

City of Rapid City, South Dakota

REQUEST FOR PROPOSALS FOR DIGITAL GIS BASE MAP DEVELOPMENT SERVICES

Deadline:

5 copies due September 14, 2012 at 5:00 PM MDT

Correspondence Shall Be Addressed to:

Donald Jarvinen
GIS Division
300 Sixth Street
Rapid City, SD 57701
605-394-4120

Any technical questions regarding this document or processes should be directed to Donald Jarvinen at 605-716-3676 or don.jarvinen@rcgov.org.

July 9, 2012

Table of Contents

I. INTRODUCTION	2
OVERVIEW.....	2
BACKGROUND	2
II. INSTRUCTIONS TO PROPOSERS	3
SOLICITATION.....	3
SUBMISSION OF PROPOSALS	3
CLARIFICATION AND/OR REVISIONS TO THE SPECIFICATIONS AND REQUIREMENTS	4
TIME LINE	5
BASIS OF AWARD.....	5
OWNERSHIP OF COMPLETED PRODUCTS	6
III. SCOPE OF WORK	6
PROJECT COMPONENTS	6
Component 1 – Aerial photography acquisition for project areas.....	6
Component 2 – Aerial photography rectification	7

APPENDIX 1 – Overview Map Pennington County, South Dakota including proposed project areas

INTRODUCTION

Overview

The City of Rapid City, SD is requesting proposals from professional aerial photography firms for the Spring of 2013 leaf-off aerial flights and natural color digital photography which will be rectified to South Dakota State Plane coordinates. The digital photography will be used within the Rapid City – Pennington County geographic information system to show development outside of the Rapid City area.

It is the City's intention to select one successful aerial photography firm to deliver all of these services. The City will not work directly with any data processing firm. Such firms may partner with an aerial photography firm at their own discretion. Note that the City does not desire contact with data processing firms. Questions for the City should be routed through aerial photography firm partners.

The City desires that the aerial photography be flown in the Spring of 2013 in snow-free, leaf-off conditions. The aerial photography specifications, including scanning (if not collected digitally), should be adequate (scale, resolution, etc.) to support production of the products desired by the City under this RFP, including:

- Color digital aerial photography with an approximate 1.0 ft. ground resolution of the areas shown in Appendix 1.
- Rectification into South Dakota State Plane (south zone) feet, NAD83 datum. The 1997/98 USGS DOQQs (supplied by the City) will be used to rectify the photos.
- FGDC or ISO-compliant metadata.
- Respondents are invited to propose costs for 0.5 ft ground resolution photography.

Product delivery may be phased to extend into the Fall of 2013 and beyond, depending upon the requirements of the City and negotiations with the selected firm. The City will retain ownership and rights to all photographs and digital products created during the performance of this project. Responses to this RFP should include a schedule for completion of tasks in general compliance with the time line on page 5.

Background

Pennington County, South Dakota, is located in the west central part of the state. It consists of prairie and forested mountains. The project area includes approximately 90 square miles. A shape file of the project area and tiling scheme may be downloaded from <http://www.rcgov.org/GIS/rfps.html>.

For the past fourteen years, the City and County governments have jointly funded a Geographic Information System. The GIS uses ESRI software, and has an enterprise license agreement with the ESRI company. The City Engineering Division also uses AutoCAD software for in-house design projects.

INSTRUCTIONS TO PROPOSERS

Solicitation

The City will negotiate a professional services agreement with the successful respondent. All respondents are responsible for the costs incurred in responding to this proposal.

Submission of Proposals

It is intended that each respondent furnish all information requested in this document. Unless specifically requested, promotional literature is not desired and will not be considered to meet any of the requirements.

Each respondent shall be required to include the following items in their proposal. These items should be used as the format around which the proposal is organized. Exclusion of any of these items could be grounds for proposal rejection by the City.

1. Transmittal Letter. A letter of transmittal, not to exceed two pages in length, which bears the signature of an authorized representative of the respondent and designates by name not more than two individuals authorized to negotiate and sign an agreement with the City on behalf of the respondent.
2. Organizational Description. A description of your organization, including qualifications, addressing your organization's capability to provide the services requested. This must also include a description of subcontractors and associations with other firms you wish to utilize in the performance of the tasks, including the intended working relationships and responsibilities of each. Also include a description of your understanding of the City's needs in the proposed project and your staffing commitments to assure your ability to meet the City's time frame. Please describe past client projects you have completed that are similar in nature to that proposed in this document.
3. Product Procedures. Describe how you will produce each of the products requested in this RFP. This must include the methods used and the quality control/quality assurance procedures that will be observed. The minimum data product specifications described under each work component must be met. Subcontractors or other firms that will work on any part of the project must also be identified, including the general nature and scope of work that will be undertaken by these firms, along with each firm's work location. The selected firm shall retain full responsibility for all work completed or uncompleted by any subcontractor.
4. Mobilization. Describe the plan for mobilization of aerial resources including the location from which the resources will be staged and the flight time to the project area. If the aerial collection firm is not part of the proposing firm, this should be noted in the proposal.
5. Project Schedule. Include a schedule for completing the work specified in this request, including a progress reporting strategy.
6. City Obligations. Provide a list of all items to be provided by the City to assist you in completing the requested work. This should include any data (i.e. existing DOQQs, etc.) and/or proposed use of staff, office space, and any equipment or

materials/supplies that will be expected from the City. This component should also describe a strategy for project management indicating the mechanisms intended to be used to coordinate the proposed work with the City.

7. Product Example. Provide an example digital aerial image file from similar work completed by your organization. The aerial photo image should be delivered in a TIF file format accompanied by an ESRI standard world header file (*.tfw) for viewing in ArcGIS. Example data should be submitted on a CD-ROM. *Only one copy of the example data sets is necessary.*

8. References. Each proposal must provide the name, address and phone number for five (5) individuals from organizations that have procured similar services to act as references for the respondent. The individuals identified must at least hold a position of project management or other contract authority.

9. Pricing Information. A separate price for each project component shall be submitted with the proposal. The contract amount should take into consideration the fact that the City is exempt from all state taxation, including state sales tax. Any increase in the price once the proposal has been submitted will invalidate the proposal and result in the disqualification of the respondent from consideration for the project. *Please note that the optional project component requested may not be pursued or may be limited in scope depending upon availability of funds.*

One (1) original and four (4) copies of the proposal document should be submitted in one sealed envelope. The Proposer's response should contain only the information requested and be limited to approximately 20 pages in length. All cost proposals shall be valid for a period of not less than ninety (90) days from the date of receipt. Articles should be submitted to the following address by the proposal receipt date and time specified:

Attention: Donald Jarvinen
GIS Division
300 Sixth Street
Rapid City, SD 57701

Respondent proposals shall be received no later than 5:00 P.M., MDT, on September 14, 2012.

Clarification and/or revisions to the specifications and requirements.

Respondents are expected to raise any questions, exceptions, or additions they have concerning the RFP document. If a respondent discovers any significant ambiguity, error, conflict, discrepancy, omission, or other deficiency in this RFP, they should immediately contact the individual named on the first page of this document of such error and request modification or clarification of the RFP document.

In the event that it becomes necessary to provide additional clarifying data or information, or to revise any part of this RFP, revisions/amendments and/or supplements will be posted to the City web site on the GIS RFP page at <http://www.rcgov.org/GIS/rfps.html>. It is the responsibility of the respondent to check the web page for change documents.

Questions and/or clarifications will be accepted by the City until September 14, 2012 at 5:00 p.m. MDT.

Time Line

The proposed schedule for digital the GIS base map development process is as follows:

09/14/12	Proposals due
09/28/12	Short-list firm interviews (if necessary) and selection of successful firm
10/12/12	Contract due from selected firm
March-May 2012	Aerial photography acquisition
Sept 2012	Delivery of aerial photos

The above dates are subject to change at the option of the City and negotiations with the selected firm.

Basis of Award

The award resulting from this request for services will be made to one firm submitting a response that best serves the needs of the City. Proposals will be evaluated on criteria that include:

- The extent that proposed approach to services meets the City's needs.
- Demonstrated competence to meet quality requirements based on QA/QC procedures and overall approach to project management.
- Proven experience of the firm to provide similar products to similar clients, including recommendations from those clients, and/or previous experience with the City.
- Ability to deliver products within proposed time frame.
- Costs of services/products.

This list of criteria is meant for informational purposes only. The City of Rapid City reserves the right to make its selection on any subjective criteria it deems appropriate.

A short list of firms will be developed from a review of written responses. These firms may be required to make a presentation by phone to supplement their proposals if requested by the City. The City will make every reasonable attempt to schedule presentation times convenient for the short-listed respondents. Failure of a respondent to conduct a requested presentation to the City on the date scheduled may result in rejection of their proposal.

The City reserves the right to reject any and all proposals and to negotiate the terms of the contract, including the award amount, with one or more, or none of the respondents prior to entering into a contract. Omissions, alterations, or irregularities of any kind shall constitute sufficient cause for rejection of a proposal. However, the City reserves the right to waive irregularities in the proposals. The City reserves the right to advertise for new proposals if, in its judgment, the best interest of the City will be served. Non-disclosure cannot be guaranteed after the selection stage of this procurement due to public record laws.

Ownership of Completed Products

All maps, photographs, documents, reports or digital data prepared or completed during the performance of services specified in this RFP shall become the property of the City and shall not be copyrighted by the proposer. Also, the same materials shall not be released or made available to any third party or used for other purposes at any time without the written approval of the City.

SCOPE OF WORK

Project Components

The proposed GIS Base Map Development project involves two separate, but related, components:

1. Aerial photography acquisition for the required areas;
2. Rectification of aerial photography;

A description of each task including minimum specifications is provided below to help guide firms in the formulation of responses to this RFP.

Respondents are invited to recommend any alternative approaches to photography, scanning, and/or rectification that will result in a better product and/or cost savings to the City.

Component 1 - Aerial photography acquisition

The City desires to obtain full color aerial photography in the Spring of 2013 for the proposed areas. Respondents are asked to propose an approach to the photography acquisition that will best meet these needs.

The proposed approach to aerial photography acquisition for the City area should outline the respondent's intended flight plan including date and time of photography, flight height and negative scale, flight lines, endlap and sidelap, planned aerial equipment and materials, and relevant quality control procedures.

Digital aerial imaging methods may be used instead of film aerial photography.

Specifications

- Photographic coverage for the City area will be for approximately 90 square miles of land. The geographic area of interest is depicted in Appendix 1. The City intends to have photography collected to produce a 1.0 foot pixel resolution, but respondents are invited to submit proposals with an optional price for completing the project at a 0.5 foot pixel resolution. Respondents may download a shape file containing the data grid at <http://www.rcgov.org/GIS/rfps.html> for use in project planning.
- The color aerial photography may be captured using either a traditional film based aerial camera or by using a digital aerial camera. If captured with a traditional film based aerial camera, the film frame shall capture natural color. If captured with a

digital aerial camera, the digital frame shall capture natural color, but may additionally and optionally capture other light bands such as, but not necessarily limited to, near infrared (NIR).

- Photography shall not be acquired when the ground is obscured by haze, snow, smoke, dust, flood waters, or environmental factors that may obscure ground detail. Photography with cloud coverage of any amount of thin cirrus, thin cirrostratus, and/or thin altostratus clouds is acceptable as long as sufficient light is available to produce the shadows and contrast necessary for good quality aerial photographs. Photography with any other type of cloud cover is not acceptable. Clouds and/or shadows of clouds shall not appear in the photographs. The solar altitude should not be less than 30 degrees when aerial negatives are exposed. Photography will be collected in snow-free, leaf-off conditions.
- Unacceptable aerial photography shall be re-flown at the earliest opportunity, weather permitting, by the vendor at no additional cost to the City

Component 2 – Aerial photography rectification

The second work component involves rectification of the digital aerial photography from the work in Component 1. Respondents should present a strategy for creating and delivering digital images rectified into State Plane coordinates

Specifications

- Images are to be geo-referenced to the South Dakota State Plane Coordinate System (South Zone) based on the NAD83 datum.
- The City will supply a set of 1997/98 USGS DOQQs in South Dakota State Plane south zone feet (NAD83) for use in rectifying the photography.
- Individual digital images will be edgematched with no pixel gaps or overlaps between adjacent geographic partitions.
- If film photographic methods are used, all digital imagery is to be generated by scanning aerial photographs and processing the data within a digital environment. Scanned conventional hardcopy orthophotos are not acceptable.
- Color and density matching of digital images will be controlled to create the appearance of a seamless mosaic. Respondents are expected to identify the quality assurance and checking procedures that will be employed to guarantee proper tone balancing and overall image quality.
- Digital images will be delivered in a standard TIFF file format with accompanying geo-reference header files (.tfw) that are appropriate for use within the City's ArcGIS and AutoCad software environments.
- Digital images will be delivered as individual files utilizing the tiling scheme supplied by the City (see Appendix 1). Individual files will use the exact same pixel resolution

and be cut to facilitate loading them into a mosaic in an ArcGIS SDE geodatabase. Note that the tiling scheme is based on state plane sections and tax parcels that do not line up with grid north. Where there are groups of adjacent tiles, the boundaries of individual tiles internal to the group should be cut using the tiling scheme as a general guide along grid north/south/east/west to ensure edges are cut along straight lines of pixels. Edges along the outer part of the group will also need to be cut along straight lines of pixels, but this will require acquiring photography slightly outside of the tile boundaries in order to prevent having “no data” areas in the resulting files.

Deliverables

- Digital images in .tif files with .tfw header files.
- FGDC or ISO-compliant metadata for the aerial photos.

Pennington County, South Dakota

Areas to be Photographed

Legend

- Township line
- Rapid City Limits
- Town Boundary
- Area to be photographed

