

EXHIBIT E

-WORK AUTHORIZATION

HIDALGO COUNTY
Professional Engineering Services
Agreement# C-16-257-09-13

WORK AUTHORIZATION NO. 1

THIS WORK AUTHORIZATION is made pursuant to the terms and conditions of Section I.A. of the Agreement made by and between **HIDALGO COUNTY**, action herein by and through the **Commissioner's Court**, hereinafter called the "**Owner**," and, **Jimenez Engineering Solutions dba International Consulting Engineers (ICE)** professional engineers of **Edinburg** Texas, hereinafter called "**Engineer**".

PART 1. SCOPE OF WORK

The purpose of this Work Authorization is for the "engineering services" to provide: **Provide Plans, Specifications and Estimated Cost (PS&E) for various roads as identified herein for (FEMA) projects located within Precinct No. 1 as follows:**

- Site 1 Mile 1-1/2 West (between Mile 11 North and Mile 12 North, Edcouch, TX)
- Site 3 Jesus Flores Road, Edcouch, TX
- Site 4 Englemen Road (between Valdez and FM 2812, Edcouch, TX)
- Site 5 Las Cumbres Drive (between FM 493 and address 12880, Edcouch, TX)
- Site 6 Mile 20 North (between FM 493 and Mile 7 West, Edcouch, TX)

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 **\$ 48,311.66**. 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 7 of the Agreement.

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 scopes of the work authorization.

PART 6. RESPONSIBILITIES AND OBLIGATIONS

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

PART 7. ACKNOWLEDGEMENT AND CONFIRMATION

Acknowledgement and Confirmation by **Hidalgo County Precinct No.1,** as to content and detail of this **Work Authorization No. 1.**

**HIDALGO COUNTY
COMMISSIONER PRECINCT No. 1:**

By: _____
A.C. Cuellar, Commissioner

PART 8. ACCEPTANCE AND APPROVAL

This Work Authorization is hereby accepted, approved by Hidalgo County Commissioners’ Court on **September 13, 2016** as indicated below and effective as of **13th** day of **September, 2016.**

**THE ENGINEER:
JIMENEZ ENGINEERING SOLUTIONS
d/b/a INTERNATIONAL CONSULTING ENGINEERS**

**THE OWNER:
HIDALGO COUNTY**

By: _____
Luis J. Nava, P.E.

By: _____
Ramon Garcia, County Judge

ATTEST:

By: _____
Arturo Guajardo Jr., County Clerk

LIST OF EXHIBITS

- Location Map
- Exhibit A – Services to be provided by Owner
- Exhibit B – Services to be provided by Engineer
- Exhibit C – Work Schedule
- Exhibit D-1 – Estimated Man-hour Breakdown

EXHIBIT A

-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 Projects (as defined and more particularly identified in Exhibit "A" attached to this Agreement).

General:

The Owner will provide to the Engineer the following:

- 1) Provide the authorization to proceed with services through coordination with the project consulting and design Engineer.
- 2) Payment for work performed by the Engineer and accepted by the Owner in accordance with Article 3 of this Agreement.
- 3) Assistance to the Engineer, as necessary, to obtain the required data and information from other local, regional, State and Federal agencies the Engineer cannot easily obtain.
- 4) Provide any available relevant data the Owner may have on file concerning the projects.
- 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 "A" attached to this Agreement.
- 6) Attend and participate in progress meetings as required and as coordinated and conducted by Engineer.
- 7) Provide the authorization to proceed with services on project by project basis through consulting design and construction Engineer.

EXHIBIT "B"

Generalized Services to be provided by the Engineer

A. BASIC ENGINEERING SERVICES

ROADWAY DESIGN CONTROLS

- 1) Develop Typical Sections- No pavement design will be completed as part of the scope of work. Pavement section will be based on directive from Hidalgo County Pct. No. 1
- 2) Prepare plan and profile sheets as required for the reconstruction.
- 3) Develop plan and profiles for inclusion in sheets.
- 4) Detuning roadway quantities and prepare quantity summary sheet.

MISCELLANEOUS (ROADWAY)

- 1) Develop Miscellaneous Roadway Details.
- 2) Prepare Title Sheet and Index sheets.
- 3) Calculate project quantities and prepare quantity summary sheet.
- 4) Prepare general notes.
- 5) Prepare list of Standard Drawing to be included in the plans.
- 6) Upon completion of the review of the final plans by Hidalgo County Precinct. No. 1, the ENGINEER shall assemble and furnish signed original (11" x 17") drawings which shall include all applicable standards. The Engineer may sign/seal plans manually or include an electronic signature/seal.
- 7) Coordinate with Pct. 1 and other agencies as necessary.

SIGNING, PAVEMENT MARKINGS AND SIGNALIZATION

- 1) Signing and Pavement Markings are to be shown on roadway P&P sheets as necessary.

CONSTRUCTION SUPPORT

- 1) Prepare Bid Documents
- 2) Attend and Coordinate Pre-bid Conference
- 3) Evaluate Bids
- 4) Make Award Recommendation
- 5) Assist County with preparation of Contract Documents
- 6) Attend Pre-Construction Conference upon request by County
- 7) Respond to Request for Information (RFI) from Contractor
- 8) Review Pay Requests
- 9) Preparation of Change Orders
- 10) Final Site Visit
- 11) Record Drawings

B. FIELD DESIGN SURVEY SERVICES

FIELD SURVEYING

- 1) Topographic survey of entire project length including:
 - a) Topography of existing roadway and ditch within existing apparent ROW.
 - b) Topography shall include any existing drainage crossings.
 - c) Include flow lines, size and direction of drainage channels/structures
 - d) Include utilities
 - e) Perform one-call (Dig Tess) and identify and locate utilities (within Limits of R.O.W) as flagged/marked by utility companies
 - f) Include inverts on sanitary sewer, measure downs to top of keys on water and gas mains
 - g) Establish x,y, and z coordinates of power poles, manholes and valves of various utilities, flow lines of existing sanitary sewer and storm sewer lines, and subsequent utility ties of facilities exposed by others. Surveyor to survey nearest manhole/valve invert outside project limits.
 - h) Establish 2 benchmarks for project control.

C. ADDITIONAL SERVICES NOT INCLUDED AS PART OF THIS PROJECT

GEOTECHNICAL SERVICES

- 1) Pavement section design or testing prior to PS&E development
 - a) Material testing during construction

EXHIBIT C - WORK SCHEDULE

Hidalgo County Precinct No.1 Mile 1.5 West, Jesus Flores Road, Englemen Road, Las Cumbres Drive and Mile 20 North

Engineering Schedule Summary	Duration Days	Weeks																										
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	
Survey	7																											
100% Design & Submittal	24																											
Specifications	7																											
Advertise/Pre-Bid/Bid Opening	21																											
Bid Tabulation/Award Contract	14																											
Contract Prep/Pre-Construction	28																											
Construction	60																											
Closeout Completion	15																											

EXHIBIT D-1 - MAN-HOUR BREAKDOWN

HIDALGO COUNTY

PRECINCT No.1

MILE 1.5 WEST, JESUS FLORES ROAD, ENGELMEN ROAD, CUMBRES DRIVE MILE 20 NORTH STREET/ROAD IMPROVEMENTS

COMMON ITEMS

1.1	Traffic control sign and seal by PE	LS	1	\$ 2,500.00	\$ 2,500.00
1.2	Inst. Amd Maintenance barricades, signs traffic handling	LS	1	\$ 4,000.00	\$ 4,000.00
				BASE TOTAL	\$ 6,500.00

MILE 1.5 WEST

1	Excavation (Pavement and 4" Caliche)	CY	2607	\$ 3.00	\$ 7,821.00
2	6" Subgrade preparation with 1.5% Lime by weight	SY	16426	\$ 3.00	\$ 49,278.00
3	Lime	TNS	45	\$ 130.00	\$ 5,850.00
4	6" New Caliche Flexible Base (Compacted in place)	SY	16426	\$ 4.80	\$ 78,844.80
5	Prime Coat (MC-30)	Gal	2933	\$ 6.00	\$ 17,598.00
6	2" Asphalt Ty "D"	TNS	1605	\$ 95.00	\$ 152,475.00
7	Regrade Roadside Ditch	LF	10260	\$ 3.00	\$ 30,780.00
				BASE TOTAL	\$ 342,646.80

JESUS FLORES RD

1	Excavation (Pavement and 4" Caliche)	CY	296	\$ 3.00	\$ 888.00
2	6" Subgrade preparation with 1.5% Lime by weight	SY	1867	\$ 3.00	\$ 5,601.00
3	Lime	TNS	5	\$ 130.00	\$ 650.00
4	6" New Caliche Flexible Base (Compacted in place)	SY	1867	\$ 4.80	\$ 8,961.60
5	Prime Coat (MC-30)	Gal	333	\$ 6.00	\$ 1,998.00
6	2" Asphalt Ty "D"	TNS	182.4	\$ 95.00	\$ 17,328.00
7	Regrade Roadside Ditch	LF	1200	\$ 3.00	\$ 3,600.00
				TOTAL	\$ 39,026.60

ENGELMEN ROAD

1	Excavation	CY	52	\$ 3.00	\$ 156.00
2	6" New Caliche Flexible Base (Compacted in place)	SY	7480	\$ 4.80	\$ 35,904.00
3	Regrade Roadside Ditch	LF	5280	\$ 3.00	\$ 15,840.00
				TOTAL	\$ 51,900.00

LAS CUMBRES DRIVE

1	Excavation (Pavement and 4" Caliche)	CY	426	\$ 3.00	\$ 1,278.00
2	6" Subgrade preparation with 1.5% Lime by weight	SY	2667	\$ 3.00	\$ 8,001.00
3	Lime	TNS	7.33	\$ 130.00	\$ 952.90
4	6" New Caliche Flexible Base (Compacted in place)	SY	2667	\$ 4.80	\$ 12,801.60
5	Prime Coat (MC-30)	Gal	483	\$ 6.00	\$ 2,898.00
6	2" Asphalt Ty "D"	TNS	266	\$ 95.00	\$ 25,270.00
7	Regrade Roadside Ditch	LF	1500	\$ 3.00	\$ 4,500.00
				TOTAL	\$ 55,701.50

MILE 20 N

1	Excavation	CY	52	\$ 3.00	\$ 156.00
2	6" New Caliche Flexible Base (Compacted in place)	SY	10472	\$ 4.80	\$ 50,265.60
3	Regrade Roadside Ditch	LF	7392	\$ 3.00	\$ 22,176.00
				TOTAL	\$ 72,597.60

	COMMON ITEMS				\$ 6,500.00
	MILE 1.5 WEST				\$ 342,646.80
	JESUS FLORES ROAD				\$ 39,026.60
	ENGELMEN ROAD				\$ 51,900.00
	LAS CUMBRES DRIVE				\$ 55,701.50
	MILE 20 N				\$ 72,597.60
				GRAND TOTAL	\$ 568,372.50

8.5% Eng Fees \$ 48,311.66