

**HIDALGO COUNTY**  
**Professional Engineering Services**  
**Contract # C-10-341-10-05**  
**Work Authorization Form**

**WORK AUTHORIZATION NO. 1**

THIS WORK AUTHORIZATION is made pursuant to the terms and conditions of Article 7 of the Agreement made by and between HIDALGO COUNTY, action herein by and through the Commissioner's Court, hereinafter called the "Owner," and, TEDSI Infrastructure Group, Inc., professional engineers of Mission, Texas, hereinafter called "Engineer".

**PART 1. SCOPE OF WORK**

The purpose of this Work Authorization is to provide Professional Design Engineering Services for construction of Pleasantview Rd-City Limits (South of 11<sup>th</sup> St) to Mile 5N Rd as indicated below:

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 \$166,638.00. 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 Articles 5 & 6 of the Agreement.

**PART 4. FUNDING**

This Work Authorization No. 1 shall be funded through funding source:

Account No. 2010-1342-431-00-121-086-0-731

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.

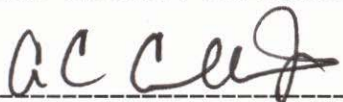
**PART 6. RESPONSIBILITIES AND OBLIGATIONS**

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 Commissioner A.C. Cuellar, Jr., as to content and detail of this Work Authorization No. 1.

HIDALGO COUNTY PRECINCT #1

BY: 

A.C. Cuellar, Jr., Commissioner

**PART 8. ACCEPTANCE AND APPROVAL**

This Work Authorization is hereby accepted, approved by Hidalgo County Commissioners' Court on October 5, 2010 as indicated below and effective as of 5<sup>th</sup> day of October, 2010.

THE ENGINEER:  
TEDSI Infrastructure Group, Inc.

THE OWNER:  
HIDALGO COUNTY

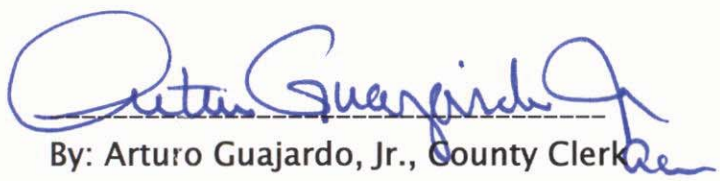


By: Jessie Salinas-Principia



By: Rene A. Ramirez, County Judge

ATTEST:



By: Arturo Guajardo, Jr., County Clerk

**LIST OF ATTACHMENTS**

- ATTACHMENT "A" - Service to be Provided by the Owner
- ATTACHMENT "B" - Services to be Provided by the Engineer
- ATTACHMENT "C" - Work Schedule
- ATTACHMENT "D" - Cost Proposal

**ATTACHMENT "A"**  
**Services to be Provided by the Owner**

**Pleasantview Rd – City Limits (South of 11th St) to Mile 5N Rd**

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

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

- 1) Prepare and execute a Purchase Order with Hidalgo County Purchasing Department
- 2) Authorization to the Engineer to begin work.
- 3) Payment for work performed by the engineer.
- 4) Assistance to the Engineer, as necessary, to obtain required data and information from other local, regional, and state agencies that the Engineer cannot easily obtain.
- 5) Secure required Environmental permits from regulatory agencies
- 6) Acquire additional Right of Way identified by the Engineer
- 7) Provide any available relevant data that may on file concerning the Project.
- 8) Provide timely review and decisions in response to the Engineers request for information and/or submittals and deliverables.
- 9) Attend and participate in progress meetings as required and as coordinated and conducted by the Engineer.
- 10) Advertise and award, as assisted and recommended by the Engineer, construction contracts for the PS&E developed by the Engineer.
- 11) Attend pre-bid and pre-construction conferences coordinated and conducted by the Engineer.
- 12) Review and approve monthly and final estimates, developed by the Engineer, for payment to the Contractor. Compensate and pay the Contractor for work performed as identified in the approved monthly and final estimates.
- 13) Provide assistance to Engineer where necessary and possible with Owner information/resources to ensure project is completed within timely/efficient basis.
- 14) Provide Engineer with Geotechnical Data for pavement design and thickness.

**ATTACHMENT "B"**  
**Services to be Provided by the Engineer**

**Pleasantview Rd – City Limits (South of 11th St) to Mile 5N Rd**

The **Engineer** shall provide the following engineering services required for the preparation of the plans, specifications and estimates (PS&E) for **Pleasantview Rd**. The **Engineer** shall maintain a direct line of communication and coordinate very closely with the Hidalgo County Pct 1.

**A. BASIC ENGINEERING DESIGN SERVICES**

**UTILITIES**

1. Coordinate and attend utility coordination meetings. Provide copies of plans to the utility companies at 60% and final plan submittals.
2. Coordinate with utility companies to determine areas of conflicts.

**ROADWAY DESIGN CONTROLS**

1. Finalize horizontal and vertical alignments.
2. Prepare Horizontal Alignment Data sheets.
3. Prepare Project Layout sheets.
4. Develop Typical Sections.
  - a) The roadway typical section shall be as per Hidalgo County Roadway Specifications and shall consist of 2" of ACP, 8" of Flexible Base with 2% lime and 12" Subgrade with 6% lime.
  - b) The typical section shall be as follow:
    - South of 11th St to Mile5N Rd (18<sup>th</sup> St) - curb and gutter, 40' back to back.
    - Mile 5N Rd (18th St) to Mile 6N Rd (34th St) – 24' asphalt roadway with roadside ditches
5. Prepare plan and profile sheets for roadway and intersecting streets as required for widening and/or reconstruction.
6. Determine roadway quantities, including cut and fill quantities, and prepare quantity summary sheet.

**DRAINAGE**

1. Coordinate all drainage design with Hidalgo County Pct 1.
2. Identify the drainage watersheds for this project, by means of site visits, as built-plans, USGS data, Pct 1 Drainage Studies and Survey information.
3. Calculate the existing and proposed discharge values, analyze the existing outfall channels & storm sewer systems all for a 2 yr design frequency.
4. Design and develop storm sewer system plans for the proposed roadway improvements.
5. Compute and summarize all drainage quantities.
6. Select all drainage standards and develop all miscellaneous drainage details.
7. Storm Water Pollution Prevention Plan (SW3P)
  - a) Develop SW3P Narrative
  - b) Develop SW3P Plans. SW3P controls may include but are not limited to temporary sediment fence, construction exits, and rock berms.
  - c) Compute and summarize all SW3P quantities.

**MISCELLANEOUS (ROADWAY)**

1. Develop Miscellaneous Roadway Details.
2. Prepare Advance Warning Signage and Barricades at intersecting roadways.
  - a) Traffic Control Plan will be developed based on street closures.
3. Prepare Title Sheet and Index sheets.
4. Calculate project quantities and prepare quantity summary sheet.
5. Prepare general notes.

6. Prepare driveway tables
7. Prepare list of Standard Drawings to be included in the plans.
8. Assemble plans for project milestones. Two reproducible paper (11" x 17") copies of the plans shall be submitted to the Pct 1 at the 60% and final design completion stages.
9. Upon completion of the review of the final plans, the ENGINEER shall assemble and furnish signed original (11" x 17") drawings which shall include all applicable standards.
10. Coordinate with Pct 1 and other agencies.
11. Develop and assemble Preliminary Construction Cost Estimates at 60% and final plan milestone submittals.
12. Develop Roadway Design Criteria.
13. Assist in developing a public involvement plan.

#### **SIGNING, PAVEMENT MARKINGS AND SIGNALIZATION**

1. Signing and Pavement Markings
  - a) Prepare Sign and Pavement Markings Layouts. Signs and Pavement Markings may be shown in same layouts.
  - b) Prepare Small Sign Details
  - c) Prepare Small Sign Summaries
2. Signalization
 

None

#### **CONSTRUCTION SUPPORT**

1. Prepare Bid Documents
2. Attend and Coordinate Pre-bid Conference
3. Evaluate Bids
4. Make Award Recommendation
5. Assist County with preparation of Contract Documents.
6. Attend and Coordinate Pre-construction Conference.
7. Site visit once a month during construction.
8. Respond to Request for Information (RFI) from Contractor
9. Review Pay Requests
10. Preparation of Change Orders
11. Final Site Visit

#### **B. FIELD DESIGN SURVEY SERVICES**

##### **FIELD SURVEYING**

1. Cross Sections
  - a) Provide cross sections every 100' up to R.O.W. line (R.O.W. 60' usual)
  - b) Cross section for drainage channels. Three sections (0 ft, 100 ft and 200 ft) down and upstream of proposed outfall as required.
2. Topographics survey of entire project length including:
  - a) Topography within existing R.O.W.
  - b) Topography shall start at South of 11th St and end at Mile 5N Rd (34th St).
  - c) Topography shall include any existing drainage crossings.
  - d) Intersections at each project's limits
  - e) Include flow lines, size and direction of irrigation and drainage channels/structures
  - f) Include utilities and drainage structures
  - g) Perform one-call (Dig Tess) and identify and locate utilities (within limits of R.O.W.) as flagged/marked by utility companies
  - h) Provide copies of all utility maps obtained from utility companies along with one call (Dig Tess) documentation/confirmation.
  - i) Provide list of each utility contact person
  - j) Include inverts on sanitary sewer, measure downs to top of keys on water and gas mains

- k) Survey sanitary sewer manholes downstream and upstream of project to determine flow and connectivity.
- l) Locate proposed soil core holes as drilled.
- m) Establish x, y, and z coordinates of power poles, manholes and valves of various utilities, flow lines of existing sanitary sewer and storm sewer lines, and subsequent utility ties of facilities exposed by others. Surveyor to survey nearest manhole/valve invert outside project limits.
- n) Establish 2 benchmarks for project control.
- o) Provide project ties at limits of project in order to provide adequate length to establish grades.
- p) R.O.W. to be determined using existing plats or title reports.

**C. ADDITIONAL SERVICES NOT INCLUDED AS PART OF THIS PROJECT**

- 1. Utility Design
- 2. ROW Survey and Acquisition Services
- 3. Traffic Studies
- 4. Design of irrigation ditches and lines
- 5. Construction staking
- 6. Development of specifications.
- 7. Submittal of documents to other agencies: Pct 1 to submit required documents (prepared by TEDSI)
- 8. Design of new drainage outfalls (design to tie into existing outfalls)
- 9. All Environmental Services and Site Assessment and necessary permits in regards to:
  - a) Impacts
  - b) Wetlands
  - c) Endangered species
  - d) Historic/archaeological/cultural
- 10. Coordination with regulatory agencies
- 11. Advertisement and award of construction contract
- 12. Geotechnical Services: pavement section design, testing prior to PS&E development and testing during construction
- 13. Perform evaluations and other tasks related to permitting issues for particular locations or elements of the project.
- 14. Construction Management:
  - a) Construction Inspection
  - b) Construction Staking
  - c) R.O.W. Staking
- 15. Record drawings.

Additional Services to be negotiated by Supplemental Agreement.

**ATTACHMENT "C"**  
**Work Schedule**

**Pleasantview Rd – City Limits (South of 11th St) to Mile 5N Rd**

<b>Months from Notice to Proceed</b>					
<b>Task</b>	<b>Description</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
1	Survey				
2	Plans, Specifications and Estimates				
3	Bid Process-Contract Award				

## Attachment "D"

### Estimated Fee Proposal

<b>Pleasantview Rd</b>			
<b>From City Limits (South of 11th St) to Mile 6N Rd (18th St)</b>			
<u>Construction Cost</u>		=	<b>\$746,847.00</b>
<u>Engineering Services</u>			
Basic Engineering Design Services Fee at	9%	=	\$67,217.00
Field Design Survey Services Fee at	3%	=	\$22,406.00
<b>Total Engineering Services</b>			<b>\$89,623.00</b>

<b>Pleasantview Dr</b>			
<b>From Mile 6N Rd (18th St) to Mile 5N Rd (34th St)</b>			
<u>Construction Cost</u>		=	<b>\$641,784.00</b>
<u>Engineering Services</u>			
Basic Engineering Design Services Fee at	9%	=	\$57,761.00
Field Design Survey Services Fee at	3%	=	\$19,254.00
<b>Total Engineering Services</b>			<b>\$77,015.00</b>

<b>Grand Total Engineering</b>	<b>\$166,638.00</b>
--------------------------------	---------------------

