THE STATE OF TEXAS §
§
COUNTY OF HIDALGO §

PROFESSIONAL SERVICES AGREEMENT
C-15-097-03-17

THIS AGREEMENT is made effective the 17th day of March, 2015 by and between **HIDALGO COUNTY, TEXAS,** ("County") and **L&G Consulting Engineers, Inc.** d/b/a **L&G Engineering,** of Mercedes, a Texas Corporation ("Engineer").

W I T N E S S E T H:

WHEREAS, the County is vested with the responsibility of providing **On-Call Services for "Road and Bridge, C.I.P. and Other Projects in General"** for projects within **Hidalgo County Precinct No. 2** (the "Services");

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

WHEREAS, pursuant to Texas Government Code Chapter 2254.002, (the "Texas Professional Services Procurement Act"), the County requested Statements of Qualifications (SOQ's) from a professional engineering to assist the County by providing the Services;

WHEREAS, County has selected the Engineer to provide the Services within **Hidalgo County Precinct No. 2,** in accordance to Exhibit "A-1" Request for Qualifications (RFQ) Procurement Packet.

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

1. Scope of Services. The County will provide to Engineer the services described in Exhibit "A" attached hereto and entitled "Services to be performed by County." Engineer agrees to provide to County with the work described in Exhibit "B", "Services to be performed by the Engineer".

2. 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

3. Term. This Agreement is for a period of 1 year, effective March 17, 2015 and will expire March 16, 2016 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 "Work Authorization".

4. Compensation. The maximum amount payable under this Agreement shall not exceed the amount for each work authorization 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 24 herein.

5. 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.

6. 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" within the 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 "C," "Engineering 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.

7. 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.

8. 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 may, at its own expense, have copies made of the documents or any other data furnished to the County under this Agreement.

9. 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.

10. 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 the project 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.

11. 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.

12. 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 agreement 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.

13. **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.

14. **Insurance.** Engineer agrees to provide liability insurance covering its activities in providing the Services for County in an amount not less than the minimum amounts prescribed by the Texas Tort Claims Act, §100.001, et seq., Texas Civil Practices and Remedies Code, and shall furnish County a certificate issued by the insurer that such insurance is in full force and effect.

15. **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.

16. **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.

17. **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.

18. **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.

19. 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.

20. 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.

21. 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.

22. Hold Harmless. In the event Engineer should cause, either directly or indirectly, damage, loss, destruction, liability, or claims against the other party as a result of intentional conduct, negligence or otherwise, Engineer shall hold harmless and indemnify County from any and all obligations, liabilities, cause of action, lawsuits, damages, and assessments, including legal fees, etc., that from the Engineer's intentional actions or negligence. This indemnification clause shall survive this Agreement and be enforceable as a separate agreement in the event its survival and enforcement becomes necessary.

23. 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 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.

24. Notices. Expect 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 302 W University Drive Edinburg, Texas 78539
If to Engineer:	L&G Engineering Attention: Jacinto Garza, P.E. 2100 W. Expressway 83 Mercedes, Texas 78570

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.

25. 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.

26. 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.

27. 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.

28. 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.

29. 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.

30. 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 ninety (90) days written notice to the 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 pursuant to the provisions of Tex. Loc. Govt. Code Ann. ' 271.903 (Vernon Supp. 1996).

31. Immunities. Nothing in this Agreement is 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.

EXECUTED as of the day and year first written above.

COUNTY:
COUNTY OF HIDALGO, TEXAS

By: _____
Hon. Ramon Garcia, County Judge

ENGINEER:
L&G ENGINEERING

By: _____

Printed Name Jacinto Garza, P.E.

Title: President

ATTEST:

_____
Arturo Guajardo Jr., County Clerk

Approved by Commissioners' Court on: _____ , 2015.

APPROVED AS TO FORM:
Atlas, Hall & Rodriguez, L.L.P.

By:_____
Stephen L. Crain, Attorney

ATTACHMENTS:

EXHIBIT A	-Scope of Services to be provided by the County
EXHIBIT B	-Scope of Services to be provided by the Engineer
EXHIBIT C	-Engineer's Rates
EXHIBIT D	-Work Authorization Form
EXHIBIT E	-Supplemental Agreement Form
EXHIBIT F	-Certificates of Insurance

EXHIBIT A-1

-Request for Qualifications (RFQ) Procurement Packet

EXHIBIT A

-Scope of Services to be provided by the County

The following provides an outline of the services to be provided by the Owner in the development of Projects (as defined and more particularly identified in Exhibit "A" attached to this Agreement).

General:

The Owner will provide to the Engineer the following:

1) Provide the authorization to proceed with services through coordination with the project consulting and design Engineer.
2) Payment for work performed by the Engineer and accepted by the Owner in accordance with Article 3 of this Agreement.
3) Assistance to the Engineer, as necessary, to obtain the required data and information from other local, regional, State and Federal agencies the Engineer cannot easily obtain.
4) Provide any available relevant data the Owner may have on file concerning the projects.
5) Provide timely review and decisions in response to the Engineer's request for information and/or required submittals and deliverables, in order for the Engineer to maintain the agreed upon work schedule prepared in accordance with Exhibit "A" attached to this Agreement.
6) Attend and participate in progress meetings as required and as coordinated and conducted by Engineer.
7) Provide the authorization to proceed with services on project by project basis through consulting design and construction Engineer.

EXHIBIT B

-Scope of Services to be provided by the Engineer

EXHIBIT B

Scope of Services to be provided by the Engineer

SECTION I - 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

PROJECT/DESCRIPTION: On-Call Services for "Road and Bridge, C.I.P. and Other Projects in General"

ENGINEER shall mean L&G Engineering.

STATE shall mean Texas Department of Transportation.

COUNTY shall mean Hidalgo County.

EXHIBIT B

Scope of Services to be provided by the Engineer

SECTION 2 – FEASIBILITY STUDIES

(Function Code 102)

Services Provided By: ENGINEER	COUNTY	
—	—	Preliminary Design Values *The Engineer will work with the Owner to establish basic design concepts, project controls and general scope of Projects.*
—	—	Preliminary Route Locations on Uncontrolled Mapping *The Engineer will evaluate various alternatives (route locations, alignment shifts, geometry) for the Projects.*
—	—	Uncontrolled Mapping (w/Contours & GIS Info) *The Engineer will investigate the existing routes and coordinate with the Owner on establishing the best-fit alignments and mapping proposed geometry for Projects. Preliminary Location Exhibit will be developed.*
—	—	Preliminary Traffic Evaluations & Trends *The Engineer will investigate existing traffic models and trends for the proposed Projects and adjacent roadways tying into the proposed Projects.*
—	—	Preliminary Hydrologic Map *The Engineer will develop a Hydrologic Map for the Projects. Hydrologic Maps will be based on LIDAR and GIS information.*
—	—	Preliminary ROW Requirements *The Engineer will research and identify affected property owners on the Projects utilizing the latest appraisal district file information from Hidalgo County Appraisal District and information from Carson Maps.*
—	—	Preliminary Cost Estimates *The Engineer will calculate preliminary construction cost estimates for the location and geometry of the Projects.*
—	—	Preliminary Environmental Analysis (for fatal flaws) *The Engineer will perform Preliminary Environmental Constraint Mapping to determine if any fatal flaws exist along the proposed alignment.*
—	—	Project Fact Sheet with Est. Local Cost vs. Total Project Cost *The Engineer will produce a Project Fact Sheet providing summaries of all pertinent items in this scope of services (as required) and providing estimated local costs vs. total project costs for the Projects.*
—	—	Meetings, Coordination & Support for Project Development *The Engineer shall provide coordination services and shall assist in meetings and workshops with TxDOT, Hidalgo County, Hidalgo County Drainage District No. 1 and Hidalgo County Irrigation Districts, 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.*

EXHIBIT B

Scope of Services to be provided by the Engineer

SECTION 3 - ROUTE AND DESIGN STUDIES

(Function Code 110)

Services Provided By: ENGINEER	COUNTY		
___	___	1.	Route Location Studies*
___	___	2.	Level of Service Analysis
___	___	3.	Traffic Evaluations and Projections
___	___	4.	Develop Roadway Design Criteria
___	___	5.	Preliminary Cost Estimates
___	___	6.	Design Schematic (See Section 7, page 7-1 for schematic layout requirements)
___	___	7.	Preliminary Right-of-Way Requirements
___	___	8.	Design Concept Conference
		9.	~~Soil Core Hole Drilling~~ - **OMITTED**
___	___		a. Pavement (See Section 7, page 7-3 for requirements)
___	___		b. Retaining Walls (See Section 10, page 10-1 for requirements)
___	___		c. Miscellaneous Structures (See Section 10, page 10-3 for requirements)
___	___		d. Bridges (See Section 11, page 11-3 thru 11-4 for requirements)

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

EXHIBIT B

Scope of Services to be provided by the Engineer

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

Services Provided By: ENGINEER	COUNTY	
		1. Environmental Reports All Environmental Reports shall be in accordance with 43 Texas Administrative Code (TAC) 2.40-2.51, Code of Federal Regulations, Title 23, Part 771 and Highway Design Operations and Procedures Manual, Part II-B.
		a. Environmental Assessments
___	___	(1) An Environmental Assessment shall be prepared, anticipating a Categorical Exclusion.
___	___	(2) An Environmental Assessment shall be prepared, anticipating a Finding of No Significant Impact.
___	___	(3) An Environmental Assessment shall be prepared, anticipating the need for a Draft Environmental Impact Statement.
		b. Environmental Impact Statement
___	___	(1) A Draft Environmental Impact Statement shall be prepared. After appropriate interagency and public reviews within time limits prescribed by the Code of Federal Regulations, Title 23, Part 771 and 43 Texas Administrative Code 2.40-2.51, a Final Environmental Impact Statement shall be prepared.
___	___	(2) A Section 4(f) Statement (Department of Transportation Act) shall be provided by the ENGINEER. The format and content of the statement is found in FHWA Technical Advisory T6640.8A.
		2. Public Involvement All public involvement procedures shall be in accordance with 43 Texas Administrative Code (TAC) 2.40-2.51, Code of Federal Regulations Title 23, Part 771 and Highway Design Operations and Procedures Manual, Part II-B.
___	___	a. A public involvement meeting(s)/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 COUNTY, 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 COUNTY.
___	___	a. Historic Structure Studies 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
___	___	(1) 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.
___	___	(2) Archeological reconnaissance will be performed under a Texas Antiquities Permit (13 TAC 26) signed for the Sponsor by a professional archeologist with the STATE.
___	___	(3) Archeological survey shall be performed under a Texas Antiquities Permit (13 TAC 26) signed for the Sponsor by a professional archeologist with the STATE.

EXHIBIT B

Scope of Services to be provided by the Engineer

Services Provided By: ENGINEER	COUNTY	
		4. Noise and Air Quality Analyses
___	___	a. Noise Analysis A noise analysis shall be prepared, including predicted noise levels and the consideration and evaluation of noise mitigation, in accordance with the STATE'S Noise Guidelines. The noise analysis 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 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.
___	___	5. Hazardous Materials The consultant shall perform an Initial Site Assessment (ISA) for hazardous materials impact in accordance with the American Society for Testing and Materials (ASTM) 1528.93 (Transaction Screen Process).
___	___	6. General Guidelines for Preparation of Environmental Documents
		a. The Biological Impact Evaluation Report will be prepared which will include water resources, threatened and endangered species, etc. and 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 through their FTP site.
		d. The administratively complete document will be prepared in accordance with the content and format of FHWA Technical Advisory T6640.8A and the TxDOT Administrative Code 43 TAC §2.44.
		e. The administratively complete document will be submitted to TxDOT electronically through their FTP site.
		f. Upon completion and approval of the administratively and technically complete document, the Engineer will provide one (1) hard copy to the Client, one (1) hardcopy to the district, and (3) hardcopies to TxDOT ENV.
		g. Exhibits in the environmental document shall be color copies and text shall be black and white.

EXHIBIT B

Scope of Services to be provided by the Engineer

~~SECTION 5 - RIGHT-OF-WAY DATA~~ - OMITTED

(Function Code 130)

Services Provided By: ENGINEER	COUNTY	
		NOTE: No work involving right-of-way (ROW) data is to be performed until the COUNTY has given the ENGINEER written approval of the final location of the proposed ROW lines as approved by TxDOT.
___	___	1. Ownership Data in a .dgn file a. 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 & Right-of-Way 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, signed and sealed by a Registered Professional Land Surveyor, for all parcels on the ROW Map b. Computation Sheets for Survey Closure and Area for Each Parcel. c. Ground surveys and preparation of parcel maps, legal descriptions, and right of way maps.
___	___	5. Survey and Stake Right-of-Way
___	___	6. Records as Required by the County and State a. Records used to establish ownership
___	___	7. General Guidelines for Preparation of Right-of-Way Maps *(Sample ROW Maps and Parcel Plats and field notes attached)* **GENERAL SPECIFICATIONS** 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.

EXHIBIT B

Scope of Services to be provided by the Engineer

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.
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.

EXHIBIT B

Scope of Services to be provided by the Engineer

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.

EXHIBIT B
Scope of Services to be provided by the Engineer

PHARR DISTRICT
ROW MAP CHECKLIST

Consultant:
Contract/WA# _____
Responsible Office: _____
TXDOT Project Manager: _____
County: _____
Highway: _____
RCSJ: _____
CCSJ: _____

As the responsible consultant project manager, I hereby certify that the attached ROW Map has undergone a QA/QC review, with the following applicable items specifically checked for accuracy, completeness and constructability (as noted by Checkmarks)

_____
Signature Date

_____
Printed Name

(This Checklist must be signed by the RPLS and turned in with all proposed ROW Projects. Pharr District ROW will not accept project without this checklist.)

MAP

GENERAL

___ All documents have been proofread and are accurate.
___ Title Commitments for each individual parcel.
___ Graphics files compatible with Microstation and Word software are provided.
___ Photos of proposed ROW staking included.
___ Field notes and Parcel Plats are numbered continuous.
___ Scale shall be 1"=50' or 1"=100".

TITLE SHEET REQUIREMENTS

___ Title and description of project including county, limits, etc....
___ Vicinity map with beginning and ending station
___ Equations and Exceptions
___ Index
___ Legend
___ Title block completely filled out with Construction and R.O.W. CSJ's
___ List all Major Utilities from Station to Station

INDIVIDUAL MAP SHEET REQUIREMENTS

___ Sheet size 34" X 22"
___ Text legible when reduced to half-scale.
___ Title block completely filled out with R.O.W. CSJ
___ Matchlines
___ Project layout sheet
___ Existing utility lines and easements, deed reference, as shown on Schedule "B" of the Title Commitment, and defined on parcel plats

EXISTING INFORMATION

___ R.O.W. lines

EXHIBIT B

Scope of Services to be provided by the Engineer

___ Whole property or whole property inset
___ Roadways
___ Survey, county, and city limit lines shown and labeled
___ Improvements shown and labeled *(see below)*
___ Monumentation i.e. P.C., P.T., Break Points
___ North arrow
___ Scale
___ Property lines
___ Property descriptions i.e., lot, block, tract, subdivision, etc...
___ Identify existing and proposed access denial locations *(if applicable)*

PROPOSED INFORMATION
___ Type II Monumentation i.e. P.C., P.T., Break Points and 1500' intervals
___ Survey and R.O.W. lines
___ Basis of bearings
___ Parcel bearings and distances correspond with traverse sheet
___ Outside ties (P.O.C.) corresponds with field notes
___ Point of beginning (P.O.B.) established on proposed R.O.W. line
___ Parcel tied to baseline
___ Baseline information shown i.e. Stationing, bearings, curve data, etc...
___ Conveyance information shown in tables i.e. parcel number, grantors name, amount of take, remainder etc...
___ Math checked on remainder

IMPROVEMENTS
___ Improvements bisected or within 25' of proposed R.O.W. line are shown on map with stationing and distance from proposed R.O.W. line. Buildings are labeled and dimensioned.
___ Off-premise outdoor advertising signs within proposed R.O.W. are shown and labeled.

UTILITIES
___ All utilities within or crossing existing and proposed right of way are shown and labeled as to size, easement or fee width, and recording data of instrument.
___ Location of underground storage tanks and/or filler caps are shown and labeled

**** DO NOT SEAL MAP***

FIELD NOTES HEADING
___ County
___ Highway
___ Parcel number
___ R.O.W. CSJ
___ Construction CSJ

GENERAL DESCRIPTION OR "PREAMBLE"
___ Area of parcel to be acquired is shown in acreage (0.000) for rural land and/or square feet (to nearest whole sq. ft.) for urban land or smaller parcels

PARENT TRACT DATA IS SHOWN
___ Size of parent tract
___ Survey data or lot, block, and subdivision
___ Name of last recorded seller and buyer
___ Date, volume and page or document number of last recorded conveyance
___ Records and county of last recorded conveyance

BEGINNING DESCRIPTION
___ Point of commencement is on outside tie and is described accurately by bearings and distances as it leads to the point of beginning.

EXHIBIT B

Scope of Services to be provided by the Engineer

___ Point of beginning is on proposed R.O.W. line

PARTICULAR DESCRIPTION

___ Traverse calls are clockwise sequence
___ Bearings and distances correspond exactly with map, parcel sketch, and traverse sheet
___ Bearings are to nearest whole second and distances are to the nearest one-hundredth of a foot
___ Calls are numbered
___ Denial of access shall be described from beginning to end *(if applicable)*

CLOSING DESCRIPTION

___ Last call leads back to P.O.B.
___ Restates area of parcel
___ Establishes taking in existing road R.O.W. *(if applicable)*
___ Legal description is referenced to Plat
___ Sealed and signed
___ Include an access clause whether access is permitted or denied *(if applicable)*

PARCEL SKETCH

___ Shows P.O.B. and P.O.C.
___ All data corresponds exactly with Map and Field Notes
___ Sheet size is no larger than 81/2" x 11"
___ Plat closely matches example provided
___ Plat referenced to legal description
___ Sealed and signed
___ Include an access clause whether access is permitted or denied *(if applicable)*
___ Existing utility lines and easements (deed reference, if available);

TRAVERSE SHEET

___ Computations show area to be acquired in sq. ft. or acres, whichever is applicable
___ Computations show area that is existing road R.O.W. *(if applicable)*
___ Traverse calls are in clockwise sequence
___ Error of closure meets the following:

Secondary rural	.0003
Primary rural - secondary urban	.0002
Urban or industrial	.00013

EXHIBIT B

Scope of Services to be provided by the Engineer

~~SECTION 6 - FIELD SURVEYING AND PHOTOGRAMMETRY~~ - OMITTED

(Function Code 150)

Services Provided By: ENGINEER	COUNTY	
		1. Field Surveying
___	___	a. Primary Project Control – 3 to 5 miles spacing Precision shall be 1 part in 20,000 or better, unless otherwise directed by the District Engineer. (1) Establish horizontal control points (2) 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
___	___	b. 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. • 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. • The unadjusted angular error should not exceed 2 seconds per angle, plus 14 seconds. • 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.) • The unadjusted vertical error should not exceed 0.03 foot per mile of traverse. (1) Project control base lines
___	___	(2) Photogrammetric ground control
___	___	(a) Establish horizontal control
___	___	(b) Establish vertical control points
___	___	(c) Place and maintain control point targets
___	___	c. Other Field Surveying (1) **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. (2) Complete topographic and cross section survey, data processing, and CADD mapping (2D & 3D) for the limits of the project. (3) Locate all visible utilities, data processing and CADD mapping (2D & 3D) including irrigation lines. Follow sample provided by the Engineer. (4) Field locate cross culverts, driveway culverts, inverts, irrigation lines, within the project limits, data processing and CADD mapping (2D & 3D). (5) Right of Entry, Right of Way Research, and Appraisal District Records is the responsibility of the Surveyor.

EXHIBIT B

Scope of Services to be provided by the Engineer

Services Provided By: ENGINEER	COUNTY	
___	___	c. Other Field Surveying *(continued)*
		(6) The Surveyor shall also paint the proposed centerline on the existing pavement as approved by Engineer. (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.
		(7) 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.
		(8) 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 appurtances as identified by the engineer sample layout.
		(9) 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.
___	___	(10) Tie to existing underground and overhead utilities (location, elevation and direction) 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. 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.
___	___	(11) Additional Field Surveying as shown below: (a) 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. (b) OUTFALLS – The surveyor will provide a complete 2D & 3D File including utilities of the outfall identified on the Hydrologic Map.
		(12) Driveways and Turnouts (a) Inventory commercial entrances, public roads and side streets separately. (b) Obtain centerline station. (Width at ROW, PAV'T and existing radius. (c) Inventory by type (dirt, caliche, gravel or paved). If paved, indicate condition in terms of no patches, has patches or has potholes. (d) Obtain width at R.O.W. line. (e) Obtain elevations at both edges of the driveway or turnout in line with the side drain.
___	___	(13) ROW staking (Existing and Proposed @ 1,000 ft. stations PC's PT's and Angle points as per ROW Map)
___	___	(14) Soil core hole staking.
___	___	(15) Determine changes in topography from voids and outdated maps due to development, erosion, etc.
___	___	(16) Profiles of existing drainage facilities.
___	___	(17) Measurement of hydraulic opening under existing bridges.
___	___	(18) Obtain elevations of manholes and valves of utilities

EXHIBIT B

Scope of Services to be provided by the Engineer

Services Provided By: ENGINEER	COUNTY	
		c. Other Field Surveying *(continued)*
___	___	(19) Provide temporary signs, traffic control, flags, safety equipment, etc.
___	___	(20) Ties to existing bridges or culverts that may conflict with new construction.
___	___	(21) Bridge widening top of deck and/or top of cap elevations at the Profile Grade Line (PGL) and the edges of slab at bent locations.
___	___	(22) Inventory signs, mailboxes, and driveways
___	___	(23) Survey controlled data sheets per TxDOT guidelines.
___	___	2. Photogrammetric Products
		a. Uncontrolled Photography
		(1) Contact Prints
		(2) Mosaics
		(3) Digital ortho plots
		b. Mapping
		(1) Planimetric Maps
		(2) Contour Maps
		(3) Cross Sections
		(4) Profiles
		(5) Digital Terrain Models (DTM)

EXHIBIT B

Scope of Services to be provided by the Engineer

SECTION 7 - ROADWAY DESIGN CONTROLS

(Function Code 160)

Services Provided By: ENGINEER	COUNTY
___	___
___	___

1. Geometric Design
   a. Horizontal and Vertical Alignment
   b. Schematic Layout
      (1) The location of interchanges, main lanes, grade separations, frontage roads and ramps.
      (2) Develop vertical and horizontal alignment of main lanes, ramps and cross roads at proposed interchanges or grade separations. Frontage road alignment data need not be shown on the schematic; however, it should be developed in sufficient detail to determine ROW needs. The degree of horizontal curves and vertical curve data, including "K" values, shall also be shown for ease of checking.
      (3) For freeways, show the location and text of the proposed main lane guide signs. Lane lines and/or arrows indicating the number of lanes shall also be shown.
      (4) A complete explanation of the sequence and methods of stage construction, if proposed, including the initial and ultimate proposed treatment of crossovers and ramps.
      (5) The tentative ROW limits.
         (a) Provide a roadway Design System (RDS) or (GEOPAK) computer tape of the preliminary earthwork to verify ROW requirements.
         (b) Provide a graphics file containing the approved schematic.
      (6) The geometric (pavement cross slopes, lane and shoulder widths, slope rates for fills and cuts) of the typical sections of proposed highway main lanes, ramps, frontage roads, and cross roads.
      (7) The current and projected traffic volumes as provided by the TxDOT (20 year traffic projection, unless otherwise determined by the District Engineer).
      (8) The control of access lines if Interstate or designated under House Bill 179.
      (9) Direction of traffic flow on all roadways.
      (10) Location and width of median openings for highway without access control.
      (11) The geometric of speed change (acceleration, deceleration, climbing) lanes.

___ ___ 2. General Guidelines for Project Development
   a. Prior to preparing detailed plans for a proposed project, a preliminary schematic layout shall be prepared which indicates the general geometric features and location requirements peculiar to the project. An uncontrolled aerial mosaic will be provided for this use. Four copies of the schematic layout shall be submitted through the district to the Design Division for approval and subsequent coordination with the Federal Highway Administration (FHWA) where applicable. The layout shall be submitted for two-lane arterial highway projects on new locations and for all multi-lane highway projects. **No geometric design is to be performed until the COUNTY has given the engineer written approval of the preliminary schematic layout.**
   b. All geometric design shall be in conformance with the State's Design Division, Operations and Procedures Manual, except where variances are permitted in writing by the STATE.
   c. The schematic layout shall include basic information which is necessary for the proper review and evaluation including the items listed above in the checklist for schematic layout.
   d. Handling of traffic during construction shall be a consideration in the development of preliminary designs.

EXHIBIT B

Scope of Services to be provided by the Engineer

Services Provided By: ENGINEER	COUNTY	
___	___	2. General Guidelines for Project Development *(continued)*
		e. Upon approval of the schematic layout by Design Division (FHWA on Federal-aid projects), it shall be the basis for an exhibit at any required public hearing prior to final development of the project. If there are any changes to the schematic after the Design Division and FHWA approval and before the public hearing, four copies of the revised schematic, as displayed at the hearing, shall be submitted either prior to or accompanying the public hearing data. If there are no changes in the schematic as displayed at the hearing, only photographs of the schematic and other displays shall be submitted with the public hearing data.
		f. For all freeway construction projects, these schematics shall show the location and text of the proposed main lane guide signs. A schematic layout shall be submitted through the district to the Traffic Operations Division, Traffic Safety Section for approval and subsequent coordination with the FHWA. All signing shall be in conformance with the Texas MUTCD.
		g. On complex projects, informal contact through the district with the Design Division and FHWA personnel is encouraged with regard to development of preliminary design prior to official schematic submission.
		h. The engineer shall furnish a project tape that is compatible with the STATE's computer system, a project listing, and a cross section plot showing the original design sections containing the earthwork input and original cross sections for the project. **Accuracy of the earthwork design is of utmost importance since it is the basis for contractor payments and construction staking.**
___	___	3. Exhibit for Airway/Highway Clearance Permits
		4. Grading Design
___	___	a. Refine the horizontal and vertical alignment of main lanes, frontage roads, ramps, cross roads and direct connectors based upon the approved schematic layout. Determine vertical clearances at grade separations and overpasses, taking into account the appropriate super elevation rate.
___	___	b. Typical Sections
___	___	c. Design Cross Sections
___	___	d. Determine Cut and Fill Quantities
___	___	e. Slope Stability Analysis
___	___	f. Embankment Foundation Stability Analysis
___	___	g. Embankment Settlement Analysis
		5. 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~~ - **OMITTED**
		(1) Soil Core Holes (Show cost estimate with Function Code 110)
___	___	(a) Along center line
___	___	(b) Along center line of each roadway
		The location and minimum number of soil core holes required for this project are as follows: (To be determined when schematic is being completed)

EXHIBIT B

Scope of Services to be provided by the Engineer

Services Provided By: ENGINEER	COUNTY
___	___
___	___
___	___
___	___
___	___
___	___
___	___
___	___

5. Pavement Design *(continued)*
   c. ~~Embankment and Subgrade *(continued)*~~ - **OMITTED**
      (2) Identify,interpret and summarize geologic features that affect engineering design (PI, Sulfate content, % of lime)
   d. Traffic Data for Pavement Design by STATE
   e. Basic Design Criteria
   f. Life Cycle Cost Analysis(es)
   g. Cost Data
   h. Pavement Material Properties
   i. Rehabilitation Investigations
      (1) Core Hole Survey (Show cost estimate with Function Code 110)
         (a) Determine type and depth of existing material, pavement, etc. The Engineer will determine whether to salvage ACP and FLEXBASE as well as their properties and provide this information to TxDOT.

EXHIBIT B

Scope of Services to be provided by the Engineer

SECTION 8 - DRAINAGE

(Function Code 161)

Services Provided By: ENGINEER	COUNTY	
		All hydraulic design shall be in accordance with the TxDOT's Hydraulic Manual, except where variances are permitted in writing by the COUNTY.
		1. Hydrologic Map
___	___	a. Hydrologic data/discharge determination for outfalls
		2. Hydraulic Drainage Study and Documentation
		a. Hydraulic computations and Drainage area maps showing existing conditions and proposed improvements.
___	___	(1) Storm water detention available within the ROW (linear ft. along side drain ditch).
___	___	(2) Storm water detention required outside the ROW (as per HCDD#1)
___	___	(3) Culverts
___	___	(4) Bridge waterways
___	___	(5) Channels
___	___	(6) Storm sewers/inlets
___	___	(7) Pump stations
___	___	(8) Storm Water Management facilities
___	___	(9) Other
		(a) Irrigation Canals/Siphons
___	___	b. Hydraulic report(s)
___	___	c. Federal Emergency Management Agency (FEMA) floodway requirements
___	___	d. Determine impact of proposed drainage plan on the following receiving stream(s)
		(1) Hidalgo County Drainage District Outfalls
		(2) All Irrigation District Outfalls impacted
		3. Layout, Structural Design and Detailing of Drainage Features
		a. Culverts
___	___	(1) New culverts
___	___	(2) Culvert widening and/or lengthening
___	___	(3) Culvert replacements
		b. Storm sewers
___	___	(1) New storm sewers
___	___	(2) Modify existing storm sewers
___	___	(3) Inlets
___	___	(4) Manholes
___	___	(5) 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
___	___	j. Storm Water Management facilities
___	___	4. Storm Water Pollution Prevention Plan (SW3P)
___	___	5. Scour Evaluation - Waterway Structures only (to be completed by Bridge Engineer under FC 170.

EXHIBIT B

Scope of Services to be provided by the Engineer

SECTION 9 - SIGNING, MARKINGS AND SIGNALIZATION

(Function Code 162)

Services Provided By: ENGINEER	COUNTY	
___	___	1. Signing and Markings Layout
		a. Requirements (Separate Layout)
		(1) Roadway layout
		(2) Center line with station numbering
		(3) ROW lines
		(4) Culverts and other structures that present a hazard to traffic
		(5) Location of utilities, if not shown on plan and profile
		(6) Existing signs to remain, to be removed, to be relocated
		(7) Proposed signs (illustrated and numbered)
		(8) Existing overhead sign bridges to remain, to be revised, removed or relocated
		(9) Proposed overhead sign bridges indicating location by plan layout (electrical details need not be shown on this layout)
		(10) Proposed markings (illustrated and quantified) which include pavement markings, object markings and delineation
		(12) Quantities of existing pavement markings to be removed
		(13) Proposed delineators and object markers
		b. 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:
		(1) The location of interchanges, main lanes, grade separations, frontage roads and ramps
		(2) 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
		(3) The number of lanes in each section of proposed highway and the location of changes in numbers of lanes
		(4) The projected traffic volumes as provided by the STATE (20 year traffic projection, unless otherwise determined by the District Engineer)
		(5) Tentative ROW limits
		(6) Direction of traffic flow on all roadways
		(7) Main lane, ramp, frontage road, and necessary cross road profiles at proposed interchanges or grade separations
___	___	2. Summary of Small Signs Tabulation
___	___	3. Summary of Large Signs Tabulation including all Guide Signs
___	___	4. Sign Detail Sheets
		a. All signs except 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

EXHIBIT B

Scope of Services to be provided by the Engineer

Services Provided By: ENGINEER	COUNTY	
		5. Traffic Signals
		a. Development of Justification (Warrant) Data
___	___	(1) Location Map Relationship of proposed installation to other traffic signals, highways, business areas and traffic generators
___	___	(2) Photographs as appropriate
___	___	(3) Accident data as appropriate
		(4) Vehicle volumes (provided by TxDOT)
___	___	(a) Existing
___	___	(b) Estimated
___	___	(c) Projected
___	___	(d) Pedestrian
___	___	(5) Traffic Survey - Count Analysis
___	___	(6) Recommendation based on above data
		b. Layout
___	___	(1) Title Sheet (when applicable)
		(a) Describe the location
		(b) Type of installation
		(c) Area map with project limits for each location
		(d) Index of sheets
		(e) Space for official signatures
		(2) Estimate and quantity sheet (when applicable)
		(a) List of all bid items
		(b) Bid item quantities
		(c) Specification item number
		(d) Paid item description and unit of measure
		(3) Basis of estimate sheet (list of materials)
		(4) General notes and specification data sheet
		(5) Condition diagram
		(a) Highway and intersection design features
		(b) Roadside development
		(c) Traffic control including illumination
		(6) Plan sheet(s)
		(a) Existing traffic control that will remain (signs and markings)
		(b) Existing utilities
		(c) Proposed highway improvements
		(d) Proposed installation
		(e) Proposed additional traffic controls
		(f) When applicable, proposed conduit for Railroad interconnect with standard details for runs under tracks.
		(g) Proposed illumination attached to signal poles.
		(7) Notes for plan layout
		(8) Elevation sheet(s) (span wire design)
		(9) Phase sequence diagram(s)
		(a) Signal locations
		(b) Signal indications
		(c) Phase diagram
		(d) Signal sequence table
		(e) Flashing operation (normal and emergency)
		(f) Preemption operation (when applicable)
		(g) Interval timing, cycle length and offset

EXHIBIT B

Scope of Services to be provided by the Engineer

Services Provided By: ENGINEER	COUNTY	
		5. Traffic Signals *(continued)*
___	___	b. Layout *(continued)*
		(10) Construction detail sheets(s)
		(a) Poles (TxDOT standard sheets)
		(b) Detectors
		(c) Pull Box and conduit layout
		(d) Controller Foundation standard sheet
		(11) Marking details (when applicable)
		(12) Barricade and warning sign standard sheet and any special details for work zone traffic control for special conditions
		(13) Aerial or underground interconnect details (when applicable)
		c. General Requirements
		(1) Contact local utility company
___	___	(a) Confirm power source
___	___	(b) Discuss route of aerial or underground interconnect cable (when applicable)
___	___	(c) Adjustment of overhead utility lines
___	___	(2) Prepare governing specifications and special provisions list
___	___	(3) Prepare project estimate
___	___	d. Summary of Quantities

EXHIBIT B

Scope of Services to be provided by the Engineer

SECTION 10 - MISCELLANEOUS (ROADWAY)

(Function Code 163)

Services Provided By: ENGINEER	COUNTY	
		1. Retaining Walls
		a. Structural Details
___	___	(1) Cast-in-Place Cantilever at _____ locations. (TxDOT Standard Retaining Wall)*
___	___	(2) Tiedback Retaining Wall at _____ location. (TxDOT standard retaining wall)
___	___	(3) Specialized Retaining Wall at _____ locations (Unique Design).*
		b. Alternate Patented Retaining Walls at all locations. (Layouts Only)**
___	___	(1) Mechanically Stabilized Earth
___	___	(2) Concrete Block Wall Systems
___	___	c. Retaining Wall Layout (PLAN)
		(1) Designation of reference line
		(2) Beginning and ending retaining wall stations
		(3) Station of each retaining wall joint***
		(4) Offset from reference line
		(5) Horizontal curve data
		(6) Number of retaining wall panels and lengths***
		(7) Total length of wall
		(8) Indicate face of wall
		(9) All wall dimensions and alignment relations (alignment data as necessary)
		(10) Soil core hole locations
___	___	d. Retaining Wall Layout (ELEVATION)
		(1) Top of wall elevations at each joint or intervals***
		(2) Existing and finished ground line elevations
		(3) Height of stem at each joint***
		(4) Wall panel designations***
		(5) Top of footing elevations***
		(6) Limits of measurement for payment****
		(7) Type, limits and anchorage details of railing (If applicable)
		(8) Top and bottom of wall profiles and soil core hole data plotted at correct station and elevation. The plot shall be at the same scale as the wall profile. Ground water elevations and the observation date shall be shown.
___	___	e. ~~Foundation Studies (Show cost estimate with Function Code 110)~~ - **OMITTED**
___	___	(1) The soil core holes shall be obtained at approximately 200 foot intervals along retaining wall alignments. The core holes shall extend 25 feet below the footing elevation.
___	___	f. Stability Analysis (the ENGINEER shall estimate this task as part of his bid to complete the work).
___	___	g. Estimate
___	___	h. Summary of Quantities
___	___	i. Typical X-section.
___	___	j. General Guidelines for Retaining Walls
		(1) The ENGINEER shall make final design calculations and final detail drawings in accordance with standard requirements of the Texas Department of Transportation. **The designer and checker shall check all calculations and initial each page.**
		(2) The ground water level should be observed at the water strike.
		(3) 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.
		(4) Foundation exploration shall conform to the requirements set forth in Administrative Circular No. 25-84, Administrative Circular 33-87 and Administrative Circular No. 25-92.

EXHIBIT B

Scope of Services to be provided by the Engineer

Services Provided By: ENGINEER	COUNTY	
___	___	2. Traffic Control Plan, Detours and Sequence of Construction Traffic Control Plans (TCP) are required for all projects. 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 Traffic Control Plan Layouts: a. The sequence of construction and method of handling traffic during each phase. b. 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. c. The proposed traffic control devices (stop signs, signals, flag person, etc.) at grade intersections during each construction sequence. d. Where detours are provided, typical cross sections shall be shown. e. Road construction work hours shall be developed after an investigation of the traffic volumes has been performed.
		3. Illumination
___	___	a. Preliminary Roadway Illumination Layout and Circuit Layout (1) For projects involving freeway to freeway or other types of directional interchanges and projects including left-hand ramps or connections, provide the following: (a) The location of interchanges, main lanes, grade separations, frontage roads and ramps (b) A 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 the 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
___	___	b. Final Roadway Illumination and Electrical Circuit Layouts (1) Roadway layout showing pavement edges, shoulders, curbs, retaining walls, etc. (2) Center line with station numbering. (3) ROW lines. (4) Symbol legend. Use department standard symbols for lighting and electrical. (5) Culverts and other structures that present a hazard to traffic. (6) Location of underground utilities, if not shown on plan profile. (7) Location of overhead electrical lines, both crossing and parallel to ROW. (8) Existing sign lighting circuits and roadway illumination to remain, to be removed, to be relocated. (9) Existing service poles, electrical circuits, ground boxes, etc. (10) Contact electric utility for service pole locations, voltage characteristics. (11) Location of proposed sign lighting circuits and roadway illumination. (12) Proposed electrical circuits. (13) Tabulation of all quantities including proposed, existing to be relocated, existing to be removed. The layout sheet quantities and lighting summary shall be shown. Tabulations to include estimated quantity with a column for final quantities.

EXHIBIT B

Scope of Services to be provided by the Engineer

Services Provided By: ENGINEER	COUNTY	
		3. Illumination *(continued)*
___	___	c. General Guidelines for Illumination (If applicable) The ENGINEER shall submit to the COUNTY, well in advance of PS&E due date, the roadway illumination and electrical circuit layout sheets for review by the STATE. Two copies of the layout sheets are to be submitted. One copy will be returned to the Engineer showing corrections that are to be made by the ENGINEER. When final plan submission is made, the ENGINEER shall provide a written statement regarding completion of the corrections.
		4. Miscellaneous Drafting/Standards
___	___	a. Erosion Control
___	___	b. Landscape Development
___	___	5. Compute and Tabulate Quantities
___	___	6. Special Utility Details (Irrigation lines)
		7. Miscellaneous Structures
		a. Type of Structure*
		(1) Overhead Sign Bridges (O.S.B.) Modifications or special O.S.B. designs shall be prepared using the same design assumptions that are used for the standard O.S.B structures.
___	___	(a) New O.S.B. structure(s)
___	___	(b) Structural evaluation of existing O.S.B. structure(s) that are to remain in place or to be relocated.
___	___	(2) High Mast Illumination Poles (HMIP)
___	___	(3) Traffic Signal Supports
___	___	(4) Conventional Illumination Poles
___	___	(5) Sound Barrier Walls
___	___	b. Checklist for Layouts
		(1) Reference appropriate O.S.B. standard
		(2) Drilled shaft size and length
		(3) Soil strength used for design {indicate basis and boring(s) used}
		(4) Design height
		(5) Tower heights
		(6) Leg spacings
		(7) Design wind speed
___	___	c. Foundation Studies (Show cost estimate with Function Code 110) The soils exploration requirements for miscellaneous structures on this project are as follows: (To be provided by the Engineer on an as-needed basis)
		8. Agreements
___	___	a. Utility Agreements
___	___	b. Exhibits for Utility Agreements
___	___	c. Railroad Agreements
		d. Railroad Exhibits
___	___	(1) Railroad Underpasses
___	___	(2) Railroad Overpasses
___	___	(3) Railroad Grade Crossing (Replanking)
___	___	(4) Railroad Grade Crossing Warning Systems (Signals)
___	___	(5) Other Miscellaneous Sketches for Railroads
___	___	e. Traffic Signal Agreements
___	___	f. Exhibits for Traffic Signal Agreements
___	___	9. Estimate
___	___	10. Specifications and General Notes

EXHIBIT B

Scope of Services to be provided by the Engineer

SECTION 11 - BRIDGE DESIGN

(Function Code 170)

Services Provided By: ENGINEER	COUNTY		NUMBER REQUIRED
		1. Preparation of Structural Details	
		a. New Structure(s)	
___	___	(1) Underpass(es)	
___	___	(2) Overpass(es)	
___	___	(3) Main Lanes	____
___	___	(4) Direct Connector(s)	____
___	___	(5) Ramp Bridge(s)	____
___	___	(6) Waterway Structure(s)**	____
___	___	(7) Pedestrian Structure(s)	____
___	___	(8) Utility Structure(s)	____
___	___	(9) Railroad Underpass(es)	____
___	___	(10) Railroad Overpass(es)	____
___	___	(11) Bridge Classification Culvert(s)**	____
___	___	(11) Alternate Structural Designs	____
___	___	(12) Alternate Foundation Design	____
		Total New Structures =	
		b. Existing Structure(s)	____
___	___	(1) Bridge Widening, Rehabilitation and/or Modification of Existing Structure(s)	
___	___	(2) Bridge Replacement	____
___	___	(3) Raising Bridge Elevation	____
___	___	(4) Bridge Classification Culvert(s) Widening and/or Modification of Existing Structures(s)	____
___	___	(5) Railroad Overpass(es)	____
___	___	(6) Railroad Underpass(es)	____
		Total Existing Structures =	____

* Countour 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.

EXHIBIT B

Scope of Services to be provided by the Engineer

Services Provided By: ENGINEER	COUNTY	
___	___	2. Preparation of Bridge Layouts (each bridge)

a. Bridge Layouts (PLAN)
   (1) Horizontal curve information or bearing of centerline.
   (2) Including horizontal, vertical, and template information of all roadways or railroads crossed.
   (3) Bearing of center line or reference line.
   (4) Skew angle(s).
   (5) Slope for header banks and approach fills.
   (6) Control stations at beginning and ending of bridge (with deck elevation), intersections, etc.
   (7) Approach pavement and crown width.
   (8) Bridge roadway width and curbs, face of rail, shoulders, or sidewalks.
   (9) Approach slab and curb returns.
   (10) Limits and type of riprap.
   (11) Proposed features under structure.
   (12) Location of profile grade line.
   (13) North arrow.
   (14) Typical bridge roadway section including preliminary proposed beam types and spacings.
   (15) Cross slope and super elevation data.
   (16) Minimum horizontal clearances when applicable.
      (a) Dimensions to features that control clearances. (Calculate and indicate points of minimum vertical and horizontal clearances.
   (17) Location of soil core holes (station and offset), shown on layout.
   (18) Bent stations and bearings.
   (19) Retaining wall locations.
   (20) Traffic flow directional arrows.
   (21) Railing types shown.
   (22) Joint types and seal size, if used.
   (23) Beam line numbers consistent with span details.
   (24) Critical horizontal clearances (location of railroad tracks, nearby structures and utilities).
   (25) Bearings of utilities.

b. Bridge Layouts (ELEVATION)
   (1) Type of foundation.
   (2) Finished grade elevations at beginning and end of bridge.
   (3) Overall length of structure.
   (4) Length, type of spans and units.
   (5) Type of railing.
   (6) Minimum calculated vertical clearance(s).
   (7) Existing and proposed ground lines clearly marked.
   (8) Grid elevations and stations.
   (9) Bent numbers encircled.
   (10) Stationing of bridge compatible with grid stations.
   (11) Standard title.
   (12) Profile grade data.
   (13) Type of riprap.
   (14) Soil Core Hole information with penetrometer test data shall be shown on the bridge layout at correct station, elevation and scale.
   (15) Fixed/expansion condition of all bents.
   (16) Column "H" heights.
   (17) Number, size and length of foundations.

EXHIBIT B

Scope of Services to be provided by the Engineer

Services Provided By: ENGINEER	COUNTY	
___	___	2. Preparation of Bridge Layouts (each bridge) *(continued)* c. Additional layout requirements for waterway structures and bridge classification culverts. (1) Design and 100-year peak discharges. (2) Design and 100-year high water (HW) (Recorded HW and date if available) (3) Natural and through-bridge velocities for design and 100-year floods. (4) Calculated backwater for design and 100-year floods. (5) Direction of flow for waterway crossings. (6) Contours for water crossing.
___	___	3. Bridge Classification Culvert, Estimate, Quantities, and Specifications (each bridge)
___	___	4. ~~Foundation Studies (Show cost estimate with Function Code 110)~~ - **OMITTED** 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 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).
___	___	5. Bridge Total Quantities and Cost Estimates (each bridge)
___	___	6. Bridge Special Provisions and Specifications (each bridge)
___	___	7. Bearing seat elevations for each beam or girder. Top of cap elevations for non-beam type structures.
___	___	8. 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 COUNTY has given the engineer written approval of the preliminary bridge layout.** Several months may be required, after the preliminary bridge layout is submitted, for the district to obtain approval and/or permits from the following: • TxDOT Design Division, when applicable: - Railroad Companies - FHWA - U.S. Army Corps of Engineers - U.S. Coast Guard - Bureau of Reclamation - Texas Parks and Wildlife - Others Therefore, the bridge layout should be submitted at the earliest possible date and the ENGINEER's design schedule should reflect this. b. All bridge superstructure and substructure design will be reviewed by the Design Division for purposes of verifying structural integrity and optimization of design. c. The final bridge layout shall be in conformance with the Bridges and Structures, Operation and Planning Manual and the Bridges and Structures Detailing Manual.

EXHIBIT B

Scope of Services to be provided by the Engineer

Services Provided By:
ENGINEER COUNTY

8. General Guidelines for Bridge Design *(continued)*

d. 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 Texas Department of Transportation 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.**

e. 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.

f. 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).

g. 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.

h. 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.

i. APPENDIX C, "GENERAL PLAN CHECKLIST", on pages C-1 thru C-5, more specifically relates various sheet types, details, summaries, standards, etc.

j. 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.

k. Geometry and structural design errors found after acceptance of bridge plans shall be promptly corrected by the consultant at no cost to the Company.

EXHIBIT B

Scope of Services to be provided by the Engineer

~~SECTION 12 - CONSTRUCTION PHASE SERVICES~~ - OMITTED

(Function Code 320)

Services Provided By: ENGINEER	COUNTY
___	___

CONSTRUCTION MANAGEMENT SERVICES:

The ENGINEER will provide engineering and support services for and during the construction of the Project or portions of the Project approved by the COUNTY. 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 COUNTY the necessary copies of approved plans, specifications, notices to bidders, and proposals as prepared under PS&E.

2) The ENGINEER will assist the COUNTY 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 COUNTY and act as the COUNTY'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 COUNTY against defects and deficiencies in the work of the Contractor. The ENGINEER will promptly notify the COUNTY 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 COUNTY for the preparation of the monthly and final estimates for payment to the Contractor.

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.

EXHIBIT B

Scope of Services to be provided by the Engineer

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 COUNTY.

11) As Built Drawings. The ENGINEER will develop as built drawings to depict the work as actually constructed. The COUNTY will be furnished five (5) set of prints.

CONSTRUCTION MATERIAL TESTING:

The ENGINEER will provide the COUNTY 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.
(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 COUNTY and the project plans and specifications.
(h) Providing accurate and timely reports to the COUNTY and all/other recipients as designated by the COUNTY.
(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.

EXHIBIT B

Scope of Services to be provided by the Engineer

~~***SECTION 13 - FC 600 - ACQUISITION PROVIDER SERVICES***~~
~~**(for EST. 0 PARCELS, 0 EASEMENTS AND 0 RELOCATIONS/DISPLACEMENTS)** -~~**OMITTED**

(Services to be provided by L&G Engineering)

Services Provided By: ENGINEER	COUNTY	
		1) PROJECT ADMINISTRATION
___	___	a) Negotiation of Scope of Services for Work Authorization i) Acquisition Provider will visit project site with COUNTY personnel if necessary.
___	___	b) Project Presence at L&G Consultant Office Headquarters i) Full Project Office (1) No Joint Use of COUNTY or TxDOT facilities (2) Open during normal COUNTY and State work hours (3) Personnel available to answer questions (4) Availability of Project Files (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) Provide monthly progress reports with invoice. ii) Participate in project review meetings as determined by the COUNTY. iii) Prepare initial property owner contact list for use by the COUNTY in distribution of Acquisition Provider introduction letters.
___	___	e) File Management i) Project and parcel files will be kept in the COUNTY'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 COUNTY office as they are generated or received by the Acquisition Provider, if necessary. ii) Prepare payment transmittal request utilizing standard payment submissions forms with supporting documentation. iii) Maintain records of all payments including check number, amount, and date paid, etc. iv) Provide copies of all incoming and outgoing correspondence as generated if requested by COUNTY at provider conference. v) Maintain copies of all correspondence and contacts 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.

EXHIBIT B

Scope of Services to be provided by the Engineer

Services Provided By: ENGINEER	COUNTY	
___	___	c) Secure title insurance for all parcels acquired, insuring acceptable title to COUNTY OF HIDALGO. Written approval by the COUNTY 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 COUNTY/TxDOT. Maintain permission letters with appraisal reports.
___	___	c) Prepare (if necessary) pre-appraisal contact with interest owner(s) for each parcel using acceptable COUNTY/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/COUNTY policies and procedures along with the Uniform Standards of Professional Appraisal Practices.
___	___	f) As necessary, prepare written notification to COUNTY/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 L&G Engineering ROW Office and recommended for approval by 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 L&G Engineering and/or TxDOT.
___	___	i) As necessary, the appraiser will coordinate with 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 COUNTY.
		4) APPRAISAL REVIEW
___	___	a) Review Appraiser 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/COUNTY policies and procedures and the Uniform Standards of Professional Appraisal Practices.

EXHIBIT B

Scope of Services to be provided by the Engineer

Services Provided By:

ENGINEER	COUNTY	
___	___	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 COUNTY.
		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 COUNTY/TxDOT policies and procedures along with the Uniform Standards of Professional Appraisal Practices.
___	___	b) As necessary, prepare written notification to COUNTY/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 L&G Engineering Right of Way Office and recommended for approval by 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/COUNTY.
___	___	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 COUNTY.
___	___	e) As necessary, the appraiser will coordinate with the review appraiser regarding corrections and/or additional information that may be required.
		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 COUNTY /TxDOT on applicable COUNTY /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.

EXHIBIT B

Scope of Services to be provided by the Engineer

Services Provided By: ENGINEER	COUNTY	
___	___	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 COUNTY /TxDOT policy and procedures.
___	___	j) Prepare final offer letter, documents of conveyance as necessary.
___	___	k) Appear and provide Expert Witness testimony as an Acquisition Provider when requested.
___	___	l) Meet at the L&G Engineering ROW office in Mission once per week as agreed-upon with the Right of Way Acquisition Manager/Administrator.
___	___	m) Provide a monthly progress report per parcel by the 25th of the month with invoice.
___	___	n) The consultant shall, as part of this proposal, estimates 10% of the parcels identified on Page 37 may end up in condemnation. The consultant shall be available for any meeting/hearings as requested by the COUNTY Attorney.
		7) CLOSING SERVICE FEES
___	___	a) Coordinate with COUNTY 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 COUNTY.
___	___	b) Acquisition Provider shall attend closings and provide closing services in conjunction with Title Company.
___	___	c) Acquisition Provider 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 (separate Work Authorization will be issued once relocations have been identified, unless noted otherwise).
___	___	a) The amount of relocations or displacements as identified. L&G will provide relocation advisory services. L&G will compute replacement housing supplements (owner occupant and/or tenants)
___	___	b) L&G will provide advisory services to business displacements and relocate them effectively.
___	___	c) TxDOT will review, approve and pay for all relocation costs as per the Agreement.
		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

EXHIBIT B

Scope of Services to be provided by the Engineer

iii) Use the information from the Title Commitment to join all interested parties on the necessary forms. Spouses of owners must also be joined.

Services Provided By:
ENGINEER COUNTY

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, Preappraisal 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 COUNTY Office for submission to the COUNTY 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 COUNTY 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 COUNTY Attorney; the attorney shall file the original petition with the COUNTY Court at Law or other appropriate Court for a cause number to be assigned.

vii) The COUNTY attorney shall file the Lis Pendens including the cause number with the COUNTY Clerk's Office.

viii) Upon assignment of a court, the COUNTY 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 COUNTY 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 COUNTY shall file all originals with the court and send copies marked "copy" to L & G Engineering.

xi) The COUNTY 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.

xii) The COUNTY 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, COUNTY will approve the new value and the COUNTY's provider will present a revised offer and a final offer letter and submit a copy of the final offer letter.

xiii) The COUNTY Attorney shall coordinate a pre-hearing conference prior to the hearing (the day before or earlier) to discuss facts of the case with the COUNTY, Appraiser, and Negotiator.

xiv) After the hearing is set, the COUNTY 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 COUNTY Attorney shall file the original notices with the court and send copies stamped "copy" to L&G Engineering ROW Office.

xvi) The COUNTY's Attorney shall send a reminder letter 2-3 weeks in advance to the COUNTY Administration offices, Acquisition Provider, the three special commissioners and court reporter concerning Hearing dates.

— — b) Post Hearing Support (by COUNTY Attorney)

i) For the hearing, prepare the necessary forms and Special Commissioners time sheets and submit forms to Hidalgo COUNTY clerk's office.

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 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

COUNTY, 1 certified copy to L&G Engineering with the Commitment to request the warrant in the amount of the Special Commissioners Award.

v) Send the Commitment and the Award to COUNTY, along with individual special commissioner's billing requesting the payment for their fees.

vi) File COUNTY 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 COUNTY 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 COUNTY Attorney's office for his further handling in accordance to the Eminent Domain process by the COUNTY.

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:

___ ___ 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.

EXHIBIT B

Scope of Services to be provided by the Engineer

11) PAYMENT SCHEDULE

a) Project Administration
   i) Payment and Milestones
      (a) Full Project Office
         (1) Lump Sum Basis (assume 1 year project presence)
         (2) Initial payment of 25% upon establishment of a project office with functional phone and utility services.
         (3) Remainder paid out in equal monthly installments of 15% starting the following month.
         (4) Monthly billing to COUNTY OF HIDALGO will be required.

b) Title Services
   ii) Payment
      (a) Per Parcel basis.
   iii) Milestones
      (a) 100% upon securing initial title commitment.

c) Appraisal Services
   i) Payment
      (a) Per Parcel Basis
   ii) Milestones
      (a) 100% paid upon delivery of complete and acceptable appraisal report

d) Appraisal Review
   i) Payment
      (a) Per Parcel Basis
   ii) Milestones
      (a) 100% upon submission of ROW-A-10

e) Appraisal Update
   i) Payment
      (a) Per Parcel Basis
   ii) Milestones
      (a) 100% upon delivery of complete and acceptable appraisal update.

f) Negotiation, Task, and Fees
   i) Payment
      (a) Per Parcel Basis
   ii) Milestones
      (a) 80% upon presentation of initial offer.
      (b) 20% upon successful negotiation and all instruments are recorded.

g) Closing Service Fees
   i) Payment
      (a) Per Parcel Basis
   ii) Milestones
      (a) 100% upon recordation of instrument of conveyance.

h) Relocation Assistance
   i) Payment
      (a) Per Relocation
   ii) Milestones
      (a) 100% upon issuance of 90-day vacancy letter.

i) Compensable Utilities
   i) Payment
      (a) By percent complete

EXHIBIT B

Scope of Services to be provided by the Engineer

SECTION 14 - ADDITIONAL RESONSIBILITIES

~~Easements, Letters of Permission, Etc.~~ - OMITTED

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

Coordination of Utilities

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

Meetings

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

Specifications, Special Provisions, Special Specifications

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

Project Manager/Engineer Communication

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

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

Design Responsibilities

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

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

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

EXHIBIT B

Scope of Services to be provided by the Engineer

Document and Information Exchange

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

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

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

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

CD Tape Required (YES or NO): YES

Proposal Time

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

Office Location

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

Service	Office Location
PS&E	Mission Office
Schematic	Mission Office
Environmental Document	Mercedes Office

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

office located at 2100 West Expressway 83 (Address),

Mercedes (City), Texas (State).

EXHIBIT B

Scope of Services to be provided by the Engineer

APPENDIX A - PLAN SHEET SEQUENCE PROCEDURE

1. Title Sheet
   Detailed Index of Sheets

2. Typical Sections

3. General Notes and Specifications Data

4. Estimate and Quantity Sheets

5. Storm Water Pollution Prevention Plan (SW3P) Sheets

6. Traffic Control Plans
   a. Sequence of Construction Layouts
   b. Detour Plan/Profile/Typical Sections/Quantities

7. Roadway Layouts
   a. Roadway Plan/Profile Sheets
   b. Intersection Plan/Profile Sheets
   c. Intersection Layouts
   d. Alignment Layouts/Data
   e. Ramp Layouts/Profiles
   f. Connection Roads/U-turns Layouts/Profile

8. Roadway Details
   a. Concrete Pavement Details/Standards
   b. Concrete Pavement Terminal Anchorage Details/Standards
   c. Bridge Approach Details/Standards
   d. Bridge Terminal Anchorage Details/Standards
   e. Roadway/Median Barrier Details/Standards
   f. Curb Details
   g. Driveway Details/Typical Sections/Standards

9. Signing Layouts and Marking Layouts

10. Traffic Signal Layouts

11. Lighting Layouts

12. Illumination Detail Standards (HMID, HMIF, HMIP, RID)

13. Utility Layouts/Profiles

14. Drainage Area Maps and Hydraulic Data
    a. General Drainage Area Maps
    b. Stage-Discharge Curves
    c. Main Cross-Drainage Culvert/Bridge Hydraulic Data
    d. Drainage Area Maps/Culverts/Storm Sewer
    e. Hydraulic Data/Culverts/Inlets/Storm Sewer/Pumps

15. Detailed Drainage Plans
    a. Drainage Plan/Profile Sheets (Storm Sewer Plan/Profile Sheets)
    b. Channel Plan/Profiles/Typical Sections
    c. Box Culvert Plan/Profile
    d. Pipe Sewer/Culvert Cross Sections

EXHIBIT B

Scope of Services to be provided by the Engineer

APPENDIX A - PLAN SHEET SEQUENCE PROCEDURE (Continued)

16. Drainage Structural Details/Standards
    a. Inlet Details/Standards
    b. Manhole Details/Standards
    c. Junction Box Details/Standards
    d. Safety End Treatment Details/Standards
    e. Box Culvert Details/Standards
    f. Culvert Wingwall Details/Standards
    g. Excavation-Backfill Diaphrams
    h. Riprap Details/Standards
    i. Temporary Pollution and Erosion Control Details

17. Pumphouse Layouts

18. Pumphouse Details

19. Pumphouse Standard Details

20. Bridge Layouts/Profile/Typical Sections*

21. Bridge Details*
    a. Summary of Bridge Quantities
    b. Abutments
    c. Interior Bents
    d. Spans
    e. Special details for the specific bridge

22. Bridge Standard Details*

23. Bridge Railing Standards

24. Retaining Wall Layouts/Profiles**

25. Retaining Wall Details**

26. Retaining Wall Standard Details**

27. Guard Fence/Standards and Signal Pole Standards

28. Signal/Electrical Details/Standards and Signal Pole Standards

29. Signing/Markers/Striping Details/Standards

30. Barricade/Construction/Beacon Standards

31. Miscellaneous Standards
    a. Chain Link Fence Standards
    b. Bridge End Detail/Standards
    c. Roadway Clearance Details/Standards
    e. Attenuator Standards

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

EXHIBIT B

Scope of Services to be provided by the Engineer

APPENDIX B - PLAN PREPARATION PROCEDURES

1. Title Sheet
   The ENGINEER shall be responsible for completing the title sheet as required and formatted by the STATE and as discussed in Part V of the Highway Design, Operations and Procedures Manual. Refer to Section K - Plans, 1 - Title Sheets, page 5-24, for the procedure to be used regarding all plans prepared by the ENGINEER.

2. Project Layout
   The project layout shall clearly depict the entire project as it is proposed and will usually be drawn at a scale of 1 inch=100 feet or 1 inch=200 feet, depending on the size of the project.

3. Typical Sections
   See Part IV of the Highway Design, Operations and Procedures Manual.

4. Sequence of Work Sheets (Traffic Control Plan)
   Clarity and completeness should be the rule to follow in preparing these sheets, with particular attention given to location of construction signs and barricades, lane widths, protection of drop offs, etc. For a reference guide use the Texas Department of Transportation, Texas Manual on Uniform Traffic Control Devices. Usual scale of 1 inch=100 feet and/or 1 inch=50 feet for special locations. A narrative sequence shall be included in the special provisions for the project. Staging of structural elements shall be considered. Provisions for drainage shall be considered, included and indicated during all stages of construction operations.

5. Removal Item Sheets
   These sheets indicate removal of existing facilities necessary to the proposed construction. (1 inch=40 feet) (use same scale as plan/profile sheets).

6. Summary Sheets
   Summary Sheets are required to indicate type, quantity and/or location of work for individual items of the proposed project.

7. Alignment Layout Sheets
   These sheets indicate the horizontal alignment with curve data and coordinates usually tabulated thereon. On some projects, depending on size, this information may be included on the plan profile sheets. Usual scale (1 inch=100 feet) or (1 inch=40 feet).

8. Plan Profile Sheet
   Clarity and completeness should be the rule to follow in preparation of these sheets. Usual scale (1 inch=40 feet or 1 inch=50 feet) or (1 inch=20 feet), depending on project complexity.

9. Drainage Area Maps
   Usual scale (1 inch=100 feet) and/or (1 inch=200 feet) supplemented by large scale area maps as necessary.

10. Drainage Plan Profile Sheets
    These sheets may be required on some projects to clearly depict location of inlets, storm sewer lines, and profile of storm sewer lines and laterals. Usual scale (1 inch=40 feet or 1 inch=50 feet) or (1 inch=20 feet). Storm sewer design does include redesign of storm sewers imposed by utility constraints developing after initial reviews by the STATE and consequential redesign and adjustments.

11. Runoff, Inlet, Storm Sewer and Culvert Sheets
    Use standard sheets.

EXHIBIT B

Scope of Services to be provided by the Engineer

APPENDIX B - PLAN PREPARATION PROCEDURES (Continued)

12. Culvert Cross Sections and Details
District standard reproducible sheets can be furnished (one each) to the ENGINEER for modification of special designs.

13. Manhole and Inlet Details
District standard reproducible sheets can be furnished (one each) to the ENGINEER.

14. Miscellaneous Detail
Curb, Sidewalk, Driveways, etc.

15. Intersection Details

16. Marking Layouts and/or Details
Layouts of the entire project with markings depicted thereon. Usual scale 1:500 (1 inch=40 feet or 1 inch=50 feet). On some projects typical details might suffice.

17. Structural Details
Bridge layout sheets shall have the same horizontal and vertical scale. Usually (1 inch = 10 feet) (1 inch = 20 feet). Sections of existing and proposed structures usually have a scale of (1 inch = 5 feet). Elements of the bridge (abutments, bents, slabs, etc.) shall be detailed to a (1/2 inch = 1 foot) or (1/4 inch equals 1 foot) architect scale to provide clear legible drawings when reduced. Letters shall be a minimum size of 4 millimeters (5/32 inch) height for hand lettering and 140 for lettering by computer-aided design and drafting (CADD).

18. Overhead Sign Bridge Layouts
A maximum of four structures may be shown on each layout sheet. The reference to the appropriate overhead sign bridge (OSB) standard and the following requirements shall be shown on the layout:
(1) Drilled shaft size and length
(2) Soil strength used for design {indicate basis and boring(s) used}
(3) Design height
(4) Tower height
(5) Leg spacings and
(6) Design wind speed.
The wind speed design map need not be included in the project plans. Designation of tower member size and anchor bolt size shall not be shown. For OSBs which require special design, the design shall be in accordance with the AASHTO sign specifications (see Item 22 of References on page 49) and to the same loading requirements as for normal standard structures. Structures (special or standard) which will have changeable message signs shall be analyzed by the ENGINEER.

EXHIBIT B

Scope of Services to be provided by the Engineer

APPENDIX C - GENERAL PLAN CHECKLIST

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

EXHIBIT B

Scope of Services to be provided by the Engineer

APPENDIX C - GENERAL PLAN CHECKLIST *(continued)*

Services Provided By: ENGINEER	COUNTY	
___	___	Permanent Lighting Plans, Quantities & Standards
___	___	Bridge Layout(s)
___	___	Bridge Details
___	___	Retaining Wall Layout(s)
___	___	Retaining Wall Details
___	___	Pumphouse Details
___	___	Underdrain Details (Retaining Walls)
___	___	Culvert Standards
___	___	Soil Profile
___	___	Temporary Traffic Signals
___	___	Design Cross Sections
___	___	Estimate
___	___	List of Standard Specification, Special Provisions & Special Specifications
___	___	Detour Special Provisions (If Required)
___	___	Construction Time Estimate
___	___	Critical Path Method (CPM)
___	___	Unit Price Documentation
Miscellaneous		
___	___	Conduit Requirements
___	___	Traffic signal Requirements
Summaries		**(ALL BELOW YES FOR ENGINEER AND NO FOR COUNTY UNLESS NOTED OTHERWISE)**
___	___	Salvaging and Placing Topsoil
___	___	Prepare ROW
___	___	Remove Old Structures
___	___	Scarify Existing Pavement
___	___	Remove Old Concrete Curb of Curb and Gutter (C&G)
___	___	Remove Old Concrete Pavement
___	___	Remove Old Concrete Riprap
___	___	Remove Metal Beam Guard Fence
___	___	Galvanized steel Beam Guard Fence (12Ga) (GSBGF)
___	___	Temporary Guard Fence (TEMPGF)
___	___	Summary of Concrete Flumes
___	___	Curbs
___	___	Adjust Manholes & Inlets
___	___	Underdrains
___	___	Base and Pavement
___	___	Large Structure
___	___	Concrete Riprap (RR8 & RR9)
___	___	Temporary Portable Concrete Barrier (PCBR)
___	___	Concrete Traffic Barrier
___	___	Vehicle Attenuator
___	___	Guard Rail Energy Absorbing Terminal (Great System)
___	___	Pavement Markings & Blast Cleaning (Thermoplastic)
___	___	Retaining Walls
___	___	Large Structure Summaries
___	___	Small Structure Summaries

EXHIBIT B

Scope of Services to be provided by the Engineer

APPENDIX C - GENERAL PLAN CHECKLIST *(continued)*

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

EXHIBIT C

-Engineer Contract Rates

EXHIBIT "C"
CONTRACT RATES

L & G Engineering
Transportation Consulting Engineers

Audited Overhead Rate FY 2013

Labor/Staff Classification	Hourly Base Rate	Contract Rate FY 15	Contract Rate *FY 16
Principal	$ -	$ -	$ -
Senior Project Manager	$ 70.00	$ 218.04	$ 224.58
Engineer (V) - Senior Engineer	$ 58.00	$ 180.66	$ 186.08
Senior Environmental Scientist/Specialist	$ 49.00	$ 152.63	$ 157.21
Engineer (III) - Project Engineer	$ 43.00	$ 133.94	$ 137.96
Engineering Lab Manager	$ 34.00	$ 105.91	$ 109.08
ROW Administrator	$ 34.00	$ 105.91	$ 109.08
Senior Engineer Tech	$ 30.00	$ 93.45	$ 96.25
Project Inspector (V)	$ 28.00	$ 87.22	$ 89.83
Record Keeper	$ 27.00	$ 84.10	$ 86.63
Project Inspector (I)	$ 22.00	$ 68.53	$ 70.58
CADD Operator / GIS Analyst	$ 22.00	$ 68.53	$ 70.58
Admin/Clerical	$ 20.00	$ 62.30	$ 64.17
Field Technician	$ 17.00	$ 52.95	$ 54.54

Negotiated Overhead Rate: **178.12%**

Negotiated Profit Rate: **12.00%**

Multiplier: **3.1149**

* Annual Escalation Rate = 3.00%

Contract Rates include labor, overhead, and profit. All rates are negotiated rates and are not subject to change or adjustment.

Other Direct Expenses:	Cost
Lodging	**$85/night**
Meals	**$36/day**
Mileage	**$0.55/mile**
Car Rental	**$75.00/day**
8 1/2" X 11" copies	**$1.00**/sheet
11" X 17" copies	**$1.50**/sheet
11" X 17" Mylar	**$2.00/sheet**
42in Color Roll Plots	**$5.00/SF**
Overnight Mail - Letter Size	**$15.00/Each**
Overnight Mail - Oversized Box	**$38.00/Each**

EXHIBIT D

-Work Authorization Form

HIDALGO COUNTY
Professional Engineering Services
Agreement #C-15-097-03-17

WORK AUTHORIZATION NO. ___

THIS WORK AUTHORIZATION is made pursuant to the terms and conditions of Section I.A. of the Agreement made by and between **HIDALGO COUNTY**, action herein by and through the **Commissioner's Court**, hereinafter called the "**Owner**," and, _____ professional engineers of_____ Texas, hereinafter called "**Engineer**".

PART 1. SCOPE OF WORK
The purpose of this Work Authorization is for the "engineering services" to provide_____.

The scope of services to be provided by the **Owner** is identified in **EXHIBIT "A" – Scope of Services to be provided by the Owner** attached hereto.

The scope of services to be provided by the **Engineer** is identified in **EXHIBIT "B" – Scope of Services to be provided by the Engineer** attached hereto.

PART 2. ESTIMATED COST
The estimated cost for services under this Work Authorization is _____.This amount is based upon the costs outlined in the Estimated **Cost Proposal** attached hereto as **EXHIBIT "D".**

PART 3. PAYMENT
Compensation and payment to the Engineer for the services established under this Work Authorization shall be made in accordance with Article/Part/Section _____ of the Agreement.

PART 4. FUNDING
This Work Authorization No.__ shall be funded through funding source:
Account No. _-_ _ _ _-_ _ _-_ _-_ _ _-_ _ _-_-_ _ _
Requisition Number _____ **(MUST BE INCLUDED AFTER CC APPROVAL)**

PART 5. PERIOD OF SERVICE
This Work Authorization shall become effective on the date of final acceptance of the parties hereto, and terminate **upon completion of scopes of the work authorization**.

PART 6. RESPONSIBILITIES AND OBLIGATIONS
This Authorization does not waive the parties' responsibilities and obligations provided under the **Agreement**.

PART 7. ACKNOWLEDGEMENT AND CONFIRMATION
Acknowledgement and Confirmation by Hidalgo County Precinct No.2, Commissioner, Eduardo Cantu, as to content and detail of this **Work Authorization No. ____.**

HIDALGO COUNTY
COMMISSIONER PRECINCT No. 2:

BY: _____

PART 8. ACCEPTANCE AND APPROVAL
This Work Authorization is hereby accepted, approved by Hidalgo County Commissioners' Court on _____(cc approval date)_____ as indicated below and effective as of _____ day of _____, 201__.

THE ENGINEER:
L&G ENGINEERING

_____
By: Jacinto Garza, P.E.

THE OWNER:
HIDALGO COUNTY

_____
By: Ramon Garcia, County Judge

ATTEST:

_____
By: Arturo Guajardo Jr., County Clerk

EXHIBIT E

-Supplemental Agreement Form

THE STATE OF TEXAS §
§
COUNTY OF HIDALGO §

SUPPLEMENTAL AGREEMENT NO.
TO AGREEMENT FOR PROFESSIONAL ENGINEERING SERVICES

THIS SUPPLEMENTAL AGREEMENT is made pursuant to the terms and conditions of paragraph 5 of the Agreement made by and between **HIDALGO COUNTY**, acting herein by and through the **Commissioner's Court**, hereinafter called the "**Owner**", and _____, Professional Engineers of, _____, Texas, hereinafter called the "**Engineer**".

WITNESSETH

WHEREAS, the **Owner** and the **Engineer** executed the **Agreement** on the ___ day of _____ **20**___ concerning Engineering for_____ hereinafter referred to as the ("**Project**"); and,

WHEREAS, Paragraph ___ of the **Agreement**, (paragraph title), establishes _____; and,

WHEREAS, it has become necessary to amend the Agreement to _____

A. AGREEMENT

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

I. Paragraph ___ of the **Agreement**, (paragraph title), is revised to

_____
_____
_____
_____
_____
_____

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:

BY:_____

Address for Giving Notices:

_____

_____

THE OWNER:
HIDALGO COUNTY

BY:_____
Ramon Garcia, County Judge

LIST OF ATTACHMENTS

(as required)

EXHIBIT F

-Certificates of Insurance

Exhibit F
CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 07/23/2014

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER	CONTACT NAME:	
The Risk Specialty Group LLC 4801 Woodway Drive Suite 300 East Houston TX 77056	PHONE (A/C, No, Ext): (713) 552-1900	FAX (A/C, No): (713) 513-5411
	E-MAIL ADDRESS: tlanders@riskspecialtygroup.com	
	INSURER(S) AFFORDING COVERAGE	NAIC #
	INSURER A : Valley Forge Insurance Company	
INSURED L&G Consulting Engineers, Inc. 2100 W. Expressway 83 Mercedes TX 78570	INSURER B : Continental Casualty Insurance Co.	
	INSURER C : Gemini Insurance Company	
	INSURER D : Texas Mutual Insurance Company	
	INSURER E :	
	INSURER F :	

COVERAGES **CERTIFICATE NUMBER:** **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	GENERAL LIABILITY X COMMERCIAL GENERAL LIABILITY CLAIMS-MADE X OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: POLICY X PRO-JECT LOC			5095025836	07/19/2014	07/19/2015	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG	$ 1,000,000 $ 100,000 $ 5,000 $ 1,000,000 $ 2,000,000 $ 2,000,000
	AUTOMOBILE LIABILITY ANY AUTO ALL OWNED AUTOS SCHEDULED AUTOS HIRED AUTOS NON-OWNED AUTOS						COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)	$ $ $ $
B	X UMBRELLA LIAB X OCCUR EXCESS LIAB CLAIMS-MADE DED X RETENTION $ 10,000			5095026016	07/19/2014	07/19/2015	EACH OCCURRENCE AGGREGATE	$ 1,000,000 $ 1,000,000
D	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY Y / N ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	N / A		TSF0001273119	07/23/2014	07/23/2015	X WC STATU-TORY LIMITS OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	$ 1,000,000 $ 1,000,000 $ 1,000,000
C	Professional Liability "claims made"			HPM-DP-00195-00	07/19/2014	07/19/2015	Each Claim Limit Aggregate Limit	$2,000,000 $2,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

Ref: Professional Engineering Services. Hidalgo County is named as additional insured on General Liability & Automobile and is provided with 30 days notice of cancellation and waiver of subrogation on General Liability, Automobile & Workers Compensation as required by written contract. Policies are primary/non-contributory when required by written contract.

CERTIFICATE HOLDER

Hidalgo County
Attn: Purchasing Department
2812 S. Highway Bus. 281
Edinburg, TX 78539

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE <CC>

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 9/2/2014

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER RUBY CASAS INSURANCE AGENCY 702 N Closner Blvd Edinburg, TX 78541	CONTACT NAME: PHONE (A/C, No, Ext): (956) 383-8141 FAX (A/C, No): (956) 278-3246 E-MAIL ADDRESS: rubycasas@rubycasasinsurance.com
INSURED L&G CONSULTING ENGINEERS, INC DBA L&G ENGINEERING 2100 W EXPRESSWAY 83 MERCEDES TX 78570	INSURER(S) AFFORDING COVERAGE — NAIC# INSURER A: TRUCK INSURANCE EXCHANGE — 21709 INSURER B: FARMERS INSURANCE EXCHANGE — 21652 INSURER C: MID CENTURY INSURANCE COMPANY — 21687 INSURER D: INSURER E: INSURER F:

COVERAGES CERTIFICATE NUMBER: REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
	COMMERCIAL GENERAL LIABILITY						EACH OCCURRENCE	$
	[ ] CLAIMS-MADE [ ] OCCUR						DAMAGE TO RENTED PREMISES (Ea occurrence)	$
							MED EXP (Any one person)	$
	GEN'L AGGREGATE LIMIT APPLIES PER:						PERSONAL & ADV INJURY	$
	[ ] POLICY [ ] PRO-JECT [ ] LOC						GENERAL AGGREGATE	$
	OTHER:						PRODUCTS - COMP/OP AGG	$
								$
A	AUTOMOBILE LIABILITY						COMBINED SINGLE LIMIT (Ea accident)	$ 1,000,000
	[X] ANY AUTO						BODILY INJURY (Per person)	$
	[ ] ALL OWNED AUTOS [ ] SCHEDULED AUTOS	Y	Y	605950941	07/19/2014	07/19/2015	BODILY INJURY (Per accident)	$
	[X] HIRED AUTOS [X] NON-OWNED AUTOS						PROPERTY DAMAGE (Per accident)	$
								$
	UMBRELLA LIAB [ ] OCCUR						EACH OCCURRENCE	$
	EXCESS LIAB [ ] CLAIMS-MADE						AGGREGATE	$
	DED [ ] RETENTION $							$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY Y/N						[ ] PER STATUTE [ ] OTH-ER	
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? [ ] N/A						E.L. EACH ACCIDENT	$
	(Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - EA EMPLOYEE	$
							E.L. DISEASE - POLICY LIMIT	$

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

HIDALGO COUNTY IS AUTOMATICALLY INCLUDED AS ADDITIONAL INSURED ON THE AUTOMOBILE POLICY AND PROVIDED WITH BLANKET WAIVER OF SUBROGATION IN THEIR FAVOR ON THE AUTOMOBILE AS REQUIRED BY WRITTEN CONTRACT.

CERTIFICATE HOLDER	CANCELLATION
HIDALGO COUNTY 2802 S BUSINESS HWY 281 EDINBURG, TX 78539	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE