REQUEST FOR PROPOSAL for the E. MALL DRIVE CONNECTION (E. NORTH STREET to DYESS AVENUE) PROJECT NO. ST03-1334

PROJECT DESCRIPTION

The City of Rapid City and the SD DOT propose to construct a connection from E.North Street to Dyess Avenue. This new arterial street will be a segment of E. Mall Drive from the extension of E.North Street (the north leg of the Exit 60 interchange on I90) easterly to Dyess Avenue, located in the northeast portion of Rapid City. (See attached aerial photo alignment.) The street segment is approximately 2000 LF long; and includes water and sewer construction.

Design criteria for traffic control, utilities, drainage, grading, surfacing, curb and gutter, sidewalk, bike path, pavement markings, signage, signals, street lighting and right-of-way shall include consideration of the applicable City of Rapid City and/or Pennington County Drainage Basin Plan(s), the City of Rapid City and/or SD DOT Standard Specifications, the Rapid City Street Design Criteria Manual, the Rapid City Drainage Criteria Manual, the Rapid City Utilities Design Criteria Manual, the SD DOT Road Design Manual, the AASHTO Roadside Design Guide, and the Ten States Standards, and other City, State, and Pennington County requirements.

Additional background information includes, but is not limited to, the master plans and studies in this area, such as:

Northeast Area Analysis Study, Alliance/HDR, June 2002 East Anamosa Street Extension Study, Alliance/HDR, May 2000 Dyess Avenue Water Main Extension, Clark Engineering, April 2000 Visitors Information Center Utilities Extensions, FMG, June 1996 Northeast Sanitary Sewer Interceptor Study, Ferber, February 1996 and, the Municipal Water System Study, FMG December 1985;

as well as the proposed plans for new infrastructure; any available GIS data including image data files; the City of Rapid City Project workbook; and the Engineer's Estimating Guide.

SCOPE OF SERVICES REQUESTED

1. PRELIMINARY DESIGN PHASE

- 1.1. Review information listed on the prior page.
- 1.2. Perform the following planning and design tasks:
 - Perform site surveys sufficient for the proposed vertical and horizontal alignments
 - Perform site surveys sufficient for design plans and right-of-way plat preparation.
 - Perform a preliminary evaluation of the water and sewer system/corridor needs.
 - Coordinate with private utilities owners to establish their system/corridor needs.
 - Coordinate the design recommendations of the various analysis studies.
 - Coordinate with the design of the I90 Exit 60 interchange and E.North Street extension prepared by SD DOT.
- 1.3. Prepare half-sized (11" by 17" sheets) preliminary layouts in the form of plan and profile sheets showing proposed alignment, locations of existing storm water facilities, water (hydrants, valve boxes and mains), sanitary sewer (manholes and mains), and private utilities immediately adjacent to the construction limits; the proposed SD DOT design geometrics; and proposed locations of the various City owned and private utilities (corridor/location assignments). Show the existing and proposed utilities locations with probable depth. Scale of preliminary plan and profile sheets shall be: 1"=40' Horizontal, and 1"=10' Vertical.
- 1.4. Prepare Preliminary Design, recommend design horizontal and vertical alignment, right-of-way acquisition requirements, materials suitability for embankment and utilities backfill, pavement type and section thickness design including various infrastructure components required, provide layout maps for future systems with recommendations for review and comment by City staff, prepare preliminary opinion of probable construction cost, and conduct a review meeting with City staff.
- 1.5. Assist the City/SD DOT with property acquisition for street right-of-way as necessary, perform legal survey for property, and prepare plats and/or easement exhibits.

1.6. Define the scope of any further geo-technical investigations as may be necessary for final design, and coordinate with City/SD DOT.

2. FINAL DESIGN

- 2.1. Provide complete plans and specifications for a unit price construction contract. Plans drawings shall comply with the current City of Rapid City Drafting Standards.
- 2.2. Provide route and topographic survey, establish land ties and benchmarks, locate property corners, and field locate all existing utilities. At least two control points at each end of the project shall be tied vertically and horizontally to the existing City of Rapid City Area Monuments Control utilizing the state plane coordinate system. Topographic survey and design layout shall utilize a local datum tied to at least one of the Rapid City Area Monuments tied control points.
- 2.3. Design plans shall be half sized (11" by 17" sheets). Scale of plan & profile sheets shall be 1" = 40' Horizontal, 1" = 10' Vertical. Construction staking information shall include either of the following formats:
 - 2.3.1. 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
 - 2.3.2. 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.

2.4 Provide project layout plan to include lot lines (front and side) and owner's addresses of all properties adjacent to construction.

- 2.5 Coordinate directly with utility companies' engineering divisions to ensure that all existing utilities are completely and accurately located in the field; that all proposed utilities are shown to scale and accurately represented on the plans; 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.
- 2.6 Provide general sequence of construction requirements in order to coordinate utilities construction with the street construction, to ensure no interruption of service to sewer or water users, etc. and to all participants of scheduling requirements necessary to complete this project.
- 2.7 Provide Detailed Specifications supplementing City of Rapid City and/or SD DOT Standard Specifications as necessary.
- 2.8 Provide construction Traffic Control Plans identifying detour routes and signage for various stages of construction.
- 2.9 Prepare opinion of probable construction cost (engineer's estimate) for the project based upon the City of Rapid City Engineer's Estimating Guide.
- 2.10 Prepare any permits required, e.g. SD DOT utility occupancy permits with exhibits.
- 2.11 Deliver the following:
 - Construction plans on 11"x17" reproducible format for biddable plan sets
 - Construction plans on 22"x34" mylar for the City records
 - Construction plans on disk in AutoCAD 14.0 format
 - 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 specifications on disk in Word 97 format for the City/SD DOT
 - A unit price cost estimate on disk in Excel 97 format

3. BIDDING PHASE

Provide the following standard bidding phase services:

• Attend Prebid Conference

- Issue addenda to the bid documents, if required
- Review submittals, if required

4. CONSTRUCTION PHASE

Provide construction management services as negotiated, which may include:

- Attend pre-construction conference and periodic progress meetings
- Review and take action on shop drawings, test results, and other submittals
- Provide construction observation make periodic site visits at intervals appropriate to the various stages of construction

5. MEETINGS AND SUBMITTALS

- 5.1. Project team members will include:
 - 5.1.1. The consultant
 - 5.1.2. City/SD DOT Engineering Division staff
 - Project management
 - Design coordination
 - Construction coordination
 - 5.1.3. Operations Divisions staff
 - Water Division (service area and O&M related issues)
 - Planning Department (master planning, traffic planning)
 - Fire Department (fire flows and hydrant locations)
- 5.2. Meetings requiring the Consultant's participation will include:
 - Kick-off Meeting
 - Preliminary Design Presentation and Discussion
 - 35% Plans and Specifications Review
 - 65% Plans and Specifications Review
 - 95% Plans and Specifications Review
 - Prebid Conference
 - Preconstruction Conference

- 5.3. Submittals required during the design phase include:
 - Preliminary Design
 - *35*% Plans and Specifications
 - 65% Plans and Specifications
 - Plats suitable for land acquisition by the City or State
 - 95% Plans and Specifications
 - 100% Plans and Specifications

PROJECT SCHEDULE

Contract Negotiations Complete	September 3, 2003
Notice to Proceed with Design	September 16, 2003
Preliminary Design Submittal	October 10, 2003
65% Design Submittal	November 10, 2003
ROW Plans/Plats to City/SD DOT	December 1, 2003
100% P&S Submittal	January 1, 2004
Bid Opening	March 1, 2004

PROPOSAL SUBMISSION

Please submit four (4) copies of your proposal with a man-hour estimate no later than 4:00PM on August 29, 2003. Interviews will be scheduled on September 2, 2003.