



A · DYNAMIC · PERSPECTIVE

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McKinney, TX 75070
972.542.2995

March 7, 2016

Randy J. Byers, C.M.
Airport Director
Grand Prairie Municipal Airport
3116 S. Great Southwest Parkway
Grand Prairie, Texas 75052

via email delivery

**Re: Grand Prairie Municipal Airport
North Side Drainage Study and Taxiway "B" Culvert Replacement
Proposal for Services**

Dear Mr. Byers:

The following scope of services is provided to Grand Prairie Municipal Airport (OWNER) by KSA Engineers, Inc. (ENGINEER) to provide engineering services for the following project at the Grand Prairie Municipal Airport (GPM) and funded by the City of Grand Prairie, Texas (CITY):

- North Side Drainage Study (PROJECT #1); and
- Taxiway "B" Culvert Replacement (PROJECT #2).

PROJECT DESCRIPTION

PROJECT #1 scope is based on providing the services described herein, to design the proposed project in accordance with the Federal Aviation Administration (FAA) and CITY requirements. If standards conflict, the most stringent standard shall govern.

Between Taxiway's "A" and "B", directly west of Runway End 17, there are three existing drainage ditches that flow into existing culverts, which flows east under the runway and ultimately discharges east of Great Southwest Parkway. The OWNER wishes to replace these open ditches with culverts to reduce erosion, improve maintenance on the airfield, eliminate a possible wildlife attractant area, and improve the safety of the airport.

KSA will prepare a Preliminary Engineering Report (REPORT) to evaluate the existing drainage system and make recommendations for improvements. KSA will provide professional services for the development of the REPORT and to include recommendations along with alternative designs to eliminate the existing drainage ditches.

PROJECT #2 scope is based on providing the services described herein, to design the proposed project in accordance with the Federal Aviation Administration (FAA) and CITY requirements. If standards conflict, the most stringent standard shall govern.

On Taxiway "B", directly west of the taxiway/runway intersection, there is an existing culvert crossing underneath Taxiway "B", which flows from south to north. This existing culvert has significant erosion on the downstream end (on the north side of the taxiway), which is beginning to undercut the pavement section. The OWNER wishes to replace this culvert to protect the existing taxiway pavement, reduce erosion, improve maintenance on the airfield, and improve the safety of the airport.

KSA will provide professional services for the development of plans and specifications to include the replacement of the existing culvert under Taxiway "B".

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It is understood that the OWNER shall provide the following documents to the ENGINEER:

- Any available Record Drawings within the area of the drainage study.

SCOPE OF SERVICES

BASIC SERVICES

1. Study and Report Phase – PROJECT #1 (Only)

After written authorization to proceed, ENGINEER shall:

- Provide the basic services as described in Exhibit A, Section A1.01 of the Agreement between Owner and Engineer for Professional Services,
- Survey and map the existing drainage system,
- Analyze the existing drainage area and calculate existing and possible future flow rates,
- Review the necessary design requirements,
- Prepare a recommended and alternative designs,

Deliverables

Deliverables shall be as follows for the Study and Report Phase:

- Draft Report Submittal: three (3) complete bound reports for the OWNER's review.
- Final Sealed Report Submittal: three (3) complete bound reports for the OWNER's review.

The ENGINEER's services under the Study and Report Phase will be considered complete when the REPORT has been accepted by the OWNER.

2. Preliminary Design Phase – PROJECT #2 (Only)

After written authorization to proceed, ENGINEER shall:

- Provide the basic services as described in Exhibit A, Section A1.02 of the Agreement between Owner and Engineer for Professional Services.

Deliverables

Deliverables shall be as follows for the Preliminary Design Phase:

- Full Size Plans: one (1) complete 22" x 34" bound plan set for the OWNER's review.
- Half Size Plans: two (2) complete 11" x 17" bound plan sets for the OWNER's review.
- Specifications: two (2) complete bound sets of specifications for the OWNER's review.

The ENGINEER's services under the Preliminary Design Phase will be considered complete when the preliminary plans and specifications have been accepted by the OWNER.

3. Final Design Phase – PROJECT #2 (Only)

After written authorization to proceed, ENGINEER shall:

- Provide the basic services as described in Exhibit A, Section A1.03 of the Agreement between Owner and Engineer for Professional Services.

Deliverables

Deliverables shall be as follows for the Final Design Phase:

- Full Size Plans: one (1) complete 22" x 34" bound plan set for the OWNER's review.
- Half Size Plans: two (2) complete 11" x 17" bound plan sets for the OWNER's review.
- Specifications: two (2) complete bound sets of specifications for the OWNER's review.

Deliverables shall be as follows for the Sealed Plans and Specifications:

- Full Size Plans: four (4) complete 22" x 34" bound plan set for the OWNER's use during the Bidding Phase.
- Half Size Plans: four (4) complete 11" x 17" bound plan sets for the OWNER's use during the Bidding Phase.
- Specifications: four (4) complete bound sets of specifications for the OWNER's use during the Bidding Phase.

The ENGINEER's services under the Final Design Phase will be considered complete when the Sealed Plans and Specifications have been delivered to the OWNER.

4. Bidding Phase – PROJECT #2 (Only)

After written authorization to proceed, ENGINEER shall:

- Provide the basic services as described in Exhibit A, Section A1.04 of the Agreement between Owner and Engineer for Professional Services,

The ENGINEER's services under the Bidding Phase will be considered complete when the OWNER has awarded Sealed Plans and Specifications have been delivered to the OWNER.

5. Construction Phase – PROJECT #2 (Only)

Not Included – to be negotiated following the Bidding Phase.

6. Post-Construction Phase – PROJECT #2 (Only)

Not Included – to be negotiated following the Bidding Phase.

ADDITIONAL SERVICES

7. Field Topographic Survey

- Coordinate and schedule utility locates.

- Coordinate and obtain topographic survey of the proposed project site. Payment to the ENGINEER will be made monthly on an hourly basis in accordance with the attached Schedule of Fees.
- 8. **Geotechnical Engineering Investigation**
 - Not Included
- 9. **Preparation of FAA Forms – PROJECT #2 (Only)**
 - Prepare and submit the FAA OEAAA form prior to bidding the project.
- 10. **Printing of Plans and Specifications & Postage**
 - Reimbursement for printing and postage expenses for the various phases of the project.
- 11. **Construction Survey - Control Points – PROJECT #2 (Only)**
 - Not Included – to be negotiated following the Bidding Phase.
- 12. **Construction Materials Testing – PROJECT #2 (Only)**
 - Not Included – to be negotiated following the Bidding Phase.
- 13. **Program Management Services**
 - This will include minor coordination with the CITY and the CITY’s Engineering Department. There are two (2) meeting estimated for this task, if additional coordination is required additional fees may be required.
- 14. **Resident Project Representative – PROJECT #2 (Only)**
 - Not Included – to be negotiated following the Bidding Phase.

EXCLUSIONS

Exclusions to this proposal are as follows:

- Geotechnical Investigations
- Survey Site Platting
- Stormwater Detention
- City Permitting
- Landscape Design (beyond revegetating disturbed areas)

COMPENSATION

In return for the services described above, the Owner shall pay the Engineer as described in Attachment A to this Proposal.

The total cost of all services provided under this Proposal will not exceed \$71,200.00 without prior written approval by the Owner.

Payment for services denoted lump sum shall be made monthly based upon ENGINEER's estimate of percentage complete for each phase. Payment for services denoted hourly shall be made monthly on an hourly basis in accordance with the attached Schedule of Fees (Attachment A). Payment for services denoted reimbursable shall be made monthly on the basis of the ENGINEER's cost plus a 15% markup.

SCHEDULE

The Engineer shall perform basic services for each project in accordance with the following schedule:

Study and Report Phase PROJECT #1 & #2	8 weeks following NTP
Preliminary Design Phase PROJECT #2 (Only)	3 weeks following NTP
Final Design Phase PROJECT #2 (Only)	2 weeks following NTP
Bidding Phase PROJECT #2 (Only)	As Required
Construction Phase PROJECT #2 (Only)	Not Included
Post-Construction Phase PROJECT #2 (Only)	Not Included

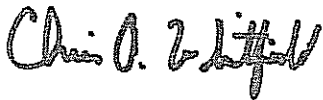
*The schedule above does not include review time for the City or other governing authorities.

If the proposal is to your satisfaction, KSA will prepare a contract meeting the conditions as stated herein and will send to the OWNER for execution.

If you have comments or require additional information, please do not hesitate to contact me.

Sincerely,

KSA



Chris A. Whitfield, P.E.
Regional Manager

CAW/cp

Attachments

pc: GP.036

Summary of Engineering Related Fees

CLIENT: Grand Prairie Municipal Airport
 PROJECT: Taxiway Culvert Replacement
 KSA NO.: GP.036
 DATE: 3/7/2016



Item No.	Description	Invoicing Method	Total Amount
Basic Services			
1	Study and Report Phase	Lump Sum	\$ 27,700.00
2	Preliminary Design Phase	Lump Sum	\$ 8,500.00
3	Final Design Phase	Lump Sum	\$ 10,000.00
4	Bidding Phase	Lump Sum	\$ 7,100.00
5	Construction Phase	Lump Sum	Not Included
6	Post-Construction Phase	Lump Sum	Not Included
Subtotal:			\$ 53,300.00
Additional Services			
7	Field Topographic Survey	Hourly	\$ 7,800.00
8	Geotechnical Engineering Investigation	Direct Cost + 15%	Not Included
9	Preparation of FAA Forms	Lump Sum	\$ 2,000.00
10	Printing of Plans and Specifications & Postage	Direct Cost + 15%	\$ 2,400.00
11	Construction Survey - Control Points	Hourly	Not Included
12	Construction Materials Testing	Direct Cost + 15%	Not Included
13	Program Management Services	Hourly	\$ 5,700.00
14	Resident Project Representative	Hourly	Not Included
Subtotal:			\$ 17,900.00
Total Estimated Engineering Related Fees:			\$ 71,200.00

Notes:

Hourly rates shown on Page 2 of 2 on this Attachment



2016 SCHEDULE OF HOURLY FEES

Principal	\$205.00 /hour
Senior Environmental Planner	\$200.00 /hour
Environmental Planner	\$160.00 /hour
Senior Aviation Planner	\$190.00 /hour
Aviation Planner	\$140.00 /hour
Electrical Engineer	\$170.00 /hour
Mechanical Engineer	\$150.00 /hour
Senior Project Manager	\$165.00 /hour
Project Manager	\$140.00 /hour
Senior Project Engineer	\$130.00 /hour
Project Engineer	\$120.00 /hour
Senior Design Engineer	\$110.00 /hour
Design Engineer	\$100.00 /hour
Senior Project Architect	\$140.00 /hour
Project Architect	\$120.00 /hour
Design Architect	\$100.00 /hour
GIS Analyst	\$130.00 /hour
GIS Specialist	\$110.00 /hour
SR. Engineering Technician	\$110.00 /hour
Engineering Technician	\$100.00 /hour
Senior Design Technician	\$95.00 /hour
Design Technician	\$90.00 /hour
Project Assistant	\$65.00 /hour
Senior CAD Technician	\$85.00 /hour
CAD Technician	\$75.00 /hour
Senior Project Representative	\$75.00 /hour
Project Representative	\$70.00 /hour
Graphic Designer	\$60.00 /hour
Administrative Assistant	\$55.00 /hour
Secretary	\$45.00 /hour
Four-Man Survey Crew	\$175.00 /hour
Three-Man Survey Crew	\$150.00 /hour
Two-Man Survey Crew	\$120.00 /hour
Registered Surveyor	\$110.00 /hour
Survey Technician	\$75.00 /hour
Mileage	\$0.58 /mile
ATV (4-Wheeler)	\$100.00 /day

Reimbursable Expenses (Air Travel, Lodging, Copies, Printing)	Actual Cost
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Outside Consultants	Cost + 15%
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*Subject to adjustments on annual basis.