

April 1, 2020

Honorable Eduardo “Eddie” Cantu
Attn: Ms. Erika Zamora, Director of Administrative Operations
Hidalgo County Precinct No. 2
300 West Hall Acres
Pharr, TX 78589


**RE: Dicker Road Project in Hidalgo County Precinct No. 2
(C-19-016-08-13)
Supplemental No. 2 to Work Authorization No. 1**

Dear Ms. Zamora,

Attached for your review and approval is Supplemental No. 2 to Work Authorization No. 1 to provide Professional Engineering Services for Inspection, Material Testing, and Construction Management for the subject project. This submittal is made to you for your further coordination with Commissioner Cantu.

We appreciate the opportunity to provide our professional services and look forward to working with you. Should you have any questions, please feel free to give me a call at (956) 585-3773.

Sincerely,


Nicholus Muñoz, RPC
Vice President

Attachments: Supplemental No. 2 to Work Authorization No. 1

SUPPLEMENTAL AGREEMENT NO. 2
TO WORK AUTHORIZATION 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**, acting herein by and through the **Commissioner's Court**, hereinafter called the "**Owner**", and **B2Z Engineering, LLC**, Professional Engineers of Mission, Texas, hereinafter called "**Engineer**".

WITNESSETH

WHEREAS, the **Owner** and the **Engineer** executed the **Agreement** on the 13th day of August, 2019 to provide **Professional Engineering Services for Inspection, Material Testing, and Construction Management for the Dicker Road Project (from SP 115 to FM 2061) in Hidalgo County Precinct No. 2** (hereinafter referred to as the "**Project**"); and,

WHEREAS, Article 8 of the **Agreement**, (Supplemental Agreements), establishes that, "The terms of this Agreement may be amended by supplemental agreement if the Owner determines that [...] (3) for any other reason agreeable to the **Owner** and the **Engineer**"; and,

WHEREAS, the need for a new waterline for the project has been identified requiring additional Management, Inspection and CMT services; and,

WHEREAS, it has become necessary to amend "Exhibit D - Fee Schedule" of Work Authorization No. 1 to increase the original amount of **\$1,165,481.52** to **\$1,255,426.27**; therefore, the amount of **Supplemental No. 2 is \$89,944.75.**

A. AGREEMENT

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

- I. Section of the Agreement, "Exhibit D - Fee Proposal" is revised to reflect the above listed modifications of this Supplemental.

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 _____, 2020.

**THE ENGINEER:
B2Z ENGINEERING**

BY: _____



**THE OWNER:
HIDALGO COUNTY**

BY: _____

Richard Cortez, County Judge

LIST OF ATTACHMENTS
Exhibit D



Exhibit D

Dicker Road Project - McAllen Public Utility 23rd St. / Dicker Rd. Water Line Project (23rd St. to McColl Rd.)

Construction Phase Services (FC320)

Supplemental #2 to Work Authorization No. 1

| <i>Hidalgo County Precinct No. 2 Construction Management Services (FC320)</i> | | | MANHOURS | | | | | | | Total Hours | Total Line Item Cost |
|---|--|----|-----------------------------------|-------------------------------|--------------------------|-----------------------------|------------------------|----------------------------|---------------|-------------|----------------------|
| | | | Sr. Construction Engineer/Manager | Construction Manager (PE/PMP) | Environmental Specialist | Construction Superintendent | Construction Inspector | Construction Record Keeper | CADD Operator | | |
| TASKS | | | | | | | | | | | |
| Construction Contract Administration | | | | | | | | | | | |
| 1 | Review project plans, general notes, general conditions, bid & contract documents, interlocal agreements, and any other pertinent project documents. | 2 | | | | | | | 2 | \$381.02 | |
| 2 | Prepare/Coordinate & Conduct a Project Pre-Construction Meeting with the County RPIC, County Staff, TxDOT Project Manager, McAllen Public Utility, Design Engineer, City Officials, and the Construction Contractor | 2 | 2 | | 1 | | 1 | | 6 | \$949.28 | |
| 3 | Coordinate w/ County RPIC, Hidalgo County Precinct No. 2, McAllen Public Utility, and TxDOT to Develop the required Change-Order for the Contractor (Plans provided by MPU) | 34 | 12 | | 20 | | | 6 | 72 | \$11,535.80 | |
| 4 | Coordination with Design Engineer of Record, Hidalgo County RPIC, TxDOT PM, McAllen Public Utility, and the Construction Contractor(s) throughout the duration of the project | 4 | 4 | | 4 | | | 2 | 14 | \$2,115.34 | |
| 5 | Coordinate the Certificate of Substantial Completion with Contractor and McAllen Public Utility at the Appropriate Time (Certificate to be Issued by MPU) | 2 | 2 | | 2 | | 2 | 4 | 12 | \$1,418.98 | |
| 6 | Coordinate with the County to provide the County RPIC a certification that all work performed on the project met and/or exceeded the project specifications | 6 | 2 | | 2 | | 2 | 2 | 14 | \$2,049.64 | |
| 7 | Prepare Monthly Invoicing to County | 2 | 6 | | | | | 4 | 12 | \$1,727.74 | |
| Subtotal Labor Hours | | | 52 | 28 | 0 | 29 | 0 | 5 | 0 | 18 | \$20,177.80 |
| Construction Management & Inspection | | | | | | | | | | | |
| Construction Management (During Construction) | | | | | | | | | | | |
| 1 | Conduct Meetings with the County RPIC & Contractor Throughout Construction Duration for Adherence to the Schedule (as needed) | 4 | | | 2 | | 2 | | 8 | \$1,175.92 | |
| 2 | Assist the RPIC with Implementation of the Adopted Quality Assurance Program (QAP) | 2 | | | | | | 1 | 3 | \$446.71 | |
| 3 | Prepare a Contractors Progress Payment Estimate on a Monthly Basis | 2 | 1 | | 2 | | 8 | 4 | 17 | \$1,731.04 | |
| 4 | Review & Processing of Contractor Invoices (Approval/Modification/Rejection) | 1 | 1 | | 2 | | 6 | 2 | 12 | \$1,244.91 | |
| 5 | Obtain Design Engineer's Concurrence with any Suggestions or Request for Information (RFI's) made by the Contractor to Change or Modify any Requirements of the Plans or Contract Documents | 4 | | | 2 | 1 | | 1 | 8 | \$1,162.77 | |
| 6 | Coordinate with County RPIC, Design Engineer, TxDOT/FHWA Representatives, and City of Pharr/Hidalgo/McAllen Personnel to participate in all Project Related Stakeholder Meetings, Construction Status Meetings, and Final Inspection | 4 | | | 2 | | 2 | | 8 | \$1,175.92 | |
| 7 | Coordinate with the Design Engineer on Change Orders and Obtain TxDOT Approval | 4 | | | 1 | | | 4 | 1 | 10 | \$1,228.47 |
| Subtotal Labor Hours | | | 21 | 2 | 0 | 11 | 1 | 18 | 4 | 9 | \$8,165.74 |

| Hidalgo County Precinct No. 2 Construction Management Services (FC320) | | | MANHOURS | | | | | | | Total Hours | Total Line Item Cost |
|---|---|---|-----------------------------------|-------------------------------|--------------------------|-----------------------------|------------------------|----------------------------|------------------|--------------------|----------------------|
| | | | Sr. Construction Engineer/Manager | Construction Manager (PE/PMP) | Environmental Specialist | Construction Superintendent | Construction Inspector | Construction Record Keeper | CADD Operator | | |
| TASKS | | | | | | | | | | | |
| Construction Inspection | | | | | | | | | | | |
| 1 | On-Site Inspection During Construction Activities & Documentation in Project Diary | | | | 24 | 160 | 24 | | | 208 | \$18,630.56 |
| 2 | Inspect SW3P BMP's, as well as Compliance with Requirements of EPIC Sheets | | | 6 | 2 | | | | | 8 | \$880.30 |
| 3 | Verify Daily Pay Sheets & Assure Compliance of Materials Delivered to the Job Site Meet Specifications (Including Buy America Act) | 3 | | | | | 10 | | | 13 | \$1,392.73 |
| 4 | Maintain Job Safety Measures & Implement OSHA Requirements Including Day/Night Inspection of Barricades | | | | 4 | | 2 | | 1 | 7 | \$729.21 |
| 5 | Develop and Oversee Completion of a "Project Punch List" with the County RPIC, McAllen Public Utility & Contractor's Representative | 1 | 1 | | 2 | | 1 | | 1 | 6 | \$768.62 |
| Subtotal Labor Hours | | | 4 | 1 | 6 | 32 | 160 | 37 | 0 | 242 | \$22,401.42 |
| Construction Management (Post Construction) | | | | | | | | | | | |
| 1 | Prepare a Final Estimate for Project Close-Out & Release of Retainage | 1 | 1 | | 1 | | 1 | | 1 | 5 | \$643.80 |
| 2 | Prepare and Provide all Close-Out Documents to County RPIC and McAllen Public Utility | 1 | | | 1 | | 1 | | 1 | 4 | \$463.14 |
| 3 | Coordinate Final Acceptance of Project with McAllen Public Utility | 1 | 1 | | 1 | | 1 | | 1 | 5 | \$643.80 |
| Subtotal Labor Hours | | | 3 | 2 | 0 | 3 | 0 | 3 | 0 | 14 | \$1,750.74 |
| Miscellaneous Technical Activities | | | | | | | | | | | |
| 1 | Coordination w/ Engineer of Record for Shop Drawing Review as Appropriate | 2 | | | | | 1 | | 1 | 4 | \$528.83 |
| 2 | Coordination w/ County RPIC and City of Hidalgo/Pharr/McAllen Personnel on Relocation of Utilities in Conflict | 2 | | 2 | 6 | | | | 1 | 11 | \$1,405.85 |
| 3 | Track Utility Relocations and Plot Final Facility Locations on the Final As-Built Plans (if any) | 1 | | | 1 | | | 4 | 1 | 7 | \$656.94 |
| 4 | Monthly Reporting/Presentation to Hidalgo County Commissioner Pct#2 & HCMPO (as needed) | 2 | 2 | | | | | | 1 | 5 | \$808.03 |
| Subtotal Labor Hours | | | 7 | 2 | 2 | 7 | 0 | 1 | 4 | 27 | \$3,399.65 |
| Total Labor Hours | | | 87 | 35 | 8 | 82 | 161 | 64 | 8 | 481 | 481 |
| Hourly Base Rates | | | \$ 58.00 | \$ 55.00 | \$ 32.00 | \$ 38.00 | \$ 26.00 | \$ 25.00 | \$ 21.00 | \$ 20.00 | |
| Contract Rate FY2020 | | | \$ 190.51 | \$ 180.66 | \$ 105.11 | \$ 124.82 | \$ 85.40 | \$ 82.12 | \$ 68.98 | \$ 65.69 | |
| Total Costs | | | \$ 16,574.37 | \$ 6,323.10 | \$ 840.88 | \$ 10,235.24 | \$ 13,749.40 | \$ 5,255.68 | \$ 551.84 | \$ 2,364.84 | \$55,895.35 |

Direct Expenses Mileage: \$0.585/mile \$ 1,170.00
 CMT (See Detailed Breakdown on Page 3 of 3) \$ 32,879.40
Total Direct Expenses \$ 34,049.40

B2Z Engineering Total Cost

\$89,944.75

EXHIBIT D
ESTIMATED MAN-HOURS AND TEST BREAKDOWN

Dicker Road Project - McAllen Public Utility 23rd St. / Dicker Rd. Water Line Project (23rd St. to McColl Rd.)
Construction Material Testing
Supplemental #2 to Work Authorization No. 1

Waterline Pipe Embedment Material (Shall Conform to ASTM D 2321 Class II or III)

- Sampling and laboratory testing of soils and base materials proposed for use in the construction of Project (Roads/Bridges/Misc.) to determine compliance of these materials with project plans and specifications.
- Field density testing of soils and base materials to ensure proposer compaction as required by project plans and specifications.

| | Test | Spec | Additional Assumptions | Unit | Qty. | Contract Rate | Total |
|----------------------|------------|--------------------------|--------------------------------|------|------|---------------|--------------------|
| Plasticity Index | Tex-106-E | Shall Conform D 2321 | 1 per Project | Each | 1 | \$45.00 | \$45.00 |
| Gradation | Tex-110-E | Shall Conform D 2321 | 1 per Project | Each | 1 | \$90.00 | \$90.00 |
| Moisture/Density | ASTM D698 | One per Each Material | Assume 1 Mtl for Project | Each | 1 | \$225.00 | \$225.00 |
| In-Place Density | ASTM D6938 | Every 250 LF, Alt. Lifts | 6" Lifts - 2' Ht. | Each | 62 | \$28.00 | \$1,736.00 |
| Test Reports | | | LL/PI, Grad, MD, FD | Each | 24 | \$25.00 | \$600.00 |
| Tech Time (Soils) | | | 4 hrs - PI,Gr,MD, 4 hrs - 3 FD | Hour | 92 | \$78.83 | \$7,252.36 |
| # of Trips (Tech) | | | 22 Trips (40 Miles RT) | Mile | 880 | \$0.585 | \$514.80 |
| **Admin/Clerical | | | | Hour | 16 | \$65.69 | \$1,051.04 |
| Item Subtotal | | | | | | | \$11,514.20 |

Waterline Pipe Backfill Material (Excavated Earth Backfill)

- Sampling and laboratory testing of soils and base materials proposed for use in the construction of Project (Roads/Bridges/Misc.) to determine compliance of these materials with project plans and specifications.
- Field density testing of soils and base materials to ensure proposer compaction as required by project plans and specifications.

| | Test | Spec | Additional Assumptions | Unit | Qty. | Contract Rate | Total |
|----------------------|------------|--------------------------|--------------------------------|------|------|---------------|--------------------|
| Plasticity Index | Tex-106-E | Shall Conform D 2321 | 1 per Project | Each | 1 | \$45.00 | \$45.00 |
| Gradation | Tex-110-E | Shall Conform D 2321 | 1 per Project | Each | 1 | \$90.00 | \$90.00 |
| Moisture/Density | ASTM D698 | One per Each Material | Assume 1 Mtl for Project | Each | 1 | \$225.00 | \$225.00 |
| In-Place Density | ASTM D6938 | Every 250 LF, Alt. Lifts | 12" Lifts - 4-8' Ht. | Each | 92 | \$28.00 | \$2,576.00 |
| Test Reports | | | LL/PI, Grad, MD, FD | Each | 34 | \$25.00 | \$850.00 |
| Tech Time (Soils) | | | 4 hrs - PI,Gr,MD, 4 hrs - 3 FD | Hour | 132 | \$78.83 | \$10,405.56 |
| # of Trips (Tech) | | | 32 Trips (40 Miles RT) | Mile | 1280 | \$0.585 | \$748.80 |
| **Admin/Clerical | | | | Hour | 22 | \$65.69 | \$1,445.18 |
| Item Subtotal | | | | | | | \$16,385.54 |

| Summary | | |
|---|-----------------------|--------------------|
| Sub-Total (CMT Items) = | | \$27,899.74 |
| Sr. Eng. Tech. (Coord. w/ RPIC/Rpt. Rev.) | (6 hrs x 131.39 Hr.) | \$788.34 |
| Project Engineer (QA/QC of CMT) | (12 hrs x 174.09 Hr.) | \$2,089.08 |
| Sr. Eng. Tech. (Coord. w/ CEI Team) | (16 hrs x 131.39 Hr.) | \$2,102.24 |

** Project Administrative Fee is assessed on a per invoice basis and involves engineering review, evaluation, management and administration

| | |
|---|--------------------|
| Construction Materials Testing Total : | \$32,879.40 |
|---|--------------------|