

To Solve. To Excel. Together.

600 Kansas City St Rapid City, SD 57701-2712

phone (605) 343-6102 fax (605) 343-7159

www.teamtsp.com

Architecture Engineering Construction April 8, 2004

Mr. Joe Jagodzinski Engineering Division City of Rapid City 300 Sixth Street Rapid City, SD 57701-2724

RE: Chapel Lane Bridge Widening – ST04-1359

TSP #03030244

Dear Mr. Jagodzinski:

Enclosed is our fee proposal to provide services for the design of the Chapel Lane Bridge Widening project ST04-1359.

Our services will consist of the following tasks:

Topographic Survey

Precision Surveying will provide the survey for project. This will include specific detailed information of the bridge and roadway necessary to widen the bridge and transition at each end of the existing surfacing on Chapel Lane and Jackson Boulevard. The survey will also set bench marks that can be tied to during construction of the project.

Preliminary and Final Design

TSP will develop sheets for the Chapel Lane Bridge widening project in accordance with City of Rapid City Standards and AASHTO standards. In addition to the deck widening, TSP will also evaluate and make recommendation for improvements to the existing deck. These will be completed and reviewed with by the City of Rapid City prior to moving into the design for the widening. The preliminary design will also evaluate the existing sanitary sewer line that is attached to the structure and make recommendations for maintaining full operation during the construction. The basic elements of the Preliminary Design will consist of the following:

Bridge Plans

- 1. Plan base map
- 2. Recommendations for sanitary sewer line
- 3. Recommendations for existing bridge deck rehabilitation

- 4. Bridge removal plan
- 5. Girder analysis
- 6. Abutment plans
- 7. Superstructure Plans
- 8. Main Span Deck Plans
- 9. Approach Span Deck Plans
- 10. Joint Plans Railing Plans
- 11. Overlay Plans
- 12. Bridge Details

Roadway Plans

- 1. Removal Plan
- 2. Typical Sections
- 3. Plan/Profile
- 4. Cross Sections
- 5. Erosion Control Plan
- 6. Traffic Control Plan
- 7. Roadway Details

The Preliminary Design will also include interim reviews with the City on various design issues. Once the Preliminary Design has been reviewed TSP will then prepare the final contract documents.

Anticipated services for the Final Design in conjunction are as follows:

Final Design

- 1. Provide complete plans and specifications for a unit price construction contract
- 2. Final revisions to the preliminary design documents.
- 3. Construction staking information on the drawings shall include a survey control and project layout sheet that includes a survey control table and a construction survey control table. Benchmark information shall be provided on each sheet. Equation to the City benchmark system shall also be provided on the drawings.
- 4. Provide separate, special detail drawings at appropriate scale showing additional information necessary to construct the project but not shown adequately elsewhere in the drawings.
- 5. Provide general sequence of construction requirements in order to assist bidders to prepare their bids and to coordinate construction to minimize interruption of service, etc.
- 6. The Traffic Control Plans identifying detour details and signage for critical stages of the construction.
- 7. Detailed Specifications supplementing *City of Rapid City Standard Specifications* (2002 Edition) as necessary.

4/12/2004 Page 2 of 4

- 8. Opinion of probable construction cost at each phase (engineer's estimate) for the project based upon the City of Rapid City Engineer's Estimating Guide format and average bid price and engineering judgment.
- 9. Provide general dewatering and sediment control requirements.
- 10. Prepare and include within the detailed specifications any permits required by the contractor for construction dewatering, etc.
- 11. Prepare any other permits required by the City.
- 12. Deliver the following: 1) Provide 3-copies of each submittal set of plans. 2) Final mylar construction plans on 22" x 34" for printing by the City of Rapid City. 3) Complete construction plans on disk in AutoCAD 2005 format. 4) Complete specifications on disk in Word 2002 format for printing by the City; 5) A unit price Engineer's cost estimate on disk in City of Rapid City Project Workbook format (based upon the City of Rapid City Bid Items and/or listed in the Engineer's Estimating Guide) in Excel 2002 format; and 6) Copies of consultant's Quantity Take Off Sheets.
- 13. Review design, plans and specifications, and permanent or temporary easement exhibits with City staff at Preliminary Design and Final stages.
- 14. Plans shall be prepared per City of Rapid City drafting standards.
- 15. Include appropriate City of Rapid City Standard Details in the plan drawings. (The City can furnish the consultant with AutoCAD drawings of the details.)
- 16. Provide additional Final Design services as negotiated

Bidding Phase

Provide standard bidding phase services; attend Prebid Conference, issue addenda and interpretations to the bid documents if required. Bid tabs will be prepared by the City of Rapid City in the Project Workbook.

Construction Phase

Provide construction management services on an hourly basis for an approximate 26 week construction period, including:

- 1. Attend preconstruction conference
- 2. Attend weekly coordination meetings
- 3. Review shop drawings and other submittals
- 4. Periodic Inspection
- 5. Payment Application
- 6. Final document preparation

With that as a basis, TSP will bill you monthly for **Design Services** based on hourly not to exceed maximum of \$ 32,935 for services and expenses as described in the attached fee proposal. The total cost will not be exceeded unless there is a change in the scope of work that is mutually agreed upon by both parties. The budget for each phase shall not be exceeded until a notice to proceed if given by staff.

4/12/2004 Page 3 of 4

Construction Observation is estimated at a total not to exceed fee of \$15,090.00. TSP will bill on an hourly basis monthly for services and expenses for this phase of the work.

Appropriate taxes are <u>not</u> included and will be billed in addition to fee identified above. Additional expenses beyond the original scope of work will be billed at our standard reimbursable rates.

If the following proposal meets your satisfaction, please sign the Standard form of Agreement and return a copy for our records.

Thank you for the opportunity to provide our services to the City of Rapid City.

Very truly yours,

TSP Three, Inc.

Robert Morcom, P.E.

Principal

Attachments