

January 13, 2017

City of Grand Prairie, Texas 1821 W. Freeway Grand Prairie, Texas 75051

Cobb, Fendley & Associates, Inc. ("CobbFendley") is pleased to provide the City of Grand Prairie ("CITY", "OWNER") professional engineering services for the design plans, specifications, and estimates (PS&E) and related documents for bridge repairs and rehabilitation for two (2) bridges over Fish Creek on Great Southwest Parkway and Robinson Road. Each bridge consists of 2 independent structures; one structure for southbound traffic, one for northbound traffic.

Field observations at the Great Southwest Parkway bridge revealed pavement damage at bridge joints, damaged approach slabs, and compromised abutments. Photos of the typical damage at the bridge are shown below.

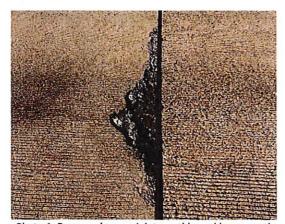


Photo 1: Damaged armor joint, northbound lanes, north abutment

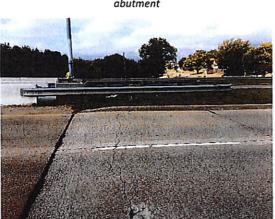


Photo 2: Damaged approach slab, northbound lanes, north abutment



Photo 3: Compromised abutment riprap, southbound lanes, south abutment



Photo 4: Damaged abutment backwall (spalling), southbound lanes, south abutment



Field observations of the Robinson Road bridge showed similar deficiencies – severe undermining and cracking of an approach slab and undermined riprap. Photos of the typical damage are shown below.



Photo 5: Severe underming of approach slab and sidewalk, southbound lanes, south abutment



Photo 7: Honeycombing at armor joint on abutment backwall, southbound lanes, south abutment



Photo 6: Severe undermining of abutment riprap, southbound lanes, south abutment



Photo 8: Approach slab cracking, southbound lanes, south abutment

SCOPE OF WORK:

A. Design Services

Great Southwest Parkway Bridge: CobbFendley (the ENGINEER) will prepare a design for the repair and/or replacement of: four (4) armor joints at the approach slabs, four (4) approach slabs, two (2) abutment backwalls and wingwalls, associated concrete pavement and curbs, bridge railing, metal beam guard fence (MBGF), slope paving, embankment voids, and the existing concrete channel bottom. Structural analysis and review of the integrity of the existing bridge abutments, girders, columns, pavement slabs, and any associated structures or components and any modifications to the existing river bed are specifically excluded from this task and will not be addressed within this scope.

Robinson Road Bridge: CobbFendley will prepare a design for the repair and/or replacement of: two (2) approach slabs on the southbound side, two (2) abutment backwalls and wingwalls, associated concrete pavement and curbs, metal beam guard fence (MBGF), slope paving, sidewalks, embankment voids. Structural analysis and review of the integrity of the existing bridge abutments, girders, columns, pavement slabs, and any associated structures or components and any modifications to the existing river bed are specifically excluded from this task and will not be



addressed within this scope.

- 1. Survey (both locations)
 - a. CobbFendley will locate and identify bridge features including edge of pavement, joints, columns, approach slabs, guard rails, existing slope paving, etc. The vertical survey will be tied to a local benchmark.
- 2. Prepare bridge layout and profile plans:
 - Demolition & Removal Plans
 - b. Bridge Rehabilitation Plans and Details
 - c. Erosion Control Plan
 - d. Traffic Control Plan
- 3. Prepare technical specifications and bid book.
- 4. Prepare construction cost estimate.

B. Bidding Services

- Assist CITY in securing bids. CobbFendley will prepare the City standard bid book for the project and coordinate with purchasing to advertise and bid this project. The cost for publications shall be paid by CITY.
- 2. Assist CITY by responding to questions and interpreting bid documents. Prepare and issue addenda to the bid documents to plan holders, if necessary.
- CobbFendley will assist CITY in the opening, tabulating, and analyzing the bids received.
 Review the qualification information provided by the apparent low bidder to determine, based on the information available, if they appear to be qualified to construct the Project.
- 4. Recommend award of contracts or other actions as appropriate to be taken by CITY.
- 5. Furnish CITY two (2) full size and two (2) half size copies of the drawings for construction.

C. Construction Services

Upon completion of the bid phase services, CobbFendley will proceed with the performance of construction phase services as described below. CobbFendley will endeavor to protect CITY in providing these services however, it is understood that CobbFendley does not guarantee the Contractor's performance, nor is CobbFendley responsible for supervision of the Contractor's operation and employees. CobbFendley shall not be responsible for the means, methods, techniques, sequences or procedures of construction selected by the Contractor, or any safety precautions and programs relating in any way to the condition of the premises, the work of the Contractor or any Subcontractor. CobbFendley shall not be responsible for the acts or omissions of any person (except its own employees or agents) at the Project site or otherwise performing any of the work of the Project.

- Assist CITY in conducting pre-construction conference(s) with the Contractor(s) and review construction schedules prepared by the Contractor(s) pursuant to the requirements of the construction contract.
- Review Contractor's submittals, including: requests for information, modification requests, shop drawings, schedules, and other submittals in accordance with the requirements of the construction contract documents for the Project.



- 3. Make three (3) visits to each site to observe the progress and the quality of work and to attempt to determine in general if the work is proceeding in accordance with the Construction Contract Documents. In this effort CobbFendley will endeavor to protect the CITY against defects and deficiencies in the work of Contractors and will report any observed deficiencies to CITY. Visits to the site in excess of the specified number are an Additional Service.
- Revise the construction drawings in accordance with the information furnished by construction Contractor(s) reflecting changes in the Project made during construction. Two (2) sets of prints of "Record Drawings" shall be provided by CobbFendley to CITY.

D. Deliverables

- 1. The final plan sheets shall be full size 22" x 34", signed, sealed and dated by a Professional Engineer licensed in the State of Texas.
- The ENGINEER shall make two (2) submittals (90% and Final). The submittals shall consist of 2 half-size (11"x17") sets per submittal, unless requested otherwise. CobbFendley will provide hard copies of the final construction documents and a CD of electronic documents (PDF and CAD).
- 3. The CITY will mark up or provide written comments (or both) on the ENGINEER's submittals. The ENGINEER shall address each comment and provide a written response to each comment with the next scheduled submittal. Review meetings between the CITY and the ENGINEER will be scheduled by mutual agreement to discuss comments and responses. The ENGINEER shall make all agreed- upon changes to the submitted documents before the next scheduled submittal.

ADDITIONAL SERVICES

The following services are not included in this proposal. They can be added as additional services or provided by the City as necessary:

- 1. Construction staking, daily inspection or time for staff to probe for, locate, and uncover existing facilities in the field.
- 2. Relocation of water, sewer, or other utilities.
- 3. Environmental support services including the design and implementation of ecological baseline studies, environmental monitoring, impact assessment and analyses, permitting assistance, and other assistance required to address environmental issues.
- 4. Geotechnical investigation, borings, and material testing for the design or construction phases of this project.
- 5. Detailed drainage analysis or flood studies including any offsite drainage design.
- 6. Street lighting, landscaping/hardscaping, or irrigation improvements.



COMPENSATION

A. BASIC SERVICES

Compensation to CobbFendley for the Basic Services in the Scope of Services shall be the lump sum. If CobbFendley sees the Scope of Services changing so that Additional Services are needed, CobbFendley will notify OWNER for OWNER's approval before proceeding. Additional Services shall be computed based on the Schedule of Charges.

| Grand Total | \$ 76,240.00 |
|-----------------------|--------------|
| Topographic Survey | \$8,850 |
| Construction Services | \$11,990.00 |
| Bidding Services | \$2,890.00 |
| Design Services | \$52,510.00 |

B. OTHER DIRECT EXPENSES

Other direct expenses are reimbursed at actual cost times a multiplier of 1.15. They include outside printing and reproduction expense, communication expense, travel, transportation and subsistence away from Dallas and other miscellaneous expenses directly related to the work, including costs of laboratory analysis, tests, and other work required to be done by independent persons other than staff members.

This proposal is valid for a period of ninety (90) days from the date of receipt.

Your project is very important and we look forward to completing a successful project with you. Should you have any questions or require additional information, please feel free to contact our office.

Sincerely,

COBB, FENDLEY & ASSOCIATES, INC.

Ted B. Sugg, P.E.

Principal: Regional Municipal Manager