

EXHIBIT E -Work Authorization

HIDALGO COUNTY

Professional Engineering Services Contract # C-15-137-04-28

Work Authorization Form

WORK AUTHORIZATION NO. 01

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, Halff Associates, Inc., professional engineers of McAllen, Texas, hereinafter called "Engineer".

PART 1. SCOPE OF WORK The purpose of this Work Authorization is for the Engineer to provide Mechanical, Electrical, Plumbing, and Civil Engineering Assessment and Reporting for Courthouse Electrical Generator.

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 for \$75,420.00. 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 Article/Part/Section 6 of the Agreement.

PART 4. FUNDING This Work Authorization No. 1 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 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 #4, Commissioner Joseph Palacios as to content and detail of this Work Authorization No. 01.

HIDALGO COUNTY PRECINCT No. 4

BY: Joseph Palacios, Commissioner

PART 8. ACCEPTANCE AND APPROVAL This Work Authorization is hereby accepted, approved by Hidalgo County Commissioners' Court on _____ as indicated below and effective as of ____ day of _____, 2015.

THE ENGINEER:
ASSOCIATES INC.

THE OWNER: HALFF
HIDALGO COUNTY


By: Menton J. Murray, III, P.E., LEED AP

By: Ramon Garcia, 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

EXHIBIT A

-Scope of 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.

The **OWNER** will provide to the **ENGINEER** the following:

- (1) Authorization to the **ENGINEER** to begin work in accordance with Section 3 of this Agreement.
- (2) Payment for work performed by the **ENGINEER** and accepted by the **OWNER** in accordance with Section 6 of the Agreement.
- (3) 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.
- (4) Provide any available relevant data the **OWNER** may have on file concerning the project.
- (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 Attachment "C" of this Agreement.
- (6) Attend and participate in progress meetings as required and as coordinated and conducted by the **ENGINEER**.
- (7) Assist the **ENGINEER** in the preparation of the project mailing list; provide representation, a site and stenographer for all public meetings; additionally:

Public Meetings

- (a) Approve agenda and all exhibits prior to public meeting.
 - (b) Approve date and location of the meeting.
 - (c) Review/approve Public Meeting Report.
- (8) Attend the Preliminary Concept Conference coordinated and conducted by the **ENGINEER** and more particularly identified in Attachment "B" of the Agreement.
 - (9) Assist the **ENGINEER** as required in the coordination with the USACE and the Federal Emergency Management Agency (FEMA) and any other coordinating agency or entity.
 - (10) Review and approve the Project design criteria.
 - (11) Review and approve change orders as required and prepared by the **ENGINEER**.

EXHIBIT B

-Scope of Services to be provided by the Engineer

Through project award via Work Authorization, Engineer shall provide Professional Services required to design and specify Building Repair and Renovation Projects. Type of services that may be included as dictated by the individual project requirements consist of: 1) Surveying, 2) Civil Engineering, 3) Mechanical/ Plumbing Engineering, 4) Electrical Engineering, 5) Structural Engineering. Upon Identification by the Owner of specific projects that require the professional services of the Engineer, a detailed scope of work and identification of professional service disciplines required shall be established.

Halff Associates, Inc. is please to submit Work Authorization #01 proposal under our existing Professional Service Agreement (C15-137-04-28) with Hidalgo County to provide Mechanical, Electrical, Plumbing, and Civil Engineering Assessment and Reporting for Courthouse Electrical Generator.

Assessment and Reporting Phase

- Site visits to determine existing conditions
- Review with staff to determine options
- Prepare existing drawings and draft background
- Review existing feeders & connections to Courthouse, Annex, IT Dept., Modular Buildings
- Evaluate conduit routing options
- Select equipment to be replaced or relocated
- Establish plan with demo generator and existing tank
- Document existing main switchgear and main panels
- Document existing sub-panels and distribution
- Document existing unused emergency system
- Document critical loads and locations
- Document feeders
- Open existing Jboxes panels with County Help
- Prepare existing one line
- Plan for Building to house switchgear
- Plan for New AEP Service for New Equipment
- Prepare new one line
- Elevator circuits and sump pumps
- Establish plan to maintain HVAC and equipment loads
- Prepare emergency distribution plan
- Evaluate natural gas and propane vs diesel.
- Run generator sizing program
- Evaluate step loads
- Evaluate generator use for future courthouse
- Review existing sump pump locations and size
- Review routing of sump lines.
- Assess sump pumps and sewage separation to improve drainage
- Establish probable costs with options
- Review with staff estimate of probable costs
- Provide report power point with equipment revisions
- Review with staff to determine recommended options
- Make final recommendations for design
- Sub consultant- Structural Evaluation

EXHIBIT C

-Work Schedule

A detailed work schedule for each **Work Authorization**, identified and more particularly described in **Article 7** of this Agreement, shall be prepared by the **Engineer** to be submitted and approved by the Owner in writing for each **Work Authorization**. The work schedule will provide specific work sequence and definite review times by the **Owner** and the **Engineer** of the work performed.

The **Engineer** will diligently pursue the completion of each **Work Authorization** as defined by the milestones and deliverable due dates outlined in each **Work Authorization**'s associated work schedule.

The **Engineer** will inform the **Owner** (in reasonable advance of the delay) should the **Engineer** encounter delays that would prevent the performance of all work in accordance with the established work schedule.

EXHIBIT D

Cost Proposal

Provide Mechanical, Electrical, Plumbing, and Civil Engineering Assessment and Reporting for Courthouse Electrical Generator.

Phase 1

- **Assessment and Reporting** **\$ 75,420.00**

Total: **\$ 75,420.00**

Half Associates, Inc.
 Fee Schedule-Courthouse Electrical Generator Addition assessment
 HIDALGO COUNTY 2014 On-Call Contract No: C15-137-04-28

| | Project Manager | PE | EIT | Designer | Const. Admin | CAD Tech | Clerical | Sub-Consultant | TOTAL (HOURS) | TOTAL (\$) |
|---|-----------------|------------|------------|-----------|--------------|-----------|-----------|----------------|---------------|-----------------|
| Contracted Rate: | \$205 | \$160 | \$120 | \$80 | \$90 | \$60 | \$60 | | | |
| Phase 1 | | | | | | | | | | |
| Assessment and Reporting Phase | | | | | | | | | | |
| Site visits to determine existing conditions | 12 | 12 | 8 | 8 | | | | | 40 | \$5,980 |
| Review with staff to determine options | 4 | 4 | | | | | | | 8 | \$1,460 |
| Prepare existing drawings and draft background | 8 | 8 | | 8 | | 8 | | | 32 | \$4,040 |
| Review existing feeders & connections to Courthouse, Annex, IT Dept., Modular Buildings | 4 | 16 | | | | | | | 20 | \$3,380 |
| Evaluate conduit routing options | 4 | 4 | | | | | | | 8 | \$1,460 |
| Select equipment to be replaced or relocated | 4 | 4 | | | | | | | 8 | \$1,460 |
| Establish plan with demo generator and existing tank | | 4 | | | | 4 | | | 8 | \$880 |
| Document existing main switchgear and main panels | 4 | | | 8 | | 8 | | | 20 | \$1,940 |
| Document existing sub-panels and distribution | | 8 | | 8 | | 8 | | | 24 | \$2,400 |
| Document existing unused emergency system | | 8 | | 4 | | 8 | | | 20 | \$2,080 |
| Document critical loads and locations | | 4 | | 8 | | 8 | | | 20 | \$1,760 |
| Document feeders | | 8 | | 8 | | 8 | | | 24 | \$2,400 |
| Open existing Jboxes panels with County Help | 4 | 4 | | 8 | | | | | 16 | \$2,100 |
| Prepare existing one line | 2 | 4 | | 4 | | | | | 10 | \$1,370 |
| Plan for Building to house switchgear | 4 | 4 | | | | | | | 8 | \$1,460 |
| Plan for New AEP Service for New Equipment | | 4 | | | | | | | 4 | \$640 |
| Prepare new one line | 2 | 4 | | 4 | | | | | 10 | \$1,370 |
| Elevator circuits and sump pumps | 4 | 8 | 4 | | | 4 | | | 20 | \$2,820 |
| Establish plan to maintain HVAC and equipment loads | 4 | 4 | | | | | | | 8 | \$1,460 |
| Prepare emergency distribution plan | 8 | 8 | 4 | | | 8 | | | 28 | \$3,880 |
| Evaluate natural gas and propane vs diesel. | 8 | 4 | | | | | | | 12 | \$2,280 |
| Run generator sizing program | 2 | 4 | 8 | | | | | | 14 | \$2,010 |
| Evaluate step loads | 2 | 4 | 8 | | | | | | 14 | \$2,010 |
| Evaluate generator use for future courthouse | 6 | 8 | | | | | | | 14 | \$2,510 |
| Review existing sump pump locations and size | 2 | 12 | | 8 | | | | | 22 | \$2,970 |
| Review routing of sump lines. | 2 | 4 | | 8 | | | | | 14 | \$1,690 |
| Assess sump pumps and sewage separation to improve drainage | 4 | 12 | | 8 | | 4 | | | 28 | \$3,620 |
| Establish probable costs with options | 8 | 8 | 8 | | | | 4 | | 28 | \$4,120 |
| Review with staff estimate of probable costs | 4 | 4 | | | | | 4 | | 12 | \$1,700 |
| Provide report power point with equipment revisions | 8 | 8 | | | | | 16 | | 32 | \$3,880 |
| Review with staff to determine recommended options | 4 | 4 | | | | | 6 | | 14 | \$1,820 |
| Make final recommendations for design | 2 | 2 | | | | | 4 | | 8 | \$970 |
| Sub consultant- Structural Evaluation | | | | | | | | \$1,500 | | \$1,500 |
| Assessment And reporting (Hours)/(Cost) | 120 | 194 | 140 | 92 | 0 | 68 | 34 | \$1,500 | 548 | \$75,420 |

8/26/2015

Half Associates, Inc. Professional Engineering Service Agreement C15-137-04-28