

EXHIBIT "F"
Supplemental Agreement Form

THE STATE OF TEXAS §
 §
COUNTY OF HIDALGO §

**SUPPLEMENTAL AGREEMENT NO. 1
TO WORK AUTHORIZATION NO. 3
TO AGREEMENT FOR PROFESSIONAL SERVICES
C-12-246-10-16**

This **SUPPLEMENTAL AGREEMENT** is made pursuant to the terms and conditions of Article 8 of the Agreement made by and between **HIDALGO COUNTY**, hereinafter called the "**Owner**", and **L&G ENGINEERING**, professional engineers of Mercedes, Texas, hereinafter called the "**Engineer**".

WITNESSETH

WHEREAS, the **Owner** and the **Engineer** executed the Main Contract Agreement on the 16th day of October, 2012, concerning professional engineering services for the "**Liberty Road Project (from US 83 to Mile 3)**" project hereinafter referred to as the "**Project**"; and,

WHEREAS, it has become necessary to amend "*Exhibit B – Services to be provided by the Engineer*" of Work Authorization No. 3, Part 1, Scope of Work as identified below:

- *Provide a re-evaluation to the existing environmental clearance and redesign due to the requested changes by the City of Penitas and Hidalgo County Irrigation District #6 from a bridge crossing to a siphon with bypass design; and*

WHEREAS, it has become necessary to amend "*Exhibit D-1 – Project Estimated Fee Schedule*" of Work Authorization No. 3, Part 2, Estimated Cost, to increase the original Work Authorization amount of **\$1,797,300.00 to \$1,889,452.82**; therefore the amount of **Supplemental No. 1 is \$ 92,152.82**.

A. AGREEMENT

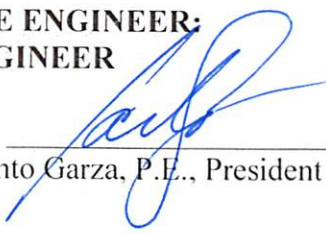
NOW THEREFORE, premises considered, the **Owner** and the **Engineer** agree that said **Agreement** is amended as follows:

- I. Sections of the Agreement, EXHIBIT "B" – SERVICES TO BE PROVIDED BY THE ENGINEER and EXHIBIT "D-1" – PROJECT ESTIMATED FEE SCHEDULE, are 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 _____, 2019.

THE ENGINEER:
ENGINEER

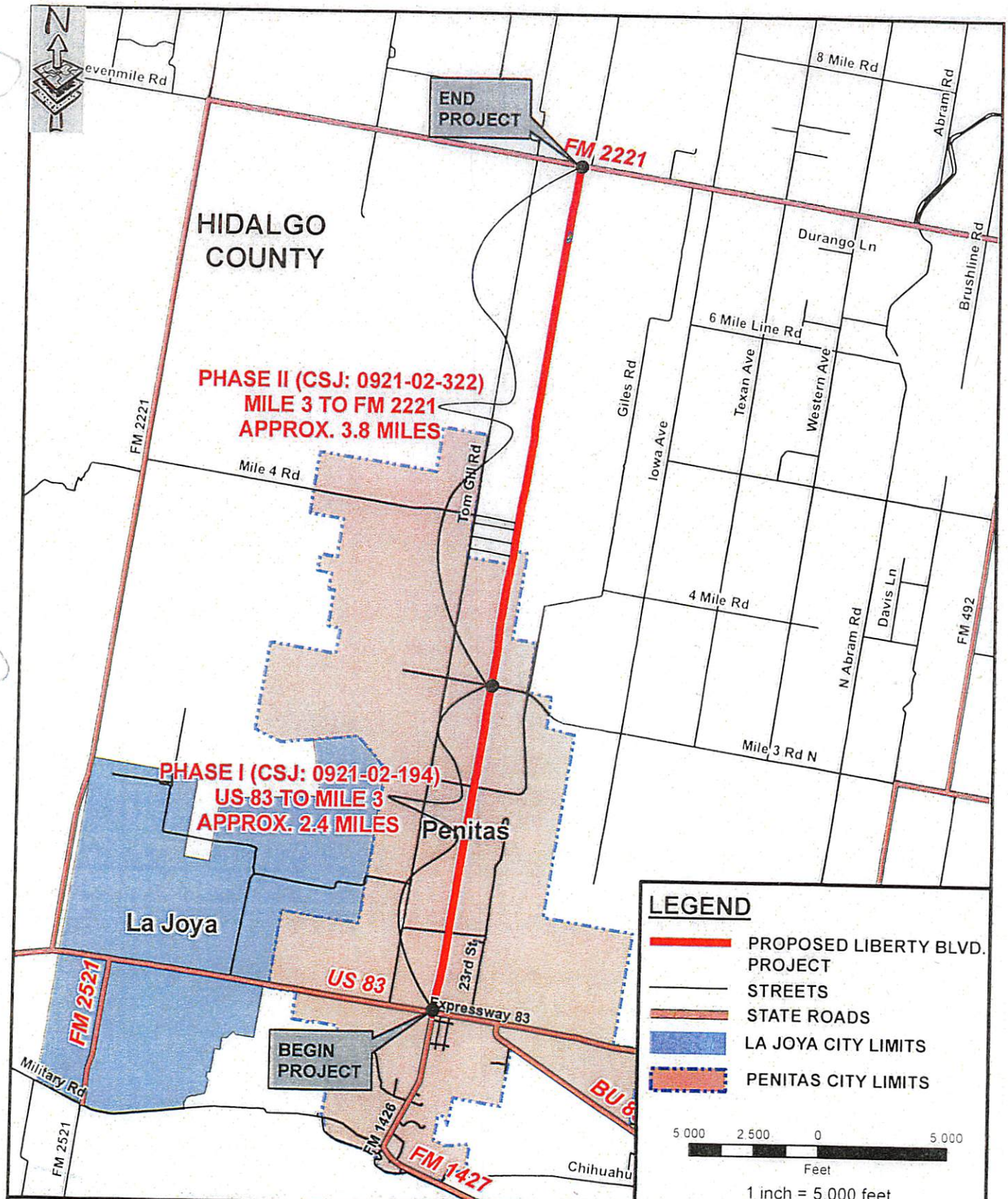
BY: 
Jacinto Garza, P.E., President

THE OWNER:
HIDALGO COUNTY

BY: _____
Richard Cortez, County Judge

LIST OF EXHIBITS:

- EXHIBIT A – "Services to be provided by the County" - OMITTED
- EXHIBIT B – "Services to be provided by Engineer"
- EXHIBIT C – "Time Schedule"
- EXHIBIT D-1 – "Project Estimated Fee Schedule"



LIBERTY BOULEVARD LOCATION MAP

FROM US 83 TO FM 2221
APPROX. PROJECT LENGTH 6.2 MILES

FIGURE 2

PREPARED BY: [unreadable] MAPS & SURVEYING, INC. 1000 N. GARDNER ST., SUITE 100, SAN ANTONIO, TEXAS 78207

EXHIBIT "A"
SERVICES TO BE PROVIDED BY THE OWNER

1. The COUNTY will issue work authorization to initiate all required services and designate the authorized representative of the coordination of each work authorization.
2. The COUNTY will provide copies of all subdivision plats of record and/or in the subdivision process.
3. The COUNTY will provide the ENGINEER with on-going guidance, timely reviews, and decisions necessary to complete services required by the work authorization in order to permit the ENGINEER to maintain an agreed upon project schedule.
4. The COUNTY will process all acceptable requests for payment in a timely manner.

EXHIBIT "B"
SCOPE OF SERVICES TO BE PROVIDED BY THE ENGINEER

FOR ADDITIONAL WORK OF SUPPLEMENTAL NO. 1 OF WORK AUTHORIZATION NO. 3
SECTION 1-PROJECT DESCRIPTION

The services designated herein as "Services provided by the ENGINEER" shall include the performance of all engineering services for the following described facility:

COUNTY/CITY: CITY OF PEÑITAS/HIDALGO COUNTY

CONTROL: CSJ: 0921-02-194

PROJECT/DESCRIPTION: Environmental Re-evaluation & PS&E of Siphon

LENGTH: 2.4 MILES

HIGHWAY: LIBERTY ROAD

LIMITS: FROM: US83 TO MILE 3

PROJECT CLASSIFICATION

(Place an "X" in only one Project Classification)

- Surface Treatment
- Overlay
- Rehabilitation Existing Road (Scarify & Reshape)
- Convert Non-Freeway to Freeway
- Widen Freeway
- Widen Non-Freeway
- New Location Toll Freeway
- New Location Non-Freeway
- Interchange (New or Reconstruct)
- Bridge Widening or Rehabilitation
- Bridge Replacement
- Upgrade to Standards - Freeway
- Upgrade to Standards - Non-Freeway
- Miscellaneous Studies (Use Function Code 110 for All Tasks)

ENGINEER shall mean L&G Engineering.

SURVEYOR shall mean Right-of-Way Surveying Surveys, Inc.

STATE shall mean Texas Department of Transportation.

COUNTY shall mean the Hidalgo County

CITY shall mean the City of Peñitas

EXHIBIT "B"
SCOPE OF SERVICES TO BE PROVIDED BY THE ENGINEER

SECTION 4 - SOCIAL, ECONOMIC AND ENVIRONMENTAL STUDIES
AND PUBLIC INVOLVEMENT
(Function Code 120)

Services
Provided By:
ENGINEER COUNTY

1. Environmental Reports
All Environmental Reports shall be in accordance with 43 Texas Administrative Code (TAC) 2.40-2.51, Code of Federal Regulations, Title 23, Part 771 and Highway Design Operations and Procedures Manual, Part II-B.
 - a. Environmental Assessments
 - (1) An Environmental Assessment shall be prepared, anticipating a Categorical Exclusion.
 - (2) An Environmental Assessment shall be prepared in accordance with 23 USC 327 and the 2014 TxDOT-FHWA Memorandum of Understanding, anticipating a Finding of No Significant Impact.
 - (3) An Environmental Assessment shall be prepared, anticipating the need for a Draft Environmental Impact Statement.
 - b. Environmental Impact Statement
 - (1) A Draft Environmental Impact Statement shall be prepared. After appropriate interagency and public reviews within time limits prescribed by the Code of Federal Regulations, Title 23, Part 771 and 43 Texas Administrative Code 2.40-2.51, a Final Environmental Impact Statement shall be prepared.
 - (2) A Section 4(f) Statement (Department of Transportation Act) shall be provided by the ENGINEER. The format and content of the statement is found in FHWA Technical Advisory T6640.8A.
 - c. Reevaluation
 - (1) A reevaluation consultation memo and/or reevaluation checklist shall be prepared.
2. Public Involvement
All public involvement procedures shall be in accordance with 43 Texas Administrative Code (TAC) 2.40-2.51, Code of Federal Regulations Title 23, Part 771 and Highway Design Operations and Procedures Manual, Part II-B.
 - a. A public involvement meeting(s) shall be scheduled, coordinated and conducted.
 - b. Technical assistance for one MAPO (Meeting with affected property owner), preparation of, and maintenance of contact lists, minutes of meeting(s), exhibit preparation, and other tasks outlined by the COUNTY, shall be provided.
 - c. A Notice of Availability (NOA) shall be published by the COUNTY upon approval of the environmental decision.
3. Technical Reports
All technical reports shall be prepared in accordance with TxDOT's environmental rules and guidelines.
 - a. Air Quality Analysis
An air quality analysis shall be prepared in accordance with the STATE'S Air Quality Guidelines. The air quality analysis shall be provided as a Technical Report and a summary of the air quality results included in the administratively complete document for the project.
 - b. Biological Technical Report
A biological form and technical report shall be prepared in accordance with the STATE'S Biological Guidelines. The report will include water resources, and threatened and endangered species.
 - c. Cultural Resources
Historical and archeological studies shall be completed in accordance with the STATE'S guidelines.

EXHIBIT "B"
SCOPE OF SERVICES TO BE PROVIDED BY THE ENGINEER

| Services Provided By: | | |
|--------------------------|---------------|---|
| <u>ENGINEER</u> | <u>COUNTY</u> | |
| <u>N/A</u> | <u>N/A</u> | (1) Historic Structure Studies A records search, project coordination request, and reconnaissance survey shall be performed, and documentation prepared regarding identification efforts, National Register eligibility and potential impacts to historic properties in accordance with the state's historic structure requirements. |
| <u>N/A</u> | <u>N/A</u> | (2) Archeological Studies File searches, project coordination request, an archeological reconnaissance, and an archeological survey shall be conducted to determine if known archeological sites are present or have been designated State Archeological Landmarks; and to identify the need (if any) to perform additional archeological investigations. |
| <u>N/A</u> | <u>N/A</u> | d. Community Impact Analysis A community impact analysis shall be prepared in accordance with the STATE'S Community Impact Guidelines. |
| <u>N/A</u> | <u>N/A</u> | e. Hazardous Materials The consultant shall perform an Initial Site Assessment (ISA) for hazardous materials impact in accordance with the American Society for Testing and Materials (ASTM) 1528.93 (Transaction Screen Process) and a Hazardous Materials Technical Report, as needed. |
| <u>N/A</u> | <u>N/A</u> | f. Indirect and Cumulative Impacts Analysis An indirect and cumulative impacts analysis shall be prepared in accordance with the STATE's guidelines. |
| <u>N/A</u> | <u>N/A</u> | g. Noise Analysis A noise analysis shall be prepared, including predicted noise levels and the consideration and evaluation of noise mitigation, in accordance with the STATE'S Noise Guidelines. The noise analysis shall be provided as a Technical Report and a summary of the noise analysis results shall be included in the administratively complete document. |
| <u>YES</u> | <u>N/A</u> | 4. Environmental Scoping (Reevaluation) The ENGINEER shall coordinate with TxDOT on the reevaluation process. |
| <u>N/A</u> | <u>N/A</u> | 5. General Guidelines for Preparation of Environmental Documents <ul style="list-style-type: none"> a. All technical reports will be submitted electronically to TxDOT through their FTP site. b. The draft administratively complete document will be submitted to TxDOT electronically through their FTP site. c. The administratively complete document will be prepared in accordance with the content and format of FHWA Technical Advisory T6640.8A and the TxDOT Administrative Code 43 TAC §2.44. d. The administratively complete document will be submitted to TxDOT electronically through their FTP site. e. Upon completion and approval of the administratively and technically complete document, the Engineer will provide one (1) hard copy to the Client. All copies to TxDOT will be digital. f. Exhibits in the environmental document shall be color copies and text shall be black and white. |

EXHIBIT "B"
SCOPE OF SERVICES TO BE PROVIDED BY THE ENGINEER

SECTION 7 - ROADWAY DESIGN CONTROLS

(Function Code 160)

Services
Provided By:
ENGINEER COUNTY

- | | | |
|-----------|------------|--|
| <u>NO</u> | <u>N/A</u> | 1. Geometric Design |
| <u>NO</u> | <u>N/A</u> | a. Horizontal and Vertical Alignment (Preliminary based on office surveys) |
| | | b. Schematic Layout |
| | | (1) The location of interchanges, main lanes, grade separations, frontage roads and ramps. |
| | | (2) Develop vertical and horizontal alignment of main lanes, ramps and cross roads at proposed interchanges or grade separations. Frontage road alignment data need not be shown on the schematic; however, it should be developed in sufficient detail to determine ROW needs. The degree of horizontal curves and vertical curve data, including "K" values, shall also be shown for ease of checking. |
| | | (3) For freeways, show the location and text of the proposed main lane guide signs. Lane lines and/or arrows indicating the number of lanes shall also be shown. |
| | | (4) A complete explanation of the sequence and methods of stage construction, if proposed, including the initial and ultimate proposed treatment of crossovers and ramps. |
| | | (5) The tentative ROW limits. |
| | | (a) Provide a roadway Design System (RDS) or (GEOPAK) computer tape of the preliminary earthwork to verify ROW requirements. |
| | | (b) Provide a graphics file containing the approved schematic. |
| | | (6) The geometric (pavement cross slopes, lane and shoulder widths, slope rates for fills and cuts) of the typical sections of proposed highway main lanes, ramps, frontage roads, and cross roads. |
| | | (7) The current and projected traffic volumes as provided by the TxDOT (20 year traffic projection, unless otherwise determined by the District Engineer). |
| | | (8) The control of access lines if Interstate or designated under House Bill 179. |
| | | (9) Direction of traffic flow on all roadways. |
| | | (10) Location and width of median openings for highway without access control. |
| | | (11) The geometric of speed change (acceleration, deceleration, climbing) lanes. |
| <u>NO</u> | <u>N/A</u> | 2. General Guidelines for Project Development |
| | | a. Prior to preparing detailed plans for a proposed project, a preliminary schematic layout shall be prepared which indicates the general geometric features and location requirements peculiar to the project. An uncontrolled aerial mosaic will be provided for this use. Four copies of the schematic layout shall be submitted through the district to the Design Division for approval and subsequent coordination with the Federal Highway Administration (FHWA) where applicable. The layout shall be submitted for two-lane arterial highway projects on new locations and for all multi-lane highway projects. No geometric design is to be performed until the COUNTY has given the engineer written approval of the preliminary schematic layout. |
| | | b. All geometric design shall be in conformance with the State's Design Division, Operations and Procedures Manual, except where variances are permitted in writing by the STATE. |
| | | c. The schematic layout shall include basic information which is necessary for the proper review and evaluation including the items listed above in the checklist for schematic layout. |
| | | d. Handling of traffic during construction shall be a consideration in the development of preliminary designs. |

EXHIBIT "B"
SCOPE OF SERVICES TO BE PROVIDED BY THE ENGINEER

Services
 Provided By:
ENGINEER COUNTY

- | | | |
|------------|------------|---|
| <u>YES</u> | <u>N/A</u> | 2. General Guidelines for Project Development (<i>continued</i>) <ul style="list-style-type: none"> e. Upon approval of the schematic layout by Design Division (FHWA on Federal-aid projects), it shall be the basis for an exhibit at any required public hearing prior to final development of the project. If there are any changes to the schematic after the Design Division and FHWA approval and before the public hearing, four copies of the revised schematic, as displayed at the hearing, shall be submitted either prior to or accompanying the public hearing data. If there are no changes in the schematic as displayed at the hearing, only photographs of the schematic and other displays shall be submitted with the public hearing data. f. For all freeway construction projects, these schematics shall show the location and text of the proposed main lane guide signs. A schematic layout shall be submitted through the district to the Traffic Operations Division, Traffic Safety Section for approval and subsequent coordination with the FHWA. All signing shall be in conformance with the Texas MUTCD. g. On complex projects, informal contact through the district with the Design Division and FHWA personnel is encouraged with regard to development of preliminary design prior to official schematic submission. h. The engineer shall furnish a project tape that is compatible with the STATE's computer system, a project listing, and a cross section plot showing the original design sections containing the earthwork input and original cross sections for the project. Accuracy of the earthwork design is of utmost importance since it is the basis for contractor payments and construction staking. |
| <u>N/A</u> | <u>N/A</u> | 3. Exhibit for Airway/Highway Clearance Permits |
| <u>YES</u> | <u>N/A</u> | 4. Grading Design <ul style="list-style-type: none"> a. Refine the horizontal and vertical alignment of main lanes, frontage roads, ramps, cross roads and direct connectors based upon the approved schematic layout. Determine vertical clearances at grade separations and overpasses, taking into account the appropriate super elevation rate. b. Typical Sections c. Design Cross Sections d. Determine Cut and Fill Quantities e. Slope Stability Analysis f. Embankment Foundation Stability Analysis g. Embankment Settlement Analysis |
| <u>NO</u> | <u>N/A</u> | 5. Pavement Design |
| <u>YES</u> | <u>N/A</u> | |
| <u>YES</u> | <u>N/A</u> | |
| <u>N/A</u> | <u>N/A</u> | |
| <u>N/A</u> | <u>N/A</u> | |
| <u>N/A</u> | <u>N/A</u> | |
| <u>N/A</u> | <u>N/A</u> | |
| <u>NO</u> | <u>N/A</u> | <ul style="list-style-type: none"> a. Prior to initiating detailed plan preparations for a project, a preliminary investigation shall be made to determine the approximate section and pavement type to be used for the pavement structure. The Flexible Pavement Design Manual for flexible pavement, "Appendix F" of the Design Division, Operations and Procedures Manual, and the current AASHTO Guide for the Design of Pavement Structures, may be used for this purpose. |
| <u>NO</u> | <u>N/A</u> | <ul style="list-style-type: none"> b. The typical section shall also reflect proposed geometric including pavement cross slopes, lane and shoulder widths, and slope rates whenever this data have not been previously shown on a schematic submission. c. Embankment and Subgrade <ul style="list-style-type: none"> (1) Soil Core Holes (Show cost estimate with Function Code 110) <ul style="list-style-type: none"> (a) Along center line (b) Along center line of each roadway |
| <u>NO</u> | <u>N/A</u> | <ul style="list-style-type: none"> The location and minimum number of soil core holes required for this project are as follows: (To be determined when schematic is being completed) |

EXHIBIT "B"
SCOPE OF SERVICES TO BE PROVIDED BY THE ENGINEER

Services
 Provided By:
ENGINEER COUNTY

- | | | |
|-----------|------------|--|
| <u>NO</u> | <u>N/A</u> | 5. Pavement Design (<i>continued</i>) |
| | | c. Embankment and Subgrade (<i>continued</i>) |
| | | (2) Identify, interpret and summarize geologic features that affect engineering design (PI, Sulfate content, % of lime) |
| <u>NO</u> | <u>N/A</u> | d. Traffic Data for Pavement Design by STATE |
| <u>NO</u> | <u>N/A</u> | e. Basic Design Criteria |
| <u>NO</u> | <u>N/A</u> | f. Life Cycle Cost Analysis(es) |
| <u>NO</u> | <u>N/A</u> | g. Cost Data |
| <u>NO</u> | <u>N/A</u> | h. Pavement Material Properties |
| <u>NO</u> | <u>N/A</u> | i. Rehabilitation Investigations |
| | | (1) Core Hole Survey (Show cost estimate with Function Code 110) |
| | | (a) Determine type and depth of existing material, pavement, etc. The Engineer will determine whether to salvage ACP and FLEXBASE as well as their properties and provide this information to TxDOT. |

EXHIBIT "B"
SCOPE OF SERVICES TO BE PROVIDED BY THE ENGINEER

ADDITIONAL RESONSIBILITIES

Easements, Letters of Permission, Etc.

The ENGINEER shall be responsible for delineating easements. The ENGINEER will be responsible for securing the necessary legal instruments.

Coordination of Utilities

The ENGINEER shall furnish the COUNTY prints of a project layout which will be distributed by ENGINEER to various utility companies to determine which utilities are in the limits of the project. These shall be preliminary layouts. Upon completion of the preliminary drainage plans and U&D sheets, the ENGINEER shall distribute to the various utility companies and request return. Upon return of these prints, the ENGINEER will schedule a meeting with the various utility companies to discuss potential conflicts and conformance with the State's Utility Accommodation Policy. The ENGINEER is responsible for coordination with the various utility companies for exposing potential conflicts and field ties to uncover utilities in potential conflict areas.

Meetings

Meetings will be held with the FHWA, State Officials, local governments, property owners, utility owners, railroad companies, other consulting firms, etc., as needed or required by the COUNTY. The ENGINEER shall coordinate through the COUNTY for the development of this project with any local entity having jurisdiction or interest in the project (i.e., city, county, etc).

Specifications, Special Provisions, Special Specifications

Use the State's standard specifications or previously approved special provisions and/or special specifications. If a special provision and/or special specification is developed for this project, it shall be in the State's format and incorporate references to approved State test procedures.

Project Manager/Engineer Communication

The ENGINEER shall designate one Texas Registered Professional Engineer to be responsible throughout the project for project management and all communications, including billing, with the COUNTY's Director. Any replacements to the ENGINEER's designated Project Manager/Engineer must be approved by the COUNTY.

Engineering documents produced for the department's engineering projects shall be signed, sealed and dated or CADD sealed in accordance with Administrative Order No. 5-89 and Administrative Circular No. 26-91.

Design Responsibilities

The ENGINEER is responsible for design errors and/or omissions that become evident before, during or after construction of the project. The ENGINEER's responsibility for all questions arising from design errors and/or omissions will be determined by the COUNTY and all decisions shall be final and binding. This would include, but not necessarily be limited to:

1. All design errors and/or omissions resulting in additional design work to correct the errors and/or omissions.
2. Preparation of design documents and detail drawings necessary for a field change due to design errors and/or omissions.
3. Revision of original tracings to the extent required for a field change due to design errors and/or omissions.

The ENGINEER shall promptly make necessary revisions or corrections resulting from the ENGINEER's errors, omissions or negligent acts without additional compensation. Acceptance of the work by the COUNTY will not relieve the ENGINEER of the responsibility for subsequent correction of any such errors or omissions or for clarification of any ambiguities.

EXHIBIT "B"
SCOPE OF SERVICES TO BE PROVIDED BY THE ENGINEER

Document and Information Exchange

Data, Plan Sheets, General Notes and/or Specifications provided to the COUNTY shall be furnished on 8GB USB flash drives. Each 8 GB flash drive shall have a file titled Table of Contents. The Table of Contents shall indicate the locations of files within the directory structure of the documentation.

General Notes and specifications shall be provided in MS Office 2007 format. Plan sheets shall be provided in Microstation DGN or GEOPAK GPK format. PDF copies of plan sheets shall also be provided.

Two copies of the documentation shall be provided to the COUNTY.

If required, the ENGINEER shall provide to the COUNTY, a CD that contains all the plan sheets for the project. The graphics tape shall be compatible with the COUNTY's computer system.

CD Tape Required (YES or NO): YES

Proposal Time

The time indicated in the proposal and the contract shall include time necessary for reviews, approval, etc.

Office Location

The ENGINEER will perform the services to be provided under this agreement out of their office or offices listed below:

| <u>Service</u> | <u>Office Location</u> |
|-----------------|------------------------|
| PS&E | Mission Office |
| Schematic | Mission Office |
| ROW Acquisition | Mission Office |

The work effort will be managed out of the _____ Mercedes _____
(City)

office located at 2100 West Expressway 83 _____,
(Address)

Mercedes _____, _____ Texas _____.
(City) (State)

EXHIBIT “B”
SCOPE OF SERVICES TO BE PROVIDED BY THE ENGINEER

APPENDIX A - PLAN SHEET SEQUENCE PROCEDURE

1. Title Sheet
Detailed Index of Sheets
2. Typical Sections
3. General Notes and Specifications Data
4. Estimate and Quantity Sheets
5. Storm Water Pollution Prevention Plan (SW3P) Sheets
6. Traffic Control Plans
 - a. Sequence of Construction Layouts
 - b. Detour Plan/Profile/Typical Sections/Quantities
7. Roadway Layouts
 - a. Roadway Plan/Profile Sheets
 - b. Intersection Plan/Profile Sheets
 - c. Intersection Layouts
 - d. Alignment Layouts/Data
 - e. Ramp Layouts/Profiles
 - f. Connection Roads/U-turns Layouts/Profile
8. Roadway Details
 - a. Concrete Pavement Details/Standards
 - b. Concrete Pavement Terminal Anchorage Details/Standards
 - c. Bridge Approach Details/Standards
 - d. Bridge Terminal Anchorage Details/Standards
 - e. Roadway/Median Barrier Details/Standards
 - f. Curb Details
 - g. Driveway Details/Typical Sections/Standards
9. Signing Layouts and Marking Layouts
10. Traffic Signal Layouts
11. Lighting Layouts
12. Illumination Detail Standards (HMID, HMIF, HMIP, RID)
13. Utility Layouts/Profiles
14. Drainage Area Maps and Hydraulic Data
 - a. General Drainage Area Maps
 - b. Stage-Discharge Curves
 - c. Main Cross-Drainage Culvert/Bridge Hydraulic Data
 - d. Drainage Area Maps/Culverts/Storm Sewer
 - e. Hydraulic Data/Culverts/Inlets/Storm Sewer/Pumps
15. Detailed Drainage Plans
 - a. Drainage Plan/Profile Sheets (Storm Sewer Plan/Profile Sheets)
 - b. Channel Plan/Profiles/Typical Sections
 - c. Box Culvert Plan/Profile
 - d. Pipe Sewer/Culvert Cross Sections

EXHIBIT “B”
SCOPE OF SERVICES TO BE PROVIDED BY THE ENGINEER

APPENDIX A - PLAN SHEET SEQUENCE PROCEDURE (Continued)

16. Drainage Structural Details/Standards
 - a. Inlet Details/Standards
 - b. Manhole Details/Standards
 - c. Junction Box Details/Standards
 - d. Safety End Treatment Details/Standards
 - e. Box Culvert Details/Standards
 - f. Culvert Wingwall Details/Standards
 - g. Excavation-Backfill Diaphragms
 - h. Riprap Details/Standards
 - i. Temporary Pollution and Erosion Control Details
17. Pumphouse Layouts
18. Pumphouse Details
19. Pumphouse Standard Details
20. Bridge Layouts/Profile/Typical Sections*
21. Bridge Details*
 - a. Summary of Bridge Quantities
 - b. Abutments
 - c. Interior Bents
 - d. Spans
 - e. Special details for the specific bridge
22. Bridge Standard Details*
23. Bridge Railing Standards
24. Retaining Wall Layouts/Profiles**
25. Retaining Wall Details**
26. Retaining Wall Standard Details**
27. Guard Fence/Standards and Signal Pole Standards
28. Signal/Electrical Details/Standards and Signal Pole Standards
29. Signing/Markers/Striping Details/Standards
30. Barricade/Construction/Beacon Standards
31. Miscellaneous Standards
 - a. Chain Link Fence Standards
 - b. Bridge End Detail/Standards
 - c. Roadway Clearance Details/Standards
 - e. Attenuator Standards

NOTE: Variations of these plan sheet sequence guidelines may be permitted if approved in writing by the County.

EXHIBIT "B"
SCOPE OF SERVICES TO BE PROVIDED BY THE ENGINEER

APPENDIX B - PLAN PREPARATION PROCEDURES

1. Title Sheet
The ENGINEER shall be responsible for completing the title sheet as required and formatted by the STATE and as discussed in Part V of the Highway Design, Operations and Procedures Manual. Refer to Section K - Plans, 1 - Title Sheets, page 5-24, for the procedure to be used regarding all plans prepared by the ENGINEER.
2. Project Layout
The project layout shall clearly depict the entire project as it is proposed and will usually be drawn at a scale of 1 inch=100 feet or 1 inch=200 feet, depending on the size of the project.
3. Typical Sections
See Part IV of the Highway Design, Operations and Procedures Manual.
4. Sequence of Work Sheets (Traffic Control Plan)
Clarity and completeness should be the rule to follow in preparing these sheets, with particular attention given to location of construction signs and barricades, lane widths, protection of drop offs, etc. For a reference guide use the Texas Department of Transportation, Texas Manual on Uniform Traffic Control Devices. Usual scale of 1 inch=100 feet and/or 1 inch=50 feet for special locations. A narrative sequence shall be included in the special provisions for the project. Staging of structural elements shall be considered. Provisions for drainage shall be considered, included and indicated during all stages of construction operations.
5. Removal Item Sheets
These sheets indicate removal of existing facilities necessary to the proposed construction. (1 inch=40 feet) (use same scale as plan/profile sheets).
6. Summary Sheets
Summary Sheets are required to indicate type, quantity and/or location of work for individual items of the proposed project.
7. Alignment Layout Sheets
These sheets indicate the horizontal alignment with curve data and coordinates usually tabulated thereon. On some projects, depending on size, this information may be included on the plan profile sheets. Usual scale (1 inch=100 feet) or (1 inch=40 feet).
8. Plan Profile Sheet
Clarity and completeness should be the rule to follow in preparation of these sheets. Usual scale (1 inch=40 feet or 1 inch=50 feet) or (1 inch=20 feet), depending on project complexity.
9. Drainage Area Maps
Usual scale (1 inch=100 feet) and/or (1 inch=200 feet) supplemented by large scale area maps as necessary.
10. Drainage Plan Profile Sheets
These sheets may be required on some projects to clearly depict location of inlets, storm sewer lines, and profile of storm sewer lines and laterals. Usual scale (1 inch=40 feet or 1 inch=50 feet) or (1 inch=20 feet). Storm sewer design does include redesign of storm sewers imposed by utility constraints developing after initial reviews by the STATE and consequential redesign and adjustments.
11. Runoff, Inlet, Storm Sewer and Culvert Sheets
Use standard sheets.

EXHIBIT "B"
SCOPE OF SERVICES TO BE PROVIDED BY THE ENGINEER

APPENDIX B - PLAN PREPARATION PROCEDURES (Continued)

12. Culvert Cross Sections and Details
District standard reproducible sheets can be furnished (one each) to the ENGINEER for modification of special designs.
13. Manhole and Inlet Details
District standard reproducible sheets can be furnished (one each) to the ENGINEER.
14. Miscellaneous Detail
Curb, Sidewalk, Driveways, etc.
15. Intersection Details
16. Marking Layouts and/or Details
Layouts of the entire project with markings depicted thereon. Usual scale 1:500 (1 inch=40 feet or 1 inch=50 feet). On some projects typical details might suffice.
17. Structural Details
Bridge layout sheets shall have the same horizontal and vertical scale. Usually (1 inch = 10 feet) (1 inch = 20 feet). Sections of existing and proposed structures usually have a scale of (1 inch = 5 feet). Elements of the bridge (abutments, bents, slabs, etc.) shall be detailed to a (1/2 inch = 1 foot) or (1/4 inch equals 1 foot) architect scale to provide clear legible drawings when reduced. Letters shall be a minimum size of 4 millimeters (5/32 inch) height for hand lettering and 140 for lettering by computer-aided design and drafting (CADD).
18. Overhead Sign Bridge Layouts
A maximum of four structures may be shown on each layout sheet. The reference to the appropriate overhead sign bridge (OSB) standard and the following requirements shall be shown on the layout:
 - (1) Drilled shaft size and length
 - (2) Soil strength used for design {indicate basis and boring(s) used}
 - (3) Design height
 - (4) Tower height
 - (5) Leg spacings and
 - (6) Design wind speed.

The wind speed design map need not be included in the project plans. Designation of tower member size and anchor bolt size shall not be shown. For OSBs which require special design, the design shall be in accordance with the AASHTO sign specifications (see Item 22 of References on page 49) and to the same loading requirements as for normal standard structures. Structures (special or standard) which will have changeable message signs shall be analyzed by the ENGINEER.

EXHIBIT "B"
SCOPE OF SERVICES TO BE PROVIDED BY THE ENGINEER

APPENDIX C - GENERAL PLAN CHECKLIST

Services
 Provided By:
ENGINEER COUNTY

| | | |
|-----|-----|---|
| ___ | ___ | Title Sheet |
| ___ | ___ | Project Layout |
| ___ | ___ | Sequence of Work |
| ___ | ___ | Detour Layouts & Profiles |
| ___ | ___ | Construction Pavement Markings |
| ___ | ___ | Signing & Barricades |
| ___ | ___ | Construction Sign & Beacons |
| ___ | ___ | Typical Sections |
| ___ | ___ | Shaping & Finishing Sections |
| ___ | ___ | Slopes Adjacent to Shoulders |
| ___ | ___ | Estimate & Quantities |
| ___ | ___ | General Notes & Specification Data |
| ___ | ___ | Grading Summary |
| ___ | ___ | Miscellaneous Summaries (See following "SUMMARIES" heading) |
| ___ | ___ | Horizontal Curve Data & Alignment Layouts |
| ___ | ___ | Drainage Summaries |
| ___ | ___ | Structure Summaries |
| ___ | ___ | Erosion Control Summary & Details |
| ___ | ___ | Plan/Profile Sheets |
| ___ | ___ | Erosion Control Summary & Details |
| ___ | ___ | Pavement Contours |
| ___ | ___ | Superelevation Transition (If Required) |
| ___ | ___ | Grading Contours |
| ___ | ___ | Guard Fence Layouts |
| ___ | ___ | Storm Water Pollution Prevention Plans (SW3P) |
| ___ | ___ | Drainage Area Maps |
| ___ | ___ | Hydraulic Data |
| ___ | ___ | Drainage Sheets |
| ___ | ___ | Bridge Hydrology Sheets |
| ___ | ___ | Inlet & Manhole Details |
| ___ | ___ | Utility Support Details |
| ___ | ___ | Culvert Cross Sections & Details |
| ___ | ___ | Special Culvert Designs |
| ___ | ___ | Special Drainage Details |
| ___ | ___ | Chain Link Fence Locations |
| ___ | ___ | Ramp Details Sheet |
| ___ | ___ | Removal Item Sheet - Including detours (Shown in detour summary, No payment for removal; subsidiary to construction detours) |
| ___ | ___ | Pavement Details |
| ___ | ___ | Pavement Standard Modification for Concrete Shoulder |
| ___ | ___ | Concrete Pavement Continuously Reinforced (CPCR) |
| ___ | ___ | Concrete Pavement Contraction Design (CPCD) |
| ___ | ___ | Concrete Pavement Details - Jointed Reinforced (Steel Bars) (CPJR) |
| ___ | ___ | Bridge Approach Slab Details |
| ___ | ___ | Vehicle Attenuator Details |
| ___ | ___ | Miscellaneous Details |
| ___ | ___ | Wheelchair Ramps |
| ___ | ___ | Pavement Marking Details |
| ___ | ___ | Modified Standards |
| ___ | ___ | List of Standards |
| ___ | ___ | Permanent Signing Plans & Quantities |

EXHIBIT "B"
SCOPE OF SERVICES TO BE PROVIDED BY THE ENGINEER

APPENDIX C - GENERAL PLAN CHECKLIST *(continued)*

Services
 Provided By:
ENGINEER COUNTY

- | | | |
|-----|-----|---|
| ___ | ___ | Permanent Lighting Plans, Quantities & Standards |
| ___ | ___ | Bridge Layout(s) |
| ___ | ___ | Bridge Details |
| ___ | ___ | Retaining Wall Layout(s) |
| ___ | ___ | Retaining Wall Details |
| ___ | ___ | Pumphouse Details |
| ___ | ___ | Underdrain Details (Retaining Walls) |
| ___ | ___ | Culvert Standards |
| ___ | ___ | Soil Profile |
| ___ | ___ | Temporary Traffic Signals |
| ___ | ___ | Design Cross Sections |
| ___ | ___ | Estimate |
| ___ | ___ | List of Standard Specification, Special Provisions & Special Specifications |
| ___ | ___ | Detour Special Provisions (If Required) |
| ___ | ___ | Construction Time Estimate |
| ___ | ___ | Critical Path Method (CPM) |
| ___ | ___ | Unit Price Documentation |

Miscellaneous

- | | | |
|-----|-----|-----------------------------|
| ___ | ___ | Conduit Requirements |
| ___ | ___ | Traffic signal Requirements |

Summaries

(ALL BELOW YES FOR ENGINEER AND NO FOR COUNTY UNLESS NOTED OTHERWISE)

- | | | |
|-----|-----|---|
| ___ | ___ | Salvaging and Placing Topsoil |
| ___ | ___ | Prepare ROW |
| ___ | ___ | Remove Old Structures |
| ___ | ___ | Scarify Existing Pavement |
| ___ | ___ | Remove Old Concrete Curb of Curb and Gutter (C&G) |
| ___ | ___ | Remove Old Concrete Pavement |
| ___ | ___ | Remove Old Concrete Riprap |
| ___ | ___ | Remove Metal Beam Guard Fence |
| ___ | ___ | Galvanized steel Beam Guard Fence (12Ga) (GSBGF) |
| ___ | ___ | Temporary Guard Fence (TEMPGF) |
| ___ | ___ | Summary of Concrete Flumes |
| ___ | ___ | Curbs |
| ___ | ___ | Adjust Manholes & Inlets |
| ___ | ___ | Underdrains |
| ___ | ___ | Base and Pavement |
| ___ | ___ | Large Structure |
| ___ | ___ | Concrete Riprap (RR8 & RR9) |
| ___ | ___ | Temporary Portable Concrete Barrier (PCBR) |
| ___ | ___ | Concrete Traffic Barrier |
| ___ | ___ | Vehicle Attenuator |
| ___ | ___ | Guard Rail Energy Absorbing Terminal (Great System) |
| ___ | ___ | Pavement Markings & Blast Cleaning (Thermoplastic) |
| ___ | ___ | Retaining Walls |
| ___ | ___ | Large Structure Summaries |
| ___ | ___ | Small Structure Summaries |

EXHIBIT "B"
SCOPE OF SERVICES TO BE PROVIDED BY THE ENGINEER

APPENDIX C - GENERAL PLAN CHECKLIST *(continued)*

Services
 Provided By:
ENGINEER COUNTY

| Summaries | (ALL BELOW YES FOR ENGINEER AND NO FOR COUNTY UNLESS NOTED OTHERWISE) | |
|------------------|--|---|
| — | — | Earthwork (Roadway & Channel) & Channel Details |
| — | — | Culverts |
| — | — | Detours |
| — | — | Seeding or Mulch Sod - Quantity Only |
| — | — | Inlet & Manholes |
| — | — | Sidewalks |
| — | — | Construction Pavement Markings |
| — | — | Driveways |
| — | — | Concrete Median |
| — | — | Storm Sewers |
| — | — | Head Walls & Safety End Treatments |
| — | — | Curb Openings |
| — | — | Manholes |
| — | — | Chain Link Fence, Remove & Replace Chain Link Fence |
| — | — | Remove & Relay Reinforced Concrete Pipe (RCP) or Pipe Sewer |

| TASK AND DESCRIPTION | FIRM | 2020 | | | | | | | | | | | 2021 | | | |
|--|--------|---------|-----|-----|-----|-----|-----|-----|-----|----|----|----|------|--|--|--|
| | | JUL | JUN | JUL | AUG | SEP | OCT | NOV | DEC | Q1 | Q2 | Q3 | Q4 | | | |
| Advanced Funding Agreement Execution | | | | | | | | | | | | | | | | |
| TxDOT Submit AFA to Hidalgo County | TxDOT | 6/4/20 | | | | | | | | | | | | | | |
| Hidalgo County Execute Through Comm. Court | County | 6/12/20 | | | | | | | | | | | | | | |
| TxDOT Executes AFA | TxDOT | | | | | | | | | | | | | | | |
| ROW Map | | | | | | | | | | | | | | | | |
| Hidalgo County Complete ROW Map & Submit to TxDOT | County | | | | | | | | | | | | | | | |
| TxDOT Inputs Parcels Into ROWIS | TxDOT | | | | | | | | | | | | | | | |
| Environmental Re-Evaluation | | | | | | | | | | | | | | | | |
| Environmental Re-Evaluation for Major Design Change | County | | | | | | | | | | | | | | | |
| PS&E | | | | | | | | | | | | | | | | |
| 90% PS&E Submittal | County | | | | | | | | | | | | | | | |
| Redesign for Siphon with Bypass | County | | | | | | | | | | | | | | | |
| 100% PS&E Submittal | County | | | | | | | | | | | | | | | |
| TxDOT Plan Set Approval | TxDOT | | | | | | | | | | | | | | | |
| ROW Acquisition (23 Parcels) | | | | | | | | | | | | | | | | |
| FPAF Funding Assignment | TxDOT | | | | | | | | | | | | | | | |
| Appraisal Work | County | | | | | | | | | | | | | | | |
| Obtain Title Commitments | County | | | | | | | | | | | | | | | |
| Property Owner Notifications | County | | | | | | | | | | | | | | | |
| Parcel Negotiations | County | | | | | | | | | | | | | | | |
| Closing Of All Parcels | County | | | | | | | | | | | | | | | |
| Construction Mngmnt - Bid Analysis & Contract Award | | | | | | | | | | | | | | | | |
| Advertise for Construction Bids | County | | | | | | | | | | | | | | | |
| Open Bids (Letting Date - July 2020) | County | | | | | | | | | | | | | | | |
| Award Contract at Comm Court | County | | | | | | | | | | | | | | | |
| Construction Operations | County | | | | | | | | | | | | | | | |



| | Admin / Clerical | TOTAL HOURS | Sub-Contract Amounts / ROW COST | TOTAL LINE ITEM COST |
|--|------------------|-------------|---------------------------------------|-------------------------|
| CONTRACT RATE | | | | |
| | 53.02 | | | |
| SUPPL. NO. 1 TO WORK AUTHORIZATION NO. 3 | | | | |
| PHASE II - ENVIRONMENTAL & PS&E REVISIONS for REQUESTED D | | | | |
| 1 | | 100 | | \$ 9,483.80 |
| 2 | 10 | 804 | | \$ 75,835.90 |
| 3 | | 52 | \$ - | \$ 6,833.12 |
| 4 | | 0 | | \$ - |
| 5 | | 0 | \$ - | \$ - |
| SUB-TOTAL | | | | |
| | 10 | 956 | \$ | 92,152.82 |

| | | |
|------------------|-----------|------------------|
| JECT FEE: | \$ | 92,152.82 |
|------------------|-----------|------------------|

CERTIFICATE OF INTERESTED PARTIES

FORM 1295

1 of 1

Complete Nos. 1 - 4 and 6 if there are interested parties.
 Complete Nos. 1, 2, 3, 5, and 6 if there are no interested parties.

OFFICE USE ONLY CERTIFICATION OF FILING

1 Name of business entity filing form, and the city, state and country of the business entity's place of business.

L&G Engineering
 Mercedes, TX United States

Certificate Number:
 2019-541239

Date Filed:
 09/17/2019

2 Name of governmental entity or state agency that is a party to the contract for which the form is being filed.

Hidalgo County

Date Acknowledged:

3 Provide the identification number used by the governmental entity or state agency to track or identify the contract, and provide a description of the services, goods, or other property to be provided under the contract.

C-12-246-10-16
 Suppl. No. 1 to Work Auth. No. 3 - Liberty Road Project (US 83 to Mile 3)

| 4 | Name of Interested Party | City, State, Country (place of business) | Nature of interest (check applicable) | |
|---|--------------------------|--|---------------------------------------|--------------|
| | | | Controlling | Intermediary |
| | Sandoval, Armando | Mercedes, TX United States | | X |
| | Garza, Jacinto | Mercedes, TX United States | X | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

5 Check only if there is NO Interested Party.

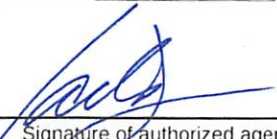
6 UNSWORN DECLARATION

My name is Jacinto Garza, and my date of birth is 10/23/1961.

My address is 2100 W. Expressway 83, Mercedes, TX, 78570, USA.
(street) (city) (state) (zip code) (country)

I declare under penalty of perjury that the foregoing is true and correct.

Executed in Hidalgo County, State of Texas, on the 17 day of September, 2019.
(month) (year)



 Signature of authorized agent of contracting business entity
 (Declarant)