

THE STATE OF TEXAS §  
§  
COUNTY OF HIDALGO §

**PROFESSIONAL SERVICES AGREEMENT**  
**C-21-0554-08-10**

**THIS AGREEMENT** is made and entered the 10<sup>th</sup> day of August, 2021 by and between **HIDALGO COUNTY, TEXAS**, (“County”) and GDJ Engineering (“Engineer”).

**WITNESSETH:**

**WHEREAS**, the County is in need of On-Call Professional Engineering Services (the “Services”) for projects within **Hidalgo County Precinct No. 2**;

**WHEREAS**, the County has determined that the services of a professional engineering company are necessary to carry out the required Services;

**WHEREAS**, pursuant to Texas Government Code Chapter 2254 (the “Texas Professional Services Procurement Act”), the County requested Statements of Qualifications from professional engineering firms to assist the County by providing the Services;

**WHEREAS**, the County solicited Requests for Qualifications (RFQ) for the development and establishment of a yearly pool for “Professional Engineering Services”; and

**WHEREAS**, the Engineer was pre-qualified from the County’s pool of Professional Engineers and has been selected from the pool to provide On-Call Professional Engineering Services on an as needed basis for Hidalgo County Precinct No.2 (“County”), in accordance with the terms and provisions of **Exhibit “A”** Requirements/Request for Qualifications, attached hereto and incorporated by reference herein; and

**WHEREAS**, in continuation of the procurement process and in response to the County’s request to negotiate for a fair and reasonable price pursuant to Chapter 2254 Texas Government Code, the Engineer has provided a fee schedule (“Engineer Contract Rates”), which is attached hereto and made part of this Agreement as **Exhibit “B”**; and

**WHEREAS**, on a project to project basis, County shall determine when the services of an Engineer for Professional Engineering Services is required and shall provide project specifications (the “Specifications”) to Engineer for review and response.

**NOW THEREFORE**, in consideration of the mutual covenants and agreements herein contained, County and Engineer do mutually agree as follows:

1. County and Engineer hereby agree that this Agreement is entered into in order to provide the Services for Hidalgo County Precinct #2.

2. The County will furnish Specifications as needed and on a per project basis to Engineer for the development of project(s) and fulfillment of this Agreement. Engineer agrees to review the project as presented by County (on a per-project basis) and submit to County within fourteen (14) days of receipt of the Specifications, a proposal and work authorization. The proposal shall include, but not be limited to, the following: (1) fee structure for the project; (2) services included in the basic fee; (3) amount of, or basis for, compensation for additional services (including additional services that may arise during the course of the project and cost of Engineer’s consultants); and (4) cost for reimbursable expenses (collectively the “Engineering Services”);

3. The County may enter into negotiations with the Engineer regarding the Engineering Services Proposal and should the parties reach an agreement, then Engineer will submit a “Work Authorization” to County for approval and execution. The Work Authorization will detail the Engineer’s duties and responsibilities with respect to each specific project. Engineering Services to be provided by the engineer are detailed in the attached **Exhibit “C”**. However, if the parties are unsuccessful at coming to terms for any specific project, then the County may seek the services of other engineers.

4. Engineer agrees in performing the Services that it will use proper professional standards, comply with any and all appropriate laws and regulations in providing the Services, and devote such time as is necessary to safely and efficiently provide the Services.

**5. Non-Exclusive Services of Engineer.** Hidalgo County reserves the right to request these services from other sources other than the Engineer and shall not be in violation of any terms or conditions of this Agreement.

**6. Term.** This Agreement is for a period of **one (1) year**, effective August 10, 2021 and will terminate August 9, 2022 or unless sooner terminated as provided herein. The Engineer will not begin to work or incur costs until authorized in writing by the County with each Project Specific “Work Authorization” as more particularly described in **Exhibit “D.”**

**7. Compensation and Work Authorizations.** The maximum amount payable under this Agreement shall not exceed the amount for each “Work Authorization”, an example of which is attached hereto and incorporated by reference as **Exhibit “D”**, unless an amendment is executed as provided hereinafter. The Engineer shall submit periodic requests for payment within (30) thirty days after completion of each Work Authorization. The request for payment shall be made using forms acceptable to the County and shall show the total amount earned to the date of submission and the amount due and payable as of the date of the current billing. Upon receipt of said request for payment, County shall submit a requisition for payment for said Services in the customary manner provided for payments utilized by Hidalgo County, Texas. Engineer agrees to separately account for the receipt and/or expenditure of funds received pursuant to this Agreement and to keep accurate books and records of all such receipts and/or expenditures. All payments to Engineer shall be mailed to the address shown in numbered paragraph 29. Titled “Notices” herein.

**8. Inspection of Work.** The County has the right at all reasonable times to inspect or otherwise evaluate the work performed hereunder and the premises in which it is being performed. If any inspection or evaluation is made on the premises of the Engineer, or of a subcontractor, the Engineer shall provide and require its subcontractor to provide all reasonable facilities and assistance for the safety and convenience of the inspectors in the performance of their duties. All inspections and evaluations shall be performed in such a manner as will not unduly delay their work.

**9. Amendments.** If it becomes necessary at any time during this Agreement to change the scope of services, the Agreement period, the maximum amount payable, the complexity, or the character of this Agreement, an amendment shall be executed by use of a (Supplemental Agreement Form) more particularly described in **Exhibit “E”** which is attached to this Agreement. The County retains the right to reject any such amendment proposed by the Engineer. Any such amendments shall be made in writing, agreed to by all parties hereto, and duly executed before the end of the Agreement as specified. If the County finds it necessary to require changes in completed work because of errors made by the Engineer, the County shall require the Engineer to correct the work at no cost to the County and without amendment to the Agreement. If the changes are made at the request of the County and are not due to errors of the Engineer, the County will reimburse the Engineer for the additional work at the same rate of pay established in **Exhibit “B”** "Engineer Contract Rates." If payment for the additional work will cause the maximum amount payable under this Agreement to be exhausted, an amendment shall be proposed in accordance with all State procurement laws.

**10. Reporting.** The Engineer shall promptly advise the County in writing of events which have a significant impact upon the Agreement, including:

- a. Problems, delays, or adverse conditions which will materially affect the ability to meet time schedules and goals, or preclude the attainment of project work units by established time periods. This disclosure shall be accompanied by a statement of the action taken, or contemplated and any County or, if Federal Funds are involved, Federal assistance needed to resolve the situation.
- b. Favorable developments or events which enable meeting time schedules and goals to be met sooner than anticipated or which are producing more work units than originally projected.

**11. Ownership of Documents.** Upon completion or termination of this Agreement, all documents prepared by the Engineer or furnished to the Engineer by the County shall be delivered to and become the property of the County. All sketches, photographs, calculations, and other data prepared

under this Agreement shall be made available, upon request, to the County without restriction or limitation on their further use. The Engineer shall not be liable for the reuse or modification of its work product. The Engineer may, at its own expense, have copies made of the documents or any other data furnished to the County under this Agreement.

**12. Suspension of Work.** Should County desire to suspend the work under this Agreement, but not terminate this Agreement, the County shall provide thirty (30) calendar days verbal notification to Engineer, followed by written confirmation from the County to Engineer to that effect. The thirty-day notice may be waived as agreed in writing by both the County and Engineer to that effect. The work under this Agreement may be reinstated and resumed in full force and effect within sixty (60) days of receipt of written notice from the County to the Engineer. The sixty-day notice may be waived as agreed in writing by both the County and Engineer. If the County suspends the work, the Termination Date as identified above is not affected and this Agreement will terminate on the date specified.

**13. Progress and Coordination.** The Engineer shall, from time to time during the progress of the work, confer with the County. The Engineer shall prepare and present such information as may be pertinent and necessary, or as may be requested by the County, in order to evaluate features of the Engineer's services and work.

At the request of the County or the Engineer, conferences shall be provided at the Engineer's office, the offices of the County, or at other locations designated by the County. These conferences shall also include evaluation of the Engineer's services and work when requested by the County.

All applicable study reports shall be submitted in preliminary form for approval by the County before the final report is issued. The County's comments regarding the Engineer's preliminary report will be addressed by the Engineer in the final report.

If funds by other agencies or entities are to be used for the development of any project awarded under this Agreement, the Engineer's Services and work will be subject to periodic review and approval by other agencies or entities, including those of the city, county, state and/or federal agencies.

Should it be determined that the progress in the production of the Engineer's Services and work does not satisfy the requirements of the approved Work Authorization as provided by **Exhibit "D"**, attached hereto, the County shall review the approved Work Authorization with the Engineer to determine the corrective action needed by either the County or the Engineer.

The Engineer shall promptly advise the County in writing of events which have a significant impact upon the progress of the Engineer's Services and work and the approved Work Schedule, including:

- a. problems, delays, adverse conditions which will materially affect the ability to attain Agreement objectives, prevent the meeting of time schedules and goals, or preclude the timely completion and submittal of Project deliverables by the Engineer within established time periods; this disclosure will be accompanied by a statement by the Engineer of recommended or immediate action taken, or contemplated, and any Owner or other agency or entity assistance needed to resolve the situation: and
- b. favorable developments or events which enable meeting the Work Schedule goals sooner than anticipated.

**14. Independent Contractor.** Engineer must comply with all applicable Hidalgo County policies and with any applicable federal, state or local laws, regulations, orders or ordinances applicable to the Services provided by Engineer under this Agreement. Notwithstanding the foregoing sentence, Engineer represents and maintains that it is an Independent Contractor and is not an employee of Hidalgo County, Texas or any agency thereof, and represents and warrants that it does not desire or request any fringe benefits provided to employees of Hidalgo County, Texas, and/or any agency thereof, including, but not limited to benefits associated with Hidalgo County's civil service program. Engineer agrees to be responsible for any federal income tax, withholding or social security tax liability that might arise from payments received hereunder.

**15. Subcontracting and Assignment.** The Engineer shall not assign subconsultant or transfer the Engineer's interest in this Agreement without the prior written consent of the County. The

Engineer shall bind every subconsultant by written contract to observe all the terms of this Agreement to the extent that they may be applicable to each subconsultant. No subcontractor relieves the Engineer of any responsibilities under this Agreement.

**16. Voluntary Termination.** County may terminate this Agreement at any time for any reason or no reason at all upon giving thirty (30) days prior written notice to the Engineer.

**17. Insurance.** Consistent with its status as an independent contractor and at its sole expense, Engineer agrees that throughout the duration of the work under this contract and any extension hereof, it shall provide and maintain in full force and effect any and all insurances which may be necessary in providing Services or are otherwise required by law, and shall require of all its' subconsultants connected with providing services under this contract to provide insurance in full force and effect as well. Insurance policies shall cover, but are not limited to, Engineer's activities and all persons, vehicles, equipment, and property connected with providing Services, including but not limited to professional liability insurance covering Engineer's activities in providing the services to County. Coverage shall be in the amounts specified by the County in the Request for Qualifications ("RFQ") or as prescribed by law, but in no event shall any amount be less than the minimum amounts prescribed by the Texas Tort Claims Act, §100.001, et seq., Texas Civil Practices and Remedies Code. Engineer shall furnish to County certificate(s) of insurance and all renewals throughout the duration of any assigned Project on an Accord form, issued by the insurer that such insurance is in full force and effect. **See attached Exhibit "F" Insurance Information.**

**18.** As a condition of this Agreement, Engineer shall hold and maintain throughout the term of this Agreement all licenses and permits required, or which may be required by any authority during the term hereof to provide the Services for a particular project. If such license or permit is suspended or revoked, this Agreement shall automatically be terminated and Engineer shall immediately notify the County.

**19.** All trucks or vehicles operated by the Engineer to perform the Services shall contain all equipment required by any authority to operate on streets and roads and all persons in the employ of Engineer who operate such trucks or vehicles shall have the required licenses, qualifications, skill and expertise to perform

such Services and shall comply with all laws, rules and regulations prescribed by any agency or authority having jurisdiction with regard to the operation of such trucks or vehicles in providing the Services.

**20. Payment of Franchise Tax.** The Engineer hereby certifies that the Engineer is not delinquent in Texas franchise tax payments, or that the Engineer is exempt from, or not subject to, such tax. A false statement concerning corporation's franchise tax status shall constitute grounds for termination of the Agreement at the sole option of the County.

**21. No Assignment.** Except as otherwise herein provided, Engineer may not assign the obligations or rights under this Agreement to any person without the prior written consent of County.

**22. Conflict.** Nothing in this Agreement shall be construed so as to require the commission of any act contrary to law, and whenever there is any conflict between any provision of this Agreement and any present or future law, ordinance or administrative, executive or judicial regulation, order or decree, or amendment thereof, contrary to which the parties have no legal right to Agreement, the latter shall prevail, but in such event the affected provision or provisions of this Agreement shall be modified only to the extent necessary to bring them the legal requirements and only during the time such conflict exists.

**23. Termination by County.** If Engineer fails to deliver quality Services, fails to achieve the defined goals, outcomes, strategies and outputs required by County, or if Engineer fails to comply with any conditions in this Agreement, then County shall have the right to terminate this Agreement upon the giving of ten (10) days prior written notice to Engineer.

**24. No Waiver.** No waiver by County of any breach of any provision of this Agreement shall be deemed to be a waiver of any preceding or succeeding breach of the same or any other provision hereof.

**25. Entire Agreement.** This Agreement contains the entire agreement between the parties hereto, and each party acknowledges that neither has made (either directly or through any agent or representative) any representations or agreements in connection with this Agreement not specifically set

forth herein. This Agreement may be modified or amended only by agreement in writing executed by County and Engineer, and not otherwise.

**26. Venue.** This Agreement shall be construed under and in accordance with the laws of the State of Texas, and all obligations of the parties created hereunder are performable in Hidalgo County, Texas. The parties hereby consent to personal jurisdiction in Hidalgo County, Texas.

**27. INDEMNIFICATION.** Engineer shall indemnify and hold harmless County, its elected officials, employees and agents from any and all claims, damages, losses, and expenses including reasonable attorney's fees for the defense of any action against County to the extent arising out of, resulting from, or connected with the negligent provision of the Services by Engineer under this Contract. Said indemnity shall cover any intentional misconduct, negligent act, or failure to act by the Engineer, its agents or employees. This indemnification clause shall survive this Agreement and be enforceable as a separate agreement in the event its survival and enforcement becomes necessary.

**28. Attorney's Fees.** In the unlikely event that a dispute occurs which is litigated, or a cause of action in law or equity is filed concerning the operation, construction, interpretation, or enforcement of this Agreement, the losing party shall bear the cost of the reasonable attorney's fees incurred by the prevailing party and any and all costs applicable thereto, including, but not limited to, court costs, deposition fees, expert witness fees, out-of-pocket expenses and travel expenses which are incurred by the prevailing party.

**29. Notices.** Except as may be otherwise specifically provided in this Agreement, all notices, demands, requests or communications required or permitted hereunder shall be in writing and shall either be (i) personally delivered against a written receipt, or (ii) sent by a registered or certified mail, return receipt requested, postage prepaid and addressed to the parties at the addresses set forth below, or at such other addresses as may have been theretofore specified by written notice delivered in accordance herewith:

If to County: County of Hidalgo  
Attention: County Judge  
100 E. Cano, 2<sup>nd</sup> Floor  
Edinburg, Texas 78539

If to Engineer: GDJ Engineering  
Attn: Robert Macheska, P.E., CFM  
2805 Fountain Plaza Blvd., Suite A  
Edinburg, Texas 78539

Each notice, demand, request or communication which shall be delivered or mailed in the manner described above shall be deemed sufficiently given for all purposes at such time as it is personally delivered to the addresses or, if mailed at such time as it is deposited in the United States mail.

**30. Executions of Documents.** The parties hereto covenant and agree that they will execute such other and further instruments and documents as are or may become necessary or convenient to effectuate and carry out the terms of this Agreement.

**31. Binding Agreement.** This Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective heirs, executors, administrators, legal representatives, successors, and assigns where permitted by this Agreement.

**32. Gender.** All pronouns used in this Agreement shall include the other gender, whether used in the masculine, feminine or neutral gender, and the singular shall include the plural whenever and as often as may be appropriate.

**33. Authority.** The execution and performance of this Agreement by County and Engineer have been duly authorized by all necessary laws, resolutions or corporate action, and this Agreement constitutes the valid and enforceable obligations of County and Engineer in accordance with its terms.

**34. Professional Seal.** All documents and data furnished by the Engineer to the County shall bear Professional seal of a licensed Engineer employed by the Engineer.

**35. Commitment of Current Revenues Only.** In the event that, during any term hereof, the Commissioners Court does not appropriate sufficient funds to meet the obligations of County under this Agreement, County may terminate this Agreement upon thirty (30) days written notice to Engineer. County agrees, however, to use reasonable efforts to secure funds necessary for the continued performance of this Agreement. The parties intend this provision to be a continuing right to terminate this Agreement at the

expiration of each budget period of County. **Agreements for the acquisition, including the lease of real or personal property under Tex.Loc.Govt.Code §271.903:** In the event that during any term hereof the Commissioner's Court does not appropriate sufficient funds to meet the obligations of County under this agreement, County may terminate the Agreement upon thirty (30) days written notice to Engineer. County agrees, however, to use a best efforts attempt to obtain and appropriate funds for payment of the Agreement. The parties intend this provision, if applicable, to be a continuing right to terminate this Agreement at the expiration of each budget period of County in accordance with Tex. Loc. Govt. Code §271.903 (Vernon Supp. 1966).

**36. IMMUNITIES.** Nothing in this Agreement intended to and County does not hereby waive, release or relinquish any right to assert any of the defenses County enjoys by virtue of the state or federal constitution, laws, rules or regulations, and any sovereign, official or qualified immunity available to County as to any claim or action of any person, entity, or individual against County.

**37. Nondiscrimination:** Engineer, including subcontractors, assignees and successors in interest, ensures that no person shall on the grounds of race, religion, color, national origin, sex, age, or disability, or any other protected class under law, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination or retaliation in any federally or non- federally funded program or activity when providing any services described herein under this Contract. Applicable nondiscrimination statements and provisions of Title VI of the Civil Rights Act of 1964, as amended, were provided as part of the initial procurement packet and are incorporated herein and made part of this agreement for all purposes.

**38. Required Contract Provision for Contracts Subject to Federal Award (if applicable):** Pursuant to 2 CFR 200.236, a non-federal entity's contracts must contain the applicable provisions described in appendix II to 2 CFR 200-Contract Provisions for non-Federal Entity Contracts under Federal Awards. Additionally, County contracts under Federal award which are subject to assistance from the Federal Emergency Management Agency (FEMA) are also required to contain additional contract clauses. The applicable required contract clauses were provided as part of the initial procurement packet and are incorporated herein and made part of this agreement for all purposes.

*Signature page to follow*

**EXECUTED** as of the day and year first written above.

**COUNTY:**  
**COUNTY OF HIDALGO, TEXAS**

By: \_\_\_\_\_  
Richard F. Cortez, County Judge

**ENGINEER:**  
**GDJ ENGINEERING**

By:  \_\_\_\_\_

Printed Name Robert Macheska, P.E., CFM

Title Executive Vice President/COO

**ATTEST:**

\_\_\_\_\_  
Arturo Guajardo Jr., County Clerk

**APPROVED AS TO FORM:**  
Hidalgo County District Attorney's Office

By: \_\_\_\_\_  
Victor M. Garza, Assistant District Attorney

**ATTACHMENTS:**

- EXHIBIT A** -Requirements/County's Request for Qualifications
- EXHIBIT B** -Engineer's Contract Rates
- EXHIBIT C** -Scope of Services to be provided by Engineer
- EXHIBIT D** -Work Authorization Form
- EXHIBIT E** -Supplemental Agreement Form
- EXHIBIT F** -Certificates of Insurance



General Engineering Services / Transportation /  
 Environmental / Planning and Development /  
 Water Resources / Construction

## EXHIBIT B CONTRACT RATES

LABOR CLASSIFICATION	CONTRACT RATE
Senior Project Manager/Principal	\$ 185.00
Project Manager	\$ 160.00
Project Engineer	\$ 125.00
Utility Manager	\$ 120.00
Engineer-In-Training	\$ 95.00
Engineering Technician	\$ 82.00
Admin/Clerical	\$ 55.00
DIRECT EXPENSES	COST
Postage	At Cost
Black And White Copies	No Cost
Color Copies	\$0.50 per Page
Fax	No Cost
Overnight Mail - Letter Size	\$15.00 per Each
Overnight Mail - Oversized Box	\$38.00 per Each
Long Distance Charges	No Cost
Mileage	\$0.58 per Mile
Travel Expenses (Lodging)	\$90.00 per Night
Travel Expenses (Airfare)	At Cost
Scans To File	No Cost
Recording Fees	At Cost

# **EXHIBIT “C”**

## **SCOPE OF SERVICES TO BE PROVIDED BY ENGINEER**

The services to be provided by the ENGINEER in providing On-Call Engineering Services for Hidalgo County Precinct 2 Projects are as follows:

**EXHIBIT "C"**  
**SCOPE OF SERVICES TO BE PROVIDED BY THE ENGINEER**

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**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: Hidalgo County Pct. #2

CONTROL: \_\_\_\_\_

PROJECT/DESCRIPTION: On-Call Engineering Contract

LENGTH: N/A

HIGHWAY: Various

LIMITS: Various

**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 GDJ Engineering.

COUNTY shall mean Hidalgo County.

LPA shall mean Hidalgo County.

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

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**PRELIMINARY PROJECT DEVELOPMENT**

(Function Code 102)

**ADVANCED PLANNING MPO COORDINATION:**

The ENGINEER will perform any needed preliminary/ongoing project planning which will include:

1. Meetings, Coordination & Support for Project Development
    - a. The Engineer will coordinate with the LPAs representatives at the MPO Technical Advisory Committee (TAC) and Policy Committee and serve in an advisory position to assist the LPA in obtaining funding for projects. The Engineer shall serve as representative for the LPA in coordination items. The Engineer shall coordinate with the LPA’s staff on all Project related items.
  2. Evaluate the LPAs Projects on Regional Planning Documents.
    - a. The Engineer will work with the LPA and the MPO to evaluate the status of the LPAs projects in the regional planning documents.
    - b. The Engineer will review the local Transportation Improvement Program (TIP) to ensure there are no delays to the letting of projects in an advanced state of project development. This includes coordination with project engineers to ensure estimates and schedules are accurate.
    - c. The Engineer will review the Unified Transportation Program (UTP) to ensure the LPAs Projects are properly listed on the TxDOT UTP to ensure there are no delays to project development.
    - d. The Engineer will review the Metropolitan Transportation Plan (MTP) to ensure the LPAs long range goals are properly listed on the MTP to advance opportunities for additional funding.
    - e. The Engineer will review and assess potential opportunities to advance the construction of the LPAs projects.
    - f. The Engineer will coordinate with the LPA to develop project mitigation plans in the event that there is a decrease in available funding for projects.
  3. Capital Improvements Program (CIP) Development
    - a. The Engineer will assist the LPA with the Development of the CIP as it relates to available opportunities to leverage funding from the MPO.
  4. Audit and Periodically Update Regional Planning Documents
    - a. The Engineer will review the local Transportation Improvement Program (TIP) to ensure there are no delays to the letting of projects in an advanced state of project development. This includes coordination with project engineers to ensure estimates and schedules are accurate.
    - b. The Engineer will review the Unified Transportation Program (UTP) to ensure the LPAs Projects are properly listed on the TxDOT UTP to ensure there are no delays to project development.
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**EXHIBIT “C”**  
**SCOPE OF SERVICES TO BE PROVIDED BY THE ENGINEER**

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- c. The Engineer will review the Metropolitan Transportation Plan (MTP) to ensure the LPAs long range goals are properly listed on the MTP to advance opportunities for additional funding.
  - d. The Engineer will review and assess potential opportunities to advance the construction of the LPAs projects.
  - e. The Engineer will coordinate with the LPA to develop project mitigation plans if there is a decrease in regional funding for projects.
5. Prepare Exhibits / Preliminary Estimates
    - a. The Engineer will assist the LPA with the preparation of preliminary project exhibits, maps, typical sections to allow for the development of preliminary project cost estimates for planning purposes.
  6. Draft Correspondence
    - a. The Engineer will assist the LPA with the preparation of draft correspondence to be used to advance the development of the LPAs priority projects.
  7. Develop Project Agreements
    - a. The Engineer will assist the LPA with the development of Interlocal Agreements and project agreements with TxDOT, for example Advanced Funding Agreements (AFA), to ensure the LPAs projects can be reviewed by TxDOT.
  8. State and Federal Grants
    - a. The Engineer will monitor opportunities for additional funding for the LPAs projects including non-conventional State and Federal funding that may become available.

**PRELIMINARY PROJECT DEVELOPMENT:**

The ENGINEER will perform any needed preliminary project development which will include:

1. Establish Preliminary Design Values
    - a. The Engineer will work with the LPA to establish basic design concepts, project controls and a general scope for the Project.
  2. Prepare/Evaluate Preliminary Route Locations on Uncontrolled Mapping\*
    - a. The Engineer will evaluate various alternatives (route locations, alignment shifts, geometry) for the Project.
  3. Uncontrolled Mapping (w/Contours & GIS Data)
    - a. The Engineer will investigate the existing routes and coordinate with the LPA on establishing the best-fit alignments and mapping proposed geometry for Projects. A Preliminary Location Exhibit will be developed.
  4. Prepare Preliminary Hydrologic Map
    - a. The Engineer will develop a Hydrologic Map for the Projects. The Hydrologic Maps will be based on LIDAR and GIS information.
  5. Investigate Preliminary ROW Requirements
    - a. The Engineer will research and identify affected property owners on the Projects alignment and proposed ROW utilizing the latest appraisal district file information from the Hidalgo County Appraisal District and subdivision plat information from Carson Maps.
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**EXHIBIT “C”**  
**SCOPE OF SERVICES TO BE PROVIDED BY THE ENGINEER**

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6. Prepare Preliminary Cost Estimates
  - a. The Engineer will calculate preliminary construction cost estimates for the location and geometry of the Projects.
  
7. Preliminary Environmental Analysis (for Fatal Flaws)
  - a. The Engineer will perform Preliminary Environmental Constraint Mapping to determine if any fatal flaws exist along the proposed alignment.
  
8. Prepare a Project Fact Sheet for All Anticipated Costs
  - a. The Engineer will produce a Project Fact Sheet providing summaries of all pertinent items in the scope of services (as required) and providing estimated local costs vs. total project costs for the Projects.
  
9. Meetings, Coordination & Support for Project Development
  - a. The Engineer shall provide coordination services and shall assist in meetings and workshops with TxDOT, Hidalgo County, Hidalgo County Drainage District No. 1, any Hidalgo County Irrigation Districts, and all other affected parties. The Engineer shall serve as representative for the LPA in coordination items. The Engineer shall coordinate with the LPA’s staff on all Project related items.

\* A Phase I or better survey for hazardous materials should be included as a determining factor of route selection. Projects which do not require additional ROW should be considered separately from an expansion or new location.

**ROUTE AND DESIGN STUDIES**  
(Function Code 110)

**ROUTE AND DESIGN STUDIES:**

The ENGINEER will perform any of the following tasks needed for the route and design studies:

1. Analyze Level of Service for Proposed Improvements
  
2. Provide Traffic Evaluations and Projections
  
3. Develop Roadway Design Criteria
  
4. Prepare the Design Schematic
  - a. Horizontal and Vertical Alignment (Preliminary based on office surveys)
  - b. Schematic Layout
    - i. Identify the location of interchanges, main lanes, grade separations, frontage roads and ramps, if applicable.
    - ii. Develop vertical and horizontal alignment of main lanes, ramps and cross roads at proposed interchanges or grade separations, if applicable. 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.
    - iii. 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.
    - iv. Provide a complete explanation of the sequence and methods of stage construction, if proposed, including the initial and ultimate proposed treatment of crossovers and ramps.

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

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- v. Identify the tentative ROW limits
    - 1. Provide a roadway Design System (RDS) or (GEOPAK) computer tape of the preliminary earthwork to verify ROW requirements.
    - 2. Provide a graphics file containing the approved schematic.
  - vi. Provide the geometric configuration (pavement cross slopes, lane and shoulder widths, slope rates for fills and cuts) of the typical sections of the proposed highway main lanes, ramps, frontage roads, and cross roads.
  - vii. Identify the current and projected traffic volumes as provided by TxDOT (if On-System roadway) or by ENGINEER (if Off-System roadway) based on a 20 year traffic projection.
  - viii. Label the control of access lines if Interstate or designated under House Bill 179.
  - ix. Label the direction of traffic flow on all roadways.
  - x. Identify the location and width of any proposed median openings for highways without access control.
  - xi. Identify the geometrics of any speed change lanes (acceleration, deceleration, climbing, etc...).
5. Coordinate and Attend a Project Design Concept Conference
6. 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 LPA 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 and in the schematic checklist provided by the STATE.
  - d. Handling of traffic during construction shall be a consideration in the development of preliminary designs.
  - 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.
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## EXHIBIT "C"

### SCOPE OF SERVICES TO BE PROVIDED BY THE ENGINEER

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- 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.**
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**EXHIBIT “C”**  
**SCOPE OF SERVICES TO BE PROVIDED BY THE ENGINEER**  

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**SOCIAL, ECONOMIC AND ENVIRONMENTAL STUDIES AND PUBLIC INVOLVEMENT**  
(Function Code 120)

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. An Environmental Document shall be prepared anticipating one of the following levels of clearance:
      - i. A Categorical Exclusion
      - ii. A Finding of No Significant Impact
    - b. If it is determined that an Environmental Assessment is not sufficient, an Environmental Impact Statement shall be prepared under a supplemental agreement.
      - i. 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.
      - ii. 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.
  2. Public Involvement (All Public Involvement procedures shall be in accordance with 43 Texas Administrative Code (TAC) 2.101-2.110, Code of Federal Regulations Title 23, Part 771 and Highway Design Operations and Procedures Manual, Part II-B.)
    - a. A public involvement meeting(s)/hearing(s) shall be scheduled, coordinated and conducted.\*
    - b. Technical assistance, meeting(s)/hearing(s) preparation, maintenance of contracts lists, minutes of meeting(s), exhibit preparation, and other tasks outlined by the LPA, shall be provided.
  3. Cultural Resources (Formal consultation with the State Historic Preservation Office (SHPO) and the Texas Historical Commission (THC) will be conducted by the LPA.)
    - a. Historic Structure Studies
      - i. A records search 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.
    - b. Archeological Studies
      - i. Files searches shall be conducted to determine if known archeological sites are present; to identify whether these sites have been listed or determined eligible for the National Register of Historic Places or have been designated State Archeological Landmarks; and to identify the need (if any) to perform additional archeological investigations.
      - ii. Archeological reconnaissance will be performed under a Texas Antiquities Permit (13 TAC 26) signed for the Sponsor by a professional archeologist with the STATE.
      - iii. Archeological survey shall be performed under a Texas Antiquities Permit (13 TAC 26) signed for the Sponsor by a professional archeologist with the STATE.
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4. Technical Reports

Technical reports will be scoped with TxDOT's Work Plan Development Tool (WPD) and prepared in accordance with the TxDOT Environmental Toolkit.

    - a. Traffic Noise Analysis
      - i. A traffic 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 or a summary of the noise analysis shall be provided as a Technical Report and results included in the administratively complete document.
    - b. Air Quality Analysis
      - i. An air quality analysis shall be prepared in accordance with the STATE'S Air Quality Guidelines. The air quality analysis or a summary of the air quality shall be provided as a Technical Report and results included in the administratively complete document for the project.
    - c. Hazardous Materials
      - i. The ENGINEER 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).
    - d. Biological Assessment
      - i. A Species Analysis and Site Assessment will be completed in accordance with the STATE'S guidelines. The assessment shall be provided as a Technical Report and results included in the administratively complete document for the project.
    - e. Water Resources
      - i. A Surface Water Analysis will be completed in accordance with the STATE'S guidelines. The analysis shall be provided as a Technical Report and results included in the administratively complete document for the project.
    - f. Community Impact Analysis
      - i. A Community Impact Assessment will be completed in accordance with the STATE'S guidelines. The analysis shall be provided as a Technical Report and results included in the administratively complete document for the project.
  5. General Guidelines for Preparation of Environmental Documents
    - a. All technical reports will be submitted electronically to TxDOT.
    - b. All cultural resource reports (i.e. Archeological and Historical Project Coordination Requests (PCRs), background and reconnaissance surveys) will be submitted electronically to TxDOT.
    - c. The draft administratively complete document will be submitted to TxDOT electronically.
    - d. The administratively complete document will be prepared in accordance with the content and format of TxDOT Administrative Code 43 TAC §2.48 and the TxDOT Environmental Toolkit.
    - e. The administratively complete document will be submitted to TxDOT electronically.
    - f. Upon completion and approval of the administratively and technically complete document, the Engineer will provide one (1) hard copy to the Client.
    - g. Exhibits in the environmental document shall be color copies and text shall be black and white.
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**EXHIBIT “C”**  
**SCOPE OF SERVICES TO BE PROVIDED BY THE ENGINEER**

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**RIGHT-OF-WAY DATA**

(Function Code 130)

**NOTE:** No work involving right-of-way (ROW) data is to be performed until the LPA has given the ENGINEER written approval of the final location of the proposed ROW lines.

The ENGINEER shall perform the following Right-Of-Way Data duties:

1. Provide Ownership Data in a .dgn file
    - a. For the entire project limits
    - b. Compensable utility ownership that has property rights on ROW shall be researched and provided.
    - c. For each drainage outfall property
    - d. For each irrigation structure pipe
  2. Parcel Plats & ROW Map
    - a. A ROW map, parcel plats and field notes shall be prepared and furnished.
    - b. All plats and field notes must be signed and sealed by a Registered Professional Land Surveyor (RPLS).
    - c. ROW map must depict all improvements affecting ROW.
  3. Utilities (Compensable)
    - a. Property ownership with recording information shall be shown on ROW Map and Parcel Plats with distance ties to property corners in an effort to locate utility.
  4. Field Notes
    - a. Field notes and plats shall be provided, signed and sealed by a Registered Professional Land Surveyor, for all parcels on the ROW Map.
    - b. Computation sheets for survey closure and area of each parcel shall be provided.
    - c. Ground surveys and preparation of parcel maps, legal descriptions, and ROW maps
  5. Survey and Stake Right-of-Way
  6. Records as required by the LPA and State
    - a. Records used to establish property ownership
  7. General Guidance for Preparation of Right-of Way Maps
    - a. All data submitted by the surveyor will be legible, organized and well documented.
    - b. The surveyor shall provide temporary signs and shall control traffic near surveying operations adequately to comply with provisions of the MUTCD; a copy of which the Surveyor acknowledges has been furnished to him. All signs, flags, and safety equipment are to be provided by the surveyor.
    - c. Permission to enter private property for surveying (Right-Of-Entry) shall be the sole responsibility of the surveyor.
    - d. The surveyor will be held responsible for the correctness of his services. The surveyor will be responsible for the completion of his services.
    - e. The surveyor will be required to complete the attached “Right-of-Way Map Checklist” and submit along with the completed R.O.W. map. All requirements of attached R.O.W. map checklist must be complete, accurate and also considered to be essential and is a part of this contract.
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**SCOPE OF SERVICES TO BE PROVIDED BY THE ENGINEER**

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**PROJECT SPECIFIC SCOPE OF SERVICES**

FC 130 – RIGHT-OF-WAY DATA – Abstract analysis, development of ROW Map sheets including parcel plats and field notes with Metes & Bounds field descriptions, and Title Commitments.

FC 150 – FIELD SURVEYING FOR PARCEL MAPPING – Recover horizontal & vertical control, locate and field tie existing ROW and boundary corners. Update topography, and reestablish corners for ROW map revisions.

**SURVEYING SCOPE OF SERVICES FOR PARCEL MAPPING**

FC 130 – RIGHT-OF-WAY DATA

Right-of-Way Documents - The SURVEYOR will utilize State examples and provide the following:

**GENERAL**

- a. Abstracting: The SURVEYOR will determine Ownership Data.
- b. Prepare individual parcel maps and field notes as needed to properly describe the right-of-way the State is to acquire.
- c. All procedures involving right-of-way maps will be in accordance with the STATE’S Right-of-Way Book I and Book II, the State’s local operating procedures and according to the Texas Board of Professional Land Surveying Practices Act.
- d. All required documents will be in English units.
- e. The SURVEYOR will monument all corners with a 5/8 inch iron rod with a Surveyor’s plastic cap on all parcel boundary corners.
- f. The SURVEYOR will provide to the STATE a copy of Instruments of Record.
- g. The SURVEYOR will attach graphics files compatible with the latest version of Micro-Station graphics software.
- h. The SURVEYOR will attach documents or text files compatible with the latest version of Word software.

**PARCEL PLATS**

- a. A parcel plat will be prepared for each parcel of land to be acquired. The STATE has developed standard formats for parcel plats, copies of which the SURVEYOR will request and secure for all purposes
  - b. Parcel boundary lines will be delineated with appropriate bearings, distances, and curve data.
  - c. Private property lines will be delineated with appropriate bearings, distances, and curve data to the extent necessary to describe the individual parcels of land to be acquired.
  - d. League lines and survey lines will be shown and identified by name and abstract number.
  - e. A north arrow will be shown on each sheet and, if possible, in the upper right hand corner.
  - f. Monumentation set or found will be shown and described as to material and size.
  - g. A station and offset will be shown for each PC, PT, and angle point in the proposed right-of-way lines and the existing right-of-way lines in areas of no proposed acquisition.
  - h. Intersecting streets will be shown and identified by name and right-of-way width.
  - i. A parent tract inset will be shown for each parent tract.
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- j. A note will be included on each map sheet stating the basis of bearings, coordinates, and datum used.
- k. Appropriate notes will be included on the title sheet stating the following:
  - a. Month(s) and year abstracting was performed upon which the map is based.
  - b. Month(s) and year field surveys were conducted upon which the map is based.
  - c. Month and year map was completed by the SURVEYOR.
- l. The right-of-way account number and R.O.W. CSJ if available will be shown on each parcel map sheet.
- m. All parcel maps should be 8-1/2" x 11" signed and sealed by a Registered Professional Land Surveyor and note referencing legal description.
- n. The acreage of the part taken should be shown to three decimal places, rounded.

**FIELD NOTE DESCRIPTIONS**

A field note description will be prepared for each parcel of land to be acquired. Field note descriptions will include, but need not be limited to, the following:

- a. The field note description will begin with a general description that will include, as a minimum:
  - (1) State, county, and city within which the proposed parcel of land to be acquired is located.
  - (2) A reference to unrecorded and recorded subdivisions by name, lot, block, and recording data to the extent applicable.
  - (3) A reference, by name, to the grantor and grantee, date, and recording data of the most current instrument(s) of conveyance describing the parent tract.
- b. The field note description will continue with a metes and bounds description that will include, as a minimum:
  - (1) A point of commencing (outside property corner).
  - (2) A point of beginning on proposed R.O.W. line.
  - (3) A series of courses, identified by number and proceeding in a clockwise direction, describing the perimeter of the parcel of land to be acquired, and delineated with appropriate bearings, distances, and curve data.
  - (4) A description (8-1/2" x 11") of all monumentation set or found to include, as a minimum, size and material.
  - (5) All field note descriptions will be signed and sealed by a Registered Professional Land Surveyor.
  - (6) Note referencing parcel plat.

**NOTE:**

Surveyor to use the latest STATE approved ROW Map checklist while preparing the ROW Map.

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**FIELD SURVEYING AND PHOTOGRAMMETRY**

(Function Code 150)

**TOPOGRAPHY AND CONSTRUCTION SURVEYS:**

The SURVEYOR will perform Topography and Construction Surveying for the project which will include:

1. Primary Project Control: 3 to 5 mile spacing (Precision shall be 1 part in 20,000 or better, unless otherwise directed by the ENGINEER).
  - a. Establish Horizontal Control Points
  - b. Establish Vertical Control Points

NOTE: ALL BEARING AND DISTANCE SHALL BE BASED ON THE STATE PLANE COORDINATE SYSTEM NAD 1983, SOUTH ZONE.

ALL DISTANCES AND COORDINATES SHALL BE SURFACE AND MAY BE CONVERTED TO GRID BY MULTIPLYING BY A COMBINED SCALE FACTOR OF 0.999960

2. Secondary Project Control (Surveyor shall recover and/or reset H&V Control Points as provided by the Engineer and create Survey Data Sheets for inclusion in the Project Plans).
    - a. No traverse should exceed 25 angle points. Planimetrics shall be 20 ft Lt & Rt from the proposed ROW as per the schematic provided by the Engineer.
    - b. The unadjusted angular error should not exceed 2 seconds per angle, plus 14 seconds.
    - c. The unadjusted ratio of precision should be one part in 10,000 or better (The ratio of precision is the total length of the traverse divided by the total error.).
    - d. The unadjusted vertical error should not exceed 0.03 foot per mile of traverse.
  3. Other Field Surveying
    - a. **The limit of the Design surveys shall be 1,500-ft before and after the limits of the project as identified by the Project Engineer on the schematic. Establish horizontal and vertical control.** Set benchmarks at 1000-ft intervals along the project proposed right-of-way. Provide x, y, z for each Benchmark. Provide a BM along each outfall identified on the Hydrologic Map. The BM's shall be #5 I.R. 2-ft in depth set in concrete. **The surveyor shall provide an H&V Book (a Sample shall be provided by the Engineer to the Surveyor).** The Surveyor will provide a 3-pt reference sketch with ties to the BMs for inclusion the existing H&V Control Book. Establish benchmark circuit throughout the project with a tolerance of 0.03'/ft per mile error vertically.
    - b. The Surveyor shall provide complete topographic and cross section survey, data processing, and CADD mapping (2D & 3D) for the limits of the project.
    - c. The Surveyor shall locate all visible utilities, data processing and CADD mapping (2D & 3D) including irrigation lines. Follow sample provided by the Engineer.
    - d. The Surveyor shall field locate cross culverts, driveway culverts, inverts, irrigation lines, within the project limits, data processing and CADD mapping (2D & 3D).
    - e. Right of Entry, Right of Way Research, and Appraisal District Records is the responsibility of the Surveyor.
    - f. The Surveyor shall also paint the proposed centerline on the existing pavement as approved by the ENGINEER (at 500-ft stations and a tick mark at 100-ft stations, 12 inches long with approved paint by ENGINEER) before construction for the purpose of utility adjustments and project location.
    - g. Profile and cross section intersecting streets for ties into project (500-ft. beyond the proposed ROW per schematic and 20-ft wider than the existing ROW of intersecting street). Reference missing voids as per CD provided by the Engineer.
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SCOPE OF SERVICES TO BE PROVIDED BY THE ENGINEER

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- h. Cross section irrigation crossings for a distance of 20-ft beyond the proposed ROW at 100-ft intervals in a DTM file. Provide a complete description of irrigation appurtenances as identified by the engineer sample layout.
  - i. Tie Horizontally and Vertically the existing storm drain system that lies within the existing proposed ROW including the elevation of the outfall of said recovered existing storm drain systems.
  - j. Tie to existing underground and overhead utilities (location, elevation and direction)
    - i. Horizontally - The surveyor shall call the 1-800 number for the utilities to be marked on the ground as well as any city water and sewer lines. He shall tie all visible utility crossings with name, address and Phone #'s of utility companies. The engineer will coordinate with the utility companies and jointly the Surveyor and the Engineer will identify which utilities were missed and need to be tied down.
    - ii. Vertically - The engineer shall identify all utilities that are potential conflicts and that need to be tied vertically. The engineer will advise the surveyor in writing of the needed vertical ties and the surveyor will tie the lines vertically once the surveyor has coordinated the exposure and provide the information to the engineer.
  - k. Additional Field Surveying as shown below:
    - i. Irrigation Lines - The surveyor will meet with the engineer before he ties down any irrigation lines. The Engineer will provide him the existing Irrigation District Maps and the A&M Data of existing irrigation lines that are identified of record. He will follow the sample given to him by the engineer and tie the structures horizontally and vertically and provide Field Books to the engineer.
    - ii. Outfalls - The surveyor will provide a complete 2D & 3D File including utilities of the outfall identified on the Hydrologic Map.
  - l. Driveways and Turnouts
    - i. Inventory commercial entrances, public roads and side streets separately.
    - ii. Obtain centerline station (Width at ROW, Pavement and existing radius).
    - iii. Inventory by type (dirt, caliche, gravel or paved). If paved, indicate condition in terms of no patches, has patches or has potholes.
    - iv. Obtain width at ROW line
    - v. Obtain elevations at both edges of the driveway or turnout in line with any side drain.
  - m. ROW Staking (Existing and proposed @ 1,000 ft stations, PC's, PT's and Angle points as per ROW Map)
  - n. Soil core hole staking
  - o. Determine changes in topography from voids and outdated maps due to development, erosion, etc.
  - p. Profile existing drainage facilities, if applicable
  - q. Measure hydraulic openings under existing bridges, if applicable
  - r. Obtain elevations of manholes and valves of utilities, if applicable
  - s. Provide temporary signs, traffic control, flags, safety equipment, etc.
  - t. Provide ties to existing bridges or culverts that may conflict with new construction
  - u. If there is a Bridge widening, provide top of deck and/or top of cap elevations at the Profile Grade Line (PGL) and the edges of slab at bent locations.
  - v. Inventory signs, mailboxes and driveways
  - w. Survey controlled data sheets as per STATE guidelines
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**ADDITIONAL RESPONSIBILITIES**

**A. TRAFFIC CONTROL:**

The SURVEYOR shall control traffic in and near surveying operations adequately to comply with provisions of the latest edition of the TxDOT Manual on Uniform Traffic Control Devices – Part VI and the latest edition of the Occupational Safety Manual both of which can be found on the TxDOT internet site.

In the event field crew personnel must divert traffic or close traveled lanes, a Traffic Control Plan based upon principles outlined in the latest edition of the TxDOT Manual on Uniform Traffic Control Devices – Part VI shall be prepared by the SURVEYOR and approved by the ENGINEER prior to commencement of field work. A copy of the approved plan shall be in the possession of field crew personnel on the job site at all times and shall be made available to the ENGINEER for inspection upon request.

**B. INVOICING:**

Payment requests shall include a SURVEYOR's invoice. With each payment request, the SURVEYOR shall submit a project status report which will, as a minimum, include the percentage of total work complete as of the date of the payment request and a description of current work activity. The percentage of total work complete shall not be based simply on the percentage of funds expended, but shall be based on the best judgment of the SURVEYOR as to the percentage of actual work complete.

**C. EASEMENTS, LETTERS OF PERMISSION, ETC.**

The SURVEYOR shall be responsible for delineating easements. The SURVEYOR will be responsible for securing the necessary legal instruments and obtaining all Right-of-Entries (ROEs).

**D. MEETINGS:**

The ENGINEER shall setup the necessary meetings with the SURVEYOR in order to assure all field information is provided on-time and products are delivered in accordance with TxDOT's/LPA's specifications. SURVEYOR must attend all meetings involving data provided if requested by ENGINEER.

**E. PROJECT MANAGER/SURVEYOR COMMUNICATION:**

The SURVEYOR shall designate one Texas Registered Professional Land Surveyor (RPLS) to be responsible throughout the project for project surveying coordination and all communications, including billing, with the ENGINEER.

**F. OFFICE LOCATION:**

The SURVEYOR will perform the services to be provided under this agreement out of a local office and have a crew available to perform requested tasks within 24 hours of request. The coordinating SURVEYOR's Project Manager (RPLS) shall be accessible at all times and working from the local office.

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**ROADWAY DESIGN CONTROLS**

(Function Code 160)

**ROADWAY DESIGN:**

The ENGINEER will perform roadway design services for the needed construction repairs along the project limits. The services will include:

1. Geometric Design
  - a. Horizontal and Vertical Alignment
  - 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 LPA.
  - c. Handling of traffic during construction shall be a consideration in the development of preliminary designs.
2. Exhibits for Airway/Highway clearance permits (if within airport vicinity)
3. Grading Design
  - a. Refine the horizontal alignment including the following items
    - i. Typical Sections
    - ii. Design Cross Sections
    - iii. Determine Cut and Fill Quantities
    - iv. Slope Stability Analysis, if applicable
    - v. Embankment Foundation Stability Analysis, if applicable
    - vi. Embankment Settlement Analysis, if applicable
4. Pavement Design
  - 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.
  - 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
    - i. Provide Soil Core Holes (location and number to be agreed upon with Owner)
      1. Along center line of each roadway
    - ii. Identify , interpret and summarize the geological features that affect engineering design (PI, sulfate content & % of lime)
  - d. Traffic Data for Pavement Design
  - e. Basic Design Criteria
  - f. Life Cycle Cost Analysis(es)
  - g. Cost Data
  - h. Pavement Material Properties
  - i. Rehabilitation Investigations
    - i. Soil Core Holes to determine type and depth of existing material, pavement, etc. The ENGINEER, in coordination with LPA, will determine whether to salvage the existing ACP and Flexbase.

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

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**DRAINAGE**  
(Function Code 161)

**DRAINAGE DESIGN:**

The ENGINEER will perform drainage design services for the needed construction repairs along the project limits. All hydraulic design shall be in accordance with TxDOT’s Hydraulic Manual, except where variances are permitted in writing by the LPA. The services will include:

1. Hydraulic Studies, Discharges
    - a. Hydrologic Map showing drainage areas, contours and drainage Q’s.
    - b. Drainage area maps showing existing conditions and proposed improvements.
    - c. Hydrologic data/discharge determination
  
  2. Hydraulic Drainage Study & Documentation
    - a. Hydraulic Computations, if applicable
      - i. Storm water detention available within the ROW (linear ft. along side drain ditch).
      - ii. Storm water detention available outside the ROW (as per local Drainage District)
      - iii. Culverts
      - iv. Bridge Waterways
      - v. Channels
      - vi. Storm sewers/inlets
      - vii. Pump Stations
      - viii. Storm Water Management Facilities
      - ix. Irrigation Canals/Siphons
    - b. Hydraulic Reports
    - c. Federal Emergency Management Agency (FEMA) floodway requirements
    - d. Determine impact of proposed drainage plan on Drainage District or Irrigation District receiving streams
  
  3. Layout, Structural Design and Detailing of Drainage Features
    - a. Culverts
      - i. New Culverts
      - ii. Culvert widening and/or lengthening
      - iii. Culvert replacements
    - b. Storm Sewers
      - i. New storm sewers
      - ii. Modify existing storm sewers
      - iii. Inlets
      - iv. Manholes
      - v. Trunk lines
    - c. Pump Stations
    - d. Subsurface drainage at retaining walls
    - e. Outfall channel(s) within the ROW
    - f. Outfall channel(s) outside the ROW
    - g. Detention Pond(s) within the ROW
    - h. Detention Pond(s) outside the ROW
    - i. Summary of Quantities
  
  4. Storm Water Pollution Prevention Plan (SW3P)
  
  5. Scour Evaluation – Waterway structures only (to be completed under FC 170)
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**SIGNING, MARKINGS AND SIGNALIZATION**  
(Function Code 162)

**PAVEMENT MARKINGS:**

The ENGINEER will provide pavement marking layouts for the needed construction repairs along the project limits. The services will include:

1. Signing and Markings Layout
    - a. Roadway layout
    - b. Center line with station numbering
    - c. ROW lines
    - d. Culverts and other structures that present a hazard to traffic
    - e. Location of utilities, if not shown on plan and profile
    - f. Existing signs to remain, to be removed, to be relocated
    - g. Proposed signs (illustrated and numbered)
    - h. Existing overhead sign bridges to remain, to be revised, removed or relocated
    - i. Proposed overhead sign bridges indicating location by plan layout (electrical details need not be shown on this layout)
    - j. Proposed markings (illustrated and quantified) which include pavement markings, object markings and delineation
    - k. Quantities of existing pavement markings to be removed
    - l. Proposed delineators and object markers
  
  2. For projects involving freeway to freeway or other types of directional interchanges, projects including left-hand ramps or connections, the following information must be provided:
    - a. The location of interchanges, main lanes, grade separations, frontage roads and ramps
    - b. Complete explanation of the sequence and methods of stage construction, where applicable, which would include the initial and ultimate proposed treatment of crossovers and ramps
    - c. The number of lanes in each section of proposed highway and the location of changes in number of lanes
    - d. The projected traffic volumes as provided by the STATE (20 year traffic projection, unless otherwise determined by the District Engineer)
    - e. Tentative ROW limits
    - f. Direction of traffic flow on all roadways
    - g. Main lane, ramp, frontage road and necessary cross road profiles at proposed interchanges or grade separations
  
  3. Summary of Small Sign Tabulation
  
  4. Summary of Large Sign Tabulation including all Guide Signs (if applicable)
  
  5. Sign Detail Sheets
    - a. All signs except for route markers
    - b. Design details for large guide signs
    - c. Dimensions of letters, shields, borders, corner radii, etc.
    - d. Designation of shields attached to guide signs
    - e. Designation of arrow used on exit direction signs
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EXHIBIT "C"  
SCOPE OF SERVICES TO BE PROVIDED BY THE ENGINEER

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6. Traffic Signals (if applicable)
  - a. Development of Justification (Warrant) Data
    - i. Location Map
    - ii. Photographs as appropriate
    - iii. Accident data as appropriate
    - iv. Vehicle volumes (existing, estimated, projected, and pedestrian)
    - v. Traffic Survey – Count Analysis
    - vi. Recommendation based on the collected data
  - b. Layout
    - i. Title Sheet (when applicable)
      1. Describe the location
      2. Type of installation
      3. Area map with project limits for each location
      4. Index of sheets
      5. Space for official signatures
    - ii. Estimate and quantity sheet (when applicable)
      1. List of all bid items
      2. Bid item quantities
      3. Specification item number
      4. Paid item description and unit of measure
    - iii. Basis of estimate sheet
    - iv. General notes and specification data sheet
    - v. Condition Diagram
      1. Highway and intersection design features
      2. Roadside development
      3. Traffic control including illumination
    - vi. Plan Sheets(s)
      1. Existing traffic control that will remain (signs and markings)
      2. Existing utilities
      3. Proposed highway improvements
      4. Proposed installation
      5. Proposed additional traffic controls
      6. When applicable, proposed conduit for Railroad interconnect with standard details for runs under tracks
      7. Proposed illumination attached to signal poles
    - vii. Notes for plan layout
    - viii. Elevation sheet(s) (span wire design)
    - ix. Phase sequence diagram(s)
      1. Signal locations
      2. Signal indications
      3. Phase Diagram
      4. Signal sequence table
      5. Flashing operation
      6. Preemption operation
      7. Interval timing, cycle length and offset
    - x. Construction Detail Sheets
      1. Poles, Detectors, Pull box and conduit layout & Controller Foundation
    - xi. Marking Details (when applicable)
    - xii. Barricade and warning sign standard sheet and any special details for work zone traffic control for special conditions
    - xiii. Aerial or underground interconnect details (when applicable)

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- c. General Requirements
  - i. Contact the local utility company
    - 1. Confirm Power Source
    - 2. Discuss route of aerial or underground interconnect cable
    - 3. Adjustment of overhead utility lines
  - ii. Prepare governing specifications, special provisions list and estimate
- d. Summary of Quantities

**MISCELLANEOUS ROADWAY**  
(Function Code 163)

**TRAFFIC CONTROL PLAN, DETOURS AND SEQUENCE OF CONSTRUCTION:**

The ENGINEER will provide a Traffic Control Plan (TCP) for the needed construction repairs along the project limits. TCP's are required for all projects; therefore a detailed TCP shall be developed when traffic handling during construction involves complications for which a feasible solution is not covered by the Texas MUTCD or the current Barricade and Construction (BC) standards. The following items are required on all TCP Layouts:

- 1. The Sequence of Construction and method of handling traffic during each phase
- 2. Roadway layout
- 3. Center line with station numbering
- 4. The existing and proposed traffic control devices that will be used to handle traffic during each construction sequence. Include signals, regulatory signs, warning signs, construction warning signs, guide signs, route markers, construction pavement markings, channelizing devices, portable changeable message signs, flashing arrow boards, barricades, barriers, etc...
- 5. The proposed traffic control devices (stop signs, signals, flag person, etc.) at grade intersections during each construction sequence.
- 6. Where detours are provided, typical cross sections shall be shown.
- 7. Road construction work hours shall be developed after an investigation of the traffic volumes has been performed.

**COMPUTE AND TABULATE QUANTITIES:**

The ENGINEER will provide a summary of quantities sheet in the plans identifying all estimated project quantities.

**PROJECT ESTIMATE:**

The ENGINEER will provide a project estimate summarizing all estimated construction costs.

**SPECIFICATIONS AND GENERAL NOTES:**

The ENGINEER will provide all relevant project specification and general notes to the project construction activities.

**PROJECT MANAGEMENT**  
(Function Code 164)

**MEETINGS, COORDINATION & SUPPORT FOR PROJECT MANAGEMENT:**

The ENGINEER shall meet and coordinate with all relevant entities (i.e. County, Regional Mobility Authority, Texas Department of Transportation, Rio Grande Valley Metropolitan Planning Organization, etc...) and all other affected parties. The Engineer shall serve as representative for the Owner in coordination items. The Engineer shall coordinate with the Owner's staff on all Project related items.

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**BRIDGE DESIGN**

(Function Code 170)

**BRIDGE DESIGN:**

The ENGINEER will provide bridge design and bridge layouts for the needed construction repairs along the project limits. The services may include the following type of bridge structures:

1. Preparation of Structural Details for New Structures
  - a. Underpass
  - b. Overpass
  - c. Main Lane
  - d. Direct Connector
  - e. Ramp Bridge
  - f. Waterway Structure\*\*
  - g. Pedestrian Structure
  - h. Utility Structure
  - i. Railroad Underpass
  - j. Railroad Overpass
  - k. Bridge Classification Culvert\*\*

Total anticipated new structures shall be reflected on the fee proposal

2. Preparation of Structural Details for Existing Structures
  - a. Bridge widening, rehabilitation and/or modification of existing structure
  - b. Bridge replacement
  - c. Raising bridge elevation
  - d. Bridge classification culvert widening and/or modification of existing structure
  - e. Railroad overpass
  - f. Railroad underpass

Total anticipated existing structures shall be reflected on the fee proposal

\* Contour plots of bridge gores are required for projects involving ramps within the main bridge in order to ensure project transition. The Template data and vertical alignment necessary to generate the contour plots are also required.

\*\* In the early stages of a project, it sometimes cannot be determined whether a Waterway Bridge Structure or a Bridge Classification Culvert (20' minimum length) will be required. Therefore, the ENGINEER should be aware that either of these two types of bridges may be reclassified later in the project for the other type when more information is known that would dictate a change in structure classification.

3. Preparation of Bridge Layouts (each Bridge)
  - a. Bridge Layout (Plan)
    - i. Horizontal curve information or bearing of centerline
    - ii. Including horizontal, vertical, and template information of all roadways or railroads crossed
    - iii. Bearing of center line or reference line
    - iv. Skew angle
    - v. Slope for header banks and approach fills
    - vi. Control stations at beginning and ending of bridge (with deck elevation), intersections, etc.
    - vii. Approach pavement and crown width
    - viii. Bridge roadway width and curbs, face of rail, shoulders, or sidewalks

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- ix. Approach slab and curb returns
  - x. Limits and type of riprap
  - xi. Proposed features under structure
  - xii. Location of profile grade line
  - xiii. North arrow
  - xiv. Typical bridge roadway section including preliminary proposed beam types and spacings
  - xv. Cross slope and super elevation data
  - xvi. Minimum horizontal clearances when applicable
  - xvii. Location of soil core holes (station & offset), shown on layout
  - xviii. Bent stations and bearings
  - xix. Retaining wall locations
  - xx. Traffic flow directional arrows
  - xxi. Railing types shown
  - xxii. Joint types and seal size, if used
  - xxiii. Beam line numbers consistent with span details
  - xxiv. Critical horizontal clearances
  - xxv. Bearings of utilities
  - b. Bridge Layouts (Elevation)
    - i. Type of foundation
    - ii. Finished grade elevations at beginning and end of bridge
    - iii. Overall length of structure
    - iv. Length, type of spans and units
    - v. Type of railing
    - vi. Minimum calculated vertical clearance(s)
    - vii. Existing and proposed ground lines clearly marked
    - viii. Grid elevations and stations
    - ix. Bent numbers encircled
    - x. Stationing of bridge compatible with grid stations
    - xi. Standard title
    - xii. Profile grade data
    - xiii. Type of riprap
    - xiv. Soil Core Hole Information with penetrometer test data (shall be shown on the bridge layout at correct station, elevation and scale)
    - xv. Fixed/expansion condition of all bents
    - xvi. Column "H" heights
    - xvii. Number, size and length of foundations
  - c. Additional layout requirements for waterway structures and bridge classification culverts
    - i. Design and 100-year peak discharges
    - ii. Design and 100-year high water (recorded data and date if available)
    - iii. Natural and through-bridge velocities for design and 100-year floods
    - iv. Calculated backwater for design and 100-year floods
    - v. Direction of flow for waterway crossings
    - vi. Contours for water crossing
4. Bridge Classification Culvert, Estimate, Quantities, and Specification (Each Bridge)
5. Foundation Studies (The minimum number of soil core holes shall be obtained in accordance with Section 1-301 of the Bridges and Structures Foundation Exploration and Design Manual. Soil core holes shall be obtained at approximately (300 foot) intervals along bridge alignments. Texas cone penetrometer (TCP) tests shall be conducted in all soil types encountered at a maximum of (10
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foot) intervals. If single column bents with single drilled shafts are planned, TCP values should be taken at close intervals in the upper (15 feet.)

6. Bridge Total Quantities and Cost Estimates (Each Bridge)
  7. Bridge Special Provisions and Specifications (Each Bridge)
  8. Bearing Seat elevations for each beam or girder. Top of cap elevations for non-beam type structures.
  9. General Guidelines for Bridge Design
    - a. The ENGINEER shall prepare a bridge layout of each bridge structure for Company's review and approval. The bridge layout shall be in conformance with the Bridges and Structures, Operation and Planning Manual and the Bridges and Structures, Detailing Manual. Soil core hole data is not required for submission of the preliminary bridge layout. **No bridge design work is to be performed until the LPA has given the engineer written approval of the preliminary bridge layout.**
    - b. Several months may be required, after the preliminary bridge layout is submitted, for the district to obtain approval and/or permits from the following:
      - i. TxDOT Design Division, when applicable
      - ii. Railroad companies
      - iii. FHWA
      - iv. USACOE
      - v. US Coast Guard
      - vi. Bureau of Reclamation
      - vii. Texas Parks & Wildlife
      - viii. Others
    - c. Therefore, the bridge layout should be submitted at the earliest possible date and the ENGINEER's design schedule should reflect this.
    - d. All Bridge superstructure and substructure design will be reviewed by the TxDOT Design Division for purposes of verifying structural integrity and optimization of design.
    - e. The final bridge layout shall be in conformance with the Bridges and Structures, Operation and Planning Manual and the Bridges and Structures Detailing Manual.
    - f. The ENGINEER shall make final design calculations and final detail drawings in accordance with standard requirements of the Texas Department of Transportation. All bridge design shall be in conformance with the TxDOT Bridges and Structures Operation and Planning Manual, the current American Association of State Highway and Transportation Officials or American Railway Engineers Association Specifications for railway structures, Standard Specifications for Highway Bridges, including applicable interim specifications, and the Bridges and Structures, Foundation Exploration and Design Manual. The ENGINEER shall furnish design calculations to the Design Division. **The designer and checker shall check all calculations and initial each page.**
    - g. Structural steel or prestressed concrete shop drawings, form work drawings and false work drawings are not part of the design requirements. However, contract plans shall be in sufficient detail to permit the preparation of complete shop details for fabrication and erection.
    - h. Elements of the bridge (abutments, bents, slabs, etc.) shall be detailed to a metric scale of 1:20 (1/2 inch equals one foot architect scale) or 1:50 (1/4 inch equals one foot architect scale) to provide clear legible drawings when the drawings are reduced. Lettering 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).
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- i. Standard drawings for beams, diaframs, railings, armor joints, riprap, etc., shall be furnished to the ENGINEER upon request. These standards shall not be redrawn by the ENGINEER nor shall his title block be transferred to the standard drawings. Modifications to the standards, if necessary, shall be clearly identified and designated by "MOD" in the standard title. Specific special drawings prepared by the ENGINEER shall not be identified as standards.
- j. Bridge layout sheets shall have the same vertical and horizontal scale. Usually a metric scale of 1:100 (1 inch = 10 feet) or 1:200 (1 inch = 20 feet) is used. Sections of existing and proposed structures usually have a metric scale of 1:50 (1 inch = 5 feet). Soil core holes shall be positioned and labeled on the bridge layout plan view. The core hole data shall be plotted at the correct station, at the same vertical scale, and at the proper elevation unless otherwise approved by the Design Division.
- k. APPENDIX C, "GENERAL PLAN CHECKLIST", on pages C-1 thru C-5, more specifically relates various sheet types, details, summaries, standards, etc.
- l. For purposes of uniformity statewide, soil core hole data shall be shown on layouts as illustrated in the Bridges and Structures Foundation Exploration and Design Manual.
- m. Geometry and structural design errors found after acceptance of bridge plans shall be promptly corrected by the consultant at no cost to the Company.

### CONSTRUCTION PHASE SERVICES

(Function Code 320)

The ENGINEER will provide engineering, geotechnical testing and support services for and during the construction of the Project or portions of the Project approved by the LPA. Specific (basic and special) services for CONSTRUCTION MANAGEMENT AND SUPPORT by the ENGINEER will include the following:

#### **CONSTRUCTION BIDDING:**

1. The ENGINEER will furnish the LPA the necessary copies of approved plans, specifications, notices to bidders, and proposals as prepared under PS&E.
2. The ENGINEER will assist the LPA on the tabulation of bids, recommendations to the Owner as to the proper action on all bid proposals received, and the preparation of formal contract documents for the award of each construction contract.

#### **CONSTRUCTION CONTRACT ADMINISTRATION AND INSPECTION:**

3. In general, the ENGINEER will provide the management and engineering support/data required for consultation and advisement to the LPA and act as the LPA's representative as provided in the General Condition of the Construction Contract.
  4. The ENGINEER will coordinate and conduct a pre-construction conference (if required).
  5. Defects and Deficiencies. The ENGINEER will use his best efforts to protect the LPA against defects and deficiencies in the work of the Contractor. The ENGINEER will promptly notify the LPA of any such defect or deficiency, and take all steps possible to require the Contractor to correct the defect or deficiency.
  6. Contractor Payment. The ENGINEER will review quantities as submitted by the Contractor and will coordinate with the LPA for the preparation of the monthly and final estimates for payment to the Contractor.
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7. The ENGINEER will provide Project site inspection of the authorized construction contract as follows:
  - a. Project Engineer. The ENGINEER will provide visits by the Project Engineer or a competent representative of the ENGINEER to the site of construction for the purpose of monitoring the Contractor’s progress and conformance to the construction contract plans and specifications.
  - b. Resident Engineer and/or Construction Inspector(s). The ENGINEER will furnish the services of a Resident Engineer and/or Construction Inspector(s) for on the site inspection construction to monitor/inspect the Contractor’s daily progress and conformance to TxDOT’s PS&E specifications.

**MISCELLANEOUS TECHNICAL ACTIVITIES:**

8. Shop Drawings. The ENGINEER will review and check all shop or working drawings furnished by the Contractor.
9. Control of Materials & Equipment. The ENGINEER will provide inspection of all materials and equipment furnished/used by the Contractor as follows:
  - a. Review and record all laboratory, shop and mill tests of materials and equipment for compliance with the construction contract specifications.
  - b. Observe and/or perform Project record testing and/or independent assurance testing as outlined in the construction contract specifications.
10. Change Orders. When applicable the ENGINEER will prepare the engineering data, including plan sheet drawings, specifications, and estimates, for the preparation of construction contract change orders, which may be required due to actual field conditions encountered or new requirements directed by the LPA.
11. As Built Drawings. The ENGINEER will develop as built drawings to depict the work as actually constructed. The LPA will be furnished five (5) set of prints.

**CONSTRUCTION MATERIAL TESTING:**

The ENGINEER will provide the LPA with construction material testing services for the Project. The services to be provided include sampling and testing of all construction materials as required by the project plans and specifications. All sampling frequencies and test procedures will be performed in general accordance with the Texas Department of Transportation TEX methods (or ASTM methods as required) as outlined in the Guide Schedule for Sampling and Testing (11/07). The construction material testing includes, but is not limited to the following:

- a. 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.
  - b. Field density testing of soils and base 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.
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- e. Field inspection, sampling and laboratory testing of asphalt materials to determine their material properties and their compliance with project plans and specifications.
- f. The ENGINEER will be responsible for concrete batching as well as the asphalt testing at the plants to insure delivery of acceptable material to the job site.
- g. Any additional laboratory testing as required/requested by the LPA and the project plans and specifications.
- h. Providing accurate and timely reports to the LPA and all/other recipients as designated by the LPA.
- i. The ENGINEER will verify the concrete and asphalt designs to assure it is in accordance with TxDOT specifications to be developed by the contractor.

**ROW ACQUISITION PROVIDER SERVICES**

(Function Code 600)

The ENGINEER will perform the following tasks associated with ROW Acquisition Services:

- 1. Project Administration
    - a. Negotiation of Scope of Services for the Work Authorization
      - i. The Acquisition Provider will visit the project site with LPA personnel if necessary.
    - b. Project Presence at ENGINEER’s Office
      - i. ENGINEER will provide a full project office
        - 1. No joint use of LPA or STATE facilities
        - 2. Office will be open during normal LPA and/or STATE work hours
        - 3. Personnel will be available to answer any questions
        - 4. Project files will always be available for review
        - 5. At least one office staff member is required to be a current commissioned notary public.
    - c. Overhead Costs
      - i. Administrative Costs
    - d. Communication
      - i. ENGINEER will provide monthly progress reports with invoice
      - ii. ENGINEER will participate in project review meetings as determined by the LPA
      - iii. ENGINEER will prepare initial property owner contact list for use by the LPA in distribution of Acquisition Provider introduction letters
    - e. File Management
      - i. The project and parcel files will be kept in the LPA’s office, if necessary. Working files will be kept in the Acquisition Provider’s project administrative office, but documents generated or received by the Acquisition Provider will be forwarded to the LPA’s office as they are generated or received by the Acquisition Provider, if necessary.
      - ii. The ENGINEER will prepare payment transmittal request utilizing standard payment submissions forms with supporting documentation.
      - iii. The ENGINEER will maintain records of all payments including check number, amount, date paid, etc.
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- iv. The ENGINEER will provide copies of all incoming and outgoing correspondence as generated if requested by LPA at provider conference.
  - v. The ENGINEER will maintain copies of all correspondence and contact with property owners.
2. Title Services
- a. Secure preliminary title commitments from the Title Company that will be providing title insurance. Cost of preliminary title commitments will be paid by the Acquisition Provider (if requested by the title company) and will be included in the Acquisition Provider’s scope of work for payment and paid as a separate item.
  - b. Secure title commitment updates in accordance with insurance rules and requirements for parcel payment submissions. Cost of title commitment updates will be paid by the Acquisition Provider (if requested by the title company) and will be included in the Acquisition Provider’s scope of work and paid as a separate item.
  - c. Secure title insurance for all parcels acquired, insuring acceptable title to the LPA. Written approval by the LPA is required for any exception.
3. Appraisal
- a. Appraiser may be selected from TxDOT’s list of state approved fee appraisers. This list will be available for review at all District offices or at the Right of Way Division Office at 118 E. Riverside Drive, Austin, Texas, upon request.
  - b. Secure written permission (if necessary) from the owner to enter the property from which land is to be acquired. If the Acquisition Provider and/or the fee appraiser, after diligent effort, is unable to secure the necessary letter of permission from the property owner, a waiver must be obtained, in writing from the LPA/TxDOT. Maintain permission letters with appraisal reports.
  - c. Prepare (if necessary) pre-appraisal contact with interest owner(s) for each parcel using acceptable LPA/TxDOT forms.
  - d. Contact property owners or their designated representative to offer opportunity to accompany the appraiser on the appraiser’s inspection of subject property. Maintain record of contact in file.
  - e. Prepare complete appraisal report for each parcel to be acquired utilizing TxDOT Forms No. ROW-A-5 and ROW-A-6 as applicable. These reports shall conform to TxDOT/LPA policies and procedures along with the Uniform Standards of Professional Appraisal Practices.
  - f. As necessary, prepare written notification to LPA/TxDOT of any environmental concerns associated with the right of way to be acquired which could require environmental remediation.
  - g. All completed appraisals will be administratively reviewed by the ENGINEER’s ROW office and recommended for approval for TxDOT.
  - h. As necessary, the appraiser will appear and or testify as an Expert Witness in eminent domain proceedings and be available for pre-hearing /pre-trial meetings as directed by the ENGINEER and/or TxDOT.
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- i. As necessary, the appraiser will coordinate with the review appraiser regarding revisions, comments, or additional information that may be required.
  - j. The cost of the appraiser appearing as an expert witness for testimony at special commissioners hearing must be included in the proposed fee schedule for the appraiser. The cost of the appraiser's expert witness testimony for trial is not part of this contract, and shall be paid by the LPA.
4. Appraisal Review
- a. Review Appraisers may be selected from TxDOT's list of state approved fee appraisers. This list is available for viewing at all District offices or the Right of Way Division office at 118 E. Riverside Drive, Austin, Texas upon request.
  - b. Review all appraisal reports for each parcel to determine consistency of values, supporting documentation related to the conclusion reached and compliance with TxDOT/LPA policies and procedures and the Uniform Standards of Professional Appraisal Practices.
  - c. Prepare and submit to TxDOT the Form ROW-RTA-10 "Tabulation of Values" for each appraisal.
  - d. The cost of the review appraiser appearing as an expert witness for testimony at special commissioners hearing must be included in the proposed fee schedule for the review appraiser. The cost of the appraiser's expert witness testimony for trial is not part of this contract, and shall be paid by the LPA.
5. Appraisal Updates
- a. Prepare complete appraisal update for the parcel to be acquired utilizing TxDOT Form No. ROW-A-5, which will be furnished to the provider by TxDOT. These reports shall conform to LPA/TxDOT policies and procedures along with the Uniform Standards of Professional Appraisal Practices.
  - b. As necessary, prepare written notification to LPA/TxDOT of any environmental concerns associated with the right of way to be acquired which could require environmental remediation. All completed appraisals will be administratively reviewed by the ENGINEER's Right of Way Office and recommended for approval to TxDOT.
  - c. As necessary, the appraiser will appear or testify as an Expert Witness in eminent domain proceedings and be available for pre-hearing or pre-trial meetings as directed by the TxDOT/LPA.
  - d. The cost of the appraiser appearing as an expert witness for testimony at special commissioners hearing must be included in the proposed fee schedule for the appraiser. The cost of the appraiser's expert witness testimony for trial is not part of this contract, and shall be paid by the LPA.
  - e. As necessary, the appraiser will coordinate with the review appraiser regarding corrections and/or additional information that may be required.
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6. Negotiation, Tasks and Fees

- a. Analyze appraisal and appraisal review reports and confirm the TxDOT's approved value prior to making offer for each parcel.
- b. Analyze preliminary title report to determine potential title problems, propose methods to cure title deficiencies.
- c. Prepare the initial offer letter, instruments of conveyance, and any other documents required or requested by LPA /TxDOT on applicable LPA /TxDOT forms.
- d. Mail (Certified Mail Return Receipt Requested) initial offer letter, draft deed, Bill of Rights Brochures and Appraisal Reports to address confirmed with the Appraisal District of Hidalgo County. Maintain follow-up contacts and secure the necessary instruments upon acceptance of the offer for the closing.
- e. Provide a copy of the appraisal report for the subject property exclusively to the property owner or authorized representative at mailing of initial offer. Maintain original signed Receipt of Appraisal. (unless property owner refuses to sign it).
- f. Respond to property owner inquiries verbally and in writing within two business days.
- g. Prepare a separate negotiator contact report for each parcel per contact.
- h. Maintain parcel files of original documentation related to the purchase of the real property or property interests.
- i. Advise property owner on the Administrative Settlement process. Transmit to TxDOT any written counter offer from property owners including supporting documentation, and provider recommendation with regard to Administrative Settlements in accordance with LPA /TxDOT policy and procedures.
- j. Prepare final offer letters and documents of conveyance as necessary.
- k. Appear and provide expert witness testimony as an Acquisition Provider when requested.
- l. Meet at the ENGINEER's ROW office once per week as agreed upon with the ROW Acquisition Manager/Administrator.
- m. Provide a monthly progress report per parcel by the last day of the month with invoice.
- n. The ENGINEER shall, as part of this proposal, estimate 10% of the proposed parcels may end up in condemnation. The ENGINEER's ROW staff shall be available for any meeting/hearings as requested by the LPA Attorney.

7. Closing Service Fees

- a. Coordinate with the LPA and Title Company to obtain an updated title commitment along with other Forms and certified copy of the instrument of conveyance necessary when requesting the Parcel Payment from the LPA.
  - b. The ENGINEER's ROW staff shall attend closings and provide closing services in conjunction with the Title Company.
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- c. The ENGINEER's ROW staff shall record all original instruments immediately after closing at the respective County Clerk's Office, except for donations which must be forwarded to TxDOT for acceptance by the Texas Transportation Commission.
  8. Relocation Assistance Services (A separate Work Authorization will be issued once the number of relocations have been quantified, unless noted otherwise)
    - a. The ENGINEER's ROW staff will provide relocation advisory services based on the amount of relocations or displacements identified. The ENGINEER's ROW staff will compute replacement housing supplements (owner occupant and/or tenants).
    - b. The ENGINEER's ROW staff will provide advisory services to business displacements and relocate them effectively.
    - c. TxDOT will review, approve and pay for all relocation costs for On-System projects only.
  9. Condemnation Support
    - a. Pre-Hearing Support
      - i. Upon receipt of a copy of the final offer, request an updated title commitment for Eminent Domain from the Title Company.
      - ii. Prepare a Bisection Clause for the original set of Legal Descriptions supplied by Surveyor if applicable.
      - iii. Use the information from the Title Commitment to join all interested parties on the necessary forms. Spouses of owners must also be joined.
      - iv. Upon completion of the necessary forms, prepare a packet containing 2 copies each of the following documents: Title Commitment, Negotiator's Reports, Appraisal Acknowledgment, Pre-appraisal Contact Sheet, signed and sealed property description, and plat, Final Offer Letter, any correspondence from the land owner or representatives, along with one copy of the appraisal report. Submit packet to the LPA Office for submission to the LPA Attorney's office.
      - v. Upon receipt of concurrence for the Appraisal Witness, request the update of appraisal.
      - vi. Upon receipt of packet prepared by the LPA Attorney which will include Petition for Condemnation, Lis Pendens, Order Appointing Special Commissioners, Order Setting Hearing, Oath of Special Commissioner, and Notice of Hearings, developed by the LPA Attorney; the attorney shall file the original petition with the LPA Court at Law or other appropriate Court for a cause number to be assigned.
      - vii. The LPA attorney shall file the Lis Pendens including the cause number with the COUNTY Clerk's Office.
      - viii. Upon assignment of a court, the LPA Attorney shall file the Order Appointing Commissioners with the judge retaining a copy of the Order for the files.
      - ix. Following appointment of Special Commissioners by the judge, the LPA shall secure the following documents: Oath of Commissioners signed by the Commissioners, Order Setting Hearing, 2 copies of the Notice of Hearing signed by the Commissioners.
      - x. The LPA shall file all originals with the court and send copies marked "copy" to the ENGINEER.
      - xi. The LPA Attorney shall send a copy of the petition to the Title Company so that the Title Company can make sure the appropriate parties were joined and that no changes in title have occurred.
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- xii. The LPA Attorney shall set the Special Commissioners Hearing after the updated appraisal has been submitted, if there is no change in value. If there is an increase in value, the LPA will approve the new value and the LPA’s provider will present a revised offer and a final offer letter and submit a copy of the final offer letter.
- xiii. The LPA Attorney shall coordinate a pre-hearing conference prior to the hearing (the day before or earlier) to discuss facts of the case with the LPA, Appraiser, and Negotiator.
- xiv. After the hearing is set, the LPA Attorney shall serve Notices of Hearing to the indicated parties at least 11 days prior to the Commissioner’s hearing. If it is necessary to join the Federal Government, be advised that they have an additional 60 days to prepare for the Hearing.
- xv. Once the notices have been served, the LPA Attorney shall file the original notices with the court and send copies stamped “copy” to the ENGINEER’s ROW Office.
- xvi. The LPA’s Attorney shall send a reminder letter 2-3 weeks in advance to the LPA Administration offices, Acquisition Provider, the three special commissioners and court reporter concerning Hearing dates.

b. Post Hearing Support (by the LPA Attorney)

- i. For the hearing, prepare the necessary forms and Special Commissioners time sheets and submit forms to the LPA.
- ii. Obtain the signatures of Special Commissioners on the Award of Commissioners and file with the court for the judge’s signatures within 48 hours of the Hearing.
- iii. Give timesheets to the Judge. The amount paid to the Special Commissioners is determined by the Judge.
- iv. Obtain and distribute 3 certified copies of the award as follows: 1 certified copy to the title company with a request for a commitment, 1 certified copy to the LPA, 1 certified copy to the ENGINEER with the Commitment to request the warrant in the amount of the Special Commissioners Award.
- v. Send the Commitment and the Award to LPA, along with individual special commissioner's billing requesting the payment for their fees.
- vi. File LPA warrant in the registry of the court. File a Notice of Deposit with the court and send certified copies to each defendant notifying them of the date of the deposit. The Date of Deposit is the Date of Take.
- vii. Take photograph of the interest to be acquired (if necessary) on the day of deposit for relocation verification.
- viii. Send written notices of the date of deposit to the LPA Administration office and all interested parties.
- ix. Appear as Expert Witness as requested. Sub-contractors must also appear as Expert Witnesses as requested.
- x. All acquisition negotiations file indicating all “due diligence” provided by the Acquisition Provider will be directed to the LPA Attorney’s office for his further handling in accordance to the Eminent Domain process by the LPA.

10. Compensable Utilities

Utility Accommodation is an integral factor in road construction and design. Coordination of utility adjustments is a necessary function within planning, design, acquisition and construction and requires the administration of property rights issues, utility policy, and reimbursement of eligible utility adjustments. It includes the following tasks:

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

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- a. Preliminary Design Consultations
    - i. Conduct Field Investigation and review Certificate of Convenience and Necessity boundaries to identify utility providers within the project area. Communications through letter, phone calls and email to establish a contact list. Coordinate data gathering by surveyors and design team. Introduce project to utility providers.
  - b. Field Observations and Verifications
    - i. Provide maps to Utility providers to “redline” and identify conflicts. Coordinate exposures and data collection by surveyor. Provide and confirm utility data on project maps. Order Utility Location Service.
  - c. Exchange of Information with Utility Providers
    - i. Provide project schedule
    - ii. Request schedules for utility adjustments
    - iii. Identify who is responsible for utility process
  - d. Confirmation of Property Interests
    - i. Request Documents
    - ii. Coordination of data on maps and citation of property interest documents
    - iii. Confirm utilities are within easements
  - e. Coordination of Agreements
    - i. Identify utilities that are compensable
    - ii. Determine parties and agreements necessary to complete compensable process
    - iii. Coordinate execution and processing of Standard Utility Agreements
  - f. Utility Meetings Throughout Project Development
    - i. Set up and coordinate utility meetings during planning, design, acquisition and construction phases
    - ii. Attend and participate in meetings by other parties
11. Payment Schedule
- a. Project Administration
    - i. Payment and Milestones
      - 1. Full Project Office
        - a. Lump Sum Basis (assume 1 year project presence)
        - b. Initial payment of 25% upon establishment of a project office with functional phone and utility service
        - c. Remainder paid out in equal monthly installments of 15% starting the following month
        - d. Monthly billing to LPA will be required
  - b. Title Services
    - i. Payment on a Per Parcel basis
    - ii. Milestone will be 100% upon securing initial title commitment
  - c. Appraisal Services
    - i. Payment on a Per Parcel basis
    - ii. Milestone will be 100% upon delivery of complete and acceptable appraisal report
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EXHIBIT "C"  
SCOPE OF SERVICES TO BE PROVIDED BY THE ENGINEER

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- d. Appraisal Review
    - i. Payment on a Per Parcel basis
    - ii. Milestone will be 100% upon submission of form ROW-A-10
  
  - e. Appraisal Update
    - i. Payment on a Per Parcel basis
    - ii. Milestone will be 100% upon complete and acceptable appraisal update
  
  - f. Negotiation, Task & Fees
    - i. Payment on a Per Parcel basis
    - ii. Milestones
      - 1. 80% upon presentation of the initial offer
      - 2. 20% upon successful negotiation and all instruments recorded
  
  - g. Closing Service Fees
    - i. Payment on a Per Parcel basis
    - ii. Milestone will be 100% upon recordation of instrument of conveyance
  
  - h. Relocation Assistance
    - i. Payment on a Per Relocation basis
    - ii. Milestone will be 100% upon issuance of a 90-day vacancy letter
  
  - i. Compensable Utilities
    - i. Payment will be by a percent complete
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EXHIBIT "C"  
SCOPE OF SERVICES TO BE PROVIDED BY THE ENGINEER

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**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.

**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 LPA. The ENGINEER shall coordinate through the LPA 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 LPA's Director. Any replacements to the ENGINEER's designated Project Manager/Engineer must be approved by the LPA.

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 LPA 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 LPA will not relieve the ENGINEER of the responsibility for subsequent correction of any such errors or omissions or for clarification of any ambiguities.

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

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**DOCUMENT AND INFORMATION EXCHANGE:**

Data, Plan Sheets, General Notes and/or Specifications provided to the LPA 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 LPA.

If required, the ENGINEER shall provide to the LPA, a CD that contains all the plan sheets for the project. The graphics tape shall be compatible with the LPA'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 all services to be provided under this agreement out of their office located at: 2805 Fountain Plaza Blvd., Suite A, Edinburg, Texas 78539

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**PART 8. ACCEPTANCE AND APPROVAL**

This Work Authorization is hereby accepted, approved by Hidalgo County Commissioners' Court on (DATE) \_\_\_\_\_ as indicated below and effective as of \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

**THE ENGINEER:**  
GDJ ENGINEERING

**THE OWNER:**  
HIDALGO COUNTY

\_\_\_\_\_  
By: \_\_\_\_\_  
Print Name

\_\_\_\_\_  
By: Richard F. Cortez, County Judge

**ATTEST:**

\_\_\_\_\_  
By: Arturo Guajardo Jr., County Clerk



**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 \_\_\_\_\_, 20\_\_.

**THE ENGINEER:**  
GDJ ENGINEERING

**BY:** \_\_\_\_\_

Address for Giving Notices:

\_\_\_\_\_  
\_\_\_\_\_

**THE OWNER:**  
**HIDALGO COUNTY**

**BY:** \_\_\_\_\_  
Richard F. Cortez, County Judge

**LIST OF ATTACHMENTS**

(as required)

