

EXHIBIT “F”
HIDALGO COUNTY
Professional Engineering Services for Geotechnical & Construction Material Testing
Agreement # C-24-0336-12-17
(ARPA-22-121-044)

WORK AUTHORIZATION NO. 1

THIS WORK AUTHORIZATION is made pursuant to the terms and conditions of the Professional Engineering Services Agreement No. C-24-0336-12-17, incorporated herein by reference, for the “[ARPA-22-121-044] – Geotechnical and Construction Material Testing Services – Hidalgo County Precinct 1 Mercedes Gate Structure Stormwater Project” made by and between HIDALGO COUNTY, action herein by and through the Commissioner’s Court, hereinafter called the “**Owner**,” and L & G Consulting Engineers, Inc., hereinafter called “**Engineer**”.

PART 1. SCOPE OF WORK

The purpose of this Work Authorization is for the **Engineer** to provide Geotechnical Engineering Services and Construction Material Testing and Miscellaneous Field Services, and Geotechnical Laboratory Testing Services.

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 \$24,968.81. 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-24-0336-12-17** between the **Owner** and the **Engineer**.

PART 4. FUNDING

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

Account No. 4-1290-431-50-115-237-1-723

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-24-0336-12-17, 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-24-0336-12-17** .

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 December 17, 2024.

Agenda Item No. 97669

Executive Office: _____

ENGINEER:
L & G Consulting Engineers, Inc.

COUNTY:
COUNTY OF HIDALGO

David Saenz, P.E., C.F.M.

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**

ATTACHMENT A

Scope of Services to be provided by the Engineer

GENERAL SCOPE OF WORK

The work to be performed by the **Engineer** under this Work Authorization shall consist of; Construction Material Testing (CMT) Services for the Hidalgo County Pct. 1 Mercedes Gate Structure Stormwater Project hereinafter denoted as the **Project**.

I. Construction Material Testing (CMT) Services

The **Engineer** shall provide Construction Material Testing (CMT) services during the proposed construction of the Project. The CMT services to be provided include sampling and testing of all construction materials as required by the project contract documents, plans and specifications. All sampling frequencies and test procedures will be performed in general accordance with required project specifications. CMT services may include:

- (a) Sampling and laboratory testing of soils and soil foundation materials proposed for use in the construction of Project to determine compliance of these materials with project plans and specifications.
- (b) Field density testing of soils and soil foundation materials to ensure proper compaction as required by project plans and specifications.
- (c) Field sampling and testing of fresh concrete, and laboratory testing of hardened concrete to determine compliance with project plans and specifications.
- (d) Field compaction testing of asphalt to ensure proper compaction during lay down operations.
- (e) Field inspection, sampling and laboratory testing of asphalt materials to determine their material properties and their compliance with project plans and specifications.



ATTACHMENT B

FEE PROPOSAL

L&G Engineering
Hid. Co. Pct #1 Mercedes Gate Structure Stormwater Project
Prepared for Hidalgo County

Pipe Bedding Soils Testing - Laboratory					
Moisture Density Relat (ASTM D 698)	2	Each	\$218.35	\$436.70	<i>Quantity based on 1 per Project Atterberg 1 per 2000 LF Bedding type 2 site visits</i>
Atterberg Limits of Soils	2	Each	\$84.51	\$169.02	
Particle Size Analysis (Gradation)	2	Each	\$101.59	\$203.18	
Test Report	4	Each	\$25.03	\$100.12	
Soil & Aggregate Tech	6	Hour	\$77.66	\$465.96	
Mileage (Trip Charge)(8 mi rnd)	16	Miles	\$0.66	\$10.48	
Subtotal (Field and Lab Testing):				\$1,385.46	
Report Review, QA/QC & Oversight					
Admin/Clerical	2	Hour	\$77.66	\$155.32	
Eng. Lab Mgr.	2	Hour	\$141.20	\$282.40	
Project Eng.	1	Hour	\$197.68	\$197.68	
Subtotal (Report Review, QA/QC & Oversight):				\$635.40	
Subtotal (All Item):				\$2,020.86	
Pipe Bedding Testing - Field					
Field Density Test	8	Each	\$25.37	\$202.96	<i>Quantity based on 4 site visits to perform Field Density of Haunch Testing (avg 2 tests per visit)</i>
Test Report	4	Each	\$25.03	\$100.12	
Soil & Aggregate Tech	8	Hour	\$77.66	\$621.28	
Mileage (Trip Charge)(8 mi rnd)	32	Miles	\$0.66	\$20.96	
Subtotal (Field and Lab Testing):				\$945.32	
Report Review, QA/QC & Oversight					
Admin/Clerical	2	Hour	\$77.66	\$155.32	
Eng. Lab Mgr.	2	Hour	\$141.20	\$282.40	
Project Eng.	1	Hour	\$197.68	\$197.68	
Subtotal (Report Review, QA/QC & Oversight):				\$635.40	
Subtotal (All Item):				\$1,580.72	
Trench Backfill Testing - Laboratory					
Moisture Density Relat (ASTM D 698)	1	Each	\$218.35	\$218.35	<i>Quantity based on 1 site visits to obtain samples of Trench Backfill Soils for laboratory testing</i>
Atterberg Limits of Soils	1	Each	\$84.51	\$84.51	
Particle Size Analysis (Gradation)	1	Each	\$101.59	\$101.59	
Test Report	3	Each	\$25.03	\$75.09	
Soil & Aggregate Tech	3	Hour	\$77.66	\$232.98	
Mileage (Trip Charge)(8 mi rnd)	8	Miles	\$0.66	\$5.24	
Subtotal (Field and Lab Testing):				\$717.76	
Report Review, QA/QC & Oversight					
Admin/Clerical	1	Hour	\$77.66	\$77.66	
Eng. Lab Mgr.	1	Hour	\$141.20	\$141.20	
Project Eng.	0.5	Hour	\$197.68	\$98.84	
Subtotal (Report Review, QA/QC & Oversight):				\$317.70	
Subtotal (All Item):				\$1,035.46	

Trench Backfill Soils Testing - Field

Field Density Test	24	Each	\$25.37	\$608.88	<i>Quantity based on 12 site visits to perform Field Density and Thickness Testing (avg 4 tests per visit)</i>
Test Report	12	Each	\$25.03	\$300.36	
Soil & Aggregate Tech	24	Hour	\$77.66	\$1,863.84	
Mileage (Trip Charge)(8 mi rnd)	96	Miles	\$0.66	\$62.88	
Subtotal (Field and Lab Testing):				\$2,835.96	
Report Review, QA/QC & Oversight					
Admin/Clerical	6	Hour	\$77.66	\$465.96	
Eng. Lab Mgr.	6	Hour	\$141.20	\$847.20	
Project Eng.	3	Hour	\$197.68	\$593.04	
Subtotal (Report Review, QA/QC & Oversight):				\$1,906.20	
Subtotal (All Item):				\$4,742.16	

Flexible Base Testing - Laboratory (Roadway - Cut and Restore)

Moisture Density Relat (ASTM D 698)	1	Each	\$225.54	\$225.54	<i>Quantity based on 1 site visit to obtain sample for laboratory testing</i>
Atterberg Limits of Soils	1	Each	\$84.51	\$84.51	
Particle Size Analysis (Gradation)	1	Each	\$101.59	\$101.59	
Test Report	3	Each	\$25.03	\$75.09	
Soil & Aggregate Tech	8	Hour	\$77.66	\$621.28	
Mileage (Trip Charge)(8 mi rnd)	8	Miles	\$0.66	\$5.24	
Subtotal (Field and Lab Testing):				\$1,113.25	
Report Review, QA/QC & Oversight					
Admin/Clerical	2	Hour	\$77.66	\$155.32	
Eng. Lab Mgr.	2	Hour	\$141.20	\$282.40	
Project Eng.	1	Hour	\$197.68	\$197.68	
Subtotal (Report Review, QA/QC & Oversight):				\$635.40	
Subtotal (All Item):				\$1,748.65	

Flexible Base Testing - Field (Roadway - Cut and Restore)

Field Density Test	6	Each	\$25.37	\$152.22	<i>Quantity based on 2 site visits to perform in-place testing (avg 3 tests per visit)</i>
Test Report	2	Each	\$25.03	\$50.06	
Soil & Aggregate Tech	4	Hour	\$77.66	\$310.64	
Mileage (Trip Charge)(8 mi rnd)	16	Miles	\$0.66	\$10.48	
Subtotal (Field and Lab Testing):				\$523.40	
Report Review, QA/QC & Oversight					
Admin/Clerical	1	Hour	\$77.66	\$77.66	
Eng. Lab Mgr.	1	Hour	\$141.20	\$141.20	
Project Eng.	0.5	Hour	\$197.68	\$98.84	
Subtotal (Report Review, QA/QC & Oversight):				\$317.70	
Subtotal (All Item):				\$841.10	

Hot Mix Asphalt Paving - Roadway Sections (Roadway - Cut and Restore)

Asphalt Content (%)	1	Each	\$95.48	\$95.48	<i>Assume 2 for Cut & Restore (All) Assume 1 Design for All Assume 2 Lab Molded</i>
Voids in Mineral Aggr. (VMA)	1	Each	\$116.70	\$116.70	
Gradation	2	Each	\$90.18	\$180.36	
Lab Molded Density	2	Each	\$84.87	\$169.74	
Test Report	4	Each	\$25.03	\$100.12	
Asphalt Tech	9	Hour	\$77.66	\$698.94	
Mileage (Trip Charge)(8 mi rnd)	24	Miles	\$0.66	\$15.72	
Subtotal (Field and Lab Testing):				\$1,377.06	
Report Review, QA/QC & Oversight					
Admin/Clerical	2	Hour	\$77.66	\$155.32	
Eng. Lab Mgr.	2	Hour	\$141.20	\$282.40	
Project Eng.	1	Hour	\$197.68	\$197.68	
Subtotal (Report Review, QA/QC & Oversight):				\$635.40	

Concrete Placements (Riprap, Collars & Misc.)

Cyl. Spec. Prep, Hold, Cure	40	Each	\$12.73	\$509.20	<i>Assuming 10 Trips sample pickup and deliver to laboratory for Compression Testing</i>
Comp. Str. Of Cyl. Specimen	40	Each	\$16.89	\$675.60	
Slump	10	Each	\$0.00		
Entrained Air	10	Each	\$0.00		
Temperature	10	Each	\$0.00		
Test Reports (7 and 28 day)	80	Each	\$25.03	\$2,002.40	
Concrete Technician	30	Hour	\$77.66	\$2,329.80	
Mileage (Trip Charge)(8 mi rnd)	160	Miles	\$0.66	\$104.80	
		Subtotal (Field and Lab Testing):		<u>\$5,621.80</u>	
<u>Report Review, QA/QC & Oversight</u>					
Admin/Clerical	20	Hour	\$77.66	\$1,553.20	
Eng. Lab Mgr.	20	Hour	\$141.20	\$2,824.00	
Project Eng.	5	Hour	\$197.68	\$988.40	
		Subtotal (Report Review, QA/QC & Oversight):		<u>\$5,365.60</u>	
		Subtotal (All Item):		\$10,987.40	

Estimated Field and Laboratory Test Fees	\$14,520.01
Report Review, QA/QC & Oversight	\$10,448.80
Estimated Materials Testing Total	<u>\$24,968.81</u>



ATTACHMENT C

APPROVED WORK/PROJECT SCHEDULE

ATTACHMENT C

Work Schedule

Construction Material Testing (CMT)

Work will begin upon commencement of the construction of the project. Work will continue throughout the duration of the construction as needed.