REQUEST FOR PROPOSALS For Engineering Design of FRANKLIN STREET RECONSTRUCTION, 8TH TO 11TH STREET PROJECT NO. ST04-1363 CIP # 50310

PROJECT DESCRIPTION

The City of Rapid City proposes to reconstruct approximately three blocks of Franklin Street from 8th Street/Mount Rushmore Road to West Boulevard and from West Boulevard to11th Street. The work will include demolition of existing pavement and curb and gutter, and installation of new water and sewer mains, new curb and gutter and new Portland cement and asphalt cement concrete pavement. This work will be adjacent to the Rapid City School District School Property to the south side of Franklin. Consequently, construction work shall be scheduled to begin after school lets out and must be completed prior to start of the 2004/2005 school year.

Design criteria for this project shall include the City of Rapid City Standard Specifications, 2002 edition, City of Rapid City Drainage Criteria Manual, City of Rapid City design policy standards, City of Rapid City Minimum Asphalt Design Parameter policy, South Dakota Department of Environmental Resources Standards and Ten States Standards.

Additional background information includes Plans and Specifications from the West Boulevard project ST03-106B, City of Rapid City GIS maps, City of Rapid City benchmark data, and City of Rapid City plans drawings guidelines. Such to be made available to Consultants invited to interview for this project.

The project currently has a total budget of \$365,000.00, including design and construction. Funding for the project is from the 8910 Street Improvements, the 8911 Drainage Improvements the 833 Sewer Improvements, and the 933 Water Improvements budgets.

SCOPE OF SERVICES REQUESTED

1. PRELIMINARY DESIGN PHASE

- Review information from the recent West Boulevard Reconstruction project # ST03-1067, the City water, sanitary sewer maps and storm sewer maps and the GIS mapping.
- 1.2. Perform the following planning tasks: Determine the extent of the project limits; Prepare a preliminary construction schedule and sequence to begin construction at summer 2004 suspension of activities at the adjacent school and to complete construction prior to start of school activities in the school year 2004-2005.
- 1.3. Perform a PCC pavement design near the Mt. Rushmore Road intersection, and an ACC pavement design for the remainder. Give extra consideration for heavy truck traffic to fuel station in NW corner of the intersection. Such design shall be based upon AASHTO design guidelines with consideration of the City Engineering Memorandum "Minimum asphalt concrete design parameters".
- 1.4. Prepare preliminary opinion of probable construction cost.
- 1.5. Assist the City with property acquisition, should such become necessary, or construction easement, should such become necessary for residential or commercial entrances.
- 1.6. Perform legal survey for property; and prepare plats and/or easement exhibits.
- 1.7. Define the scope of geotechnical investigations as may be necessary for final design, assist the City in negotiation of an agreement for geotechnical engineering services, and coordinate with geotechnical engineer.
- 1.8. Prepare a Preliminary Design Report including existing and proposed systems layouts for water and sewer mains and appurtences, storm sewer inlets and mains, traffic signals and signs, with recommendations for review and comment by City staff, and conduct a review meeting with City staff.

2. FINAL DESIGN

- 2.1. Provide complete plans and specifications for a unit price construction contract. Plan sheets shall be prepared utilizing the latest City of Rapid City Drafting Standards.
- 2.2. Provide route and topo survey, [establish land ties and bench marks, locate property corners, and field locate all existing utilities]. The route and topography survey shall be tied to at least two City of Rapid City Monument Control system monuments utilizing State plane coordinates. Plans documents shall adhere to current City of Rapid City project plans guidelines. Scale of plan & profile sheets, 1" = 20' Horiz., 1" = 5' Vert. Construction staking information shall include either of the following formats:
 - 2.2.1. On the Plans
 - Station offset of all PC's, PI's, PT's, and any angle points
 - Curve data
 - Station offsets for all items of work requiring field staking
 - 2.2.2. In tabular format on a plan sheet
 - Coordinates and description of inter-visible control points
 - Curve data
 - Coordinates of all items of work requiring field staking

Benchmark information shall be provided on each sheet.

- 2.3. Provide project layout plan to include lot lines (front and side) and addresses of all properties [adjacent to construction, or alternatively, in service area].
- 2.4. Coordinate directly with utility companies' engineering divisions to ensure that all existing utilities are completely and accurately located in the field; that pertinent information regarding depth, material, size, etc. are noted on the plans; and that conflicts requiring relocation of utilities or special construction techniques are fully specified in the contract documents.
- 2.5. Provide general sequence of construction requirements in order to prepare item 2.9 and item 2.10 and to coordinate utilities construction with the street construction, to ensure no interruption of service to sewer users, etc.
- 2.6. Provide Detailed Specifications supplementing the City of Rapid City Standard Specifications as necessary.

- 2.7. Provide Traffic Control Plans identifying detour routes and signage for various stages of construction.
- 2.8. Prepare opinion of probable construction cost for the project.
- 2.9. Prepare a projected construction work time schedule to insure construction start and completion can be accomplished during the summer School closure of the adjacent School property. Coordinate with the School Rapid City School District to prevent conflicts between construction and school operations.
- 2.10. Deliver the following:
 - Construction plans on 22"x34" mylar for printing by the City
 - Construction plans on CD in AutoCAD Release 14 format or newer.
 - All topographic, control, and design points in the .dwg file and in tabular format, both on disk and on a hard copy print-out
 - Complete supplemental (Detailed) specifications on disk in Word 97 format for printing by the City
 - A unit price cost estimate on disk in Excel 97 format

3. BIDDING PHASE

Provide the following standard bidding phase services:

- Attend Pre-bid Conference
- Issue addenda to the bid documents if required
- Bid tabs will be prepared by City.

4. CONSTRUCTION PHASE

Provide construction management services as negotiated, which may include:

- Attend preconstruction conference and periodic progress meetings
- Review and take action on shop drawings, test results, and other submittals
- Prepare a list of changes to the plans and specifications required to complete the construction project.
- Prepare as-built revisions to the plans drawings and specifications

5. MEETINGS AND SUBMITTALS

- 5.1. Project team members will include:
 - 5.1.1. The Consultant
 - 5.1.2. City Engineering Division staff
 - Project management
 - Design
 - Construction coordination
 - 5.1.3. Operations divisions staff
 - Water Division (service area and O&M related issues)
 - Fire Department (fire flows and hydrant locations)
 - 5.1.4. Rapid City Schools staff as determined by Rapid City Schools District
- 5.2. Meetings requiring the Consultant's participation will include:
 - Kick-off Meeting
 - Preliminary Design Report Presentation and Discussion
 - 60% Plans and Specifications Review
 - 95% Plans and Specifications Review
 - Prebid Conference
 - Preconstruction Conference
 - Construction Progress Meetings
- 5.3. Submittals required during the design phase include:
 - Preliminary Design Report
 - 60% Plans and Specifications
 - 95% Plans and Specifications
 - 100% Plans and Specifications

PROJECT SCHEDULE

Contract Negotiations Complete	25 February, 2004
Notice to Proceed with Design	2 March, 2004
Preliminary Design Submittal	31 March, 2004
[Other intermediate milestones]	19 April, 2004
100% P&S Submittal	5 May, 2004

PROPOSAL SUBMISSION

Please submit five (5) copies of your proposal no later than 20 February, 2004.