



3501 Kishwaukee Street  
P.O. Box 7480  
Rockford, IL 61126-7480  
815-387-7400  
815-387-7538 (FAX)

Donald Massier, President  
Elmer Jones, Vice President  
Rick Pollack, Clerk/Treasurer  
Ben Bernstein, Trustee  
John Sweeney, Trustee  
Timothy S. Hanson, District Director

**REQUEST FOR PROPOSALS**  
**TECHNOLOGY STAFFING ANALYSIS**  
**RFP #19-217**

September 13, 2019

Name of Firm: \_\_\_\_\_  
Address: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_  
Phone: \_\_\_\_\_ Fax: \_\_\_\_\_  
Email: \_\_\_\_\_

**Proposal Due Date:** 2:00 P.M., October 11, 2019

*Proposals will be accepted until the specified time and date. Any proposal delivered after the due time and date will be refused.*

**Bid Deposit/Bid Bond:** NO  
**Prevailing Wage:** NO  
**Performance Bond:** NO

**PLEASE MARK THE RETURN SEALED ENVELOPE:**

1. RFP Due Date and Time
2. Title of Job
3. RFP Number

**SEND PROPOSALS TO:**

Rock River Water Reclamation District  
3501 Kishwaukee Street  
Rockford, IL 61109

**PROPOSALS WILL NOT BE ACCEPTED BY FAX OR EMAIL.**

If the Illinois Department of Human Rights registration number has not been obtained, this number must be provided within 5 business days after the proposal due date.

Results are available after contracts are awarded at the Regular Meeting of the Board of Trustees, held on the fourth Monday of the month. Please call 815-387-7425 or visit [www.rrwr.district.il.us](http://www.rrwr.district.il.us)

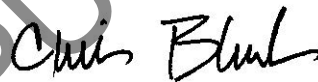
I  
NOTICE  
ROCK RIVER WATER RECLAMATION DISTRICT  
REQUEST FOR PROPOSALS  
**Technology Staffing Analysis**  
**RFP #19-217**

The Rock River Water Reclamation District will receive sealed and signed proposals for **Technology Staffing Analysis**. Proposals shall be submitted to the Rock River Water Reclamation District Administration offices located at 3501 Kishwaukee Street, Rockford, Illinois 61109 until 2:00 p.m. October 11, 2019.

Copies of the RFP for review purposes only are available through the Rock River Water Reclamation District web site [www.rr wrd.dst.il.us](http://www.rr wrd.dst.il.us). Proposal documents for submittal are available by contacting Melinda Roach at the Rock River Water Reclamation District, 3501 Kishwaukee Street, Rockford, Illinois, 61109 (815) 387-7425. For more information, visit the Rock River Water Reclamation District web site at [www.rr wrd.dst.il.us](http://www.rr wrd.dst.il.us).

No proposal shall be withdrawn without the consent of the District for 60 days after the scheduled time of receiving the proposals.

The District will confirm any award decision in writing, to the successful proposer.



Chris Black  
Business Manager  
Rock River Water Reclamation District

## II

### GENERAL SPECIFICATIONS AND INSTRUCTIONS REQUEST FOR PROPOSALS Technology Staffing Analysis RFP #19-217

#### 2.1 Important Dates (Tentative Schedule)

- |                                                 |                    |
|-------------------------------------------------|--------------------|
| • Proposal Release Date:                        | September 13, 2019 |
| • Proposal Due Date:                            | October 11, 2019   |
| • Evaluation of Proposals and selection process | October 22, 2019   |
| • Anticipated Award Date:                       | October 28, 2019   |
| • Final Report Due Date:                        | TBD                |

#### 2.2 Proposal Preparation

Where applicable, the respondent shall submit his proposal on the forms the District provides in this document. **The respondent shall complete all applicable blanks.** He may submit additional information as he believes necessary on his stationery, under signature of the authorized representative who completes this document's forms.

If this Request for Proposals contains inconsistencies between sections, Section III - Detailed Specifications shall supersede Section II - General Specifications, which shall supersede Section I - Notice. **No warranty is made or implied as to information contained in these specifications.**

An authorized officer or individual must sign the proposal. Authorized signature must be the individual owner of a proprietorship, a general partner of a partnership, or the corporation officer who is authorized to sign for a firm and whose title is affixed.

All prices and notations shall be in ink or typewritten. The respondent may cross out mistakes and type corrections adjacent to the point of error. The person who signs the proposal shall initial such corrections, in ink. **If the District finds a respondent's entry to be illegible, it may, at its sole discretion, reject the proposal.**

#### 2.3 Proposal Response Format

Submit three copies of the proposal. Proposal format should conform to that prescribed below.

##### Section 1 – Required Documents

1. Proof of required insurance (COI, additional insured endorsements)
2. Fair Employment Practices Affidavit of Compliance
3. Forms of Affidavit

##### Section 2 – Executive Summary/Overview

Executive Summary – An executive summary detailing the Proposer's competence, qualifications, past experience, and number of years providing Technology Staffing Analyses as described in this RFP. The summary should explain the Proposer's

understanding of the District's intent and objectives and how their Proposal would achieve those objectives.

### **Section 3 – Main Body of Response**

Include a complete copy (all pages and content) of this RFP document and Specifications document with all sections completed. A complete, point-by-point response is required; incomplete documents may be deemed unresponsive and therefore eliminated from consideration.

### **Section 4 – Exceptions**

It will be assumed that the Proposer accepts all conditions and considerations as outlined within this document unless specifically noted in this Exceptions section, *and* within the Main Body of Response at the section and point where the exception is taken.

## **2.4 Exceptions**

Exceptions to any part of the requirements stated in this request must be clearly identified as exceptions. The stated exceptions and any alternatives offered must be included in Section 3 at the specific point at which the exception is taken and in Section 4 of the Proposer's response (see "Proposal Response Format"). **Submission of a Proposal indicates acceptance by the Proposer of the conditions contained in this Request for Proposal, unless clearly and specifically noted in the Proposal submitted and confirmed in the contract between RRWRD and the Proposer selected.**

## **2.5 Submission of Proposals**

The District **will not** receive proposals in an electronic format or by facsimile. The respondent shall return his proposal, clearly marked as **"Request for Proposal 19-217: Technology Staffing Analysis"**. **The District cannot ensure that the sealed proposal will not be prematurely opened if the respondent does not properly label his proposal envelope.**

Mailing labels should be addressed to:

Rock River Water Reclamation District  
P.O. Box 7480  
Rockford, IL 61126-7480

Proposals sent via package delivery service should be addressed to:

Rock River Water Reclamation District  
3501 Kishwaukee Street  
Rockford, IL 61109

If the respondent chooses to hand-deliver his proposal, he shall deposit it with the Main Entrance Receptionist, 3501 Kishwaukee Street, Rockford, IL 61109, between the hours of 8:00 A.M. and 4:30 P.M.

## **2.6 Laws and Regulations**

The respondent who is awarded the contract shall comply with all laws of the United States of America, the State of Illinois, and all lawful regulations of the Rock River Water Reclamation District and the respective cities and villages in which the professional service and material supplied is to be performed respecting labor and compensation and all other statutes, ordinances, rules and regulations applicable and having the force of the law.

## **2.7 Illinois Department of Human Rights Registration Number**

All proposers inside and outside of Illinois must provide an Illinois Department of Human Rights Registration Number. If the number has not been obtained, it must be provided within 5 business days after the date proposals are due. This number shall be written or typed on the line in the Fair Employment Affidavit of Compliance (included in the documents you receive). The following link may be used to access the website where the number can be obtained:

[http://www.illinois.gov/dhr/PublicContracts/Pages/Vendor\\_On\\_Line\\_Renewal.aspx](http://www.illinois.gov/dhr/PublicContracts/Pages/Vendor_On_Line_Renewal.aspx)

## **2.8 Taxes**

This District is exempt, by law, from paying Federal Excise Tax and Illinois Retailers' Occupational Tax. Therefore, the respondent shall exclude those taxes from his proposal. The District's tax exemption number is E9992-3696-07. The respondent shall include all applicable taxes in his proposal price.

## **2.9 Withdrawal of Proposals**

At any time prior to the scheduled proposal deadline, the respondent may withdraw his proposal. In order to do so, he shall submit a written request to the Business Manager.

## **2.10 Terms**

**A. Payments to the Successful Respondent.** If the District receives an acceptable invoice for conforming materials prior to the fifth day of the month, the District shall issue payment before the fifth day of the succeeding month. If received on or after the fifth day of the month, payment will be issued the following month.

**B. Default.** In case of default, the District will procure the materials and service described in this Request for Proposals from other sources. The District shall hold the defaulting successful respondent responsible for any excess cost incurred. The defaulting successful respondent shall make such payment no more than 60 calendar days after the District notifies him, in writing, of such an occurrence.

**C. Delivery Hours.** Unless otherwise specified, all items shall be delivered to: Rock River Water Reclamation District, 3501 Kishwaukee Street, Rockford, Illinois, 61109, Monday through Friday, between the hours of 8:00 A.M. and 3:00 P.M., excluding holidays.

**D. F.O.B. Point and Shipping Charges.** All prices shall be quoted F.O.B. destination, Rock River Water Reclamation District, Rockford, Illinois. All shipping, handling and freight charges shall be included in the proposal amount.

**E. Use of District Name Prohibited.** In the absence of the District's written permission, the successful respondent shall not use the District's name in any form or medium of public advertising.

## **2.11 Addenda**

If the District issues written addenda, such addenda shall become part of the contract documents. The District will email, fax, or mail the addenda:

1. not less than 3 working days prior to the proposal's opening date;
2. via email, facsimile transmission, or mail
3. to each recipient of the specifications, at either the:
  - a. email address furnished by the proposer;
  - b. facsimile number the prospective respondent sent the District;
  - c. address to which the District mailed the original proposal document;
  - d. or the corrected address the prospective respondent subsequently furnished.

In the absence of the prospective respondent's written notice of his email or facsimile number, the District will provide addenda via mail. A respondent that does not receive the District's addenda, and who has previously submitted a proposal, shall not be relieved from any obligation in the proposal he submitted.

## **2.13 Contract Form**

No more than 10 business days following the contract award, the successful respondent shall submit a completed Contract Form to the District's Business Manager. The Contract Form is part of this Request for Proposals. By their mutual agreement, the successful respondent and District may supplement this contract form or replace it with an alternative document. If the successful respondent fails to complete the agreed upon Contract Form within the specified time, he shall be in material default.

## **2.14 Contract Termination**

**A. Respondent's Unacceptable Performance.** If the successful respondent fails to provide materials and service in conformity with this Request for Proposals, the District shall notify him in writing. If the successful respondent fails to correct the performance deficiency to the District's satisfaction within five working days after he receives the District's notice, he shall be in default. If the same performance deficiency recurs despite the District's notification and the successful respondent's temporary correction, the successful respondent shall likewise be in default. The District may, at its sole discretion, terminate the contract with the defaulting successful respondent, and remedy the matter under provisions set forth in this Section of this Request for Proposals.

**B. District's Action Following Contract Termination.** If the contract is terminated, the District may, at its sole option:

1. request new Technology Staffing Analysis proposals, or
2. designate the next-low respondent to provide Technology Staffing Analysis, provided that said next-low respondent agrees to his original proposal terms. The District may repeat this option until it obtains an acceptable Technology Staffing Analysis contract.

### **2.15 Deliveries**

The successful respondent shall ship all material as follows: F.O.B. Rock River Water Reclamation District, 3501 Kishwaukee Street, Rockford, Illinois, 61109, freight paid by seller. All deliveries shall conform to the requirements stated in this Request for Proposals.

### **2.16 Incidental Work**

The cost of incidental work described in the Specifications for which there are no specific Contract Items shall be considered as part of the general cost of doing the work and shall be included in the prices for the various Contract Items. No additional payment will be made therefore.

### **2.17 Plant, Tools and Equipment**

The Contractor shall provide and maintain such modern plant, tools and equipment as may be necessary to perform in a satisfactory and acceptable manner all the work required by this Contract. Only equipment of established reputation and proven efficiency shall be used. The Contractor shall be solely responsible for the adequacy of his plant and equipment.

### **2.18 Verification of Data**

The Contractor shall verify all Specifications or other data received from the District and shall notify it of all errors, omissions, conflicts, and discrepancies found therein. Failure to discover or correct errors, conflicts, or discrepancies shall not relieve the Contractor of full responsibility for unsatisfactory work resulting there from nor from rectifying such conditions at his own expense. Contractor will not be allowed to take advantage of any errors or omissions, as full instructions will be furnished by the District, should such errors or omissions be discovered. The Contractor shall assume all responsibility for the making of estimates of the size, kind, and quality of materials and equipment included in work to be done under the Contract.

### **2.19 Payment Terms**

Invoices must be submitted by the firm to: Rock River Water Reclamation District, 3501 Kishwaukee Street, P.O. Box 7480, Rockford, IL 61126-7480. RRWRD will make payments according to the District's standard payment terms.

III  
DETAILED SPECIFICATIONS  
REQUEST FOR PROPOSALS  
**Technology Staffing Analysis**  
**RFP #19-217**

**3.1 Purpose**

The intent of this Request for Proposal (“RFP”) is to obtain firm fixed pricing proposals from firms specializing in Technology Staffing Analysis. The District seeks to analyze DIT and other departmental technology staffing and structure to determine whether adjustments to the current staffing structure, methods of delivery and levels of service are needed based upon number of users, sites, technologies, and systems supported to best meet the technology needs of the organization and maximize the efficient use of public dollars.

**3.2 Background**

The Rock River Water Reclamation District (District) was originally incorporated as the Rockford Sanitary District in 1926 under the Sanitary District Act of 1917. Today the District covers nearly 100 square miles of Winnebago County and serves over 240,000 people in the communities of Rockford, Loves Park, Machesney Park, Roscoe, Cherry Valley, New Milford, a small part of Rockton and a number of unincorporated areas of Winnebago County. The District has approximately 75,600 customers and 117 full-time employees.

The District currently has nine full-time Information Technology staff. The District directly employees 6 full-time staff, Information Technology Supervisor/CIO (1), Systems Administrator (1), Network Administrator (1), and Programmer/Analyst (3). Three full-time positions are outsourced. These positions are Desktop Support Specialists/Technicians (3). The District also employees a Process System Engineer in its Plant Operations Department. The position oversees the Process Control System (PCS) used to manage the wastewater treatment process.

**Attached is the Rock River Water Reclamation District Information and Technology Services Briefing, which is intended to provide you background on the District’s current IT infrastructure.**

**3.3 Scope of Services**

All proposals must be made on the basis of, and either meet or exceed, the requirements contained herein. All offerors must be able to:

- A.** Provide a comprehensive review of all existing IT-related operations and assist in the development of a comprehensive strategy to improve the management of the District’s technology resources and to ensure that the District’s technology organizational structure provides for the most efficient and effective delivery of service to the organization and the most effective use of local tax dollars.
- B.** Conduct an independent analysis of the current state of technology staffing (both regular and contract positions), including the Process System Engineer position, across the District. The analysis should include an assessment of whether the District has the appropriate level of



staffing based upon number of users, sites and technologies and systems supported as well as a comparative analysis to organizations of similar size and characteristics in regards to budget, staffing levels, users and sites supported, supported application systems, and other comparable measures.

- C. Conduct an assessment of existing business processes and customer service delivery practices across the District as they relate to the delivery of technology services.
- D. Review and assess IT's current project management techniques, performance measurement objectives and customer satisfaction.
- E. Identify opportunities for staffing and organizational modifications and improvements to ensure technology services are properly staffed and aligned with organizational needs. This analysis should also explore other methods of service delivery and support such as outsourcing and should include recommendations for organizational structure, position assignments, process and technology work flows, customer service and training and performance measurements.
- F. Prepare and provide a presentation with analysis results and recommendations to the District.

### **3.4 Minimum Qualifications**

- A. **Understanding of the Project.** Capability to demonstrate understanding of the Project and the ability to meet or exceed the requirements stated in 3.3. Capable of writing comprehensive reports inclusive of detailed analysis and recommendations. Competent at presenting concepts and recommendations in a clear, concise and effective manner. Effective at delivering high quality work on time as scheduled.

- B. **Adequacy and Availability of Professional Level Staffing**

- 1. Provide a description of the staff and other resources which will be assigned to this contract.
  - 2. Provide a description of your firm's experience in providing similar services.
  - 3. Provide a description of your firm's experience in providing similar services to the public sector.

- C. **Credentials and Related Experience**

- 1. Proposers shall provide a list of at least three (3) current references for whom comparable work has been performed. Please include company name, contact name, address, telephone number, and email address.
  - 2. Provide a description of your firm's experience in providing similar services including the public sector.

- D. **Ability to Meet Project Schedule**

Please provide a detailed Project Schedule demonstrating that your firm can meet the required project completion. The Project Schedule shall describe the individual tasks to be performed and the relative scheduling of those tasks including a detailed listing of District and offeror resources, according to skill level. Please identify and describe all deliverable items.

### 3.5 Selection

The award of this contract shall be made to the responsible respondent, whose proposal is determined to be the highest evaluated offer taking into consideration the relative importance of price and other evaluation factors set forth in accordance with the following evaluation criteria:

- A. Understanding of the project and ability to meet or exceed the requirements stated in 3.2.
- B. Adequacy and availability of professional level staffing.
- C. Credentials and related experience.
- D. Ability to meet project schedule.
- E. Cost of services.

### 3.6 Price Increases Prohibited

Except for changes to which the District and the successful proposer agree because of revisions the District requires from the scope of the **Technology Staffing Analysis**, the **Technology Staffing Analysis** contract allows for no price increases.

### 3.7 Payments to the Successful Respondent

The successful respondent shall invoice the District monthly. **Section 2.10** of this Request for Proposals contains the District's general payment requirements.

### 3.8 Questions

Interested parties may direct questions concerning this Request for Proposals to Chris Black, Business Manager, 815-387-7450. The District will not interpret specifications for individual proposers. If the District determines that the specifications need to be clarified or revised, it will issue an addendum to all prospective proposers.

### 3.9 Insurance

**A. The successful respondent/contractor shall, for the duration of the contract, maintain the following:**

**General Liability:** \$1,000,000 combined single limit per occurrence for bodily injury, personal injury and property damage. If Commercial General Liability Insurance or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project or the general aggregate limit shall be twice the required occurrence limit.

**Auto Liability:** \$1,000,000 combined single limit per accident for bodily injury and property damage including coverages for owned, hired or non-owned vehicles, as applicable.

**Workers' Compensation and Employers' Liability:** Workers' Compensation limits as required by statute and Employers' Liability limits of \$500,000 per accident and \$500,000 per disease.

**Umbrella:** \$2,000,000 per occurrence/aggregate.

The policies shall contain, or be endorsed to afford Contractual Liability coverages for the

following provisions in the General Liability and Automobile Liability coverages:

1. The District, its officers, officials, employees, and volunteers shall be covered as additional insureds as respects liability arising out of activities performed by or on insured's general supervision of the successful respondent/contractor, products and completed operations of the successful respondent/contractor, premises owned, occupied or used by the successful respondent/contractor, or automobiles owned, leased, hired, or borrowed by the successful respondent/contractor. The coverage shall contain no special limitations on the scope of protection afforded to the District, its officers, officials, employees, volunteers, or agents.

2. The successful respondent's/contractor's insurance coverage shall be primary insurance as respects the District, its officers, officials, employees, volunteers, and agents. Any insurance or self-insurance maintained by the District, its officers, officials, employees, volunteers, or agents shall be in excess of the successful respondent's/contractor's insurance and shall not contribute with it.

3. Any failure to comply with reporting provisions of the policies shall not affect coverage provided to the District, its officers, officials, employees, volunteers, or agents.

4. The successful respondent's/contractor's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.

**Professional Liability (Errors and Omissions)** insurance appropriate to the Contractor's profession with limit no less than \$1,000,000 per occurrence or claim/\$1,000,000 aggregate. These limits subject to change depending on size of the project.

**B. Proof of Insurance – Certificate of Insurance and Additional Insured Endorsements.**

No more than 10 calendar days subsequent to the District's issuance of an award letter and no later than 30 days before commencement to work, the successful respondent/contractor shall provide documentation including a Certificate of Insurance and additional insured endorsements for commercial general liability and auto liability to prove that it has obtained all required insurance and bonds. The Certificate of Insurance shall state Rock River Water Reclamation District is additional insured under the commercial general liability and automobile liability on a primary, non-contributory basis. The primary, non-contributory additional insured endorsements for commercial general liability and automobile liability shall be provided. The District shall be the sole judge as to the acceptability of any such proof.

**Correction of Successful Respondent's/Contractor's Insurance Deficiencies.** If the District determines the successful respondent's/contractor's insurance or documentation does not conform to the specifications, the District shall inform said respondent/contractor of the non-conformity. If said respondent/contractor fails to provide conforming insurance or documentation within five calendar days of the District's notice, it shall be in default.

**C. Suitability of Insurance.** The District shall be the sole judge of whether an insurer's rating is satisfactory. The District's decision shall be final and the District's bidding procedures contain no appeal provision.

#### **D. Best Ratings.**

1. Alphabetical Rating. For purposes of this Request for Proposals, “insurer” shall mean any surety, insurance carrier, or other organization which proposes to provide an insurance policy or bond for the successful respondent/contractor. No insurer or surety rated lower than “A-,” **Excellent**, in the current Best’s Key Rating Guide shall be acceptable to the District.
2. Financial Size Rating. Provided an insurer’s alphabetical rating is satisfactory, the District will examine said insurer’s financial size rating.
  - a) If Best classifies the insurer XII or larger, said insurer shall be acceptable to the District.
  - b) If Best classifies the insurer as smaller than XII, but larger than VI, said insurer shall be submitted to the District’s Business Manager and/or the District’s insurance consultant for review.

Financial Size ratings less than VII are not acceptable and will disqualify the respondent/contractor.

#### **3.10 Indemnification Clause**

Successful respondent/contractor shall protect, indemnify, hold and save harmless and defend the District, its officers, officials, employees, volunteers, and agents against any and all claims, costs, causes, actions and expenses, including but not limited to attorney's fees incurred by reason of a lawsuit or claim for compensation arising in favor of any person, including the employees, officers, independent contractors, or subcontractors of the successful respondent/contractor or District, on account of personal injuries or death, or damages to property occurring, growing out of, incident to, or resulting directly or indirectly from the performance by the successful respondent/contractor or subcontractor, whether such loss, damage, injury, or liability is contributed to by the negligence of the District or by premises themselves or any equipment thereon whether latent or patent, or from other causes whatsoever, except that the successful respondent/contractor shall have no liability for damages or the costs incident thereto caused by the sole negligence of the District.

The indemnification shall not be limited by a limitation on amount or type of damages payable by or for the successful respondent/contractor or its subcontractor under any employee benefits act including, but not limited, to the Workers’ Compensation Act.

No inspection by the District, its employees, or agents shall be deemed a waiver by the District of full compliance with the requirements of the Contract. This indemnification shall not be limited by the required minimum insurance coverage in the Contract.

#### **3.11 Force Majeure**

The obligations of either the District or the successful respondent shall be suspended during the time as such party is prevented from complying therewith in whole or in part because of any cause, except financial, beyond the reasonable control of such party. In the event of either the District or the successful respondent being rendered unable wholly or in part by force majeure to carry out its obligations other than to make payments due, it is agreed that on such party giving notice and full particulars of such force majeure in writing or by facsimile to the other party as

soon as possible after the occurrence of the cause relied on, then the obligations of the parties insofar as they are affected by such force majeure shall be suspended during the continuance of any inability so caused but for no longer period, and such cause shall as far as possible be remedied with all reasonable dispatch.

FOR REVIEW PURPOSES ONLY

IV  
PROPOSAL FORM  
Request for Proposals  
**Technology Staffing Analysis**

To: BOARD OF TRUSTEES  
ROCK RIVER WATER  
RECLAMATION DISTRICT  
P. O. Box 7480  
ROCKFORD, IL 61126-7480

From: \_\_\_\_\_  
(Individual, Partnership or Corporation)

\_\_\_\_\_  
(Address of Individual, Partnership or Corporation)

Trustees:

I (We) the undersigned hereby propose to furnish **Technology Staffing Analysis** in compliance with the attached Notice, General Specifications, Detailed Specifications, Proposal Form, Fair Employment Practices Affidavit of Compliance Form, Forms of Affidavit, and Contract Form.

The Undersigned also affirms and declares:

A. That he (they) has (have) examined and is (are) familiar with all the related contract documents and found that they are accurate and complete and are approved by the undersigned.

B. That he (they) has (have) carefully examined the scope of the required service, and that, from his (their) own investigation, has (have) satisfied himself (themselves) as to the nature and location of the delivery point, the character, quality and quantity of materials, and the kind and extent of equipment and other facilities needed for the performance of the service and provision of the materials, the general and local conditions and all difficulties to be encountered, and all other items which may, in any way, affect the materials or services or their performance.

C. That this proposal is made without any understanding, agreement or connection with any other person, partnership, or corporation making a proposal for the same purposes, and is in all respects fair and without collusion or fraud; and that he (they) is (are) not barred from proposing as a result of a bid-rigging or bid-rotating conviction.

D. All goods and services provided in response to this request will be produced in compliance with all applicable requirements of Sections 6, 7 and 12 of the Fair Labor Standards Act, as amended, and of regulations and orders of the United States Department of Labor issued under Section 14 thereof.

E. The firm which I (we) represent complies with all applicable requirements of the Americans with Disabilities Act (ADA), the Occupational Safety and Health Act (OSHA), rules and regulations of the US Department of Transportation (DOT), and the Federal Drug Free Work Place Act. If said firm is awarded a contract to provide the District's **Technology Staffing Analysis**, it will:

1. complete all OSHA, ADA, and DOT required supervisory, employee and customer training,
2. document compliance as required,

3. ensure that persons in safety-sensitive positions associated with loading, transportation, and delivery of the merchandise or service detailed in these specifications are subject to all required drug and alcohol testing and are properly licensed,
4. prepare and make available all required information and documentation, and
5. hold harmless and indemnify the District and the District's representatives as defined in Section 3.10 from all:
  - a. Suits, claims, or actions;
  - b. Costs, either for defense (including but not limited to reasonable attorney's fees and expert witness fees) or for settlements, and;
  - c. Damages of any kind (including but not limited to fines, actual, punitive, and compensatory damages) relating in any way to or arising out of the ADA or the OSHA, to which said firm is exposed or which it incurs in the execution of the contract.

F. The firm which I (we) represent has adopted and promulgated written sexual harassment policies that include, at a minimum, the following information:

1. the illegality of sexual harassment;
2. the definition of sexual harassment under Illinois State law;
3. a description of sexual harassment, utilizing examples;
4. my (our) organization's internal complaint process including penalties;
5. the legal recourse, investigative and complaint process available through the Illinois Department of Human Rights and the Illinois Human Rights Commission;
6. directions on how to contact the Department and the Commission; and
7. protection against retaliation as provided by Section 6-101 of Illinois Human Rights Act.

Upon request, my (our) organization will provide the Illinois Department of Human Rights with the information described in F1 through F7 above.

In submitting this proposal, I (we) agree that I (we) shall not withdraw this proposal for a period of 60 calendar-days following the scheduled proposal due date. I (we) have carefully examined the nature of the service and materials. The cost of all the materials, equipment, and service necessary to complete this contract is given in this proposal.

I (We) hereby agree to provide the requested services as defined in Request for Proposal #19-217: Technology Staffing Analysis for the total cost of:

TOTAL COST \$ \_\_\_\_\_

In submitting this proposal, I (we) agree that I (we) shall not withdraw this proposal for a period of 60 calendar-days following the scheduled proposal opening. I (we) have carefully examined the nature of the service and materials. The cost of all the materials, equipment, and service necessary to complete this contract is given in this Proposal.

**Respondent:**

Date: \_\_\_\_\_

\_\_\_\_\_  
Name of Firm

By: \_\_\_\_\_  
Authorized Rep's Signature

\_\_\_\_\_  
Street Address

\_\_\_\_\_  
Rep's Name

\_\_\_\_\_  
City, State, Zip

\_\_\_\_\_  
Rep's Title

\_\_\_\_\_  
Phone Number

\_\_\_\_\_  
Facsimile Number

**NOTE: The Rock River Water Reclamation District, a Governmental Unit, pays neither Federal Excise Tax nor Illinois Retailers' Occupational Tax. The respondent shall exclude those taxes from his proposal.**



**“NO PROPOSAL” RESPONSE  
TO**

**REQUEST FOR PROPOSALS**

If your firm is unable to submit a proposal at this time, would you please provide the information requested in the space provided below and return to:

Rock River Water Reclamation District  
P.O. Box 7480  
Rockford, IL 61126-7480

Responses can be delivered in person to:

Rock River Water Reclamation District  
3501 Kishwaukee Street  
Rockford, IL 61109

For this form only, responses can also be faxed to:

Rock River Water Reclamation District  
815-387-7538

We have received **Request for Proposals #19-217: Technology Staffing Analysis**, due at 2:00 P.M. on October 11, 2019.

Reason for not submitting proposal: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

BY: \_\_\_\_\_

Signature

\_\_\_\_\_  
Name & Title, Typed or Printed

\_\_\_\_\_  
Company Name

V  
**FAIR EMPLOYMENT PRACTICES AFFIDAVIT OF COMPLIANCE**

PROJECT: TECHNOLOGY STAFFING ANALYSIS

NOTE: THE PROPOSER MUST EXECUTE THIS AFFIDAVIT AND SUBMIT IT WITH ITS SIGNED PROPOSAL. THE ROCK RIVER WATER RECLAMATION DISTRICT CANNOT ACCEPT ANY PROPOSAL WHICH DOES NOT CONTAIN THIS AFFIDAVIT

\_\_\_\_\_, being first duly sworn, deposes and says that:  
(Name of person making affidavit)

They are: \_\_\_\_\_ of \_\_\_\_\_  
(Officer's Title) (Company Name)

that said company is and "Equal Opportunity Employer" as defined by Section 2000(e) of Chapter 21, Title 42 of the United States Code annotated and Federal Executive Orders #11375 which are incorporated herein by reference;

and that said company will comply with any and all requirements of Title 44 Admin. Code 750. APPENDIX A – Equal Opportunity Clause, Rules and Regulations, Illinois Department of Human Rights, which read as follows:

"In the event of the contractor's non-compliance with the provisions of this Equal Employment Opportunity Clause, the Illinois Human Rights Act or the Rules and Regulations of the Illinois Department of Human Rights ("Department"), the contractor may be declared ineligible for future contracts or subcontracts with the State of Illinois or any of its political subdivisions or municipal corporations, and the contract may be cancelled or voided in whole or in part, and such other sanctions or penalties may be imposed or remedies invoked as provided by statute or regulation. During the performance to this contract, the contractor agrees as follows:

1. That it will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, marital status, national origin or ancestry, citizen status, age, physical or mental handicap unrelated to ability, sexual orientation, military status or an unfavorable discharge from military service; and further that it will examine all job classifications to determine if minority persons or women are underutilized and will take appropriate affirmative action to rectify any such underutilization.
2. That, if he or she hires additional employees in order to perform this contract or any portion of this contract, he or she will determine the availability (in accordance with the Department's Rules and Regulations) of minorities and women in the areas from which he or she may reasonably recruit and he or she will hire for each job classification for which employees are hired in a way that minorities and women are not underutilized.
3. That, in all solicitations or advertisements for employees placed by him or her or on his or her behalf, he or she will state that all applicants will be afforded equal opportunity without discrimination because of race, color, religion, sex, sexual orientation, marital status, national origin or ancestry, citizenship status, age, physical

or mental handicap unrelated to ability, sexual orientation, military status or an unfavorable discharge from military service.

4. That he or she will send to each labor organization or representative of workers with which he or she has or is bound by a collective bargaining or other agreement or understanding, a notice advising such labor organization or representative of the contractor's obligations under the Illinois Human Rights Act and the Department's Rules and Regulations. If any labor organization or representative fails or refuses to cooperate with the contractor in his or her efforts to comply with such Act and Rules and Regulations, the contractor will promptly so notify the Department and the contracting agency and will recruit employees from other sources when necessary to fulfill its obligations under the contract.
5. That he or she will submit reports as required by the Department's Rules and Regulations, furnish all relevant information as may from time to time be requested by the Department or the contracting agency, and in all respects comply with the Illinois Human Rights Act and the Departments Rules and Regulations.
6. That he or she will permit access to all relevant books, records, accounts and work sites by personnel of the contracting agency and the Department for purposes of investigation to ascertain compliance with the Illinois Human Rights Act and the Department's Rules and Regulations.
7. That he or she will include verbatim or by reference the provisions of this clause in every subcontract awarded under which any portion of the contract obligations are undertaken or assumed, so that the provisions will be binding upon the subcontractor. In the same manner as with other provisions of this contract, the contractor will be liable for compliance with applicable provisions of this clause by such subcontractors; and further it will promptly notify the contracting agency and the Department in the event any subcontractor fails or refuses to comply with the provisions. In addition, the contractor will not utilize any subcontractor declared by the Illinois Human Rights Commission to be ineligible for contracts or subcontracts with the State of Illinois or any of its political subdivisions or municipal corporations.

(Source: Amended at 32 Ill. Reg. 16484, effective September 23, 2008)"

IL Dept of Human Rights Registration No.: \_\_\_\_\_ Expiration Date: \_\_\_\_\_

Signature \_\_\_\_\_

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

Notary Public \_\_\_\_\_

VI  
FORMS OF AFFIDAVIT  
REQUEST FOR PROPOSALS  
TECHNOLOGY STAFFING ANALYSIS

City: \_\_\_\_\_ County: \_\_\_\_\_ State: \_\_\_\_\_  
-----  
-

**This Section for Sole Proprietorship:**

I, \_\_\_\_\_ (name), being duly sworn, depose and say that the organization I represent is a sole proprietorship, and that I am the person described in and who executed the foregoing proposal and that the several matters therein stated are in all respects true.

Signature \_\_\_\_\_  
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-

**This Section for Partnership:**

I, \_\_\_\_\_ (name), being duly sworn, depose and say that I am a member of \_\_\_\_\_ (partnership name), the firm described in and which executed the foregoing proposal; that I duly subscribed the name of the firm thereunto on behalf of the firm; and that the several matters therein stated are in all respects true.

Signature \_\_\_\_\_  
-----  
-

**This Section for Corporation:**

We, \_\_\_\_\_ (representative who signed the Proposal Form), and \_\_\_\_\_ (other corporate officer), being duly sworn, depose and say that we reside in the cities of \_\_\_\_\_ and \_\_\_\_\_, respectively, and that we are the \_\_\_\_\_ (representative's title) and the \_\_\_\_\_ (other corporate officer's title), respectively, of \_\_\_\_\_ (corporation name), the firm described in and which executed the foregoing instrument; that we are authorized to complete this form and to enter into this contract on behalf of said corporation; that we have signed our names thereto by like order; and that we have knowledge of the several matters therein stated and they are in all respects true.

\_\_\_\_\_  
(representative's signature)

\_\_\_\_\_  
(other corporate officer's signature)  
-----

**This Section for a Limited Liability Corporation:**

I, \_\_\_\_\_ (name), being duly sworn, depose and say that I am  
a \_\_\_\_\_ (representative's title) of  
\_\_\_\_\_ (company name), the company described in and  
which executed the foregoing proposal; that I am authorized to complete this form and to enter  
into this contract on behalf of said company and have knowledge of the several matters therein  
stated and they are in all respects true.

Signature \_\_\_\_\_

**Notarization (required for all successful proposers):**

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

Notary Public \_\_\_\_\_

County \_\_\_\_\_

My Commission Expires \_\_\_\_\_

VII  
CONTRACT  
ROCK RIVER WATER RECLAMATION DISTRICT  
ROCKFORD, ILLINOIS

THIS CONTRACT, made and concluded this \_\_\_ day of \_\_\_\_\_, 20\_\_\_ between the Rock River Water Reclamation District, Illinois, also known as "District," and \_\_\_\_\_ his/their executors, administrators, successors or assigns, known as "Contractor":

In consideration of the payments and contracts mentioned in the Proposal attached hereto, to be made and performed by the District, the Contractor agrees with the District at his/their own proper cost and expense to do all the work, furnish all equipment, materials and all labor necessary to complete the work and furnish the merchandise in accordance with the specifications hereinafter described, and the District's requirements.

**1. Scope**

Both parties understand and agree that the Notice, General Specifications, Detailed Specifications, Proposal Form, Fair Employment Practices Affidavit of Compliance Form, and Forms of Affidavit of the **Request for Proposal: Technology Staffing Analysis**, all Addenda there to (if any), and any and all provisions required by law, are all essential documents of the contract, and are a part hereof, as if herein set out verbatim or as if attached, except for titles, subtitles, headings, table of contents and portions specifically excluded.

**2. Contract Price**

The District shall pay to the Contractor, and the Contractor shall accept, in full payment for the performance of this Contract, in current funds, the prices set forth in the Proposal Form.

The Contractor's proposal price for **Technology Staffing Analysis** shall include, but not be limited to any and all costs of sufficient equipment and labor as required to perform the **Technology Staffing Analysis** as described in this Request for Proposals and shall be the only basis for payment.

The District shall make payments to the Contractor, in accordance with and subject to the provisions of **Section 2.10 A** of this Contract.

**3. Contract Execution**

The Contractor shall:

- A. Perform all services in a responsible manner, supplying only service that meets or exceeds the District's Specifications;
- B. Sustain all loss or damage arising out of the nature of the work to be done, or from any unforeseen obstruction or difficulty which he may encounter in the prosecution of the work, or from the action of the elements;

- C. Be responsible for all accidents he, his employees, or agents may incur in the contract's execution;
- D. Hold the District and its representatives harmless from liability of any nature or kind on account of use of any copyrighted or un-copyrighted composition, secret process, patented or unpatented invention, article or appliance furnished or used under this Contract. The Contractor shall likewise hold harmless and indemnify the District and its representatives from all:
1. suits, claims, or actions,
  2. costs, either for defense or for settlements, and
  3. damages to which the District or its representatives might be exposed by reason of an injury or alleged injury, to the person or property of another:
    - a. in the execution of the Contract, or
    - b. from actions the District or its representatives take on the Contractor's behalf, except in cases where such suits, claims, actions, or costs are found to be based on the District's negligence. For purposes of this paragraph, "its representatives" means "the Rock River Water Reclamation District's trustees, employees, agents, assigns, and their heirs."
- E. Comply with all applicable requirements of the Americans with Disabilities Act (ADA), the Occupational Safety and Health Act (OSHA), rules and regulations of the US Department of Transportation (DOT), and the Federal Drug Free Work Place Act, and will:
1. complete all OSHA, ADA, and DOT required supervisory, employee and customer training,
  2. document compliance as required,
  3. ensure that persons in safety-sensitive positions associated with loading, transportation, and delivery of the merchandise or service detailed in these specifications are subject to all required drug and alcohol testing and are properly licensed,
  4. prepare and make available all required information and documentation, and
  5. hold harmless and indemnify the District and the District's representatives as defined in Section 3.10 from all:
    - a. Suits, claims, or actions;
    - b. Costs, either for defense (including but not limited to reasonable attorney's fees and expert witness fees) or for settlements, and;
    - c. Damages of any kind (including but not limited to fines, actual, punitive, and compensatory damages) relating in any way to or arising out of the ADA or the OSHA, to which said firm is exposed or which it incurs in the execution of the contract.
- F. Adopt and promulgate written sexual harassment policies that include, at a minimum, the following information:
1. the illegality of sexual harassment;
  2. the definition of sexual harassment under Illinois State law;
  3. a description of sexual harassment, utilizing examples;
  4. Contractor's internal complaint process including penalties;

5. the legal recourse, investigative and complaint process available through the Illinois Department of Human Rights and the Illinois Human Rights Commission;
6. directions on how to contact the Department and the Commission; and
7. protection against retaliation as provided by Section 6-101 of Illinois Human Rights Act.

Upon request, Contractor will provide the Illinois Department of Human Rights with the information described in F1 through F7 above.

**G. Maintain all specified insurance for the duration of the contract.**

**4. Payments to Contractor**

If the District receives an acceptable invoice for conforming service prior to the fifth day of the month, the District shall issue payment before the fifth day of the succeeding month. If received on or after the fifth day of the month, payment will be issued the following month.

**5. Subcontracts**

No part of the work herein provided for shall be sublet or subcontracted without the express consent of the District, and in no case shall consent relieve said Contractor from the obligation herein entered into, or change the terms of this Contract.

**6. Contractor's Responsibility**

This Contract shall extend to and be binding upon the successors and assigns, and upon the heirs, administrators, executors, and legal representatives of the Contractor.

**7. Time**

The contractor agrees to all schedules of services specified in the Request for Proposals.



**8. Seals**

IN WITNESS WHEREOF, the parties have hereunto set their hands, and are duly authorized to enter into such contracts on behalf of their respective organizations.

\_\_\_\_\_  
Name of Firm - Contractor

By \_\_\_\_\_  
Authorized Signature

ATTEST:

By: \_\_\_\_\_

Its: \_\_\_\_\_

Rock River Water Reclamation District  
Winnebago County, Illinois

By \_\_\_\_\_  
Director

ATTEST: \_\_\_\_\_  
Business Manager

STATE OF ILLINOIS            )  
COUNTY OF WINNEBAGO    )

On this \_\_\_\_ day of \_\_\_\_\_, 20\_\_, before me, a notary public within and for said County, personally appeared Timothy S. Hanson and Chris Black, to me personally known, who, being each by me duly sworn did say that they are respectively, the Director and Business Manager of the Rock River Water Reclamation District, named in the foregoing instrument, and that said instrument was signed and sealed in behalf of the District, and said Director and Business Manager acknowledge said instrument to be the free act and deed of said District.

(SEAL)

\_\_\_\_\_  
Notary Public

### **Infrastructure**

The District's computer infrastructure is based upon user flexibility, while providing centralized storage and resources. We view each network outlet as a utility and each computer, with a few exceptions, as just a work station. Any employee can log onto any computer and receive their applications and access their data, while being able to print to the nearest printer. While there are exceptions, this feature allows us to maintain many computers and applications with minimal staff. Users are not responsible for backing up their data or virus protection.

ITS supports approximately 160 desktop and 45 laptop computers, 13 physical servers (including IBM z13s), 90 virtual servers, WIFI in vehicles, electronic security, 70 IP cameras, a web site, employee portal, a voice over IP phone system (VOIP), apple iphones, networking throughout our facilities and major portions of the Process Control System infrastructure. We support numerous distinct PC applications, as well as several large scale systems both hosted and cloud based.

Most desktops are 100MB (megabyte) with some being 1GB. ATT and Comcast supply voice services, while Ifiber and Comcast supply internet service, dual Sophos SG 230 firewalls are used to protect the District with Sophos end point and server protection. A network of radios is used to send data between the District and it's lift stations. The data center is protected by IP Security Cameras, electronic locks, fire suppression, room wide uninterruptable power supply and a building wide generator, in addition the District is usually off the grid, generating most of its own power needs.

### **Major Components**

**VDI – Virtual Desktop Infrastructure.** With the exception of the Engineering department, all departments have moved way from true desktop computers to hosting the District user's desktops on virtual servers in the data center. Although The laptops can be used in the office or in the field. The engineering systems have access to a VDI environment when necessary, but not as a normal course of daily operation.

VDI allows us to upgrade desktops without upgrading hardware, allowing us to implement Windows 7, Windows 10 and beyond. Most PCs have been replaced with smaller, less expensive thin client devices. Some PCs have been repurposed to execute thin client software. As those PCs fail they are replaced with thin clients. Additionally, by using VDI, we are able to host District Windows desktops (both locally and remotely) on non-PC devices (e.g. iPads, iPhones, Chrome books, etc.), and provide an at your desk remote experience. This is a N+1 environment, if one server would fail, impact to the District

would be minimal. All servers have redundant power supplies and redundant network connections.

### **Engineering Desktops and Laptops**

It was intended to move Engineering to the VDI environment, the AutoCAD Civil 3D environment did not adequately operate under VDI. It was discovered that AutoCAD Civil 3D was single threaded and over taxed the VDI. Engineering uses a combination of high powered workstations and laptops. The laptops allow use in the office (via docking stations), in the field or from home. VDI desktops are still available as a way of accessing applications that are seldom needed and it is a method to move data between the PC and the network. A VPN is also available.

**Oracle under Z:** Our Oracle database environment was moved from our PC virtual server environment under Linux to our IBM z13s virtual server environment under Linux. The Infor, ESRI GIS and Cues Granitenet databases are hosted in the environment. This provides increased performance for Oracle and our PC virtual server environment and better cost control of Oracle licenses. An example of performance difference, an Oracle server on PC environment took 20 minutes at boot time, on the z it is a few seconds.

### **VMWare Servers**

The District operates a cluster of 3 physical servers supporting apx. 65+ logical servers, running Windows, OES Netware and various flavors of Linux. File storage access, applications and IIS servers are among the various workloads. They support a variety of applications including portions of the phone system, call recording, video recording, databases and web services. This is a N+1 environment, if one server would fail, impact to the District would be minimal. All servers have redundant power supplies and redundant network connections.

**PCS (Process Control System).** The PCS SCADA (Supervisory Control and Data Acquisition) system runs on two physical servers that host a number of redundant virtual servers. PCS SCADA (Supervisory Control and Data Acquisition) on virtual servers provides more redundancy and testing capabilities while allowing higher performance. The servers use the same VMWare software used for VDI and our other virtual servers. This increases the amount of staff members able to assist with the basic infrastructure.

The PCS is a Supervisory Control and Data Acquisition System (SCADA) system for managing the Wastewater Treatment Process. It presents visual and textual data concerning the plant's current status, including the Lift Stations. It also provides trending data for historical analysis and decision making processes. The system runs on a 2 node VMWare

cluster, providing redundant power supplies, network connections and N+1 server redundancy.

There are over approximately 35 specialized computers called Programmable Logic Controllers (PLCs). The plant and a couple of Lift Stations use General Electric PLCs, while most Lift Stations use Motorola ACE RTUs (Remote Telemetry Units) specialized computers.

The PCS also currently has 3 IP Cameras. The Cameras and the on-plant PLCs communicate using the same Local Area Network (LAN) as the District's other networked devices. There are also 3 Johnson HVAC (Heating, Ventilating and Air Condition) controllers located in the Laboratory, the Maintenance Building and the Administration Building that are tied into the PCS. The Lift Stations communicate with the District via a District FCC licensed radio frequency that passes messages through an RTU unit sitting on the top floor of a Rockford Housing Authority (RHA) site to and from redundant RTU units at the District.

The PCS manages over 10,000 data points and about 200 historical tracking points. The 1,000+ most critical points are monitored by a subsystem that sends an email message via the Internet to specific cellular phones when significant events occur. These events include, but are not limited to, flow increases and decreases, changes in oxygen concentrations, pumps going on and off, changes in building temperatures, etc.

The PCS consists of approximately 250 screens of various types to monitor and control specific pieces of equipment and or functions.

The PCS was designed by District staff. The entire system, as it now exists, was programmed by the District. Some minor functions were built by outside vendors, but most of these have either been significantly improved by the District's Process Systems Engineer.

The PCS integrates with the STREAMS System to collect data needed for Plant Operation reports and information from the District's scale used to bill Septic Haulers.

The District's PCS places our plant at the forefront of Waste Water Treatment technology and allows this large facility and the 30+ Lift Stations to be managed by a small and highly efficient staff.

**Disk Storage System.** All computer environments are consolidated under one centralized storage system (apx. 105TB) The centralized system provides more flexibility, redundancy, and data recovery ability. All servers use this system, most servers are connected to the disk storage system using 8GB and 16GB fiber. In addition, a second duplicate system is installed in the basement of the Laboratory. This system provides a duplicate of the primary Disk Storage System, with data being replicated between the two. This is a key component of our current Business Continuity solution(s).

**Plant Wide WIFI.** This is required for bar coding, but also allows PCS control closer to our functioning equipment, provides additional tools to better run, manage, and maintain the plant. Additionally, future equipment, (e.g. controllers, pumps, and other electronics) are going to be able to send information to each other, the PCS and possibly manufacturers, etc. wirelessly. Plant Wide WIFI prepares us for this Internet Of Things (IOT). Currently access and internet calling is available at the maintenance building, main pump and the GBT2 facility. Additionally, we support wifi calling, improving use of cell phones in areas of weak signal.

**District Website.** The District does currently host its own web site [www.rr wrd.dst.il.us](http://www.rr wrd.dst.il.us) for general public access. The site contains information required by the Illinois Open Meeting Act (OMA) and the Illinois Environmental Protection Agency (IEPA). It makes Request for Bids and jobs available, forms and information for starting a new business, attempts to answer Frequently Asked Questions (FAQs) and provides mechanisms and information for contacting various district resources. It allows the customer to connect to the District's third party electronic bill payment site.

**Employee Information Portal.** This website provides a centralized web accessible point for employee information on District projects, for contractors working on plant and other projects, announcements, insurance and employee forms among other information. The portal is used to centralize some documentation, reducing clutter on the desktop, while extending access to information from multiple locations. The portal allows users to input IT trouble tickets and to access some web applications. The security model is built on user roles, so users only see items applying specifically to them.

**District Phone System**

The District's phone system is from Avaya and was installed at the time of our move to the new Administration building (July 2009). It is a Voice Over IP (VOIP) phone system. This allows the placement of a phone anywhere there is a connection to the District's Local Area Network. The System has two major connections. Normally all incoming calls come in on an ATT IPFlex line and calls go out on a Comcast ISDN line. In the event of a line failure,

all functions can be served by one of the lines. In the event of a failure of the District's equipment, calls can be routed to cell phones.

Customer calls into the Billing and Collections department, the Industrial Commercial Billing department, into the Permit line and the Sewer backup line are recorded and maintained for 30 days. The recording system “blanks out” credit card information from being recorded.

### **STREAMS**

Streams (Sewage **TRE**atment **Man**agement **S**ystem) is our primary customer, permitting and compliance reporting system. It resides primarily on an IBM zEnterprise z13s server, running the z/VSE and z/VM Operating Systems. It is programmed by District staff using Software AG's Natural Fourth Generation programming language, with the data residing on Software AG's Adabas (high performance database).

STREAMS predecessor was originally programmed in COBOL programming language. It was updated in the 1990's to use only Natural and Adabas. Adabas is similar to Oracle and is capable of managing large amounts of data and retrieving that data very fast. Other organizations using Natural and Adabas include the IMRF, the CIA, the FBI, and the states of Washington, California and Texas, among many others.

STREAMS was developed and is maintained in-house due to the uniqueness of the District's billing methodology. The District uses a method called quantity/quality (Q/Q) used by only a handful of other agencies within the United States. Although unique and therefore not supported in standard billing systems, experts in the field believe that Q/Q is the direction to be followed in the future. In the middle 1970s the federal government required agencies such as the District to bill based upon usage and surcharging for containments. Q/Q incentivizes industry to pretreat their discharge, resulting in lower bills.

Users interact with STREAMS via Graphic User Interface (GUI) accessed via a browser. Software from Rocket Software resides on a SUSE Linux virtual machine and translates in real time traditional green screen applications into modern GUI screens with pull down menus, scroll boxes, radio buttons, etc.

STREAMS supports the life cycle of a District's customer account from Engineering Connection permits to any Industrial Waste Surveillance (IWS) Activities, including sample and laboratory management. It also supports the collection and calculation of waste-water characteristics used to determine the rates and additional charges for significant industries. Data captured in the IWS phases, along with plant data entered into STREAMS, is used to generate Plant Operation reports and detailed monthly reports

(DMR) for the Illinois EPA. This includes data automatically sent from the District's Windows based Process Control System (PCS). STREAMS automatically prints letters for industry for their user fees, permit renewals, self-monitoring requirements, group samples, ERU surcharges and surcharge adjustments.

Customer bills are generated for all account types including; residential, industrial, commercial, and government. The District does not (in most cases) print bills. This process has been outsourced to BillTrust. STREAMS transmits the appropriate data to generate regular bills, past due notices and final notices. Currently the District also bills for water usage within the Winnebago County Water District.

Consumption data comes from a variety of sources. District hand-held meter reading devices are used for some non-residential accounts. The District also maintains a drive-by meter reading system for capturing meter usage from some well user and all residential lawn sprinkling meters. Most municipalities send data via the internet. Several nights a week STREAMS checks the internet for the data, if found, then downloads and processes the data.

Currently 33% of the District users pay via eBill. Bills are sent to BillTrust (an affiliate of CheckFree) and are available for payment via a connection from the District's web site, CheckFree or, if available, the customer's bank. Customers signed up for eBill do not receive a paper bill, but do receive a discount on their bill (\$1.25 as of 04/01/2016) for using eBill.

Customers may pay by eBill, by coming into the District and paying in person, by mail and by telephone. Credit Cards (Visa, MasterCard, Discover and American Express) are taken for eBill, in person and telephone payments. The District uses (through MidStates Bank) TSYS WebPass access for telephone and in person payments, and Authorize.Net for eBill. **Note: STREAMS does not contain any credit card or checking account information.**

Customer payment stubs and checks are captured by the dual Canon Remittance Processing System (RPS), using software from Creditron. These payments are verified for valid account information passed from the IBM z13s. The system reads the dollar amount written on the check to determine if it is a late or on-time payment. After the data is captured it is retrieved by the z13s for STREAMS.

STREAMS also consists of a collection sub-system that generates payment schedule notices, past-due notices, several kinds of warning letters, and liens for filing with the

County's Recorder. Water shutoff notices are also generated. Additionally, after a period of non-payment, accounts are electronically sent to the District's collection service.

Final, duplicate and receipt bills can be generated, along with permits and other items from shared printers on the District's Local Area Network. STREAMS keeps significant historical customer information, including actual and billed consumption, payment and bill history.

STREAMS supports multiple rates for user fee bills. Most charges and rates within STREAMS are “effective date” driven (rates can be entered into STREAMS in advance and become effective on the appropriate date). Additionally, STREAMS provides the ability to manage special charges for customers, an example is the 3 year Electronic Read Technology heads on Loves Park Water department accounts.

In addition, STREAMS supports the Special Assessment customer system and sewer service calls by plumbers, including invoices.

STREAMS is integrated with Financial Edge (Accounting System), the PCS, the RPS, Laboratory equipment, drive-by and hand-held meter reading equipment, Microsoft WORD and EXCEL and data from other municipalities.

Much of STREAMS is automated, based upon dates and or receipt of data. Reports are emailed to users. Most on request reports can be run by the users, via the SURE (STREAMS User Report Extensions sub-system) without ITS involvement. STREAMS also has a (new) integrated data export subsystem, allowing users to select and extract data for input to Excel, Word, etc.

The IWS staff use hand-held and drive-by meter reading equipment. Hand-held equipment reads some industrial “process meters” to tie flow to samples. The drive-by equipment is used to primarily read well meters and credit meters.

Some STREAMS statistics: consists of over 3,600 program objects; contains over 180 files (aka tables) that include nearly 58,000,000 database records; yearly the District generates almost 300,000 bills, processes 25,000 laboratory results, and captures over 115,000 plant data elements; almost 100,000 collection letters and notices are generated; over 1,200 plumber bills are printed and 1,400 Engineering permits are printed in real-time. STREAMS continuously evolves to reflect new District policy and regulations. In addition, constant changes are made to streamline District tasks.



**Blackbaud Financial Edge (FE)/Financial Edge Next (FE Nxt)**

This is the District's general accounting software, it is a hosted solution, supplied by the Blackbaud corporation. Although they share a common database, FE requires a client and provides full function ability. FE Nxt is browser based and has more limited functionality. FE Nxt supports most of the systems features via a simpler user interface, but it does not support access to payroll at this time. Additionally, at this time Blackbaud does not significant HR capabilities. The District uses proximity based ID cards that are used to open doors, get fuel and punch in and out of the timekeeping system. The timekeeping system is Infotronics' Attendance Enterprise (AE). Data from AE is imported into FE for payroll calculation. As part of payroll time accruals calculation (sick and vacation) data is exported, ran through a District VBS program and then imported back into FE. Additionally, STREAMS creates journal entries that are imported into FE. Checks both payroll and AP are printed on a laser printer using a micr toner cartridge. Most District employees use direct deposit and receive just a laser generated payment record. W2s, Tax filing, 1095s and 1099s are generated through a service provider integrated with FE.

**Infor**

Infor is one of the largest suppliers of public works software in the world. Infor software is used by many, including New York City, Las Vegas, Caltrans (California Department of Transportation) and Rockford, Illinois.

Infor is used to manage the maintenance of the sewer collection infrastructure, our linear assets (pipes). Using Infor, linear assets are selected for inspection, work orders are generated for sewer and manhole repairs, etc. Work orders requiring TV Inspection of the sewer are exported from Infor and imported into the District's CUES Granitenet software and database, these work orders are then sent to a District TV Truck for completion of the inspection. When done, the process is reversed and the data eventually ends up back in Infor, reflecting observations, and completion of the work order.

Engineering will occasionally access Infor to review the condition of sewers.

Plant Operations uses Infor to track maintenance, preventive maintenance and inventory for maintaining the Plant and Lift Station equipment. They issue and track Work Orders, and capture estimated costs. Infor is also used to manage inventory, track costs, issue and receive parts, create requisitions for part acquisition and keep track of vendor information.

Infor, Granitenet and the GIS (Geographic Information System) all currently use Oracle database software, running under SUSE Linux on the IBM z13s.

### **CUES GraniteNet**

CUES software exists in both the office and in the two District TV trucks. It is used to manage and capture video inspections of linear assets (pipes). The operators in the trucks use a scheme to code problems found in the sewer, locations and severity. In the fall of 2018, the District converted both its Granitenet and Infor environments from a home grown coding scheme to a scheme developed by the National Association of Sewer Service Contractors (NASSCO). This scheme requires training and certifications, but forces all users to take a more common look and approach to the issues, as well as providing a method allowing both the District and contractors to share data.

Work orders from Infor for inspections are sent into Granitenet in the office, then released to the trucks. After the trucks have completed their inspections, data is sent back into Granitenet in the office, and then to Infor, completing the work order and capturing other information. Most staff in reviewing the inspections use Granetnet viewer, allowing them to look at the actual video. One feature is a running footage locating issues with a segment of pipe.

### **GIS/GPS**

The GIS consists of several "pieces" of software from Environmental Software Research Institute (ESRI). ESRI provides the most popular high-end GIS software in existence. Its customers include all 50 states, most major urban areas, most Federal agencies, Winnebago County, the cities of Rockford, Loves Park, Machesney Park, etc.

The GIS really has two (2) distinct functions:

Web product, WinGIS hosts and maintains (under District supervision) this product. It allows easy query of GIS data. Most District users access this site. You can look up properties and see how close to sewer they are, determine manhole locations, etc. and even display the original plans and drawings;

The GIS is also a sophisticated analysis, modeling, data reference and design tool. It is a toolbox for building software to answer questions, etc. This side of GIS requires trained and experienced users, who are both knowledgeable with the tools and with the District's actual data.

The District uses a Linux/Oracle database for the GIS. In the future, this solution could be leveraged to include data from additional existing package systems (e.g.: Infor). Almost all District data elements can be related to one another, as they are geographic in nature.

The District is also a founding member of WinGIS, the Winnebago County Regional Geographic Information System. Along with the county and other government agencies a combined look at the region geographically is available to the general public at [www.wingis.org](http://www.wingis.org). More detailed information is available to the member agencies and to fee paying associate members. Some data accessed here at the District is from a high speed connection to WinGIS.

**LIMS - Laboratory Information Management System.** The District is currently implementing a commercial LIMS (Horizon), from Chemware. Currently Chemware hosts the LIMS software, although it may be possible to bring it back to the District in the future. The LIMS adds functionality and also will replace and enhance some STREAMS functions. The LIMS and STREAMS will exchange data. The LIMS will have tablet applications allowing field input and more flexibility within the Lab. This is a Board directive, and is a requirement for the District to maintain a “certified” Laboratory. Although most, if not all, of these requirements could be met with STREAMS, the difficulty and cost in achieving appropriate certification makes the commercial software route for this function the more viable solution.

#### **AssetWorks**

Work began during 2018 on using Assetworks for vehicle, fuel and inventory management. AssetWorks is a hosted application that manages District vehicle fueling, will manage its vehicle maintenance and inventory activities. It was expected that the District would continue with Infor for Linear and plant assets and work orders. But since that decision, we have looked much more closely at AssetWorks Enterprise Asset Management (EAM) modules and see a potentially better fit for District needs. EAM has built in integration with ESRI GIS and is researching integrating with CUES Granitenet. EAM also integrates with some financial and other utility management systems, for example Tyler Technologies MUNIS system.

#### **Cell Phones**

The District uses over 130 cellular devices from Verizon. We use close to 30 Apple iPhones and a variety of rugged/mil (military) spec flip phones. We also use cellular connection Truck Units that create a (secure) WIFI access point in the vehicle. We currently have these devices in JULIE locators, TV Trucks, and issued to Lift Station Maintenance Technicians and Supporting Services Group Leader (Jim Reader).

One of the most important uses of the cell phones is event and alarm notification. In Plant Operations the PCS sends alerts as SMS Text messages to operator phones. In ITS, various equipment (UPS, servers, etc.) sends messages to staff.

Smartphone users have access to their District email via their phones.

We use cellular modems to allow supervisory staff, and some on call staff, to access some District applications remotely. Many of these modems are being discontinued. It is less expensive to add WIFI “Hot Spot” support to SmartPhones.

In addition, cellular modems to connect to gates at the Airport, Fuller Creek Lift Stations, and the Winnebago Plant. Cellular Modems are also used by the GPS Rovers to connect to the Internet.

Most District vehicles have a Verizon NetworkFleet Vehicle management tracking device installed. This allows staff to see where vehicles are, where they have been, speeds, etc. In addition, maintenance information, including odometer and other information available via the on-board data port, is transmitted to District staff.

**Note: both the Cellular Network and Phone System/Network are tested during off hours by a semi-automatic process of messages sent to a cell phone monitored by the Guard Service, and some test activities initiated by the Guard.**

### Security Systems

The District currently operates an Access Control and an Alarm System (ACAS) for 3501, 3333 locations and the North Facility. Plus, a fire alarm and detection system at the 3501 Graceffa Administration Building. A couple of basic philosophies to our security systems: whenever possible we use IP (Internet Protocol) devices and use Ethernet cabling, if they are not (or cannot) be IP based, we use Ethernet cabling for low voltage. This allows us the ability in the future to move to IP devices when they are available. Also, we seldom use door contacts, but use motion detectors instead. We have found over the years that door contacts are much more prone to failure than motion detectors.

The Alarm systems are monitored by an outside contractor.

Another access control system that runs on a virtual server, uses Windows. It controls access to all (access secured) gates, buildings and rooms on at 3333 and 3501 Kishwaukee, at the North Facility and controls gates at the Airport and Fuller Creek Lift stations and the Village of Winnebago plant.

Bosch – Burglar Alarm system for 3501, 3333 Kishwaukee St. facilities and the North Facility.

MileStone Security Camera System – There are 33 cameras throughout the plant and Administration Building that are being recorded. Most recordings are kept for 45 days. Most cameras use motion detection to limit the amount of data actually recorded.

**Public Address Meeting Recording System (PAMRS)**

ITS maintains the Public Address Meeting Recording System in the Board Room. This system uses wireless microphones to connect to speakers and digital recorders to offer better audio and to record meetings (as required in the Illinois Open Meetings Act). This system also integrates with the room projector to provide sound for videos, etc.