

EXHIBIT “F”
HIDALGO COUNTY
Professional Engineering Services
Agreement # C-22-0128-08-18
(ARPA-21-121-044)
WORK AUTHORIZATION NO. 1

THIS WORK AUTHORIZATION is made pursuant to the terms and conditions of the Professional Engineering Services Agreement No. C-22-0128-08-18, incorporated herein by reference, for the “**Professional Engineering Services for Gate 3 Drainage Project Transfer**” made by and between HIDALGO COUNTY, action herein by and through the Commissioner’s Court, hereinafter called the “**Owner,**” and **J&R Engineering**, hereinafter called “**Engineer**”.

PART 1. SCOPE OF WORK

The purpose of this Work Authorization is for the **Engineer** to provide **HYDROLOGIC, HYDRAULICS MODELING, PRELIMINARY PROJECT PLANNING & DEVELOPMENT, PRELIMINARY ENGINEERING & TOPOGRAPHY, FINAL DESIGN, CONSTRUCTION MANAGEMENT.**

The **Engineer** is to provide the scope of Services as required by the Agreement with Owner.

The scope of services to be provided by the **Engineer** is identified in **Attachment “A” – “Scope of Services to be provided by Engineer”** attached hereto and incorporated by reference.

PART 2. ESTIMATED COST

The estimated cost for services under this Work Authorization is **\$240,322.77**. This amount is based upon the costs outlined in the **Attachment “B” – “Fee Proposal”** attached hereto and incorporated by reference.

PART 3. PAYMENT

Compensation and payment to the **Engineer** for the services established under this Work Authorization shall be made in accordance with the **Professional Engineering Services Agreement No. C-22-0128-08-18** between the **Owner** and the **Engineer**.

PART 4. FUNDING

This Work Authorization No. 1 shall be funded through funding source:

Account No. _____

Requisition Number _____ **(MUST BE INCLUDED AFTER CC APPROVAL)**

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 the scopes of the Work Authorization, within the limits of Agreement No. C-22-0128-08-18 , provided in this Work Authorization; or on (_____ DATE)**. *If applicable:* Engineer shall conform to the

approved "Work/Project Schedule", attached hereto and incorporated by reference herein as **Attachment "C"**.

PART 6. RESPONSIBILITIES AND OBLIGATIONS

This Authorization does not waive the parties' responsibilities and obligations provided under the **Agreement No. C-22-0128-08-18**

PART 7. ACKNOWLEDGEMENT AND CONFIRMATION

Acknowledgement and confirmation by **Hidalgo County Precinct 1, Commissioner David L. Fuentes**, as to content and detail of this **Work Authorization No. 1**.

HIDALGO COUNTY PRECINCT No. 1

By: _____
David L. Fuentes, Commissioner

PART 8. ACCEPTANCE AND APPROVAL

This Work Authorization is hereby accepted and approved by the Hidalgo County Commissioners Court and hereby executed and effective as of the date indicated below.

APPROVED BY COMMISSIONERS' COURT ON August 18, 2022.

Agenda Item No. 85832

Executive Office: _____

ENGINEER:
J&R ENGINEERING

COUNTY:
COUNTY OF HIDALGO

Roberto J Salinas, P.E Project Manager

Hon. Richard F. Cortez, County Judge

ATTEST:

Arturo Guajardo, Jr., County Clerk

LIST OF ATTACHMENTS:

Attachment "A" – *Scope of Services to be provided by Engineer*

Attachment "B" – *Fee Proposal*

Attachment "C" – *Approved Work/Project Schedule (If applicable)*



ATTACHMENT A

**PROJECT SPECIFIC SCOPE OF SERVICES
TO BE PROVIDED BY ENGINEER**

Scope of 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 Attachment "C" of this Agreement.
- (6) Attend and participate in progress meetings as required and as coordinated and conducted by the **ENGINEER**.
- (7) Assist the **ENGINEER** as required in the coordination with the USACE and the Federal Emergency Management Agency (FEMA) and any other coordinating agency or entity (*when and if applicable*).
- (8) Review and approve the Project design criteria.
- (9) Review and approve change orders as required and prepared by the **ENGINEER**.

ATTACHMENT A

Scope of Services based on Work Authorization

Gate 3 Drainage Project Transfer

BASIC SERVICES TOTAL AMOUNT

ITEM	DESCRIPTION OF SERVICE	CONTRACT PERCENTAGE OF TOTAL AMOUNT	ITEM AMOUNT
A	HYDROLOGIC AND HYDRAULIC MODELING	15%	\$ 36,048.42
B	PRELIMINARY PROJECT PLANNING AND DEVELOPMENT	15%	\$ 36,048.42
C	PRELIMINARY ENGINEERING & TOPOGRAPHY	25%	\$ 60,080.69
D	FINAL DESIGN	30%	\$ 72,096.83
E	CONSTRUCTION MANAGEMENT	15%	\$ 36,048.42
	TOTAL WORK AUTHORIZATION A-E	100%	\$ 240,322.77

SUMMARY OF SERVICES UNDER INDIVIDUAL ITEMS

ITEM A	HYDROLOGIC AND HYDRAULICS MODELING
A.1	Prepare watershed Data & Delineation
A.2	Set Countour Map
A.3	Prepare floodplain map
A.4	Prepare GIS Map
A.5	Prepare H&H Model
A.6	Channel culvert design
A.7	Detention Pond Location Assessment
ITEM B	PRELIMINARY PROJECT PLANNING AND DEVELOPMENT
B.1	Field Survey
B.2	Existing Utilities Assessment
B.3	Schedule Progress Report
ITEM C	PRELIMINARY ENGINEERING & TOPOGRAPHY
C.1	Topographical Surveying
C.2	Data Collection
C.3	Hydrology and Hydraulics (H&H)
C.4	Storm System Alignment Recommendation
ITEM D	FINAL DESIGN
D.1	Design Concept
D.2	Permitting
D.3	Plans, Specifications & Estimates
ITEM E	CONSTRUCTION MANAGEMENT
E.1	Construction Bidding Documents
E.2	Contractor Payment Review
E.3	Shop Drawing Review
E.4	Change Orders Review
E.5	As-Built Drawings



ATTACHMENT B

FEE PROPOSAL

ATTACHMENT B

PRELIMINARY COST ESTIMATE FOR GATE 3 DRAINAGE PROJECT TRANSFER



ITEM	DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL
<u>DITCH IMPROVEMENTS (HCP1 - OUTSOURCE)</u>					
1	DITCH EXCAVATION	CY	42,031	\$5.00	\$210,155.00
2	EXCAVATED MATERIAL HAULING AND DISPOSAL	CY	32,179	\$3.00	\$96,537.00
3	EMBAKMENT (TOP BERM)	CY	9,852	\$3.00	\$29,556.00
4	60" HP STORM	LF	500	\$195.00	\$97,500.00
SUBTOTAL DITCH IMPROVEMENTS					\$433,748.00
<u>14TH ST CROSSING IMPROVEMENTS (HCP1 - OUTSOURCE)</u>					
1	5'X5' REINFORCED CONCRETE BOX	LF	250	\$600.00	\$150,000.00
2	24" HP STORM	LF	100	\$55.00	\$5,500.00
3	CONCRETE RIP RAP	CY	100	\$210.00	\$21,000.00
4	INLET TYPE "C"	EA	4	\$3,500.00	\$14,000.00
5	REGRADE OF ROADSIDE DITCH	LF	400	\$5.00	\$2,000.00
6	SAFETY END W/GUARD (6:1)	EA	2	\$850.00	\$1,700.00
7	TRENCH PROTECTION	LF	350	\$2.00	\$700.00
8	EROSION AND TRAFFIC CONTROL	LS	1	\$5,000.00	\$5,000.00
9	ROAD CUT AND RESTORE	SY	20	\$55.00	\$1,100.00
SUBTOTAL CROSSING IMPROVEMENTS					\$201,000.00
<u>OUTFALL STRUCTURE IMPROVEMENTS (HCP1 - OUTSOURCE)</u>					
1	5'X5' REINFORCED CONCRETE BOX	LF	200	\$600.00	\$120,000.00
2	GATE VAULT	LS	1	\$220,000.00	\$220,000.00
3	5'X5' GATE STRUCTURE	EA	2	\$75,000.00	\$150,000.00
4	TRENCH PROTECTION	LF	180	\$10.00	\$1,800.00
5	CONCRETE RIP RAP	CY	250	\$280.00	\$70,000.00
SUBTOTAL STRUCTURE IMPROVEMENTS					\$561,800.00
<u>DETENTION PONDS (CITY OF MERCEDES - IN HOUSE)</u>					
<u>POND A</u>					
1	DETENTION POND EXCAVATION	CY	22,915	\$5.00	\$114,575.00
2	EXCAVATED MATERIAL HAULING AND DISPOSAL	CY	22,915	\$3.00	\$68,745.00
<u>POND B</u>					
1	DETENTION POND EXCAVATION	CY	23,210	\$5.00	\$116,050.00
2	EXCAVATED MATERIAL HAULING AND DISPOSAL	CY	23,210	\$3.00	\$69,630.00
<u>POND C</u>					
1	DETENTION POND EXCAVATION	CY	129,067	\$5.00	\$645,335.00
2	EXCAVATED MATERIAL HAULING AND DISPOSAL	CY	129,067	\$3.00	\$387,201.00
SUBTOTAL DETENTION PONDS					\$1,401,536.00
CONSTRUCTION COST TOTAL					\$2,598,084.00

LAND PURCHASE/ACQUISITION (10 ACRES) \$150,000.00
 ENGINEERING BASIC/SURVEYING FEE \$240,322.77
 MATERIAL TESTING \$77,942.52

PROJECT COST GRAND TOTAL \$3,066,349.29



ATTACHMENT C

APPROVED WORK/PROJECT SCHEDULE

EXHIBIT C -Work Schedule

Task No.	Task Description	Activities	Start	End
	Notice to Proceed/Task Order	--	9/2/2022	--
1	Planning	Project Evaluation		
		Review Existing Conditions to Develop Design Criteria	9/2/2022	9/18/22
2	Survey/Topography	Surveying and Topography field work		
		Conduct Survey, Topography, utility and existing storm infrastructure. (use existing contour maps for H&H.	9/18/22	9/29/22
3	Final Design Phase	Develop Design; Complete Bidding Documents; Complete Final Plans and Specifications.		
		30% Final Design Package	9/29/22	10/13/22
		OWNER Review of Final Design Package (30% }	10/13/22	10/20/22
		60% Final Design Package	10/20/22	11/4/22
		OWNER Review of Final Design Package {60% }	11/4/22	11/18/22
		90% Final Design Package	11/18/22	11/29/22
		OWNER Review of 90% Final Design Package	11/29/22	12/8/22
		Address Final Owner Comments (100% Package)	12/8/22	12/22/22
4	Development Time Line	Advertising, Bid Phase, Selection		
		Prepare Bid Package	12/22/22	1/5/22
		Advertisement for Drainage improvements Bid Date	1/5/22	1/26//22
		Contractor Selection/ Execute Contract	-	2/27/22
5	Construction Period	Construction, Substantial Completion, Final Completion		
		Construction Start Date	3/24/22	-