Agenda Item: 6.

Memorandum

To: Papio-Missouri River Natural Resources District
Programs Projects and Operations Subcommittee

From: Paul W. Woodward PE, Groundwater Management Engineer

Date: August 4, 2017

Re: Review and Recommendation for Geographic Information Services to Certify Irrigated Acres and Issue Well Permits

The District requested proposals, see attached RFP, to provide Geographic Information System (GIS) databases and web-based applications to certify irrigated acres and allow NRD staff to review and issue well permits. On July 28, 2017, five interested vendors submitted their proposals to the District including their estimated cost to produce the required databases and web applications (base cost) along with an estimated cost to provide annual support. The responses provided were reviewed in detail by District staff (see attached review sheet) and are summarized below:

	Langan	Burns & McDonnell	GIS Workshop	Phoenix Web Group	Timmons Group
Base Cost	$33,500	$37,523	$84,500	$84,350 - $94,800	$93,000
Annual Support	Did not include	$8,838	$10,200*	$8,000	Did not include
Base Schedule	4 months	2.5 months	7 months	3 months	4 months

The primary difference in the costs proposed is whether a vendor chose to utilize the capability of GIS software already available from ESRI (Environmental Systems Research Institute) or proposed to develop their own custom database and web interfaces. ESRI software is the basis of most GIS applications and the District currently accesses ESRI software free of charge through an agreement with USDA-NRCS. Therefore, the benefits of utilizing existing software include:
- In the long-term, it is something the District can host and maintain on our own. Custom software would require an ongoing cost for annual support as long as the service is in use.
- The District has ESRI licenses and is already familiar with this software.

In comparing the lowest two bids which proposed to use the ESRI software, District staff concluded that Langan is not the lowest responsible bidder since they did not provide a cost for annual support as requested in the RFP. Burns and McDonnell would be the lowest responsible bidder with a total cost of $46,361 (base cost + annual support). District staff is familiar with the personnel of Burns and McDonnell, they have an Omaha office, and they have experience on GIS projects involving Midwest water rights and groundwater wells.

Management recommends that the Subcommittee recommend to the Board that the General Manager be authorized to execute a contract with Burns & McDonnell for Geographic Information Services to certify irrigated acres and issue well permits for a maximum not-to-exceed cost of $46,361, subject to provisions deemed necessary by the General Manager and approval as to form by District legal counsel.

Selection Criteria	Phoenix Group	GIS Workshop	Burns & Mc	Timmons	Langan
Project Organization (Available Staff/Location and Company info)	Lincoln, NE; Available staff. Tech/IT services	Lincoln, NE; Available staff and PM are in MN. Tech/IT services	Kansas City, MO; Available staff. Engineering + Tech consulting	Richmond, VA; staff available. Engineering + Tech/IT services	Doylestown, PA; staff available. Engineering + Tech/IT consulting
Project Understanding and Approach	Customized database would be proprietary. Proposed 2 options (range of costs). Landowners would require indiv. user PIN. Includes hosting fee but ongoing support would be additional.	Customized database would be proprietary. Does allow for more automated mailings and contact with public. No login, but this could be changed. Includes initial training. Ongoing support is additional.	Use ESRI software and ArcGIS Online. Use of Web App Builder for ArcGIS and Survey 123 forms. Includes initial training and live support. They propose that the NRD host the data and web app	Develop custom wed-based application would be proprietary, but use our ArcGIS Online account to review submitted data (see pg 13 diagram). They would host the data and web app.	Use ESRI software and ArcGIS online. Hosting is available. Use Web App builder for ArcGIS and users will self-register w/out numerous ArcGIS Online accounts.
Similar Projects and Experience	Water related and Nebraska Experience: LENRD, L&CNRD, LPSNRD, LNNRD	Water related and Nebraska Experience: UPNRD, CPNRD, LENRD, LNNRD	Nebraska: none; water related: Kansas water rights; private well fields, stormwater	No Nebraska or water related experience. Natural resource projects for state agencies	No NE experience. Water pollution GIS with state agencies.
Staff Qualifications	Staff are programmers and database managers, not ESRI certified	Software developers + GIS programmers. ESRI licenses	ESRI Business Partner; ESRI certified personnel + ESRI licenses	GIS professionals + ESRI licenses + web and software developers	ESRI business partner + ArcGIS Online specialty. ESRI certified personnel + licenses
Cost and Schedule	Option 2: $85,000 - $95,000 + $8,000 annual support; 3 month schedule	$84,500 + $10,200 annual support; 7 month schedule	$37,523 + $8,838 annual support; 2.5 month schedule	$93,000 + $6,000 annual hosting (no support cost provided); 4 month schedule	$33,500 + $1,500 hosting (no support cost provided); 4 month schedule

Memorandum

To: Interested Consultants

From: John Winkler, General Manager

Date: July 10, 2017

Re: Request for Proposals for Geographic Information Services to Certify Irrigated Acres and Issue Well Permits

Proposals Received by: 2:00 PM on July 28, 2017

The Papio-Missouri River Natural Resources District (P-MRNRD) is requesting proposals to provide Geographic Information System (GIS) databases and web-based applications to certify irrigated acres and allow NRD staff to review and issue well permits. The P-MRNRD desires to work with landowners in its Integrated Management Plan area shown in Figure 2 (see email link below) to correctly map and certify cropland that has been irrigated at least two of the past ten years. The P-MRNRD does not currently have a well permitting system, but is interested in requiring well permits within the next year and wishes to create a database that integrates existing well data and allows new well permits to be submitted and approved online. The anticipated schedule to complete this project is four (4) months between September 2017 and January 2018.

To provide services to certify irrigated acres, the consultant will need to provide a GIS based system that will:
- Accurately map actual irrigated acres
- Record data about the irrigated acres including:
  - Landowner name and contact information
  - Parcel ID for respective county
  - Operator's (renter's) name and contact information (if different from landowner)
  - Reference Well ID or IDs
  - Type of irrigation, use of chemigation, etc
  - Certified acres
  - Years of documented irrigation
- Provide a web-based interface that will allow landowners to submit the required information
- Incoming data from landowners would have to be reviewed and approved by District staff before becoming active data in the "live" database
- Web-based interface should allow for communication via mail and email between landowners and the District

Services for the web-based well permit application should at a minimum include:
- Accurate location of existing water supply wells greater than 50 gpm
- Provide web application format that requires the well driller/applicant to enter:
  - Name, contact info, well driller license #
  - Parcel ID for proposed well
  - Accurate location for proposed well
  - Landowner name and contact info
  - Proposed well use and required flow in gpm

- o Distance to nearest water supply well >50 gpm and any known well <50 gpm
- o Anticipated well depth and geologic formation of well water
- Incoming data from applicants would have to be reviewed and approved by District staff before becoming active in the "live" database

Minimum deliverables for the proposed project include:
- SQL or SQL compatible database(s) accessible by the online application and available for use in ESRI software
- WebGIS mapping platform that can function in all web browsers
- Web-based application forms that can be submitted and reviewed and approved by NRD staff
- Annual maintenance for web-based application and databases
- Minimum of three (3) progress meetings with NRD staff
- Monthly invoices and updates in accordance with the schedule

All proposals must follow the format outlined in this request for proposals (RFP). Failure to do so may result in disqualification of the consultant's proposal. For the purposes of this RFP, a page shall mean one printed side of a sheet of paper. The RFP may include a front and back cover page (no plastic covers please). Do not include any divider pages. Proposals may be printed single sided (one page per sheet of paper) or double sided (two pages per sheet of paper). If interested, the following information should be submitted with the proposal

1) **A letter of interest not to exceed two (2) 8 ½ x 11 pages. Include the firm name, address, telephone number and email address, the year the firm was established, any previous names for the firm and a list of the types of services for which the firm is qualified,**

2) **The body of the proposal not to exceed ten (10) 8 ½ x 11 pages and three (3) 11 x 17 pages if necessary. General overview of firms understanding of the project and approach to the project.**

3) **A description of the project organization not to exceed two (2) 8 ½ x 11 pages. Including the names of the principals of the firm, the names of the personnel expected to be utilized including any sub-consultant personnel and the specific project contact person,**

4) **A List of not more than four (4) similar projects completed by the firm within the last 5 years. Each project description shall be limited to one (1) 8 ½ x 11 page (maximum of 4 pages),**

5) **Resumes for up to five (5) key personnel. Resumes shall include their workplace location, a description of their relevant experience, length of time with the firm, applicable licensures and registrations, and their proposed role in the project. Resumes shall be limited to one (1) 8 ½ x 11 page per resume (maximum of 5 pages).**

6) **Proposed cost estimate and schedule of project not to exceed two (2) 11 x 17 pages.**

Selection factors for the project will include the following:

1) **Project understanding and approach,**

2) **The project organization, adequacy of available staff, location of personnel relative to the project location and the proposed schedule of completion,**

3) **Similar projects completed by the firm,**

4) **Qualifications of the professional personnel and staff members,**

5) **Proposed cost estimate and schedule**

District staff will be responsible for reviewing and evaluating the proposals. Final selection of the firm to perform such services will follow the timetable below:

Date	Description
July 10, 2017	Mail out RFP to GIS consultants.
July 10, 2017	Advertise RFP in the newspaper.
July 17, 2017	Advertise RFP in the newspaper.
July 28, 2017	Final date for receipt of proposals.
August 8, 2017	PPO Subcommittee meeting to discuss proposals received and recommend one (1) firm for selection.
August 10, 2017	Board adopt subcommittee recommendation
August 31, 2017	Staff will negotiate contract with selected firm
September 12, 2017	Subcommittee reviews and provides recommendation on proposed contract
September 14, 2017	Board adopt subcommittee recommendation.

Interested firms should submit three (3) printed and bound copies and one (1) electronic copy of their proposal to the District's Omaha office, located at 8901 South 154th Street, Omaha, Nebraska 68138, no later than 2:00 pm on July 28, 2017.

Inquiries regarding this matter or requests for additional information may be addressed to Paul Woodward at 402.444.6222 or pwoodward@papionrd.org.

Cc: Marlin Petermann and Mike McNaney

Reference:
https://www.papionrd.org/wp-content/uploads/2016/08/FrmCertification.pdf
https://www.papionrd.org/wp-content/uploads/2016/08/Figure-2-IMP_Control_Areas.pdf