength tests.

ENGINEERING ANALYSIS AND REPORT

The field and laboratory phases of the study will be reviewed by our staff of engineers. The results of our review, together with the supporting field and laboratory data, will be presented in a written, engineering report. Included therein will be guidelines concerning the repair and reconstruction of the failed section of the north main channel's east bank, and our geotechnical analyses pertaining to the slope stability of the subject section of the north main channel based on the north main channel's slope

cross-section(s) to be provided by the CLIENT. The Geotechnical Engineering Report may also include the following information and recommendations:

- A summary of the field and laboratory sampling and testing program;
- Boring logs and laboratory testing results;
- A review of the general site conditions including a description of the site, the subsurface stratigraphy, groundwater conditions, and the presence and condition of fill materials, if encountered.
- Foundation design considerations and recommendations, including:
  - expansive, soil-related movements using an empirical method for predicting Potential Vertical Rise (PVR) developed by the Texas Department of Transportation (TxDOT);
  - allowable soil-bearing capacities;
  - settlement estimations, where applicable;
  - groundwater considerations; and
  - slope stability analyses.
- Foundation construction considerations, including:
  - site drainage;
  - site preparation;
  - select fill materials;
  - potential reuse of on site materials as select fill materials;
  - excavation considerations; and
  - fill placement compaction requirements.
- Seismic region condition evaluations.

Since site grading plans can result in changes in the bank's slope subgrade conditions, final site grading plans will be helpful information in the preparation of engineering recommendations. In the absence of final site grading information, we will prepare recommendations based on the existing ground surface elevations.

The final report will be reproduced in three, spirally-bound copies.

TENTATIVE PROJECT SCHEDULE

Based on our present workload and weather permitting, it is anticipated that the field exploration phase of this study can begin within three working days of receiving written authorization to proceed, provided that the site is accessible to our truck-mounted drill rig, and the CLIENT has supplied us with necessary permits and all available information regarding existing utilities and below-grade structures on site. The field exploration and laboratory testing phases of the study are expected to take approximately twelve working days to complete. The engineering report will be submitted within an additional twelve working days following completion of the laboratory testing. The above schedule does not account for delays due to

inclement weather. We will be pleased to provide the design team with verbal design information as the data becomes available.

LUMP SUM COST

The total cost for the study outlined herein is as follows.

PROPOSED NORTH MAIN CHANNEL'S WEIR SLOPE REPAIR PROJECT	
Item	**Cost**
Field Exploration, and Cement-Bentonite Grouting of Borings:	$2,300.00
Laboratory Testing:	$4,000.00
Engineering Analyses and Report Preparation:	$1,950.00
Proposed Total Cost:	**$8,250.00**
15% Contingency:	$1,237.50
Recommended Project Budget:	**$9,487.50**

Should unusual subsurface conditions be encountered in the field that indicate the desirability of significantly broadening the scope of the study, we will contact you to receive written authorization before proceeding with any additional work, as part of the 15% contingency.

RKCI has been provided with a site plan of the subject main channel's bank repair and reconstruction project, as well as other preliminary project information. It is our understanding that access to all boring locations for a conventional, truck-mounted drilling rig, and underground utility clearance will be provided by the CLIENT prior to our field exploration services.

It should be noted that our study scope (and project cost) does not include plan review or earthwork and foundation excavation observations during the construction of the project. However, plan review and construction observation costs should be included in the project budget.

It should also be noted that our study scope (and project cost) does not include professional time or travel expenses for participation in design team meetings. If these services are required, they will be billed at our standard billing rates for professional time plus expenses.

ACCEPTANCE

We appreciate the opportunity of submitting this proposal and look forward to working with you in the development of this project, which will be carried out accordance with this letter and the following attachments:

Attachment	Description
I	Standard Terms and Conditions
II	Schedule of Fees

Please return one signed original of this contract to provide written authorization for our firm to commence work on the services outlined herein. Our invoices are due and payable upon receipt at P.O. Box 971037, Dallas, Dallas County, Texas 75397-1037.

RKCI considers the data and information contained in this proposal to be proprietary. This statement of qualifications and any information contained herein shall not be disclosed and shall not be duplicated or used in whole or in part for any purpose other than to evaluate this proposal.

Very truly yours,

RABA KISTNER CONSULTANTS, INC.

Accepted By: _____
(Signature)

Luis H. Garcia
Graduate Engineer

_____
(Typed or Printed Name)

Katrin M. Leonard, P.E.
Associate

_____
(Title)

_____
(Date)

Copies submitted: Above (2)

LHG/KML

Attachments

HIDALGO COUNTY DRAINAGE DISTRICT # 1
WEIR #3
HIDALGO COUNTY, TEXAS
FEE SCHEDULE

TASK DESCRIPTION	COST	Entech Fee	Sub Fee
PHASE I (BASIC SERVICES)	$ -	$ -	$ -
PHASE I (ADDITIONAL SERVICES)	$ -	$ -	$ -
PHASE II FINAL DESIGN (BASIC SERVICES)	$9,487.50		$9,487.50
PHASE II FINAL DESIGN (ADDITIONAL SERVICES)			
PHASE III CONSTRUCTION SERVICES (TOTAL)			
SUBTOTAL CONTRACT AMOUNT	$9,487.50		$9,487.50
Total Sub Fees	$9,487.50		
Sub percentage	10%		$ 948.75
	$ -		
	$ -		
TOTAL CONTRACT AMOUNT			$10,436.25

EXHIBIT "E"

PROFESSIONAL ENGINEERING SERVICES CONTRACT # _____
WORK AUTHORIZATION FORM

WORK AUTHORIZATION NO._____4__

THIS WORK AUTHORIZATIO is made pursuant to the terms and conditions of Section I.A. of the Agreement made by and between HIDALGO COUNTY DRAINAGE DISTRICT 1 hereinafter called the "Owner", and ENTECH CIVIL ENGINEERS, Professional Engineers hereinafter called "Engineer".

PART 1. SCOPE OF WORK

The scope of services to be provided by the Owner is identified in EXHIBIT "A"- Scope of Services to be Provided by the Owner attached hereto.

The scope of services to be provided by the Engineer is identified in EXHIBIT "B" – Scope of Services to be Provided by the Engineer attached hereto.

PART 2. ESTIMATED COST

The estimated cost for services under this Work Authorization is $ 10,436.25. This amount is based upon the costs outlined in the Estimated Cost Proposal attached hereto as EXHIBIT "D".

PART 3. PAYMENT

Compensation and payment to the Engineer for the services established under this Work Authorization shall be made in accordance with Article/Part/Section _____ of the Agreement.

PART 4. FUNDING

This Work Authorization No. _4_ shall be funded through funding source:
Account No. _____
Requisition Number_____

PART 5. PERIOD OF SERVICE
This Work Authorization shall become effective on the date of final acceptance of the parties hereto, and terminate upon completion of scopes of the work authorization.

PART 6. RESPONSIBILITIES AND OBLIGATIONS
This Authorization does not waive the parties' responsibilities and obligations provided under the Agreement.

This Authorization does not waive the parties' responsibilities and obligations provided under the Agreement.

PART 7. ACKNOWLEDGEMENT AND CONFIRMATION

Acknowledgement and confirmation by _____ as to content and detail of this Work Authorization No.___.

BY: _____

PART 8. ACCEPTANCE AND APPROVAL

This Work Authorization is hereby accepted, approved by the Hidalgo County Drainage District No. 1 and Entech Civil Engineers, Inc as indicated below and effective as of _____ day of _____, 20__.

THE ENGINEER:

By: Ovidio Alanis
Vice President
Entech Civil Engineers

THE OWNER:

_____
By

EXHIBIT "A"

Services to be provided by the Owner

The following provides an outline of the services to be provided by the **OWNER** in the development of the **"Project"**.

The **OWNER** will provide to the **ENGINEER** the following:

(1) Authorization to the **ENGINEER** to begin work in accordance with Section 3 of this Agreement.

(2) Payment for work performed by the **ENGINEER**, and accepted by the **OWNER** in accordance with Section 6 of the Agreement.

(3) Assistance to the **ENGINEER**, as necessary, to obtain the required data and information from other local, regional, State and Federal agencies that the **ENGINEER** cannot easily obtain.

(4) Provide any available relevant data the **OWNER** may have on file concerning the **"Project"**.

(5) Provide timely review and decisions in response to the **ENGINEER**'S request for information and/or required submittals and deliverables, in order for the **ENGINEER** to maintain the agreed-upon work schedule prepared in accordance with Exhibit C of this Agreement.

(6) Attend and participate in progress meetings as required and as coordinated and conducted by the **ENGINEER**.

(7) Review and approve the **"Project"** design criteria.

(8) Provide timely reviews and comments to submitted construction packages.

(9) Review and approve change orders as required and prepared by the **ENGINEER**.

EXHIBIT "B"

SERVICES TO BE PROVIDED BY THE ENGINEER

WORK AUTHORIZATION NO 4

GEOTECHNICAL SERVICES

1. Perform 2 borings at Weir SMD-WR5
2. Cement bentonite grouting of borings
3. Laboratory testing for each boring
4. Engineering analyses
5. Engineering reports

RABA KISTNER
CONSULTANTS

Proposal No. PMA13-024-00
March 13, 2013

Raba Kistner
Consultants, Inc.
800 E. Hackberry
McAllen, TX 78501
www.rkci.com

P 956 :: 682 :: 5332
F 956 :: 682 :: 5487
TBPE Firm F-3257

Mr. Nick Alanis, Vice President
Entech Civil Engineers, Inc.
16360 Park Ten Place, Suite 230
Houston, Texas 77084

Re: **Proposal for Geotechnical Engineering Services**
Proposed North Main Channel Weir Slope Repair Project
Along the North Main Channel
South of Lake Edinburg
Edinburg, Hidalgo County, Texas

Dear Mr. Alanis:

On the basis of the information provided to us via electronic-mail attachment on Friday, March 8, 2013 by Mr. Mike Spiegel, P.E., with Entech Civil Engineers, Inc., the project's consulting engineering firm, **Raba Kistner Consultants, Inc. (RKCI)** is thankful for being selected to provide Geotechnical Engineering Services to Entech Civil Engineers, Inc. (CLIENT) for the above-referenced project. The broad objectives of our study will be to determine subsurface conditions along a section of the existing north main channel located in close proximity to the subject weir structure, to perform slope stability analyses, and to provide guidelines for the design of the proposed repair and reconstruction of a section of the existing north main channel's east bank located north of the weir structure. Described in this letter are:

- our understanding of currently perceived project characteristics;
- our proposed scope for field and laboratory study;
- our proposed scope for engineering evaluation and reporting;
- our tentative project schedule; and
- our project lump sum fee.

PROJECT DESCRIPTION

Based on the documents received by our office via electronic-mail attachment, provided by Mr. Spiegel on Friday, March 8, 2013, we understand that the proposed project consists of the repair and reconstruction of a failed section of the existing north main channel's east bank located north of the concrete riprap and in close proximity to the weir structure. The existing weir structure is located along the North Main Channel about 0.2 miles south of Lake Edinburg in Edinburg, Hidalgo County, Texas. .

FIELD STUDY

On the basis of geologic evidence and our past experience with subsurface conditions in the vicinity of this site, we propose to conduct the following drilling scheme along the existing north main channel:

Structure	Number of Borings	Depth, ft. *
Main Channel – East Bank	1	40
Main Channel – West Bank	1	40

* below the existing ground surface elevation, or auger refusal, whichever occurs first.

Borings will be located in the field utilizing tape and right angle measurements from existing benchmarks. Our scope of services does not include surveying of the boring locations. However, **RKCI** recommends that the final boring locations be surveyed in the field by the CLIENT.

Samples will be taken using conventional split-spoon and/or Shelby tube sampling techniques in general accordance with applicable American Society for Testing and Materials (ASTM) standards. Representative portions of the samples will be sealed, identified, packaged, and transported to our laboratory for subsequent testing and classification.

Upon completion of drilling activities, water level readings, if applicable, will be recorded in the open boreholes and the boreholes will be backfilled using the auger cuttings generated during the drilling operations, and grouted with a cement-bentonite mixture and flushed with the adjacent ground surface elevation.

LABORATORY STUDY

Upon completion of the subsurface exploration, a general testing program will be designed to define the classification and shrink/swell characteristics of the subsurface conditions. The testing program is anticipated to include moisture content determinations, Atterberg limits (plasticity) tests, unconfined compressive strength tests, dry unit weight determinations, grain size analyses to include D50 and D95 computations, percent passing a No. 200 sieve tests, a permeability test, and consolidated undrained (CU-bar) triaxial shear strength tests.

ENGINEERING ANALYSIS AND REPORT

The field and laboratory phases of the study will be reviewed by our staff of engineers. The results of our review, together with the supporting field and laboratory data, will be presented in a written, engineering report. Included therein will be guidelines concerning the repair and reconstruction of the failed section of the north main channel's east bank, and our geotechnical analyses pertaining to the slope stability of the subject section of the north main channel based on the north main channel's slope

cross-section(s) to be provided by the CLIENT. The Geotechnical Engineering Report may also include the following information and recommendations:

- A summary of the field and laboratory sampling and testing program;
- Boring logs and laboratory testing results;
- A review of the general site conditions including a description of the site, the subsurface stratigraphy, groundwater conditions, and the presence and condition of fill materials, if encountered.
- Foundation design considerations and recommendations, including:
  - expansive, soil-related movements using an empirical method for predicting Potential Vertical Rise (PVR) developed by the Texas Department of Transportation (TxDOT);
  - allowable soil-bearing capacities;
  - settlement estimations, where applicable;
  - groundwater considerations; and
  - slope stability analyses.
- Foundation construction considerations, including:
  - site drainage;
  - site preparation;
  - select fill materials;
  - potential reuse of on site materials as select fill materials;
  - excavation considerations; and
  - fill placement compaction requirements.
- Seismic region condition evaluations.

Since site grading plans can result in changes in the bank's slope subgrade conditions, final site grading plans will be helpful information in the preparation of engineering recommendations. In the absence of final site grading information, we will prepare recommendations based on the existing ground surface elevations.

The final report will be reproduced in three, spirally-bound copies.

TENTATIVE PROJECT SCHEDULE

Based on our present workload and weather permitting, it is anticipated that the field exploration phase of this study can begin within three working days of receiving written authorization to proceed, provided that the site is accessible to our truck-mounted drill rig, and the CLIENT has supplied us with necessary permits and all available information regarding existing utilities and below-grade structures on site. The field exploration and laboratory testing phases of the study are expected to take approximately twelve working days to complete. The engineering report will be submitted within an additional twelve working days following completion of the laboratory testing. The above schedule does not account for delays due to

inclement weather. We will be pleased to provide the design team with verbal design information as the data becomes available.

LUMP SUM COST

The total cost for the study outlined herein is as follows.

PROPOSED NORTH MAIN CHANNEL'S WEIR SLOPE REPAIR PROJECT	
Item	Cost
Field Exploration, and Cement-Bentonite Grouting of Borings:	$2,300.00
Laboratory Testing:	$4,000.00
Engineering Analyses and Report Preparation:	$1,950.00
Proposed Total Cost:	**$8,250.00**
15% Contingency:	$1,237.50
Recommended Project Budget:	**$9,487.50**

Should unusual subsurface conditions be encountered in the field that indicate the desirability of significantly broadening the scope of the study, we will contact you to receive written authorization before proceeding with any additional work, as part of the 15% contingency.

RKCI has been provided with a site plan of the subject main channel's bank repair and reconstruction project, as well as other preliminary project information. It is our understanding that access to all boring locations for a conventional, truck-mounted drilling rig, and underground utility clearance will be provided by the CLIENT prior to our field exploration services.

It should be noted that our study scope (and project cost) does not include plan review or earthwork and foundation excavation observations during the construction of the project. However, plan review and construction observation costs should be included in the project budget.

It should also be noted that our study scope (and project cost) does not include professional time or travel expenses for participation in design team meetings. If these services are required, they will be billed at our standard billing rates for professional time plus expenses.

ACCEPTANCE

We appreciate the opportunity of submitting this proposal and look forward to working with you in the development of this project, which will be carried out accordance with this letter and the following attachments:

Attachment	Description
I	Standard Terms and Conditions
II	Schedule of Fees

Please return one signed original of this contract to provide written authorization for our firm to commence work on the services outlined herein. Our invoices are due and payable upon receipt at P.O. Box 971037, Dallas, Dallas County, Texas 75397-1037.

RKCI considers the data and information contained in this proposal to be proprietary. This statement of qualifications and any information contained herein shall not be disclosed and shall not be duplicated or used in whole or in part for any purpose other than to evaluate this proposal.

Very truly yours,

RABA KISTNER CONSULTANTS, INC.

Luis H. Garcia
Graduate Engineer

Katrin M. Leonard, P.E.
Associate

Copies submitted: Above (2)

LHG/KML

Attachments

Accepted By: _____
(Signature)

_____
(Typed or Printed Name)

_____
(Title)

_____
(Date)

HIDALGO COUNTY DRAINAGE DISTRICT # 1
WEIR # 5
HIDALGO COUNTY, TEXAS
FEE SCHEDULE

TASK DESCRIPTION	COST	Entech Fee	Sub Fee
PHASE I (BASIC SERVICES)	$ -	$ -	$ -
PHASE I (ADDITIONAL SERVICES)	$ -	$ -	$ -
PHASE II FINAL DESIGN (BASIC SERVICES)	**$9,487.50**		$9,487.50
PHASE II FINAL DESIGN (ADDITIONAL SERVICES)			
PHASE III CONSTRUCTION SERVICES (TOTAL)			
SUBTOTAL CONTRACT AMOUNT	**$9,487.50**		$9,487.50
Total Sub Fees	$9,487.50		
Sub percentage	10%		$ 948.75
	$ -		
	$ -		
TOTAL CONTRACT AMOUNT			**$10,436.25**

EXHIBIT "E"

PROFESSIONAL ENGINEERING SERVICES CONTRACT # _____
WORK AUTHORIZATION FORM

WORK AUTHORIZATION NO._____5_

THIS WORK AUTHORIZATIO is made pursuant to the terms and conditions of Section I.A. of the Agreement made by and between HIDALGO COUNTY DRAINAGE DISTRICT 1 hereinafter called the "Owner", and ENTECH CIVIL ENGINEERS, Professional Engineers hereinafter called "Engineer".

PART 1. SCOPE OF WORK

The scope of services to be provided by the Owner is identified in EXHIBIT "A"- Scope of Services to be Provided by the Owner attached hereto.

The scope of services to be provided by the Engineer is identified in EXHIBIT "B" – Scope of Services to be Provided by the Engineer attached hereto.

PART 2. ESTIMATED COST

The estimated cost for services under this Work Authorization is $ 30,724.22. This amount is based upon the costs outlined in the Estimated Cost Proposal attached hereto as EXHIBIT "D".

PART 3. PAYMENT

Compensation and payment to the Engineer for the services established under this Work Authorization shall be made in accordance with Article/Part/Section _____ of the Agreement.

PART 4. FUNDING

This Work Authorization No. _5_ shall be funded through funding source:
Account No. _____
Requisition Number_____

PART 5. PERIOD OF SERVICE
This Work Authorization shall become effective on the date of final acceptance of the parties hereto, and terminate upon completion of scopes of the work authorization.

PART 6. RESPONSIBILITIES AND OBLIGATIONS
This Authorization does not waive the parties' responsibilities and obligations provided under the Agreement.

This Authorization does not waive the parties' responsibilities and obligations provided under the Agreement.

PART 7. ACKNOWLEDGEMENT AND CONFIRMATION

Acknowledgement and confirmation by _____ as to content and detail of this Work Authorization No.___.

BY: _____

PART 8. ACCEPTANCE AND APPROVAL

This Work Authorization is hereby accepted, approved by the Hidalgo County Drainage District No. 1 and Entech Civil Engineers, Inc as indicated below and effective as of _____ day of _____, 20__.

THE ENGINEER:

By: Ovidio Alanis
Vice President
Entech Civil Engineers

THE OWNER:

_____
By

EXHIBIT "A"

Services to be provided by the Owner

The following provides an outline of the services to be provided by the **OWNER** in the development of the **"Project"**.

The **OWNER** will provide to the **ENGINEER** the following:

(1) Authorization to the **ENGINEER** to begin work in accordance with Section 3 of this Agreement.

(2) Payment for work performed by the **ENGINEER**, and accepted by the **OWNER** in accordance with Section 6 of the Agreement.

(3) Assistance to the **ENGINEER**, as necessary, to obtain the required data and information from other local, regional, State and Federal agencies that the **ENGINEER** cannot easily obtain.

(4) Provide any available relevant data the **OWNER** may have on file concerning the **"Project"**.

(5) Provide timely review and decisions in response to the **ENGINEER'S** request for information and/or required submittals and deliverables, in order for the **ENGINEER** to maintain the agreed-upon work schedule prepared in accordance with Exhibit C of this Agreement.

(6) Attend and participate in progress meetings as required and as coordinated and conducted by the **ENGINEER**.

(7) Review and approve the **"Project"** design criteria.

(8) Provide timely reviews and comments to submitted construction packages.

(9) Review and approve change orders as required and prepared by the **ENGINEER**.

EXHIBIT "B"

SERVICES TO BE PROVIDED BY THE ENGINEER

WORK AUTHORIZATION NO 5

DESIGN SERVICES

1. Perform a summary Hydrology/Hydraulic study
2. Provide drainage area maps
3. Attend meetings with the owner as required
4. Provide regular progress reports
5. Provide a complete bid-ready package consisting of
    a. Title sheet
    b. Vicinity map
    c. Plan and sections
    d. Riprap layout
    e. Repair details for Weir NMD-WR3
    f. Summary of quantities
    g. Project manual
    h. Specifications
    i. Engineer's Estimate of Probable Cost

BID SUPPORT SERVICES

1. Attend one pre-bid meeting
2. Perform a bid analysis
3. Provide recommendations
4. Respond to bidder inquiries

HIDALGO COUNTY DRAINAGE DISTRICT # 1
WEIR #3
HIDALGO COUNTY, TEXAS
FEE SCHEDULE

TASK DESCRIPTION	COST	Entech Fee	Sub Fee
PHASE I (BASIC SERVICES)	$ -	$ -	$ -
PHASE I (ADDITIONAL SERVICES)	$ -	$ -	$ -
PHASE II FINAL DESIGN (BASIC SERVICES)	$30,724.22	$30,724.22	
PHASE II FINAL DESIGN (ADDITIONAL SERVICES)			
PHASE III CONSTRUCTION SERVICES (TOTAL)			
SUBTOTAL WEIR #3 AMOUNT	**$30,724.22**	$30,724.22	
Total Sub Fees			
			$ -
	$ -		
	$ -		
TOTAL Weir # 3 AMOUNT			**$30,724.22**

EXHIBIT "E"

PROFESSIONAL ENGINEERING SERVICES CONTRACT # _____
WORK AUTHORIZATION FORM

WORK AUTHORIZATION NO._____6_

THIS WORK AUTHORIZATIO is made pursuant to the terms and conditions of Section I.A. of the Agreement made by and between HIDALGO COUNTY DRAINAGE DISTRICT 1 hereinafter called the "Owner", and ENTECH CIVIL ENGINEERS, Professional Engineers hereinafter called "Engineer".

PART 1. SCOPE OF WORK

The scope of services to be provided by the Owner is identified in EXHIBIT "A"- Scope of Services to be Provided by the Owner attached hereto.

The scope of services to be provided by the Engineer is identified in EXHIBIT "B" – Scope of Services to be Provided by the Engineer attached hereto.

PART 2. ESTIMATED COST

The estimated cost for services under this Work Authorization is $ 28,955.98. This amount is based upon the costs outlined in the Estimated Cost Proposal attached hereto as EXHIBIT "D".

PART 3. PAYMENT

Compensation and payment to the Engineer for the services established under this Work Authorization shall be made in accordance with Article/Part/Section _____ of the Agreement.

PART 4. FUNDING

This Work Authorization No. _6_ shall be funded through funding source:
Account No. _____
Requisition Number_____

PART 5. PERIOD OF SERVICE
This Work Authorization shall become effective on the date of final acceptance of the parties hereto, and terminate upon completion of scopes of the work authorization.

PART 6. RESPONSIBILITIES AND OBLIGATIONS
This Authorization does not waive the parties' responsibilities and obligations provided under the Agreement.

This Authorization does not waive the parties' responsibilities and obligations provided under the Agreement.

PART 7. ACKNOWLEDGEMENT AND CONFIRMATION

Acknowledgement and confirmation by _____ as to content and detail of this Work Authorization No.___.

BY: _____

PART 8. ACCEPTANCE AND APPROVAL

This Work Authorization is hereby accepted, approved by the Hidalgo County Drainage District No. 1 and Entech Civil Engineers, Inc as indicated below and effective as of _____ day of _____, 20__.

THE ENGINEER:

By: Ovidio Alanis
Vice President
Entech Civil Engineers

THE OWNER:

_____
By

EXHIBIT "A"

Services to be provided by the Owner

The following provides an outline of the services to be provided by the **OWNER** in the development of the **"Project"**.

The **OWNER** will provide to the **ENGINEER** the following:

(1) Authorization to the **ENGINEER** to begin work in accordance with Section 3 of this Agreement.

(2) Payment for work performed by the **ENGINEER**, and accepted by the **OWNER** in accordance with Section 6 of the Agreement.

(3) Assistance to the **ENGINEER**, as necessary, to obtain the required data and information from other local, regional, State and Federal agencies that the **ENGINEER** cannot easily obtain.

(4) Provide any available relevant data the **OWNER** may have on file concerning the **"Project"**.

(5) Provide timely review and decisions in response to the **ENGINEER'S** request for information and/or required submittals and deliverables, in order for the **ENGINEER** to maintain the agreed-upon work schedule prepared in accordance with Exhibit C of this Agreement.

(6) Attend and participate in progress meetings as required and as coordinated and conducted by the **ENGINEER**.

(7) Review and approve the **"Project"** design criteria.

(8) Provide timely reviews and comments to submitted construction packages.

(9) Review and approve change orders as required and prepared by the **ENGINEER**.

EXHIBIT "B"

SERVICES TO BE PROVIDED BY THE ENGINEER

WORK AUTHORIZATION NO 6

DESIGN SERVICES

1. Perform a summary Hydrology/Hydraulic study
2. Provide drainage area maps
3. Attend meetings with the owner as required
4. Provide regular progress reports
5. Provide a complete bid-ready package consisting of
    a. Title sheet
    b. Vicinity map
    c. Plan and sections
    d. Riprap layout
    e. Slope stabilization details for Weir SMD-WR5
    f. Summary of quantities
    g. Project manual
    h. Specifications
    i. Engineer's Estimate of Probable Cost

BID SUPPORT SERVICES

1. Attend one pre-bid meeting
2. Perform a bid analysis
3. Provide recommendations
4. Respond to bidder inquiries

HIDALGO COUNTY DRAINAGE DISTRICT # 1
WEIR # 5
HIDALGO COUNTY, TEXAS
FEE SCHEDULE

TASK DESCRIPTION	COST	Entech Fee	Sub Fee
PHASE I (BASIC SERVICES)	$ -	$ -	$ -
PHASE I (ADDITIONAL SERVICES)	$ -	$ -	$ -
PHASE II FINAL DESIGN (BASIC SERVICES)	$28,955.98	$28,955.98	
PHASE II FINAL DESIGN (ADDITIONAL SERVICES)			
PHASE III CONSTRUCTION SERVICES (TOTAL)			
SUBTOTAL WEIR #5 AMOUNT	**$28,955.98**	$28,955.98	
Total Sub Fees			
Sub percentage	10%		$ -
	$ -		
	$ -		
TOTAL Weir # 5 AMOUNT			**$28,955.98**

EXHIBIT "E"

SUPPLEMENTAL AGREEMENT NO. 1
TO AGREEMENT FOR PROFESSIONAL SERVICES

THIS SUPPLEMENTAL AGREEMENT is made pursuant to the terms and conditions of **Article 8** of the Agreement made by and between Hidalgo County Drainage District, hereinafter called the "**Owner**", and L&G Engineering, hereinafter called the "**Engineer**".

WITNESSETH

WHEREAS, the **Owner** and the **Engineer** executed the Agreement on the 17th day of July, concerning **Engineering** services for the SH 68 TxDOT Roadway Watershed Study (hereinafter referred to as the ""**Project**""); and

WHEREAS, **Article 8** of the Agreement, (Supplemental Agreements), establishes that the terms of the agreement can be amended by a supplemental agreement; and WHEREAS, it has become necessary to amend the Work Authorization No.1 to omit the lines identified below from "Exhibit B – Scope of Services to be provided by the Engineer".

A. AGREEMENT

NOW THEREFORE, premises considered, the **Owner** and the **Engineer** agree that said Agreement is amended as follows:

I. Remove the following lines from "Task 2 – Identification of All Affected Property Owners (Appraisal District Info)":

"The Engineer will research and identify all affected property owners on proposed facilities through generalized research and coordination with title companies. The Engineer will work with a reputable title company (or title companies) to obtain title reports for each affected parcel."

All other provisions are unchanged and remain in full force and effect.

IN WITNESS WHEREOF, the **Engineer** and the **Owner** have caused this Supplemental Agreement to the Agreement for Professional Services to be executed as of the _____ day of _____, 20____.

THE ENGINEER:

_____
Mr. Jacinto Garza, P.E.
President – L&G Engineering

THE OWNER:

_____
Chairman of the Board
Hidalgo County Drainage District No. 1

APPROVED AS TO FORM:
ATLAS, HALL & RODRIGUEZ, LLP.

By: _____

Exhibit "B"
Scope of Services
Services to be Provided by the Engineer

General Project Information

The **Engineer**, through this scope of services, shall provide Hydrologic & Hydraulic Analysis and Modeling, Analysis of Existing Drainage Areas & Watersheds, Coordination with TxDOT/County/Cities to Address Drainage Needs, Field Reconnaissance, Identification of Affected Property Owners, and other services for the SH 68 – TxDOT Roadway Watershed Study in Hidalgo County, TX, hereinafter denoted as the **Project.**

The **Engineer** shall provide all engineering services as noted under this scope of services for the **Owner**. The **Engineer** shall maintain a direct line of communication and coordinate with the **Owner** throughout the project. All communication with local or governmental entities will be coordinated with the **Owner.**

The **Engineer** shall furnish all equipment, materials, supplies, and incidentals as needed to perform the services required, except as otherwise specified to be provided by the **Owner**.

Specific activities to be performed by the **Engineer** include the following:

Task 1 – Overall SH 68 Project Schematic/Exhibit w/ HCDD #1 Existing & Proposed Facilities

The **Engineer** will coordinate with all pertinent entities (as noted in the various tasks of this WA) to determine project controls (proposed roadway alignment, proposed roadway width, proposed roadway drainage pattern, etc.) and establish existing contributing watersheds and drainage areas (preliminary local drainage patterns). Under this task, exhibits will be prepared for various functions, purposes and meetings denoting the overall project and proposed watersheds, existing facilities and proposed facilities (maps will include pertinent information in multiple exhibits to better illustrate project improvements). The preliminary project outfall schematic will be prepared and provided to HCDD #1 and TxDOT for review and comment. The **Engineer** will incorporate comments and modifications that are agreed upon by all parties into the final outfall schematic.

Task 2 – Identification of All Affected Property Owners (Appraisal District Info)

The **Engineer** will research and review any/all existing file data located at the Hidalgo County Drainage District No. 1 office (if available) for cross referencing of parcel data within the **Project**. This information will be summarized on a parcel by parcel basis (a database of the information will be compiled and made available to the **Owner** upon request). The **Engineer** will research and review any/all existing file data from the Hidalgo County Appraisal District for cross referencing of parcel data within the Project.

Task 3 – Review of Previous Studies Done on and within the Project Area

The **Engineer** will research and gather all information regarding existing drainage features, facilities, & watersheds for incorporation into a master drainage file/map. In addition, the **Engineer** will research all known and/or scheduled proposed improvements (i.e. bridge replacements, proposed culvert crossings, new outfalls to be completed by others, etc.). Through this task, the **Engineer** will coordinate workshops with all affected local entities and TxDOT. All information gathered will be compiled by the **Engineer**, and electronically filed for purposes of documentation. Additional data collection gathered as a function of this task may include precipitation data, evaporation data, existing and future land use information, soils data, topography (existing maps), aerial photography, wetland coverages, construction as-built drawings and preliminary schematics or plan sets for proposed future projects. General land usage and topography will be researched through the most up to date aerial mapping information. The **Engineer** will coordinate with LRGVDC to obtain all pertinent Geographic Information Systems (GIS) information for reference. A series of maps will be prepared highlighting the existing drainage information and proposed improvements and graphically presenting the compilation of the materials. The **Engineer** will interpret and analyze all data to define and verify needed mapping criteria. These maps will be utilized in the overall defining of the proposed drainage area and Overall Drainage Area Map.

Task 4 – Support to HCDD #1 on Project Development (i.e. Mtgs. w/ Land Owners, Coord. w/ County, Coord. w/ Cities, etc.)

The **Engineer** will act as the liaison between both HCDD #1 and TxDOT on all technical issues related to project development. The **Engineer** will ensure that all Project Development Activities are well coordinated between both entities. The **Engineer** will coordinate with landowners that may be impacted based on the proposed plan for outfall facilities and/or proposed lateral drainage ditches. Dependent on the final assessment of proposed impacts, the **Engineer** will conduct limited public involvement which may include meetings with property owners, public / community meetings, public / community workshops. The **Engineer** will provide HCDD #1 with monthly progress reports and narratives of the latest developments related to the project.

The **Engineer** will coordinate with Local Governmental Agencies (in the name of HCDD #1) in the area of the **Project**. Coordination will be completed through the use of 'Project Meetings', in which the **Engineer** will present the generalized scope of the project and estimated limits of area of influence (through the use of graphical presentation materials and/or presentation slides) for discussion of any local drainage patterns or areas which need improvement. Meetings may include field visits to problem areas and field measurement of local issues for documentation. The main purpose of these meetings will be to allow any and all perceived hydrologic/hydraulic problems to be accounted for in the early coordination phase, so that they are addressed properly in the proposed Hydrologic Model. Documentation of the meetings will be completed through meeting minutes in which all localized issues will be presented and kept on file.

Task 5 – Coordination with TxDOT & SH 68 Design Engineer of Record (Discharge Pts & Roadway Flow (Q) from Roadway)

The **Engineer** will coordinate with TxDOT and the SH 68 Design Engineer of Record to establish best fit locations for proposed outfalls and utilization of existing drainage channels in the vicinity of the project based on proposed watersheds and proposed roadway alignment / roadway drainage operations. The **Engineer** will coordinate with TxDOT and the SH 68 Design Engineer of Record to determine the portion of flow (Q) that will be contributed by the proposed roadway sections to incorporate into the overall Hydrologic/Hydraulic Analysis.

Task 6 – Field Reconnaissance for Identification and Logging of Existing Conditions

The **Engineer** will perform field reconnaissance for identification and logging of existing conditions along project alignment. The field reconnaissance team will include at minimum a two-person field crew (typically a three-person field crew) and will include an investigation of all areas denoted along the proposed project. The field reconnaissance will include an examination and documentation of existing drainage facilities, drainage channel conditions & general measurements, and watershed drainage patterns. Existing breaklines will be visually inspected in the field to verify any LiDAR data and/or previous studies (any deviations will be noted in a field log book). General details for stream crossings (culverts, bridges, etc.) will be included in the field log book. Pertinent project information will be incorporated into the existing drainage area master maps developed in the previous tasks.

Task 7 – Coordination and Support to Hydraulic Engineer for Hydraulic Analysis and HEC-HMS Model Creation (Task 7a – Sub: Phase I – Existing Conditions H&H Modeling Analysis)

Hydrologic and hydraulic modeling and analysis will be conducted by a sub-consultant to the **Engineer**, Civil Systems Engineering, Inc. (CSE). Under this item, the **Engineer** will provide a detailed hydrologic and hydraulic model(s), watershed analysis and drainage improvement plan. The detailed scope of services for this item as provided to the **Engineer** by the sub-consultant, CSE, is attached. The **Engineer** will provide coordination and final QA/QC review of all documents, models and analyses developed. Once all existing conditions have been modeled successfully, a proposed drainage improvement plan will be developed and addendums to the model will be made to illustrate improvements. The **Engineer** will review the final results of the Drainage Improvement Plan and develop maps to illustrate the plan as denoted in Task 8 and 9.

Task 8 – Hydrologic Map for SH 68

The **Engineer** will analyze the watersheds and drainage areas within the project limits to produce an overall drainage area map based on the analysis and modeling noted in Task 7. The map will denote a master drainage area and contributing drainage sub-basins based on the proposed improvements developed in the Drainage Improvement Plan. In addition under this task the **Engineer** will produce an outfall exhibit (or outfall exhibits) illustrating a master proposed drainage network with locations of outfalls, major ditches and laterals (in concert with information gained from TxDOT in Task 5). The outfall exhibit(s) will be used to support Task 9.

Task 9 – Public Involvement for Vetting of Location of Outfalls with Affected Land Owners

The **Engineer** will coordinate numerous meetings with affected land owners on this project. The **Engineer** will ensure that the alignment of the proposed outfalls has the support and/or concurrence of the affected land owner(s) prior to finalizing the alignment. The **Engineer** will also coordinate meetings at the Hidalgo County Pct #4 Conference Room with all affected parties so that a final decision can be made moving forward. The **Engineer** will support TxDOT on all exhibits related to this scope of services at their formal Public Meetings (PM). The **Engineer** will ensure that the exhibits are approved by HCDD#1 and TxDOT prior to showing them at the PM.

Task 10 – Preliminary Engineering Report w/ Findings and Identifying Needed Improvements for SH 68 & Rural Drainage Improvements

The **Engineer** will prepare a Preliminary Engineering Report (PER) summarizing all findings of the existing drainage areas/network and presenting/identifying needed improvements to the **Project**. All assumptions, methodology and results will be provided in the report.

EXHIBIT "E"

SUPPLEMENTAL AGREEMENT NO. 2
TO AGREEMENT FOR PROFESSIONAL SERVICES

THIS SUPPLEMENTAL AGREEMENT is made pursuant to the terms and conditions of **Article 8** of the Agreement made by and between Hidalgo County Drainage District, hereinafter called the "**Owner**", and L&G Engineering, hereinafter called the "**Engineer**".

WITNESSETH

WHEREAS, the **Owner** and the **Engineer** executed the Agreement on the 5th day of February, concerning **Engineering** services for the La Joya Watershed Improvement Project (hereinafter referred to as the ""**Project**""); and

WHEREAS, **Article 8** of the Agreement, (Supplemental Agreements), establishes that the terms of the agreement can be amended by a supplemental agreement; and WHEREAS, it has become necessary to amend the Work Authorization No.1 to omit the lines identified below from "Exhibit B – Scope of Services to be provided by the Engineer".

A. AGREEMENT

NOW THEREFORE, premises considered, the **Owner** and the **Engineer** agree that said Agreement is amended as follows:

I. Remove the following lines from "Task 5 – Research and Identification of All Affected Property Owners on Proposed Facilities":

"The Engineer will research and identify all affected property owners on proposed facilities through generalized research and coordination with title companies. The Engineer will work with a reputable title company (or title companies) to obtain title reports for each affected parcel."

All other provisions are unchanged and remain in full force and effect.

IN WITNESS WHEREOF, the **Engineer** and the **Owner** have caused this Supplemental Agreement to the Agreement for Professional Services to be executed as of the _____ day of _____, 20____.

THE ENGINEER:

_____
Mr. Jacinto Garza, P.E.
President – L&G Engineering

THE OWNER:

_____
Chairman of the Board
Hidalgo County Drainage District No. 1

APPROVED AS TO FORM:
ATLAS, HALL & RODRIGUEZ, LLP.

By: _____

Exhibit "B"
Scope of Services
Services to be Provided by the Engineer

General Project Information

The **Engineer**, through this scope of services, shall provide Hydrologic & Hydraulic Analysis and Modeling, Analysis of Existing Drainage Areas & Watersheds, Coordination with TxDOT/County/Cities to Address Drainage Needs, Field Reconnaissance, Identification of Affected Property Owners, La Joya Lake Modeling, and other services for the La Joya Watershed Improvement Project in Hidalgo County, TX, hereinafter denoted as the **Project.**

The **Engineer** shall provide all engineering services as noted under this scope of services for the **Owner**. The **Engineer** shall maintain a direct line of communication and coordinate with the **Owner** throughout the project.

The **Engineer** shall furnish all equipment, materials, supplies, and incidentals as needed to perform the services required, except as otherwise specified to be provided by the **Owner**.

Specific activities to be performed by the **Engineer** include the following:

1. Initial Project Research and Documentation

Task 1 – Coordination with Local Government and TxDOT on Local Drainage Needs

The **Engineer** will coordinate with Local Governmental Agencies in the area of the **Project** including Hidalgo County, Starr County, City of La Joya and City of Penitas. In addition, the **Engineer** will coordinate with TxDOT. Coordination will be completed through the use of 'Project Kick-Off Meetings', in which the Engineer will present the generalized scope of the project and estimated limits of area of influence (through the use of graphical presentation materials and/or presentation slides) for discussion of any local drainage patterns or areas which need improvement. Meetings will be held individually with each entity so that any local needs specific to each entity can be addressed. Meetings may include field visits to problem areas and field measurement of said local issues for documentation. The main purpose of these meetings will be to allow any and all perceived hydrologic/hydraulic problems to be accounted for in this early coordination phase, so that they are addressed properly in the proposed Hydrologic Model. Documentation of the meetings will be completed through a 'Project Kick-Off Meetings' report and/or through meeting minutes in which all localized issues will be presented and kept on file.

Task 2 – Research & Gathering of Existing Drainage Information and Proposed Improvements

Once the initial coordination is completed as highlighted in Task 1, the **Engineer** will research and gather all information regarding existing drainage features, facilities, & watersheds for incorporation into a master drainage file/map. In addition, the Engineer will research all known and/or scheduled proposed improvements (i.e. bridge replacements, proposed culvert crossings,

new outfalls to be completed by others, etc.). Through this task, the **Engineer** will coordinate workshops with all affected local entities and TxDOT. All information gathered will be compiled by the Engineer, and electronically filed for purposes of documentation. Additional data collection gathered as a function of this task may include precipitation data, evaporation data, existing and future land use information, soils data, topography (existing maps), aerial photography, wetland coverages, construction as-built drawings and preliminary schematics or plan sets for proposed future projects. General land usage and topography will be researched through the most up to date aerial mapping information. The **Engineer** will coordinate with LRGVDC to obtain all pertinent Geographic Information Systems (GIS) information for reference. A series of maps will be prepared highlighting the existing drainage information and proposed improvements and graphically presenting the compilation of the materials. The Engineer will interpret and analyze all data to define and verify needed mapping criteria. These maps will be utilized in the overall defining of the proposed drainage area and Overall Drainage Area Map.

Task 3 – Coordination with TCEQ for Requirements of Discharging into La Joya Lake

Due to the proposed **Project** outfall to La Joya Lake termini point, the **Engineer** will be required to coordinate and ensure compliance with all TCEQ Requirements regarding discharging into a water body. The **Engineer** will research all requirements and regulations of the Texas Pollutant Discharge Elimination System (TPDES) storm water permitting program. Conditions, limitations and necessary incorporations of the permitting program based on the **Project** specifics will be denoted on a TCEQ permit requirements report/memo. The following permits may be required based on the proposed project scope: TPDES general permit for construction and TPDES municipal separate storm sewer system permit (MS4). The requirements of each permit will be identified by the **Engineer** in the TCEQ permit requirements report/memo. If required by permit, the **Engineer** will complete any necessary permit applications for submittal and approval by TCEQ. If required by permit (for construction – must be submitted prior to), the **Engineer** will develop a general Strom Water Pollution Prevention Plan (SW3P) for submittal and approval by TCEQ.

Task 4 – Examination and Analysis of Existing Hydrologic Studies

The **Engineer** will meet with TxDOT and Local Governmental Agencies in the area of the **Project** including Hidalgo County, Starr County, City of La Joya and City of Penitas to gather all existing hydrologic studies performed in the vicinity of the **Project**. The existing studies will be compiled into a master hydrologic study and analyzed as a whole to determine the impacts to the area. This information will be cross verified with the information developed in Task 1 and 2. The **Engineer** will incorporate the most pertinent information (after analysis of existing drainage information and local drainage needs/issues) into the existing drainage maps (developed in Task 2). Generalized existing watershed areas will be denoted based on the existing studies and illustrated on the maps. The **Engineer** will investigate the changes in topography from the present time versus the time of completion of each hydrologic study and will note where significant changes in terrain or land use are evident within each watershed (this will be utilized when completing the proposed master drainage map). A master map illustrating all defined information as noted in this and the previous tasks will be completed.

Task 5 – Research and Identification of All Affected Property Owners on Proposed Facilities

The **Engineer** will research and review any/all existing file data located at the Hidalgo County Drainage District No. 1 office (as dictated by the **Owner**) for cross referencing of parcel data within the **Project**. This information will be summarized on a parcel by parcel basis (a database of the information will be compiled and made available to the **Owner** upon request). The **Engineer** will research and review any/all existing file data from the Hidalgo County Appraisal District for cross referencing of parcel data within the **Project**.

Task 6 – Coordination with Property Owners (Impacts Based on Proposed Facilities)

The **Engineer** will coordinate with landowners that may be impacted based on the proposed plan for outfall facilities and/or proposed lateral drainage ditches. Dependent on the final assessment of proposed impacts, the **Engineer** will conduct limited public involvement which may include:

- Meetings with Individual Property Owners
- Public / Community Meetings
- Public / Community Workshops

Task 7 – Environmental Study (Phase I Environmental Site Assessment)

The **Engineer** will perform a "Phase I Environmental Site Assessment (ESA)" for the entire limits of the **Project**.

The **Engineer's** approach for performing the Phase I ESA consists of three sub-tasks: first, a review of the public record and an examination of the history of the Project; second, an on-site investigation of the Project; and third, preparation of a final report summarizing the findings and recommendations of the assessment. The main focus of this site assessment will be to determine if there are any chemical constituents or hazardous materials on the property. The **Engineer** will use the American Society for Testing and Materials (ASTM) Publication E 1527-00 as technical guidance for the ESA. The Tasks associated with the ESA are as follows:

Sub-Task 1.0 Compilation and Review of Public Records

This sub-task serves to identify evidence in the public record of activities that may have resulted or could result in contamination or deposition of hazardous materials on the Project. Activities to be conducted by the **Engineer** include:

- Performance of a detailed visual reconnaissance of every section of the Project and adjacent properties to observe any signs that may indicate environmental concerns along the Project.
- Compilation and review of pertinent public records (e.g., Texas Commission on Environmental Quality, U.S. Environmental Protection Agency, Texas Railroad Commission) regarding past, present and pending enforcement actions and/or investigations along the Project and on the adjoining sites.

Sub-Task 2.0 Site Reconnaissance

A site reconnaissance will be performed to inspect for evidence of past and/or current presence of hazardous materials on along the Project and adjoining sites. In addition, the Engineer will evaluate any factors in the review of the public record that might be indicative of activities that resulted in hazardous materials being used or deposited on the Project or that could result in contamination of the soils and/or water. The site reconnaissance will include:

- Performance of a detailed visual reconnaissance of every section of the Project and adjacent property to observe any signs which may indicate the presence of contaminants on the property and contaminant pathways to the property.
- Photographic documentation of all indicative features.

Sub-Task 3.0 Report Preparation

Upon completion of the prior tasks, the **Engineer** will provide the **Owner** with a written report documenting the Phase I findings.

Task 8 – Field Reconnaissance for Identification and Logging of Existing Conditions

The **Engineer** will perform field reconnaissance for identification and logging of existing conditions along project alignment. The field reconnaissance team will include at minimum a two-person field crew (typically a three-person field crew) and will include an investigation of all areas denoted along the proposed project. The field reconnaissance will include an examination and documentation of existing drainage facilities, drainage channel conditions & general measurements, and watershed drainage patterns. Existing breaklines will be visually inspected in the field to verify any LiDAR data and/or previous studies (any deviations will be noted in a field log book). General details for stream crossings (culverts, bridges, etc.) will be included in the field log book. Pertinent project information will be incorporated into the existing drainage area master maps developed in the previous tasks.

Task 9 – La Joya Lake Watershed Delineation and Operational Research

The **Engineer** will research the operational aspects of La Joya Lake for use as the master outfall for the proposed improvements. The general aspects of the lake area will also be investigated including typical land cover in the vicinity of proposed outfall, storage capacity of the lake and typical water usages and utilizations. As a function of this task, all information gathered throughout the previous tasks will be combined for use in the delineation of the watershed contributing to the La Joya Lake. The **Engineer** will delineate all exterior ridge lines and develop flow patterns throughout area (develop generalized reach layout).

2. Hydrologic/Hydraulic Modeling Analysis & Development of Drainage Area Maps

Task 10 – Development of Drainage Improvement Plan (Detailed Hydrologic/Hydraulic Models)

Hydrologic and hydraulic modeling and analysis will be conducted by a sub-consultant to the **Engineer**, Civil Systems Engineering, Inc. (CSE). Under this item, the **Engineer** will provide a detailed hydrologic and hydraulic model(s), watershed analysis and drainage improvement plan. The detailed scope of services for this item as provided to the **Engineer** by the sub-consultant, CSE, is attached. The **Engineer** will provide coordination and final QA/QC review of all documents, models and analyses developed. Once all existing conditions have been modeled successfully, a proposed drainage improvement plan will be developed and addendums to the model will be made to illustrate improvements. The **Engineer** will review the final results of the Drainage Improvement Plan and develop maps to illustrate the plan as denoted in Task 11 and 12.

Task 11 – Development of Overall Drainage Area Map

The **Engineer** will produce an overall drainage area map based on the analysis and modeling noted in Task 10. The map will denote a master drainage area and contributing drainage sub-basins based on the proposed improvements developed in the Drainage Improvement Plan.

Task 12 – Development of Outfall & Drainage Network Drainage Area Map

The **Engineer** will produce an overall drainage area map based on the analysis and modeling noted in Task 10, which exhibits proposed outfalls. The map will denote a master proposed drainage network illustrating locations of proposed outfall, major ditches and laterals.

Task 13 – Final Preliminary Engineering Report (PER)

The **Engineer** will prepare a Preliminary Engineering Report (PER) summarizing all findings of the existing drainage areas/network and presenting/identifying needed improvements to the **Project**. All assumptions, methodology and results will be provided in the report.

THE STATE OF TEXAS §

COUNTY OF HIDALGO §

AGREEMENT FOR PROFESSIONAL ENGINEERING SERVICES

THIS AGREEMENT is made, by and between **HIDALGO COUNTY DRAINAGE DISTRICT NO. 1** hereinafter called the **"Owner"**, and Entech Civil Engineers, Inc., professional Engineers, hereinafter called the **"Engineer"**.

WITNESSETH:

WHEREAS, the **Owner** desires to contract with the **Engineer** to provide management and professional **Engineering** services for **Rehabilitation of North Main Drain Weir WR3 and South Main Drain Weir WR-5** hereinafter referred to as the **""Project""**.

NOW, THEREFORE, the **Owner** and the **Engineer** in consideration of the mutual covenants and agreements herein contained do mutually agree as follows:

ARTICLE 1. Employment of Engineer. The **Owner** agrees to employ the **Engineer** and the **Engineer** agrees to perform management and professional **Engineering** services in connection with the **""Project""** as stated in the articles to follow and for having rendered such services, the **Owner** agrees to pay **the Engineer** compensation as stated in the articles to follow.

ARTICLE 2. Character and Extent of Services. This Agreement will provide for the development of the **"Project"** with the following:

2.1 Scope of Work. The **Owner** will furnish items and provide those services for the development of the **"Project"** and fulfillment of this Agreement, as identified in **EXHIBIT "A"** ***Services to be Provided by the Owner***, attached hereto and made a part of this Agreement and the **Engineer** will provide professional management and **Engineering** services identified in **EXHIBIT "B"**- ***Services to Provided by the Engineer, attached hereto and made a part of this agreement.***

I. General Contract Management (hereinafter referred to as "GCM"). For GCM, the primary role of the **Engineer** will be to perform professional management services. The **Engineer** as GCM manager, shall direct all tasks required by the project team (hereinafter referred to as **"Project Team"** and identified in the organizational chart shown in **EXHIBIT "B2"-Project Team**, attached hereto), consisting of various sub consultants, in the development of the project. As GCM manager, the **Engineer** shall organize and manage the project team, including: assigning the various **Engineering** work tasks; directing and controlling the work; planning, conducting, and documenting internal and external meetings; stabling policy, procedures, and quality assurance; and furnishing the necessary technical and support staff to implement the preliminary project planning and development (including, but not limited to, the identification and procurement of funding, and the development of a capital improvement program), preliminary **Engineering**, final design, and construction of the project.

II. Preliminary Project Planning & Development. For preliminary and development of the project, the primary role of the **Engineer** will be to perform **Engineering** activities and work tasks associated with the preparation of an environmental document, public involvement, and the development of primary and secondary project field control through field surveying and aerial mapping.

III. Preliminary Engineering, Final Design & Construction. For these services, the **Engineer** will be performing **Engineering** activities as follows:

(A) Preliminary **Engineering.** As identified in **EXHIBIT "A",** attached hereto, the **Owner** shall provide to the **Engineer** any available relevant data the **Owner** may have on file concerning the project for the **Engineer** to review. The **Engineer** will indicate of any errors and omissions and corrections needed as a basis for the final design of the project. The **Engineer** will prepare a report, hereinafter referred to as the **"Preliminary Engineering Report".** The **"Preliminary Engineering Report"** will be prepared by the **Engineer** in sufficient detail to indicate clearly the problems involved and the alternate solutions available to the **Owner,** to include preliminary layouts, sketches, and cost estimates and to set forth clearly the **Engineer's** recommendations for the final design of the project. The **Engineer's** recommendations for the final design of the project shall meet all federal, state and county permitting requirements.

(B) Final Design. Upon approval by the **Owner** of the **Engineer's** final recommendations, as shown in the **"Preliminary Engineering Report",** the **Engineer** will perform all required **Engineering** tasks, as more particularly identified in **EXHIBIT "B",** attached hereto, to provide the **Owner** with a complete and approved set of plans, specifications, and estimates (incorporated herein by reference as "PS&E" for each phase of construction of the project.

(C) Construction. The **Engineer** will provide construction phase **Engineering** services for each phase of construction of the project that is authorized and funded by the **Owner** for construction. The steps or sequence for the professional management and **Engineering**

services outlined for the scope of work above, and more particularly identified in EXHIBIT "B", attached hereto, may be performed concurrently by the **Engineer**, if approved by the **Owner**.

2.2 Classification of Services For this Agreement, the professional services to be provided by the **Engineer**, are more particularly identified in **EXHIBIT "B"**, attached hereto.

(1) Basic Services: Basic Services, incorporated herein by reference as **"Basic Services"**, includes those professional services not otherwise identified under Article 5.2 of this Agreement.

(2) Special Services: Special services, incorporated herein by reference as **"Special Services"**, includes those professional services identified under Article 5.2 of this Agreement.

2.3 Schedule of Work. The **Engineer** shall prepare a schedule of work (hereinafter referred to as "**Work Schedule**") in accordance with the terms identified in **EXHIBIT "C"** - ***Work Schedule***, attached hereto and made a part of this Agreement.

ARTICLE 3. Period of Service. Upon execution of this Agreement, the **Engineer** shall proceed with the work outlined under Article 2 hereof.

3.1 Termination Date. This Agreement shall terminate upon completion of **"Project"**s (hereinafter referred to as the "**Termination Date**"), unless extended by written supplemental agreement, as provided in Article 8 hereof, duly executed by the **Engineer** and the **Owner** prior to the **Termination Date**, or otherwise terminated as provided in Article 3.4 herein and below. The **Owner** assumes no liability or obligation for payment to the **Engineer** for work performed or costs incurred by the **Engineer** prior to the date authorized by the **Owner** for the **Engineer** to begin work, during periods when work is suspended, or subsequent to the **Termination Date.**

3.2 Extension of the Termination Date. The **Engineer** shall notify the **Owner** in writing as soon as possible if it is determined, or reasonably anticipated, that the work under this Agreement cannot be completed before the **Termination Date,** and the **Owner** may , at the **Owner's** sole discretion, extend the **Termination Date** by written supplemental agreement as provided in Article 8 hereof. The **Engineer** shall allow adequate time for review and approval by the **Owner** of the written notice and request by the **Engineer** to extend the **Termination Date.**

3.3 Suspension of Work. Should the **Owner** desire to suspend the work under this Agreement, but not terminate this Agreement, the **Owner** shall provide thirty (30) calendar days verbal notification to the **Engineer**, followed by written confirmation from the **Owner** to the **Engineer** to that effect. The thirty-day notice may be waived as agreed in writing by both the **Owner** and the **Engineer**. The work under this Agreement may be reinstated and resumed in full force and effect within sixty (60) days of receipt of written notice from the **Owner** to the **Engineer**. The sixty-day notice may be waived as agreed in writing by both the **Owner** and the **Engineer.**

If the **Owner** suspends the work, the **Termination Date** as identified above is not affected, and this Agreement will terminate on the date specified, unless extended by written supplemental agreement, as provided in Article 8 hereof, duly executed by the **Engineer** and the **Owner** prior to the **Termination Date.**

3.4 Termination of Agreement. This Agreement may be terminated before the stated **Termination Date** identified in Article 3.1 herein by any of the following conditions:

(1) **Commitment of Current Revenues.** In the event that, during any term hereof, the **Owner** does not appropriate sufficient funds to meet to the obligations of this Agreement, the **Owner** may terminate this Agreement upon thirty (30) days written notice to the **Engineer.** The **Owner** agrees, however, to use reasonable efforts to

secure funds necessary for the continued performance of this Agreement. The parties intend this provision to be a continuing right to terminate this Agreement at the expiration of each budget period of the **Owner** pursuant to the provisions of Tex. Loc. Govt. Code Ann. §271.903 (Vernon Supp. 1995).

(2) By mutual agreement and consent, in writing, of both the **Engineer** and the **Owner**.

(3) By the **Owner,** upon failure of the **Engineer** to fulfill the **Engineer's** obligations set forth herein in a satisfactory manner as determined by the **Owner** and in sole opinion of the **Owner,** after the **Owner** provides written notice to the **Engineer** of such failure and the **Engineer** has not corrected such failure within (30) days of such written notice by the **Owner.**

(4) By the **Engineer**, upon failure of the **Owner** to fulfill the **Owner's** obligations set forth herein, after the **Engineer** provides written notice to the **Owner** of such failure and the **Owner** has not corrected such failure within thirty (30) days of such written notice by the **Engineer.**

(5) By the **Owner** without cause upon thirty (30) days written notice to the **Engineer.**

(6) By satisfactory completion of all services and obligations described herein.

Should the **Owner** terminate this Agreement as herein provided, no fees other than fees due and payable at the time of termination shall thereafter be paid to the **Engineer** notwithstanding anything herein to the contrary. In determining the value of the work performed by the **Engineer** prior to termination, the **Owner** shall be the sole judge of the value of such work performed. Compensation for work at termination will be based on a percentage of the work completed at that time. Should the **Owner** terminate this Agreement under (5) of the paragraph above, the amount charged during the thirty (30) day notice period shall not exceed the amount charged during the preceding thirty (30) days.

If the termination of this Agreement is due to the failure of the **Engineer** to fulfill the **Engineer's** obligations under this Agreement, the **Owner** may take over the **"Project"** and prosecute the work to completion. In such case, the **Engineer** shall be liable to the **Owner** for any additional cost occasioned by the **Owner**.

If the **Engineer** defaults in the performance of this Agreement or if the **Owner** terminates this Agreement for fault on the part of the **Engineer**, the **Owner** will give consideration to payment of an amount in settlement to include: the actual costs incurred by the **Engineer** in performing the work to the date of default, the amount of work required which was satisfactorily completed to date of default, the value of the work which is usable to the **Owner**, the cost to the **Owner** of employing another consultant and/or firm to complete the work required and the time required to do so, and other factors which affect the value to the **Owner** of the work performed at the time of default. This Agreement shall not be considered as specifying the exclusive remedy for any default by the **Engineer,** but all remedies existing at law and in equity may be availed of by either party and shall be cumulative.

The termination of the Agreement and payment of an amount is settlement as prescribed above shall extinguish all rights, duties, and obligations of the **Owner** and the **Engineer** under this Agreement, except the obligations set forth in Articles 11.2, 12, 13, 15, 16, 17, 18.3, 19, 22 and 26 hereto.

ARTICLE 4. Progress and Coordination. The **Engineer** shall, from time to time during the progress of the work, confer with the **Owner**. The **Engineer** shall prepare and present such information as may be pertinent and necessary, or as may be requested by the **Owner**, in order to evaluate features of the **Engineer's** services and work.

At the request of the **Owner** or the **Engineer**, conferences shall be provided at the **Engineer's** office, the office of the **Owner,** or at other locations designated by the **Owner.** These conferences shall also include evaluation of the **Engineer's** services and work when requested by the **Owner.**

All applicable study reports shall be submitted in preliminary form for approval by the **Owner** before the final report is issued. The **Owner's** comments regarding the **Engineer's** preliminary report will be addressed by the **Engineer** in the final report.

If funds by other agencies or entities are to be used for the development of the **"Project"** under this Agreement, the **Engineer's** services and work will be subject to periodic review and approval by other agencies or entities, including those of the city, county, state and/or federal agencies.

Should it be determined that the progress in the production of the **Engineer's** services and work does not satisfy the requirements of the approved **Work Schedule** as provided by **Exhibit "C"**, attached hereto, the **Owner** shall review the approved **Work Schedule** with the **Engineer** to determine the corrective action needed by either the **Owner** or the **Engineer.**

The **Engineer** shall promptly advise the **Owner** in writing of events which have a significant impact upon the progress of the **Engineer's** services and work and the approved **Work Schedule**, including:

(1) problems, delays, adverse conditions which will materially affect the ability to attain contract objectives, prevent the meeting of time schedules and goals, or preclude the timely completion and submittal of **"Project"** deliverables by the **Engineer** within established time periods; this disclosure will be accompanied by a statement by the **Engineer** of recommended or immediate action taken, or contemplated, and any **Owner** or other agency or entity assistance needed to resolve the situation: and

(2) favorable developments or events which enable meeting the **Work Schedule** goals sooner than anticipated.

ARTICLE 5. Compensation and Fees. For and in consideration of the services to be rendered by the **Engineer**, the **Owner** shall compensate the **Engineer** as follows:

5.1 ***Basic Services.*** For and in consideration of the Basic Services to be rendered by the Engineer, as identified in Article 2 and more particularly identified in EXHIBIT "B", attached hereto, the maximum amount payable by the Owner to the Engineer for Basic Services, subject to adjustment in accordance with Article 6.1 herein, is equal to nine percent (9%) of the construction cost of the Project, as mutually-agreed between the Owner and the Engineer and more particularly defined in Article 6.1 herein, (hereinafter referred to as the "Basic Services Fee"), plus up to an additional one-half percent (0.5%) if the Engineer furnishes the requirements for incentives specified in Article 5.3 herein, as more particularly described in EXHIBIT "D2"

5.2 ***Special Services.*** Those services that may be required to provided by the **Engineer** as ***Special Services*** are set forth below and more particularly described in **EXHIBIT "B"**, attached hereto. For and in consideration of these ***Special Services*** rendered as required by the **Engineer,** the **Owner** shall pay the **Engineer** a negotiated lump sum fee (hereafter referred to as "**Special Services Fee**") at the hourly labor rates and non-labor rates (hereinafter referred to as "**Contract Rates**") specified in **EXHIBIT "D"** - ***Contract Rates***, attached hereto and made a part of this Agreement, and as follows:

1. **RESIDENT OR SITE ENGINEER, INSPECTOR** Actual performance of services of **"Project"** site **Engineer**, resident **Engineer** and/or inspector, if required by **Owner.**

2. **DOCUMENT COPIES** Actual performance and/or providing of additional copies (over 10) of report; additional copies (over 10) of plans (contract drawings), specifications and estimates (PS&E); additional copies (over 10) of bidding documents: additional copies (over 10) of as-built drawings.

3. **EXTRA TRAVEL** Extra travel required of **Engineer** and authorized by **Owner** to points outside of **HIDALGO COUNTY DRAINAGE DISTRICT NO. 1.**

4. **EXPERT WITNESS** Assistance to the **Owner** as expert witness in any litigation with third parties, arising from the development or construction of the **"Project"**.

5. **MISCELLANEOUS**. Investigations involving detailed consideration of operation, maintenance and overhead expenses and (unless otherwise agreed) the preparation of rate schedules, earning and expense statements; preparation of feasibility studies; environmental document preparation; appraisals, valuations, and material audits; or inventories required for certification of force account construction performed by the **Owner**; preparation of change orders for extra work done by the **Contractor.**

5.3 ***Incentives***. The **Owner** shall provide an incentive opportunity to the **Engineer** in consideration for services rendered regarding the corporate sponsorship performed by the **Engineer**, as more particularly identified in **EXHIBIT "B"** (under Funding Sources), attached hereto, for obtaining funding from potential funding sources for the **Project**. This incentive is stated in **Exhibit "D2"-Funding Source Incentive**,attached hereto and made a part of this Agreement. Payments to the **Engineer** for meeting the incentive requirements will be made by the **Owner**, upon presentation of the **Request for Payment** by the **Engineer** in accordance with the terms and provisions of Article 6 hereof.

ARTICLE 6. Method of Payment.

6.1 Request for Payment. Payments to the **Engineer** for services rendered will be made while work is in progress as executed through a lump sum fee assigned to each work authorization (hereinafter referred to as **"Work Authorization"**) in accordance with **Article 7** herein. For each **Work Authorization,** the **Engineer** shall prepare and submit to the **Owner** monthly progress reports in sufficient detail to support the progress of the work and in support of a request for payment (hereinafter referred to as "**Request for Payment**"). The progress report shall indicate the percent completion of the work accomplished by the **Engineer** during the billing period and to the date of the **Request for Payment**. On or before noon of the first Monday of each month during the performance of the services, the **Engineer** shall submit to the **Owner** for approval a **Request for Payment**. Payment of the lump sum fee for each **Work Authorization** identified in the **Request for Payment** will be in proportion to the percent completion of the work tasks identified in such **Work Authorizations** together with a detailed breakdown of the amount and the sum of all prior payments. The **Owner** shall review each

such **Request for Payment** and may make such exceptions as the **Owner** reasonably deems necessary or appropriate under the circumstances then existing. About ten (10) working days after the Commissioners Court of the **Owner** meets approving such payment, the **Owner** shall make payment to the **Engineer** in the amount approved as aforesaid subject to Article 6.4 herein and below.

Should the **Project** or portions of the **Project** be awarded for construction, the **Owner** will reconcile and determine the final maximum amount payable for the **Basic Services Fee,** as identified in Article 5.1 hereof, for that portion of the Project that has been awarded for construction as follows:

(1)Construction Cost-An estimated construction cost will be developed for each phase of the project, and be updated throughout engineering (advance planning, final design and plans and specifications) development. A construction cost will be mutually agreed between the Owner and the Engineer in writing at the time of submittal of the final plans and specifications to the Owner (the "Final Estimated Construction Cost"). A fee will be calculated as nine percent (9%) of the Final Estimated Construction Cost ("Preliminary Basic Services Fee"). After the project is constructed, and the final construction cost of the project is determined, the Preliminary Basic Services Fee will be adjusted no more than plus or minus then percent (+/-10%) as follows:

(a) If the final construction cost of the project is moiré than the Final Estimated construction Cost, the Basic Services Fee for engineering will be adjusted up, but the adjustment will be no more than plus ten percent (+10%) of the Preliminary Basic Services Fee; or,

(b) If the final construction cost of the project is less than the Final Estimated Construction Cost, the Basic Services Fee for engineering will be adjusted down, but the adjustment will be no more than minus ten percent (-10%) of the Preliminary Basic Services Fee.

(2) Incentives -- The portion of the Basic Services Fee for funding incentive will be reconciled and based on funding received at the time of reconciliation.

This reconciliation and determination by the **Owner** will be performed on a yearly basis throughout the development of the **Project,** and within the period of service established in Article 3. Payment due to the **Engineer** or credit owed to the **Owner** by the **Engineer** in the amount of this reconciliation and determination shall be applied to the next applicable **Request for Payment.**

6.2 Final Payment. After final completion of the work and acceptance thereof by the **Owner,** the **Engineer** shall submit a final request for payment (**"Final Request for Payment"**) which shall set forth all amounts due and remaining unpaid to the **Engineer** and upon approval thereof by the **Owner,** the **Owner** shall pay to the **Engineer** the amount due (**"Final Payment"**) under such **Final Request for Payment** in accordance with the provisions of Article 6.1 hereof. The **Final Payment** shall not be made until the **Engineer** delivers to the **Owner** an affidavit that so far as the **Engineer** has knowledge or information any and all amounts due for materials and services over which the **Engineer** has control have been paid.

6.3 Qualification on Obligations to Pay. Any provision hereof to the contrary notwithstanding, the **Owner** shall not be obligated to make any payment (whether a payment under Article 6.1 hereof or **Final Payment**) to the **Engineer** hereunder if any one or more of the following conditions precedent exist:

(1) The **Engineer** is in default of any of its obligations hereunder or otherwise is in default under this Agreement or under any contract documents related to this Agreement;

(2) Any part of such payment is attributable to the **Engineer's** services which are not performed in accordance with this Agreement; provided, however, such payment shall be made as to the part thereof attributable to the **Engineer's** services which were performed in accordance with this Agreement.

(3) The **Engineer** has failed to make payments promptly to consultants or other third parties used in connection with the **"Project"** for which the **Owner** has made payment to the **Engineer;**

(4) If the **Owner,** in good faith judgment, determines that the portion of the compensation then remaining unpaid will not be sufficient to complete the **Engineer's** services in accordance with this Agreement, no additional payments will be due the **Engineer** hereunder unless and until the **Engineer,** at its sole cost, performs a sufficient portion of the **Engineer's** services so that such portion of the compensation then remaining unpaid is determined by the **Owner** to be sufficient to so complete the **Engineer's** services.

6.4 No partial payment made hereunder shall be or construed to be final acceptance or approval of that part of the **Engineer's** services to which such partial payment related or relieves the **Engineer** of any of its obligations hereunder with respect thereto.

6.5 The **Engineer** shall promptly pay all bills for labor and material performed and furnished by others in connection with the performance of the **Engineer's** services.

6.6 Waiver. The making of the **Final Payment** shall constitute a waiver of all claims by the **Owner** except those arising from (1) faulty or defective services of the **Engineer** appearing after completion of the **"Project".** (2) failure of the **Engineer's** services to comply with the requirements of this Agreement or any contracts or Agreements related to the **"Project"**, or (3) terms of any special warranties required by this Agreement or provided at law or in equity. The acceptance of **Final Payment** shall constitute a waiver of all claims by the **Engineer** except those previously made in writing and identified by the **Engineer** as unsettled at the time of the **Final Request for Payment.**

ARTICLE 7. Work Authorization. After execution of this Agreement, the **Engineer** shall proceed with the work outlined under Article 2 hereof, only as authorized by the **Owner** through an agreed **Work Authorization** document in the form identified in **EXHIBIT "E"**- ***Work Authorization Form***, attached hereto and made a part of this Agreement. The **Engineer** will identify, as approved by the **Owner,** the needed services for the **"Project",** as required through the course of the development to the **"Project".** The **Owner** shall authorize the **Engineer** to perform one or more of the agreed tasks identified in **EXHIBIT "B",** attached hereto, in the form of individual work authorizations. Upon

authorization from the **Owner,** the **Engineer** will prepare a **Work Authorization** document, which will include a description of the work to be performed, including a description of the tasks and milestones, a work schedule, and an estimated cost proposal agreed upon by the **Owner** and the **Engineer**. The estimated cost proposal shall set forth in detail the computation of the cost of each work task, at the hourly rates established and identified in **EXHIBIT "D",** attached hereto. The **Work Authorizations** shall not waive the **Owner's** and the **Engineer's** responsibilities and obligations established in this Agreement.

The estimated cost proposal for each **Work Authorization,** developed by the **Engineer** and approved by the **Owner** shall be used by the **Owner** to appropriate a purchase order for the **Work Authorization.** Each executed **Work Authorization** shall become a part of this **Agreement**. Upon satisfactory completion of the **Work Authorization,** the **Engineer** shall submit the **"Project"'s** deliverables as specified in the executed **Work Authorization** to the **Owner** for review and acceptance.

Work included in a **Work Authorization** shall not begin until the **Owner** and the **Engineer** have signed the **Work Authorization.** All work must be completed on or before the completion date specified in the **Work Authorization,** unless extended by written agreement by the **Engineer** and the **Owner.** The **Engineer** shall promptly notify the **Owner** of any event that will affect completion of the **Work Authorization.** All **Work Authorizations** must be executed and completed by both the **Engineer** and the **Owner** within the period established for this Agreement as specified in Article 3 hereof.

The final acceptance by the **Owner** of each **Work Authorization** for the **"Project"** shall serve as evidence of completion, on the part of the **Engineer,** of all services under this Agreement insofar as they pertain to that portion of work on the **"Project"** identified in the applicable work authorization.

ARTICLE 8. Supplemental Agreements. The terms of this Agreement may be amended by supplemental agreement if the **Owner** determines that (1) there is a need to extend the **Termination Date** identified in Article 3.1 hereof, (2) there has been a significant change in the scope, complexity or character of the services to be performed by the **Engineer,** and/or (3) for any other reason agreeable to the **Owner** and the **Engineer**. All supplemental agreements will be developed in the form identified in **EXHIBIT "F" - *Supplemental Agreement Form***, attached hereto and made a part of this Agreement, and incorporated herein by reference as "**Supplemental Agreement".**

If determined appropriate by the **Owner,** additional compensation to the **Engineer** for (1), (2) and/or (3) above shall be paid as a negotiated lump sum fee at the **Contract Rates** specified in **EXHIBIT "D"**, attached hereto. The negotiated lump sum fee shall be incorporated into the **Supplemental Agreement.**

Any **Supplemental Agreement** must be executed by both the **Engineer** and the **Owner** prior to the **Termination Date** specified in Article 3 hereof.

It is distinctly understood and agreed that no claim by the **Engineer** for additional work, as identified in Article 9 hereof, or changes or revisions in work, as identified in Article 10 hereof, shall be made by the **Engineer** until full execution of the **Supplemental Agreement** and authorization to proceed is granted by the **Owner**. The **Owner** reserves the right to withhold payment to the **Engineer** pending verification of satisfactory work performed by the **Engineer.**

ARTICLE 9. Additional Work. If the **Engineer** is of the opinion that any work it has been directed to perform is beyond the scope of this Agreement and constitutes extra work, the **Engineer** shall promptly notify the **Owner** in writing, In the event the **Owner** finds that such work does constitute extra work, the **Owner** shall so advise the **Engineer** and a written supplemental agreement will be executed between the **Owner** and the **Engineer** as provided herein. The **Engineer** shall not perform

any proposed additional work or incur any additional cost prior to the execution by both the **Engineer** and the **Owner** of a supplemental agreement. Additional compensation from the **Owner** to the **Engineer** shall be paid as a negotiated lump sum fee at the Contract Rates specified in **EXHIBIT "D"** attached hereto. The negotiated lump sum fee shall be incorporated into the supplemental agreement as specified in Article 8 hereof. The **Owner** shall not be liable or under any obligation to compensate the **Engineer** for work performed or costs incurred by the **Engineer** relating to additional work not directly associated with the performance of the work authorized in this Agreement or as amended through supplemental agreement.

ARTICLE 10. Changes or Revisions in Work. If the **Owner** finds it necessary to request changes to the work, and the changes are within the applications of sound **Engineering** principles, the **Engineer** shall make such revisions if requested and directed by the **Owner.**

10.1 Preliminary Work. The **Engineer** will make, without expense to the **Owner,** such revisions of any preliminary reports or drawings as may be required to meet the needs of the **Owner** and the applications of sound **Engineering** principles.

10.2 Previously Approved or Satisfactorily Completed Work. If the **Owner** funds it necessary to request the **Engineer** to make changes to work previously approved by the **Owner** or work satisfactorily completed for which the **Owner** approves or, after a definite plan has been approved by the **Owner**, if a decision is subsequently made by the **Owner**, which for proper execution involves extra services and expenses for changes in or additions to the drawings specifications or other documents, this will be considered as additional work, and compensation from the **Owner** to the **Engineer** will be in accordance with Article 9 hereof.

10.3 "Project" Delays. If the **Engineer** is required to perform additional work due to delays by the imposition of causes not within the **Engineer's** control, such as by the re-advertisement of bids or

by the delinquency or insolvency of contractors, such work associated with these delays shall be considered additional work, and the **Engineer** shall be compensated by the **Owner** for such extra services and expense in accordance with Article 9 hereof.

10.4 Reduction of "Project" Cost. Notwithstanding any provision herein to the contrary, in the event it is necessary for the **Owner** to require changes in the final plan of the **"Project"** to enable it to the reduce the construction cost of the **"Project"** to an amount within the sum estimated by the **Engineer,** the **Engineer** will be required to make such revisions or changes. These changes will only be considered additional work by the **Engineer,** if the **Engineer** previously provided these same changes as options to the **Owner** at the stage of preliminary work or prior to the approval of the final plan for the **"Project"**, and the option or options were not selected or approved by the **Owner** to be incorporated into the final plan of the **"Project"**. Payment for this additional work will then be made to the **Engineer** in accordance with Article 9 hereof. If **the Engineer** failed to provide these changes as an option or options to the **Owner** at the stage of preliminary work or prior to the approval of the final plan of the **"Project"**, these changes will not be considered additional work and no additional compensation will be made to the **Engineer.**

ARTICLE 11. Ownership and **Release of Documents.**

11.1 Ownership of Documents. Original drawings and specifications are the property of the **Engineer** however the **"Project"** is the property of the **Owner**, and the **Engineer** may not use the drawings and specifications thereof for any purpose not relating to the **"Project"** with the **Owner's** consent. The **Owner** shall be furnished with such reproductions of drawings and specifications as the **Owner** may reasonably require. Upon completion of the work or any earlier termination of this Agreement under Article 3.4 hereof, the **Engineer** will revise drawings to reflect changes made during construction and will promptly furnish the **Owner** with one complete set of reproducible record prints.

Prints shall be furnished by the **Engineer,** as an additional service, at any other time requested by **Owner.** All such reproductions shall be the property of the **Owner** who may use them without the **Engineer's** permission for any proper purpose relating to the **"Project",** including but not limited to additions to or completion of the **"Project".** Any additions or revisions by the **Owner** to a drawing signed, sealed, and dated by a registered professional **Engineer**, shall be made in accordance with the Texas **Engineering** practice Act and the Rules of the State Board of Registration for Professional **Engineers**.

All documents furnished to the **Engineer** by the **Owner** shall be delivered to the **Owner** upon completion or termination of this Agreement. The **Engineer,** at the **Engineer's** own expense, may retain copies of such documents or any other data under this Agreement.

11.2 Release of Documents or Information. Release of information to the public or others regarding the **"Project"** will be accordance with the Texas Public Information Act.

ARTICLE 12 Discounts, Rebates, Refunds. In connection with procurement services rendered by the **Engineer,** if procurement services are required of the **Engineer** hereunder, all discounts, rebates and refunds shall accrue to the **Owner**. For some purchases, the **Engineer** may deem that payment within the discount period is not safe; and/or inspection, guarantees, or other considerations may dictate delay. In such cases, the **Engineer** shall promptly notify the **Owner** so that a course of action may be mutually agreed upon by the **Owner** and the **Engineer.**

ARTICLE 13. Records, Accounting, Inspection. The **Engineer** shall keep full and detailed records and accounts in a manner approved by the **Owner.** The **Engineer** shall afford the **Owner's** authorized personnel and independent auditors, if any, full access to the work performed by the **Engineer** regarding the **"Project"** and to all of the **Engineer's** books, records, correspondence, instructions, drawings, receipts, vouchers and other documents relating to such work under this

Agreement and the **Engineer** shall preserve all such records for three (3) years after final payment. The **Engineer** shall deliver to the **Owner** upon completion of such work, a statement of the cost of such work detailed according to the accounting procedure and requirements of the **Owner.**

ARTICLE 14. Subcontracting and Assignment. The **Engineer** shall not assign, subcontract or transfer the **Engineer's** interest in this Agreement without the prior written consent of the **Owner.** The **Engineer** shall bind every subconsultant by written subcontract to observe all the terms of this Agreement to the extent that they may be applicable to each subconsultant. No subcontract relieves the **Engineer** of any responsibilities under this Agreement.

The **Engineer,** and the **Owner,** do hereby bind themselves, their successors, executors, administrators and assigns to each other party of this Agreement and to the successors, executors, administrators, and assigns of such other party in respect to all covenants of this contract.

ARTICLE 15. Patents. The **Engineer** shall indemnify and save the **Owner** harmless from all liability for alleged or actual infringement of any patent resulting from the use of apparatus or equipment furnished or designed by the **Engineer** or from the use of any process designed by the **Engineer** or effected by said apparatus or equipment, and the **Engineer** shall indemnify and save the **Owner** harmless from and against all costs, legal fees, expenses and liabilities incurred in or about any claim of or action for such infringement: provided, however, that the **Owner** shall promptly transmit to the **Engineer** all papers served on the **Owner** in any suit involving such claim of infringement, and provided further, that the **Owner** permits the **Engineer** to have entire charge and control of the defense of any such suit. If because of actual infringement the use of such apparatus, equipment, or process is enjoined, the **Engineer** shall refund the purchase price thereof in proportion to the length of service uncompleted, the life of such apparatus or equipment being assumed as five years. The **Engineer** hereby grants to the **Owner** a non-exclusive, royalty-free license under patents now or hereafter owned by the

Engineer covering any machines, apparatus, processes, articles, or products included in the **Engineer's** work hereunder.

ARTICLE 16. Confidential Information, Inventions and Other Restrictions.

16.1 Confidential Information. The **Engineer** shall not use in any way, commercial or otherwise, except to the extent required by the proper performance of this Agreement; and shall hold in confidence and not disclose to any person, for any reason or at any time, any information relating to the secret processes, products, compositions, machinery, apparatus or trade secrets of the **Owner**, or any other confidential information given to the **Engineer** by any of the **Owner's** commissioners, elected officials, employees, or representatives or acquired by the **Engineer** during the term of or as a result of this Agreement. Any information not generally available to the public shall be considered secret and confidential for the foregoing purposes; provided, however, that any technical information which was lawfully in the **Engineer's** possession prior to such disclosure to the **Engineer** by the **Owner** or which is or shall lawfully be published or become part of general knowledge from sources other than the **Engineer** or which otherwise shall lawfully become available to the **Engineer** from a source other than the **Owner,** shall not be subject to these provisions. All the foregoing stipulations shall apply to such information and work hereunder as well as to any information and ideas originated or developed by the **Engineer** in performing such work. Such information may, of course, be disclosed to the proper officials or employees of the **Owner** if necessary to perform the work hereunder. The **Engineer** shall, however, inform each of its employees who receive such information of these restrictions and the **Engineer** shall take all reasonable precautions and exert all reasonable efforts to assure conformance with such restrictions by all of its officers, employees, and agents, obtaining from them if necessary, agreements satisfactory to the **Owner,** effectuating the purposes of this Article.

16.2 Inventions. The **Engineer** shall communicate to the **Owner** at once, and require the **Engineer's** employees assigned to this **"Project"** to communicate to the **Owner** all inventions and improvements which any of the **Engineer's** employees, either alone or in conjunction with any of the **Owner's** employees may conceive, make or discover during the course of or as a result of work on this **"Project"** under this or any ensuing agreement with the **Owner** that relates to the processes, products, compositions, machinery or plants of the **Owner**, or relating in any way to any of the operations in which the **Owner** may be obligated to pay to the **Engineer** as compensation for services rendered by the **Engineer** under contract with the **Owner**. The **Engineer** shall require its employees to execute patent applications and assignments thereof to the **Owner** or its nominees, and powers of attorney relating thereto for any country the **Owner** may designate, and shall take all other actions as the **Owner** may request to maintain and protect such inventions and improvements. The **Owner** shall pay all costs or charges incurred in protecting such inventions and improvements if the **Owner** desires to protect them. Before assigning any of the **Engineer's** employees to work under any contract with the **Owner** concerning this **"Project"**, the **Engineer** shall obtain from them agreements satisfactory to **Owner** complying in all respects with the terms and provisions of this Article.

16.3 The rights and obligations set forth in Article 16 shall survive the performance of this Agreement, or any termination, discharge or cancellation thereof

ARTICLE 17. Engineer's Seal, Responsibility and Warranties.

17.1 Engineer's Seal. The **Engineer** shall assign a responsible **Engineer** or **Engineers** licensed to practice in the State of Texas, who shall sign, seal and date all appropriate **Engineering** submissions to the **Owner** in accordance with the Texas **Engineering** Practice Act and the Rules of the Stare Board of Registration for Professional **Engineers**.

17.2 Engineer's Responsibility. The **Engineer** shall be responsible for the accuracy of the work for the **"Project"** and shall promptly make necessary revisions or corrections resulting from errors, omissions, or negligent acts by the **Engineer**. No additional compensation will be made to the **Engineer** for any necessary revisions or corrections resulting from errors, omissions, or negligent acts by the **Engineer.**

The **Engineer's** responsibility for all questions arising from design errors and/or omissions will be determined by the **Owner** or a designee appointed by the **Owner**. The **Engineer** will not be relieved of the responsibility for subsequent correction of any such errors or omissions or for clarification of any ambiguities until after the construction phase of the **"Project"** has been completed.

17.3 Warranties.

(a) The **Engineer** warrants that **Engineering** design work performed by the **Engineer** hereunder shall be in accordance with sound **Engineering** design practices and in conformance with applicable code and standards established for such work.

(b) Notwithstanding anything to the contrary contained in this Agreement, the **Owner** and the **Engineer** agree and acknowledge that the **Owner** is entering into this Agreement in reliance on the **Engineer's** experience and abilities with respect to performing the **Engineer's** services hereunder. The **Engineer** accepts the relationship of trust and confidence established between it and the **Owner** by this Agreement. The **Engineer** covenants with the **Owner** to use the **Engineer's** best efforts, skill, judgment and abilities to design the **"Project"** and to further the interests of the **Owner** in accordance with the **Owner's** requirements and procedures, in accordance with all professional standards, and in compliance with all applicable national, federal, state, county and municipal laws, regulations, codes, ordinances, orders and with those of any other body having jurisdiction. If the development of plans, specifications and estimates (hereinafter referred to as **"PS&E"**) are identified in this Agreement under

Article 2 hereof or **EXHIBIT "B"**, attached hereto, as part of the services to be provided by the **Engineer** for the **"Project"**, prior to the commencement of construction, the **Engineer** shall certify in writing to the **Owner** that the **PS&E** for the **"Project"**, and the improvements when built in accordance therewith, conform to all applicable governmental regulations, statutes and ordinances then in effect. The **Engineer** represents covenants and agrees that there are no obligations, commitments or impediments of any kind that will limit or prevent performance of the **Engineer's** services.

(c) The **Engineer** represents, covenants and agrees that all of **Engineer's** services to be furnished by the **Engineer** under or pursuant to this Agreement form the inception of the Agreement until the **"Project"** has been fully completed, shall be of the standard and quality which prevail among **Engineers** of similar experience, knowledge, skill and ability engaged in **Engineering** practice throughout Texas under the same or similar circumstances involving the design and construction of **"Project".**

(d) The **Engineer** represents, covenants and agrees that the **Engineer's** special talent, training and experience cause the **Engineer** to be the prime professional on the **"Project";** that because of such talent and training, the **Engineer** envisions the construction of the **"Project"** in its entirely and possesses the special skills which enable the **Engineer** to recognize dangerous conditions that a reasonable, prudent **Engineer** having such special skills could anticipate may arise from the proper use of the **"Project"** after acceptance by **Owner;** and that the **Engineer** recognizes that any commissioners, elected officials, employees and agents of the **Owner,** plus residents and **Owners** of property within the area affected by the **"Project"** are within a class of foreseeable persons who will be relying on the **"Project"** being designed in a professional and safe manner.

(e) If the development of **PS&E** is identified in this Agreement under Article 2 hereof or **EXHIBIT "B"**, attached hereto, as part of the services to be provided by the **Engineer** for the

"Project", the **Engineer** represents, covenants and agrees that the **PS&E** of the **"Project"** will be accurate and free from any material errors. The **Engineer** additionally represents, covenants and agrees to the following: that the design of the **"Project"** will conform to its foreseeable use as a **"Project"** with all the amenities as set forth in any **PS&E** developed by the **Engineer** for the **"Project"**; that the result of such **PS&E**, if built in accordance therewith, will be suitable for purposes for which the **"Project"** is designed; and the **"Project"** will be inspected in a workmanlike, professional manner and will be suitable for the **"Project"'s** intended purpose. The **Engineer's** responsibilities as set forth herein shall at no time be in any way diminished by reason of any approval by the **Owner** of any **PS&E** developed by the **Engineer** for the **"Project"**, nor shall the **Engineer** be released from any liability by reason of such approval by the **Owner**, it being understood that the **Owner** at all times is ultimately relying upon the **Engineer**'s skill and knowledge in preparing such **PS&E.**

(f) In connection with the **Engineer**'s performance of procurement services hereunder, if any, the **Engineer** use its best efforts to obtain from all vendors of equipment and materials, fullest possible warranties against defective materials and workmanship for the benefit of the **Owner.**

ARTICLE 18. Engineer's Resources. The **Engineer** shall furnish and maintain, at the **Engineer's** own expense, office space for the performance of all services, skilled and sufficient personnel, as well as adequate and sufficient equipment to perform the services as required under this Agreement.

18.1 "Project" Manager. The **Engineer** shall provide a manager **("Project" Manager)** for the **"Project"** that is a registered professional **Engineer** in the State of Texas. The **"Project"** manager shall have such knowledge and experience as will enable that **"Project" Manager** during the course of the **"Project"** without prior consent of the **Owner.** If, due to situations beyond the control of the **Engineer,** the **Engineer** must change the **"Project" Manager** prior to the completion and acceptance of

the **"Project"**, the **Engineer** will submit a request to change the **"Project" Manager** to the **Owner** for approval.

18.2 Employees of the Engineer. All employees of the **Engineer** shall have such knowledge and experience as will enable them to perform the duties assigned to them and required for the services under this Agreement. Any employee of the **Engineer** who, in the opinion of the **Owner**, is incompetent, or whose conduct becomes detrimental to the work required under this Agreement, shall immediately be removed form association with the **"Project"** when so instructed by the **Owner.** The **Engineer** certifies that the **Engineer** presently has employed sufficient and qualified personnel, and will maintain sufficient and qualified personnel for performance of the services under this Agreement.

18.3 Documents/Information Exchange The purpose of this Article is to define the required automated resources, format for graphics files, and information exchange pertaining to the **"Project".** Taking into consideration that the **Owner** has a significant investment is the development of the **"Project"**, there is a need for the **Engineer** to provide consistency in document development for information exchange. Consistency in document development for information exchange and production will help facilitate an economically efficient **"Project"**. Therefore, the **Engineer** shall provide the **Owner** with documents and information in accordance with the special requirement outlined in **EXHIBIT "B"** attached hereto.

ARTICLE 19. Indemnification. To the fullest extent permitted by applicable law, the **Engineer** and its agents, partners, subcontractors, and consultants (collectively **"Indemnitors"**) shall and do agree to indemnify, and hold harmless the **Owner**, the **Owner's** respective directors, elected officials, employees and agents (collectively **"Indemnitees"**) from and against all claims, damages, losses, liens, causes of action, suits, judgments and expenses, including attorney fees, of any nature, kind or description (collectively "Liabilities") of any person or entity whomsoever arising out of, caused by

or resulting from the negligent performance of the **Engineer's** services through activities of the **Engineer,** its agents, partners, subcontractors and/or consultants performed under this Agreement, and which are caused by or result from error, omission, or negligent act of the **Engineer** or of any person employed or contracted by the **Engineer** provided that any such **Liabilities** (1) are attributable to bodily injury, personal injury, sickness, disease or death of any person, or to the injury to or destruction of tangible personal property including the loss of use and consequential damages resulting there from and (2) are caused in whole or in part by any negligent act or omission of the **Engineer,** anyone directly or indirectly employed by the **Engineer** or anyone for whose acts the **Engineer** may be legally liable. The **Engineer** shall also save harmless the **Owner** from any and all expense, including but not limited to, attorney fees which may be incurred by the **Owner** in litigation or otherwise resisting said claim or liabilities which may be imposed on the **Owner** as a result of such activities by the **Engineer,** its agents partners, subcontractors and/or consultants. In this connection, it is agreed and understood that the **Engineer** shall not be responsible for any portion of the liability proximately caused by the **Owner's** negligence.

ARTICLE 20. Joint and Several Liability. In the event more than one of the **Indemnitors** are connected with an accident or occurrence covered by the indemnification in Article 19 hereof, then each of such **Indemnitors** shall be jointly and severally responsible to the **Indemnitees** for indemnification and the ultimate responsibility among such **Indemnitors** for the loss and expense of any such indemnification shall be settled by separate proceedings and without jeopardy to any **Indemnitee.** The provisions of this Article shall not be construed to eliminate or reduce any other indemnification or right which the **Owner** or any of the **Indemnitees** has by law.

ARTICLE 21. Insurance. The **Engineer** shall obtain and maintain insurance in the limits of liability for each of the types of insurance coverage identified as follows.

(1) **Workers' Compensation**, endorsed with a waiver of subrogation in favor of the **Owner** in accordance with the statutory obligations imposed by Worker's Compensation or Occupational Disease laws under the Texas Workers' Compensation Law **("Statutory Texas")**

(2) **Commercial General Liability**, endorsed with the **Owner** as an additional insured and endorsed with a waiver of subrogation in favor of the **Owner** ***all to the extent of the liabilities assumed by the Engineer under Article 19 and Article 20*** herein, in limits of liability not less than one million dollars (**$1,000,000**) combined single limit each occurrence and in the aggregate for bodily injury and property damage.

(3) **Texas Business Automobile Policy**, endorsed with the **Owner** as an additional insured and endorsed with a waiver of subrogation in favor of the **Owner** *all to the extent of the liabilities assumed by the* ***Engineer*** *under Article 19 and Article 20 herein*, in limits of liability not less than two hundred fifty thousand dollars (**$250,000**) each person for bodily injury, five hundred thousand dollars (**$500,000**) each occurrence for bodily injury, and one hundred thousand dollars (**$100,000**) each occurrence for property damage.

(4) **Professional Liability** in limits of **$1,000,000** each claim and aggregate.

The **Engineer** covenants and agrees to maintain an insurance policy in the minimum limits of liability for each of the types of insurance coverage identified above. The **Engineer** shall furnish the **Owner** with a certificate of insurance showing the said policy to be in full force and effect during the period of service, identified in Article 3 hereto, for this Agreement. The Certificate of Insurance shall be attached hereto and identified as **EXHIBIT "G"**- *Certificate of Insurance*. The **Engineer** will be considered in breach of contract should the **Engineer** fail to maintain an insurance policy in the

minimum limits of liability and requirements identified above while performing services for and under this Agreement, and will be subject to default and termination of the Agreement as outlined in Article 3.4 hereto. Additionally, the **Engineer** covenants and agrees to use its best efforts to maintain an insurance policy in the minimum limits of liability and requirements identified above until one year following the date of the acceptance of the **"Project" by Owner.**

ARTICLE 22. Compliance with Laws. The **Engineer** shall comply with all applicable Federal, State and local laws, statutes, codes, ordinances, rules and regulations and the orders and decrees of any court, or administrative bodies or tribunals in any manner affecting the performance of this Agreement including, without limitation, worker's compensation laws, minimum and maximum salary and wage statutes and regulations and licensing laws and regulations. When required the **Engineer** shall furnish the **Owner** with satisfactory proof of its compliance therewith.

ARTICLE 23. Non-collusion. The **Engineer** warrants that the **Engineer** has not employed or retained any company or persons, other than a bona fide employee working solely for the **Engineer**, to solicit or secure this Agreement, and that the **Engineer** has not paid or agreed to pay any company, **Engineer** or any other person or entity any fee, commission, percentage, brokerage fee, gifts or any other consideration contingent upon or resulting from the award or execution of this Agreement. For breach or violation of this warranty the **Owner** shall have the right to annul this Agreement without liability or, in the **Owner's** discretion, to deduct from the *Services Fee*, or otherwise recover, the full amount of each fee, commission, percentage, brokerage fee, gift or contingent fee.

ARTICLE 24. Gratuities. The **Owner** mandates that employees of the **Owner** shall not accept any benefits, gifts or favors from any person doing business or who reasonably speaking may do business with the **Owner** under this Agreement; the only exceptions allowed are ordinary business meals. Any person doing business with or who may reasonably seeking to do business with the **Owner**

under this Agreement may not make any offer of benefits, gifts or favors to **Owner** employees, except as mentioned herein above. Failure on the part of the **Engineer** to adhere to this provision may result in the termination of this Agreement.

ARTICLE 25. Payment of Franchise Tax. The **Engineer** hereby certifies that the **Engineer** is not delinquent in Texas franchise tax payments, or that the **Engineer** is exempt from, or not subject to, such as tax. A false statement concerning corporation's franchise tax status shall constitute grounds for termination of the Agreement at the sole option of the **Owner.**

ARTICLE 26. Disputes. The **Engineer** shall be responsible for the settlement of all contractual and administrative issues arising out of any procurement made by the **Engineer** in support of the services under this Agreement.

ARTICLE 27. Severability. In the event any one or more of the provisions contained in this Agreement shall for any reason, be held to be invalid, illegal, or unenforceable in any respect such invalidity, illegality or unenforceability shall not affect any other provision thereof and this Agreement shall be construed as if such invalid, illegal or unenforceable provision had never been contained herein .

ARTICLE 28. Notices. All notices to either party by the other required under this Agreement shall be personally delivered or mailed to such party at the following respective addresses:

OWNER:	**Hidalgo County Drainage District No. 1** **Attn: District Manager** **902 N. Doolittle Rd** **Edinburg, TX 78542**	**ENGINEER: Entech Civil Engrs, Inc** **Attn: Michael Spiegel, PE** **16360 Park 10 Place, Suite 230** **Houston, TX 77084**

The Address may be changed by either party by written notice and notice sol mailed shall be effective upon mailing.

ARTICLE 29. Miscellaneous Provisions.

(a) This Agreement constitutes the entire Agreement between the **Engineer** and the **Owner** relating to the work herein described and supersedes any prior understanding or written or oral

contracts between the parties respecting the subject matter defined herein. These are no previous or contemporary representations or warranties of the **Owner** or the **Engineer** not set forth herein.

(b) Except as specifically provided herein no modification, waiver, termination, rescission, discharge or cancellation of this Agreement or of any terms thereof shall be binding on the **Owner** unless in writing and executed by an officer or employee of the **Owner** specifically authorized to do so.

(c) No waiver of any provision of or a default under this Agreement shall affect the right of the **Owner** thereafter to enforce said provision or to exercise any right or remedy in the event of any other default whether or not similar.

(d) No modification, waiver, termination, discharge or cancellation of this Agreement or of any terms thereof shall impair the **Owner's** right with respect to any liabilities whether or not liquidated of the **Engineer** to the **Owner** theretofore accrued.

(e) All rights and remedies of the **Owner** specified in this Agreement are in addition to the **Owner**'s other rights and remedies.

(f) The **Engineer** shall remain an independent contractor and shall have no power nor shall the **Engineer** represent that the **Engineer** has any power to bind the **Owner** or to assume or to create any obligation express or implied on behalf of the **Owner** except as specifically authorized in advance by the **Owner.**

(g) The Agreement shall be construed under the laws of the State of Texas and is performable in Hidalgo County, Texas.

(h) This Agreement may only be amended by a written document executed by the **Owner** and the **Engineer** as provided by Article 8 herein.

ARTICLE 30. Signatory Warranty The undersigned signatory or signatories for the **Engineer** hereby represent and warrant that the signatory is an officer of the organization for which he or she has executed this Agreement and that he or she has full and complete authority to enter into this Agreement on behalf of the **Engineer.** The above-stated representations and warranties are made for the purpose of inducing the **Owner** to enter into this Agreement.

WITNESS WHEREOF, the **Engineer** and the **Owner** have caused this **Agreement for Professional Engineering Services** to be effective as of the ____ day of _____, 2013.

ENGINEER:

BY: 

Mr. Ovidio Alanis
Vice President
Entech Civil Engineers, Inc.

OWNER:

HIDALGO COUNTY DRAINAGE DISTRICT NO. 1

BY: _____

Ramon Garcia, Chairman of the Board
Hidalgo County Drainage District No. 1

APPROVED AS TO FORM:
ATLAS, HALL & RODRIGUEZ, LLP

By: _____

EXHIBIT "A"

Services to be provided by the Owner

The following provides an outline of the services to be provided by the **OWNER** in the development of the **"Project"**.

The **OWNER** will provide to the **ENGINEER** the following:

(1) Authorization to the **ENGINEER** to begin work in accordance with Section 3 of this Agreement.

(2) Payment for work performed by the **ENGINEER**, and accepted by the **OWNER** in accordance with Section 6 of the Agreement.

(3) Assistance to the **ENGINEER**, as necessary, to obtain the required data and information from other local, regional, State and Federal agencies that the **ENGINEER** cannot easily obtain.

(4) Provide any available relevant data the **OWNER** may have on file concerning the **"Project"**.

(5) Provide timely review and decisions in response to the **ENGINEER**'S request for information and/or required submittals and deliverables, in order for the **ENGINEER** to maintain the agreed-upon work schedule prepared in accordance with Exhibit C of this Agreement.

(6) Attend and participate in progress meetings as required and as coordinated and conducted by the **ENGINEER**.

(7) Review and approve the **"Project"** design criteria.

(8) Provide timely reviews and comments to submitted construction packages.

(9) Review and approve change orders as required and prepared by the **ENGINEER**.

HIDALGO COUNTY DRAINAGE DISTRICT # 1
WEIR #~~4~~ 3
HIDALGO COUNTY, TEXAS
FEE SCHEDULE

TASK DESCRIPTION	COST	Entech Fee	Sub Fee
PHASE I (BASIC SERVICES)	$ -	$ -	$ -
PHASE I (ADDITIONAL SERVICES)	$ -	$ -	$ -
PHASE II FINAL DESIGN (BASIC SERVICES)	$46,211.72	$30,724.22	$15,487.50
PHASE II FINAL DESIGN (ADDITIONAL SERVICES)			
PHASE III CONSTRUCTION SERVICES (TOTAL)			
SUBTOTAL WEIR #3 AMOUNT	$46,211.72	$30,724.22	$15,487.50
Total Sub Fees	$15,487.50		
Sub percentage	10%		$ 1,548.75
	$ -		
	$ -		
TOTAL Weir # 3 AMOUNT			$47,760.47

North Main Weir # 3 **ENGINEER'S ESTIMATE OF PROBABLE COSTS**

Item	Control Number	Item Description	Unit Measure	Quantity	Unit Price	Total
1		Insurance & Bonds	LS	1	$10,000.00	$10,000.00
2		Mobilization & Restore Premises to Original Conditions	EA	1	$31,932.00	$31,932.00
3		Clearing & Grubbing	LS	1	$10,000.00	$10,000.00
4		Excavation	CY	1200	$6.00	$7,200.00
5		Filter Fabric	SY	3300	$10.00	$33,000.00
6		Embankment	CY	1200	$11.00	$13,200.00
7		Temporary Piling	SF	4100	$35.00	$143,500.00
8		Seeding	SY	4600	$1.00	$4,600.00
9						$0.00
10		Rip Rap	Ton	1400	$39.00	$54,600.00
11		Contingencies	LS	1	$53,220.00	$53,220.00
Total						**$361,252.00**

July 25 2013

HIDALGO COUNTY DRAINAGE DISTRICT # 1
WEIR # 5
HIDALGO COUNTY, TEXAS
FEE SCHEDULE

TASK DESCRIPTION	COST	Entech Fee	Sub Fee
PHASE I (BASIC SERVICES)	$ -	$ -	$ -
PHASE I (ADDITIONAL SERVICES)	$ -	$ -	$ -
PHASE II FINAL DESIGN (BASIC SERVICES)	**$44,443.48**	$28,955.98	$15,487.50
PHASE II FINAL DESIGN (ADDITIONAL SERVICES)			
PHASE III CONSTRUCTION SERVICES (TOTAL)			
SUBTOTAL WEIR #3 AMOUNT	**$44,443.48**	$28,955.98	$15,487.50
Total Sub Fees	$15,487.50		
Sub percentage	10%		$ 1,548.75
	$ -		
	$ -		
TOTAL Weir # 3 AMOUNT			**$45,992.23**

South Main Weir # 5 **ENGINEER'S ESTIMATE OF PROBABLE COSTS**

Item	Control Number	Item Description	Unit Measure	Quantity	Unit Price	Total
1		Insurance & Bonds	LS	1	$10,000.00	$10,000.00
2		Mobilization & Restore Premises to Original Conditions	EA	1	$30,060.00	$30,060.00
3		Clearing & Grubbing	LS	1	$10,000.00	$10,000.00
4		Excavation	CY	1100	$6.00	$6,600.00
5		Filter Fabric	SY	3000	$10.00	$30,000.00
6		Embankment	CY	1100	$11.00	$12,100.00
7		Temporary Piling	SF	3000	$35.00	$105,000.00
8		Seeding	SY	4000	$1.00	$4,000.00
9		Class A Concrete	CY	60	$600.00	$36,000.00
10		Rip Rap	Ton	1200	$39.00	$46,800.00
11		Contingencies	LS	1	$50,100.00	$50,100.00
Total						**$340,660.00**

25-Jul-13

Entech Civil Engineers, Inc.
16360 Park Ten Place, STE. 230
Houston, Texas 77084
Tel: 281-945-0069
Fax: 281-945-0081

HIDALGO COUNTY DRAINAGE DISTRICT # 1 - EWP
SMD-WR5
HIDALGO COUNTY, TEXAS

TASK #	TASK DESCRIPTION	PRINCIPAL	PROJECT MANAGER	PROJECT ENGINEER		DESIGN ENGINEER	CADD/ DESIGNER	ADMIN	SUB FEE	SUB FEE	TOTAL LABOR HRS. & COSTS	NO. OF SHEETS
	PHASE II FINAL DESIGN (BASIC SERVICES)											
	SMD -WR5											
1	Hydrology/Hydraulic Study		14	60							74	
2	Drainage Maps			14			10				24	
3	Title Sheet											
4	Vicinity Map			2			1				3	
5	Plan & Sections		2	10			13				25	
6	SWPPP			3			9				12	
7	Summary of Quantities		2	2			1				5	
8	Project Manual & Specifications		12	4			7				23	
9	Pre-Bid Support		5	6							11	
10	Bid Analysis and Recommendations											
11	Meetings		6								6	
12	Construction Cost Estimate		4								4	
13	Coordination (Land Surveyor & Geotech)		2								2	
14	Project Administration (Contract, Invoices, Progress reports, etc)		2								2	
	*RABA KISTNER								$ 9,487.50	$ 9,487.50		
	* DOS LAND SURVEYING, LLC								$ 6,000.00	$ 6,000.00		10
	HOURS SUB-TOTALS		49	101			41				191	10
	CONTRACT RATE	$ 240.00	$ 210.00	$ 150.00		$ 120.00	$ 84.00	$ 66.00				
	DIRECT LABOR COST	$ -	$ 10,290.00	$ 15,150.00	$ -	$ -	$ 3,444.00	$ -	$ 15,487.50	$ 15,487.50	$ 44,371.50	
										$ -		
										$ -		
	SUBTOTAL	$ -	$ 10,290.00	$ 15,150.00	$ -	$ -	$ 3,444.00	$ -	$ 15,487.50	$ 15,487.50	$ 44,371.50	
	DIRECT EXPENSES											
	MILEAGE @ $0.585	122		miles	$ 0.59						71.98	
	REPRODUCTION FOR BID SET &SCAN (1 set Mylars)			ea	$ 2.50							
	REPRODUCTION FOR BID SET (15 set Paper)			ea	$ 0.55							
	COURIER/OVERNIGHT			each	$ 24.00							
	SUBTOTAL										$ 71.98	
	PHASE II - Basic Services Total										$ 44,443.48	
	PHASE II - Additional Services Total	$ -	$ -	$ -	$ -	$ -	$ -	$ -	#REF!	$ -		
	PHASE II TOTAL										$ 44,443.48	

* Work Provided by Sub-Consultant

Entech Civil Engineers, Inc.
16360 Park Ten Place, STE. 230
Houston, Texas 77084
Tel: 281-945-0069
Fax: 281-945-0081

HIDALGO COUNTY DRAINAGE DISTRICT # 1 - EWP
SMD-WR5
HIDALGO COUNTY, TEXAS

LABOR HRS PER SHEET	COST PER SHEET
N/A	N/A
N/A	N/A
N/A	N/A

Entech Civil Engineers, Inc.
16360 Park Ten Place, STE. 230
Houston, Texas 77084
Tel: 281-945-0069
Fax: 281-945-0081

HIDALGO COUNTY DRAINAGE DISTRICT # 1 - EWP
NMD-WR3
HIDALGO COUNTY, TEXAS

TASK #	TASK DESCRIPTION	PRINCIPAL	PROJECT MANAGER	PROJECT ENGINEER		DESIGN ENGINEER	CADD/ DESIGNER	ADMIN	SUB FEE	SUB FEE	TOTAL LABOR HRS. & COSTS	NO. OF SHEETS
PHASE II FINAL DESIGN (BASIC SERVICES)												
	NMD -WR3											
1	Hydrology/Hydraulic Study		2	65							67	
2	Drainage Maps		4	10			10				24	
3	Title Sheet		4				16				20	
4	Vicinity Map			2			7				9	
5	Plan & Sections		3	13			11				27	
6	SWPPP			2			7				9	
7	Summary of Quantities		2	6			9				17	
8	Project Manual & Specifications		4	4			4				12	
9	Pre-Bid Support		3	2							5	
10	Bid Analysis and Recommendations		4								4	
11	Meetings		6								6	
12	Construction Cost Estimate		4								4	
13	Coordination (Land Surveyor & Geotech)		2								2	
14	Project Administration (Contract, Invoices, Progress reports, etc)		2	2				6			10	
	*RABA KISTNER								$ 9,487.50	$ 9,487.50		
	* DOS LAND SURVEYING, LLC								$ 6,000.00	$ 6,000.00		10
	HOURS SUB-TOTALS		40	106			64	6			216	**10**
	CONTRACT RATE	$ 240.00	$ 210.00	$ 150.00		$ 120.00	$ 84.00	$ 66.00				
	DIRECT LABOR COST	$ -	$ 8,400.00	$ 15,900.00	$ -	$ -	$ 5,376.00	$ 396.00	$ 15,487.50	$ 15,487.50	$ 45,559.50	
										$ -		
										$ -		
	SUBTOTAL	$ -	$ 8,400.00	$ 15,900.00	$ -	$ -	$ 5,376.00	$ 396.00	$ 15,487.50	$ 15,487.50	**$ 45,559.50**	
	DIRECT EXPENSES											
	MILEAGE @ $0.585	808		miles	$ 0.59						476.72	
	REPRODUCTION FOR BID SET &SCAN (1 set Mylars)	12		ea	$ 2.50						30.00	
	REPRODUCTION FOR BID SET (15 set Paper)	90		ea	$ 0.55						49.50	
	COURIER/OVERNIGHT	4		each	$ 24.00						96.00	
	SUBTOTAL										**$ 652.22**	
	PHASE II - Basic Services Total										**$ 46,211.72**	
	PHASE II - Additional Services Total	$ -	$ -	$ -	$ -	$ -	$ -	$ -	#REF!	$ -		
	PHASE II TOTAL										**$ 46,211.72**	

* Work Provided by Sub-Consultant

Entech Civil Engineers, Inc.
16360 Park Ten Place, STE. 230
Houston, Texas 77084
Tel: 281-945-0069
Fax: 281-945-0081

HIDALGO COUNTY DRAINAGE DISTRICT # 1 - EWP
NMD-WR3
HIDALGO COUNTY, TEXAS

LABOR HRS PER SHEET	COST PER SHEET
N/A	N/A
N/A	N/A
N/A	N/A