



CITY of NOVI CITY COUNCIL

Agenda Item J
September 15, 2014

SUBJECT: Approval to award Novi Enterprise Asset Management System (NEAMS) Phase IV (management of water system cross-connection Inspections) implementation and system upgrade services to Power Engineers in the amount of \$39,346.

SUBMITTING DEPARTMENTS: Department of Public Services and Information Technology

CITY MANAGER APPROVAL:  TDK

EXPENDITURE REQUIRED	\$ 39,346
AMOUNT BUDGETED	\$ 39,346
APPROPRIATION REQUIRED	\$ 0
LINE ITEM NUMBERS	101-228.00-850.592 – \$ 39,346

BACKGROUND INFORMATION:

The first phase of the Novi Enterprise Asset Management System (NEAMS) approved by the Novi City Council, which included water and sewer, roadways, and sign assets, was successfully completed in May 2012. The second phase of NEAMS upgrades, which included storm water and non-motorized assets, was completed in January 2013. The third phase of NEAMS upgrades, which included forestry assets, was completed in April 2013. The City of Novi Department of Public Services and the Information Technology Department have leveraged this technology solution to improve the operations and maintenance practices involving the City's assets. This asset management strategy will improve the operational efficiency of these systems by reducing operating and capital replacement costs and improving customer service by managing service requests so they can be efficiently received, prioritized, and satisfied.

Phase IV of NEAMS upgrades is proposed to extend the system to manage water system cross connection inspections as directed by the Michigan Department of Environmental Quality (MDEQ). The cross connection program is a comprehensive program designed to eliminate and prevent all cross connections. A cross connection is an arrangement of piping which could allow undesirable bacterial or chemical contaminants to enter the drinking water system as a result of backflow or backsiphonage. For this phase of upgrades, our selected consultant, Power Engineers, will upgrade the system software and databases to gain functionality from new versions of the Esri GIS and Azteca Cityworks software programs.

Professional Services Consultant Role & Competitive Request for Proposals (RFP) Solicitation Process

Prior to the first phase of NEAMS, a competitive RFP process was conducted in accordance with the City's purchasing policy for this multiphase project. Power Engineers was the only consultant to submit a fee proposal for the first phase of NEAMS and was selected based on their qualifications and rates that were competitive based on industry standards. Power Engineers has subsequently completed all three phases of NEAMS upgrades using the fee proposal rates secured during the phase one RFP process. Based upon the successful completion of three phases, City staff recommends awarding phase four to Power Engineers using the same competitively bid rate schedule secured during the phase one RFP process. A copy of the Power Engineers proposal is provided as an attachment. This experienced vendor will provide software configuration/implementation services, training, system

documentation, and oversee the system's successful deployment to ensure staff take complete ownership of the final solution. Power was the lead consultant for over 25 projects across the nation enabling local communities to fully leverage Cityworks asset management systems. Novi's work processes for cross connection and backflow inspection management will be streamlined for essential service delivery functions including: managing service requests, assigning work orders, maintaining a device inventory, monitoring the inspections results and creating standardized reports to meet the MDEQ requirements.

NEAMS Advances Our City Council's Goals

The NEAMS asset management program will advance the City Council's goals of improving infrastructure and maintaining a fiscally responsible government. The system is also designed to evolve and mature with the City's increased operational needs as exemplified by the City's Cross Connection Management Program, which will monitor thousands of backflow devices to ensure the public has access to safe drinking water. The system is designed to associate inspections with work performed to manage and/or replace affected backflow devices installed in commercial and residential buildings.

Implementation of the Phase IV upgrade will begin in with requirements gathering in October 2014 and will be completed by the end of the fiscal year 2014/2015

RECOMMENDED ACTION: Approval to award Novi Enterprise Asset Management System (NEAMS) Phase IV (management of water system cross-connection Inspections) implementation and system upgrade services to Power Engineers in the amount of \$39,346.

	1	2	Y	N
Mayor Gatt				
Mayor Pro Tem Staudt				
Council Member Casey				
Council Member Fischer				

	1	2	Y	N
Council Member Markham				
Council Member Mutch				
Council Member Wrobel				



August 28, 2014

Keri Blough, Geospatial Applications Services Manager
Geographic Information Services
City of Novi, IT Department
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Novi, MI 48375

ENERGY

FACILITIES

COMMUNICATIONS

ENVIRONMENTAL

Subject: Proposal for NEAMS Cityworks 2014 Upgrade and Cross Connection Inspection Implementation

Hi Keri:

The following describes the general approach that will be used upgrade NEAMS to Cityworks 2014 and implement cross connection inspections in Cityworks.

Task 1 Project Management

1.1 Project Supervision

Task 2 Task 2 Implementation Planning and Requirements

2.1 Kick-off Meeting and Implementation Planning and Requirements Workshops

2.2 Develop System Requirements Documents

2.3 Develop Requirements and Design Documents for Custom Cityworks Cross Connection Inspection Reports

Task 3 Software Upgrade

3.1 Cityworks/ArcGIS Server Test System Installation and Testing

3.2 Cityworks/ArcGIS Server Production System Installation and Testing

Task 4 Cityworks Configuration and Installation

4.1 Cityworks Configuration

4.2 Custom Cityworks Cross Connection Inspection Crystal Reports Development

4.3 Cityworks Configuration QA/QC

4.4 Cityworks Production Configuration Update

Task 5 Cityworks System Review

5.1 Cityworks Configuration Review

5.2 System Test System Update

Task 6 Cityworks Training and Documentation

6.1 Training Development and remote WebEx Training

Task 7 Cityworks Deployment

7.1 Remote System Deployment Support

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CITYWORKS 2014 UPGRADE AND CROSS CONNECTION INSPECTION IMPLEMENTATION

Objective(s):

- Upgrade NEAMS to AMS 2014
- Upgrade ArcGIS Server to 10.2.2
- Deploy Cityworks for the City's Cross Connection Inspection Program

Responsibility: POWER

Duration: 3 Months

Location: POWER Office/City of Novi

Resources: Mark Rytilahti, Jessica Stack

Description

POWER will use the same methodology that was used for the implementation of Cityworks for previous phases of NEAMS. This deployment will include the following:

- Project Management
- Implementation and Planning Requirements
 - Specifying modifications to the GIS database model to support the cross connection inspection program
 - Cityworks Configuration Requirements Document
 - Commercial and Industrial Property Inspections
 - Subdivision Irrigation Inspections
 - Residential Inspections
 - Developing the requirements, design documents, and cost estimates for custom Cityworks reports
 - Letter Generation
- Software Upgrade
 - Upgrade the NEAMS website to Cityworks AMS 2014
 - Upgrade the City's GIS to the latest ArcGIS version compatible with Cityworks AMS 2014. This is anticipated to be ArcGIS 10.2.2.
- Configuration of Cityworks for Cross Connection Inspections in Development and Production Environments
- Cityworks System Review
- Cityworks End-user Training
 - Training material customized for the City
 - One day of remote Web based instructor-led training. This includes training on new functionality available in Cityworks 2014 as well as Cross Connection Inspections
- Cityworks Deployment Support
 - Up to eight hours of remote post deployment support

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Assumption(s):

- The City will provide facilities for on-site work including desk, telephone, internet access, and system access as required.
- MS Project 2010 will be used for development of the project schedule.
- The City will provide POWER with a copy of sample building assets and related backflow preventer assets in Esri file geodatabase format two (2) weeks prior to the requirements workshop. The building and backflow preventer assets will be suitable for deployment with Cityworks software.
- Migration by POWER of current backflow preventer/cross connection inspections or other data is not required.
- The City Project Manager will coordinate appropriate Subject Matter Experts (SMEs) and meeting participants for the requirements workshop.
- The requirements workshop will be conducted onsite and will consist of a workshop lasting up to one and one-half (1 ½) days and a 2-hour follow-up webcast.
- The City will deliver existing backflow preventer/cross connection inspection workflows, forms, spreadsheets, notification letters and any other related system documentation to POWER's project manager at least two (2) weeks prior to the requirements meeting.
- The City will have appropriate software licenses to support the addition of cross connection inspectors prior to the training session.
- POWER will have remote access to the City's equipment to install software and data.
- POWER will have access to the City's IT staff as needed during the software installation and testing process.
- Training and deployment support will be conducted remotely.

Client Responsibilities:

- Assign a project manager that is knowledgeable of the project and business requirements and has general decision-making authority to ensure timely resolution of issues that could impact the project schedule.
- Ensure that the appropriate project stakeholders, IT, representatives and Subject Matter Experts (SMEs) attend the kick-off meeting.
- Provide meeting facilities and coordinate the attendance of the City's project participants for all project meetings, workshops and training.
- Deliver existing work order and related system documentation.
- Coordinate the collection, organization and transfer of requested documentation, data, hard-copy samples and other appropriate information as needed.
- In order to reduce the cost to the City, the City's project manager will assist with the documentation of the requirements during the requirements workshop.
- Review and provide written comments on the draft and final System Requirements Document within ten (10) business days of delivery.
- Provide timely response to questions raised by POWER during the configuration.
- Obtain licenses for and download all required Esri software.
- Obtain enough licenses for all Cityworks users.
- Clone a development virtual machine from the current NEAMS server.
- Provide IT staff to support POWER during the software installation and testing process as needed.
- Provide remote access to the City's equipment to install software.
- Provide review and consolidated comments on the updated requirements document within ten (10) business days of receipt.
- Install ArcGIS 10.2.2 on all client desktops.

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- Coordinate departmental participation for the deployment and acceptance testing.
- During testing, the City will provide a description of the support issue and provide access to the system via remote support software.
- The City will provide timely response to requests for system evaluation comments and suggestions.
- The City will provide at least one of its current Cityworks super users to assist POWER's instructor during the remote training session conducted by POWER.

COST

The cost of the AMS 2014 upgrade and Cross Connection Inspection implementation will be **\$39,346**.

The cost is broken down between system upgrade costs and backflow preventer inspection implementation as shown below:

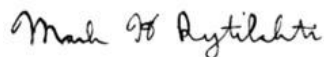
Task	Cross Connection Inspection Implementation	AMS 2014 Upgrade
Implementation Planning and Requirements	\$8,380	
Software Upgrade		\$7,440
Cityworks Configuration	\$9,960	
System Review		\$2,170
Training		\$3,720
Deployment Support		\$2,480
Project Management		\$3,518
Travel Expenses	\$1,678	
SUB TOTAL	\$20,018	\$19,328
TOTAL	\$39,346	

All estimated travel expenses for POWER staff are included and will be billed to the City of Novi at cost plus a carrying and handling charge of 10%. The total cost of the proposal does not include sales tax where applicable. The City is responsible for any taxes, duties, or fees.

Payment will be based upon task completion with payment due net 30 days. Project management services will be invoiced monthly based on percent complete. All change orders will be performed on either a time and expense or fixed price basis.

All POWER invoices are due 30 days after date of the invoice. Payments made after 30 days will be subject to a 1½ % per month late charge.

Sincerely,



Mark Ryttilahti
 Senior Consultant