

HIDALGO COUNTY
Professional Engineering Services
Contract # C-08-381-09-16
Work Authorization Form

Work Authorization No. 13

THIS WORK AUTHORIZATION is made pursuant to the terms and conditions of Article 1. of the Agreement made by and between the **HIDALGO COUNTY**, acting herein by and through Commissioner's Court, hereinafter called the "**Owner**," and, **R. GUTIERREZ ENGINEERING CORPORATION**, professional engineers of Pharr, Texas, hereinafter called "**Engineer**".

PART 1. SCOPE OF WORK

The purpose of this Work Authorization is for the **Engineer** to provide services for the development of plans, specifications and estimate for the reconstruction and upgrading of existing rural type streets, with open roadside ditches, to streets with curb & gutter and a storm sewer system typical of an urban environment. The work is in the El Charro Subdivision and includes work in this subdivision that did not receive funding under the Border Colonia Access Program (BCAP). The original BCAP project included 0.7 miles of street improvements and the additional work is for 0.37 miles of streets. The streets included in this work are Kennedy Street, Toupi Drive and Toultec Drive.

The scope of services to be provided by the **Owner** is identified in **Attachment 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 **Attachment 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 included in **Attachment D – Proposed Fee**. The actual amount payable for services under this Work Authorization will be in accordance with Article 6.

PART 3. PAYMENT

Payment to the **Engineer** for the services established under this Work Authorization shall be made in accordance with Article 9.

PART 4. FUNDING

This Work Authorization No. 13 shall be funded through funding source:

Account No. 9-1202-431-00-122-006-0-731 & 733

Requisition No. _____ (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 shall terminate upon completion of the scope of services of the work as provided in Article 4.

PART 6. RESPONSIBILITIES AND OBLIGATIONS

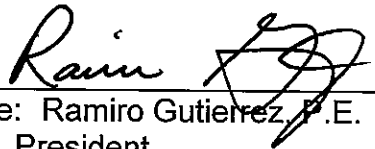
This Authorization does not waive the parties' responsibilities and obligations provided under the Agreement.

PART 7. ACCEPTANCE AND ACKNOWLEDGEMENT

This Work Authorization is hereby accepted and acknowledged as indicated below and effective as of ___ day of _____, 2009.

ENGINEER:

R. Gutierrez Engineering Corporation

By: 
Name: Ramiro Gutierrez, P.E.
Title: President

OWNER:

COUNTY OF HIDALGO

By: 
Name: Hector "Tito" Palacios
Title: Commissioner Pct. No. 2

By: _____
Name: Juan D. Salinas
Title: County Judge

LIST OF ATTACHMENTS

- ATTACHMENT A – Services to be Provided by the Owner
- ATTACHMENT B – Services to be Provided by the Engineer
- ATTACHMENT C – Work Schedule
- ATTACHMENT D – Proposed Fee

HIDALGO COUNTY
Professional Engineering Services
Contract # C-08-381-09-16

Work Authorization No. 13

ATTACHMENT A
Services to be Provided by the Owner

The following provides an outline of the services to be provided by the **Owner** in the development of the **Project**.

General

The **Owner** will provide to the **Engineer** the following:

- (1) Payment for work performed by the **Engineer** and accepted by the **Owner** in accordance with Article 6 and Article 9 of this Agreement.
- (2) Assistance to the **Engineer**, as necessary, to obtain the required data and information from other local, regional, **State** and Federal agencies that the **Engineer** cannot easily obtain.
- (3) Provide any available relevant data the **Owner** may have on file concerning the project.
- (4) Provide timely review and decisions in response to the **Engineer's** request for information and/or required submittals and deliverables.
- (5) Attend and participate in progress meetings as required and as coordinated and conducted by the **Engineer**.

HIDALGO COUNTY
Professional Engineering Services
Contract # C-08-381-09-16
Work Authorization Form

Work Authorization No. 13

ATTACHMENT B
Services to be Provided by the Engineer

The following provides an outline of the services to be provided by the **Engineer** in the development of the **Project**.

The **Engineer** will provide to the **Owner** the following:

The Engineer shall render specific management and engineering services for the development of the Project and fulfillment of this Agreement as follows:

- I. **PRELIMINARY PHASE - GENERAL PROJECT MANAGEMENT AND ADMINISTRATION**
- II. **DESIGN PHASE – FINAL DESIGN AND PLANS, SPECIFICATIONS, AND ESTIMATES (PS&E) FOR COLONIA ACCESS**

I. PRELIMINARY PHASE SERVICES

GENERAL PROJECT MANAGEMENT

Services for **GENERAL PROJECT MANAGEMENT** by the Engineer will include the following:

1. Project/Program Schedule.
2. Coordination/Meetings. The Owner may require the Engineer to attend local public hearings, policy meetings and upon request attend Owner staff meetings. The Engineer shall assist the Owner, as requested, at meetings with other necessary entities.

Planning & Assessment

The Engineer will provide the following:

- 1) Review, verify and gather data necessary to proceed with design of the project.
- 2) Obtain geotechnical data for pavement designs; determine subsurface conditions.
- 4) Engineer will utilize Hidalgo County established Standards and only if necessary and authorized by Owner, develop pavement designs, including cost data, pavement material properties, and pavement drainage.
- 5) Develop alignments; develop typical sections.
- 6) Develop hydraulic design criteria in accordance with Hidalgo County/Local Municipal or TXDOT guidelines.
- 7) Verify FEMA FIRM zones and requirements.

Right of Way Data

The Engineer shall provide utility and right of way data for each approved individual project as follows:

Utility Coordination/Inventory

- 1) The Engineer will develop utility layout sheets from schematics and incorporate utility information; identify all existing overhead and above ground utilities; identify all existing underground utilities; document all information on utility layout sheets; identify potential conflicts. The layout sheets will be reproducible drawings (11" X17") with the following information:
 - a) Existing and/or proposed right of way lines
 - b) Benchmark data
 - c) Existing and proposed drainage system(s)
 - d) Location and size of utility (plan/profile view)
 - e) Limits of existing casing pipe
 - f) Name of the owner/company
- 2) The Engineer will coordinate utility adjustments with Owner and all affected utility owners as necessary.

Field Survey

The Engineer will provide the following:

- 1) Vertical and Horizontal Control. Establish and stake the Project control centerline (baselines) and offset for the Project or portions of the Project. Establish vertical control by looping all benchmark (BM) circuits and tie to monument permanent BM elevation. BM's are to be set at approximately 1,000 ft. intervals, or at intervals appropriate to suit field conditions, using Global Positioning System (GPS) survey, and in a location that will be undisturbed by future construction.
- 2) Topography. Obtain topographic information surveyed for the length of the control centerline, as required; provide location (station and offset), size, height, and depth and/or length and description of topographic features; to include, but not limited to the following: driveways, signs, light poles, mail boxes, all fences (including metal beam guard fence and turndowns), utilities (type, owner, location, and depth), riprap, existing right of way lines, private property lines, county and/or city limits, etc.. Drainage elements to include: flow lines and/or top of structures for drain pipes, inlets, manholes, other miscellaneous structures and ditches.
- 3) Design Centerline. Establish and stake the design centerline.

II. DESIGN PHASE SERVICES

Final Design and Plans, Specifications & Estimates

The Engineer will develop the final design and prepare contract drawings, specifications and estimates for construction of the Project or portions of the Project as authorized by the Owner. These documents will be submitted to the applicable city, county, state, and/or federal agencies for approval.

All final plan sheets will be developed by the Engineer on 11" X 17" white paper.

Recognizing that there may be several team members participating in the development of the overall Project, and taking into consideration that the Owner has a significant investment in the development of the Project, there is need for consistency in document development for the purpose of review and production to help facilitate an economically efficient product. All computer document files furnished to the Owner by the Engineer shall be furnished on a CD-ROM created utilizing DOS software. Retrieval documentation relating to file storage on the designated delivery media shall be prepared by the Engineer and provided to the Owner. It is the intent of the Engineer

and this Agreement to secure computer files from all Project Team members that are composed of elements of the same precision, integrity, singularity, attributes.

The Engineer shall prepare graphic files that can be reviewed and plotted utilizing Microstation/AutoCAD, software. The graphic files submitted must be compatible with Microstation Cad System without conversion or modification and must plot consistent with reproducible plots submitted.

Plan Sheets. Plan sheets developed by the Engineer will include, but not limited to, title sheet, typical sections, sequence of construction, estimates and quantity, plan-profile, channel details, roadway details, bridge and culvert details, hydraulic details, and standards.

Specifications. The Engineer shall use the 2004 Texas Department of Transportation Standard Specifications for Construction and Maintenance of Highways, Streets, and Bridges. Other specifications may be developed by the Engineer, but must incorporate, references to standard TXDOT requirements of design & testing procedures and Hidalgo County Subdivision Required Standards.

Estimates. The Engineer will prepare detailed cost estimates and proposals of authorized construction, which will include summaries of bid items and quantities based on the unit price system of bidding.

All plots and graphic media provided by the Engineer, as a result of this Agreement, shall be delivered to the Owner. Final payment for plan sheet documents and/or associated, applicable engineering files will not be made until the files furnished by the Engineer have been demonstrated to be useable in the formats described above and herein.

Services for FINAL DESIGN AND PLANS, SPECIFICATIONS AND ESTIMATES by the Engineer will include the following:

Roadway Design Controls

The Engineer will prepare the roadway design for the Project or portions of the Project as authorized by the Owner. The roadway design will be submitted to the applicable city, county, state, and/or federal agencies for approval.

Roadway design controls will include:

- 1) Geometric design – horizontal and vertical alignments, intersection geometrics; to be incorporated onto plan and profile sheets.
- 2) Geometric and grading design – development of typical roadway sections through horizontal and vertical alignment determination and roadway cross sections.

- 3) Grading design – existing and design cross sections, cut/fill quantities, slope stability analysis, embankment foundation stability and settlement analysis.
- 4) Earthwork Quantities – obtained from grading design.
- 5) Miscellaneous supplemental plan details.

Drainage

The Engineer will perform final hydrologic/hydraulic analysis and design for the proposed improvements of the Project or portions of the Project as authorized by the Owner.

Signing

The Engineer will determine location and type of warning, regulatory and guide signs as required by the Hidalgo County Subdivision Standards or local Municipal standards as applicable. All signing design will be based on the final proposed roadway design.

Permanent Pavement Markings

The Engineer with the Owner will evaluate the need for pavement markings and design all permanent pavement markings in accordance with the Hidalgo County Subdivision Standard or Local Municipal Standards as applicable. All such design will be based on the final proposed roadway design.

Miscellaneous

If required for the Project or portion of the Project approved by the Owner, the Engineer will provide the following miscellaneous roadway items:

Miscellaneous Drafting, Standards, and Details

- 1) The Engineer will prepare a title sheet indicating, at a minimum, project limits, project location map, name of owner and owner acknowledgement/acceptance, facility identification, specification reference, Engineer's seal, signature and date.
- 2) The Engineer will determine appropriate standard drawings to be incorporated into the plans, and sign/seal any modifications to any agency or industry approved standards.
- 3) The Engineer will develop any details to clarify any construction requirements of the plan drawings.

PS&E Supporting Documents

- 4) Specifications List and general Notes. The Engineer will prepare an applicable specification list, in TXDOT format, as well as any general notes that may be applicable to each PS&E submission.
- 5) Estimates. The Engineer will prepare detailed cost estimates and proposals of authorized construction, which will include summaries of bid items and quantities based, insofar as practicable, on the unit price system of bidding.
- 6) Contract Time Determination Statement. The Engineer will determine the time required for construction of the project, outlining phases of construction and appropriate rates of production and construction for bid items determined to be in the critical path for construction of the PS&E submittal.

HIDALGO COUNTY
Professional Engineering Services
Contract # C-08-381-09-16
Work Authorization Form

Work Authorization No. 13

ATTACHMENT C
Work Schedule

The schedule for the work in this Work Authorization shall commence on the date of execution of this Work Authorization and continue for:

(1) a period which may reasonably be required for performing the topographic and boundary surveying services called for as described in Exhibit B of this Work Authorization including any extra work and any required additions thereto; or

(2) a period extending 12 months after the completion of the services called for as described in Exhibit B of this Work Authorization.

The final acceptance by the Owner of the services called for as described in Exhibit B of this Work Authorization shall serve as evidence of completion of the work on this Work Authorization.

Fee Proposal

TASK	ESTIMATED CONSTRUCTION COST	PROFESSIONAL SERVICES FEE (10.5%)
SOUTH TOWER ESTATES SUBDIVISION		
El Charro Subdivision Paving & Drainage (add'l work)	\$227,205	\$23,857
TOTAL ***	\$227,205	\$23,857
Preliminary Phase Services Fee (50% of Total)		\$11,928
Design Phase Services Fee (30% of Total)		\$7,157
Construction Services Fee (20% of Total)		\$4,771
Total Fee Estimate		\$23,857
*** Total Est. Construction Cost includes 1,989 LF of Streets not covered in previous Work Authorizations		

