



WILLETT HOFMANN
& ASSOCIATES INC
ENGINEERING ARCHITECTURE LAND SURVEYING

February 4, 2016

Rochelle Municipal Utilities
P.O. Box 456
Rochelle, Illinois 61068

Attn: Mr. Adam Lanning
Water/Water Reclamation Superintendent

Re: GIS Modifications
Engineering Proposal

Dear Adam:

We are pleased to provide the RMU with an engineering proposal to modify the existing GIS system and provide GPS surveying and inspection of all of the sanitary manholes and lift station to provide a complete GIS system. The RMU Water and Water Reclamation GIS system will include the following facilities:

1. Sanitary Manholes
2. Sanitary Sewers
3. Lift Stations
4. Forcemains
5. Wastewater Treatment Plant Buildings and Process Structures
6. Water Mains
7. Fire Hydrants
8. Water Main and Hydrant Valves
9. Water Service Shutoff Boxes
10. Water Meters
11. Elevated Water Storage Tanks
12. Wells
13. Well Buildings

General Description of Services

The GIS modification services will include creating a single GIS map and database for all of the Water and Water Reclamation facilities using the existing shape file and database file from the current GIS system; changing the water main and sanitary sewer main line color so it corresponds to the size of the main; change the water meter symbol so it corresponds to the meter type; adding the Ogle County aerial

photograph, property lines, parcel numbers and parcel information if it can be obtained from the County; providing one (1) day of installation and startup; and providing one (1) day of training for the Water and Water Reclamation staff. We have also included obtaining GPS coordinates and elevations for all the water and water reclamation facilities detailed below in our proposal and inspecting all of the sanitary sewer and lift station structures. GPS coordinates are important for locating the facilities in the field for JULIE locates. The sanitary manhole and lift station structure inspections will provide sanitary sewer invert elevations which can be used to calculate sanitary sewer grades, verify sanitary sewer sizes, and verify sewer pipe and manhole structure material.

Detailed Description of Services

1. GIS Map and Database Modifications

Scope of Services: Engineering services include using the existing shape files and database files provided by RMU and creating a single GIS map that has all of the water and water reclamation facilities detailed in Item #3 below. Each group of facilities will be placed on its own layer. For example, all of the sanitary manholes will be on one layer so they can be viewed or not viewed on the GIS map. If we can obtain the aerial photograph and the shape files and data files from Ogle County for the property lines, parcel numbers and parcel information, we will include this information in the GIS map. Lastly we will make pdfs of the construction drawings we have prepared for RMU in the past so they can be linked to facilities' attributes in the GIS map.

Engineering Fee: Technician: 240 Hours x \$80/Hr. = \$19,200

2. GIS Startup and Training

Scope of Services: Engineering services include installation of the GIS system on the City's computer system and website, testing the GIS system, and training the City Staff on how to use the system.

Engineering Fee: We have included three (3) days for the installation and testing of the system and for training of the Water and Water Reclamation staff.

Technician: 24 Hours x \$80/Hr. = \$1,920

3. GPS Field Survey

Scope of Services: The existing GIS map did not have any GPS coordinates or elevations for the water and water reclamation facilities. The water service shut-off boxes may be difficult to locate. We will have our survey crew locate the ones that are visible. We will not try to locate them with a metal detector. We will give RMU a list of the shut-off boxes that were not located, so you can attempt to locate and mark them so that a GPS location can be obtained. We have listed in the table below the estimated number of facilities that would need to be surveyed.

Water and Water Reclamation Facility List

Facility	# of Data Points
Water Towers	4
Wells	5
Well Buildings	5
Water Valves	1,351
Fire Hydrants	762
Water Service Shut-Off Valves	3,750
Sanitary Manholes	1,176
Lift Stations	10
Water Reclamation Plant Facilities	100
Total Estimated GPS Data Points	7,163

Engineering services will include performing a GPS survey that will obtain a northing, easting and USGS elevation for each facility listed in the table above.

Engineering Fee: We estimate we will be able to get 250 points shot per day, thus it will take approximately 29 days ($7,163 \text{ Points} \div 250 \text{ Points/Day}$) to survey all the facilities listed in the table above. We have also included in the budget an additional five (5) days of surveying if additional surveying is required.

Survey Crew: $29 \text{ Days} \times \$1,300/\text{Day} = \$37,700$

Contingency Surveying: $5 \text{ Days} \times \$1,300/\text{Day} = \$6,500$

Download GPS Points Into Database and Map: $60 \text{ Hours} \times \$75 \text{ Hour} = \$4,500$

Total GPS Field Survey Cost: \$48,700

4. Sanitary Manhole and Lift Station Inspection

Scope of Services: Engineering services will include opening all of the sanitary manholes and lift stations and obtaining the following information:

- Measure the size of all of the sewers.
- Measure the rim to flow depth to all of the sewers.
- Record the pipe material type.
- Record the material type and condition of the structure.
- Record the diameter or dimensions of the structure.
- Record the type of lid or grate.

We have estimated there are 1,186 sanitary manholes and lift stations that need to be inspected from the table above.

Engineering Fee: We estimate that a two (2) person crew will be able to inspect 28 manholes per day. We estimate the total number of days to perform this work will be 43 days (1,186 manholes/lift stations ÷ 28 manholes/lift stations). We have based our estimate on our crew working 8 hours/day for a total of 344 hours. We propose to perform this work with an experienced technician and a summer intern. After the sanitary manhole and lift stations have been inspected, the information will be inputted into the GIS database, and we estimate the GIS data input will take approximately 200 hours.

Technician: 344 Hours x \$70/Hr = \$24,080
 Summer Intern: 344 Hours x \$40/Hr = \$13,760
 Total Sanitary Manhole/Lift Station Inspection Cost: \$37,840

GIS Data Input: 200 Hours x \$70/Hr = \$14,000

RMU needs to complete the GPS Map and Database Modifications and the GIS Startup and Training services to get the Water and Water Reclamation GIS system functioning the way you want it to function. The GPS Field Survey, Sanitary Manhole and Lift Station Inspection and Data Input are optional items that you want to consider doing now or sometime in the future. We propose to perform the GIS services on an hourly basis at the current hourly billing rates for the classification of personnel performing the work, as outlined on the attached billing rate schedule, at the estimated cost detailed in the GIS Fee Summary table below. We are willing to perform this work in phases over multiple fiscal budget years.

GIS Modification Fee Summary

Service	Incremental Fee	Cumulative Fee
GIS Map and Database Modifications	\$19,200	\$ 19,200
GIS Startup and Training	\$ 1,920	\$ 21,120
GPS Field Survey	\$48,700	\$ 69,820
Sanitary Manhole and Lift Station Inspection	\$37,840	\$107,660
Sanitary Manhole and Lift Station Data Input	\$14,000	\$121,660

The attached Terms and Conditions dated February 4, 2016 are made a part of this Agreement.

If all meets with your approval, please have both copies of the proposal signed and return one copy to our office. Thank you.

The City Manager shall initial in the column label "Provide Service" the services the City would like to have performed under this agreement.

Mr. Adam Lanning
Rochelle Municipal Utilities
February 4, 2016
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Service	Engineering Fee	Provide Service
GPS Map and Database Modifications	\$19,200	
GIS Startup and Training	\$ 1,920	
GPS Field Survey	\$48,700	
Sanitary Manhole and Lift Station Inspection	\$37,840	
Sanitary Manhole and Lift Station Data Input	\$14,000	

ACCEPTANCE BY CITY OF ROCHELLE


By _____

Title Dave Plyman, City Manager

Date _____

Sincerely,

WILLET, HOFMANN & ASSOCIATES, INC.

BY  _____
Matt Hansen, P.E.

MH:rv
Encl.
cc: File



WILLETT HOFMANN
& A S S O C I A T E S I N C
ENGINEERING ARCHITECTURE LAND SURVEYING

Effective March 29, 2015
GENERAL RATES FOR ENGINEERING SERVICES
(FIELD AND OFFICE)

CLASSIFICATION OF EMPLOYEE	REGULAR HOURLY RATE		OVERTIME RATE
	From	To	
Principal Engineering Manager	\$132.00	\$189.00	Regular Rate
Engineering Manager	\$120.00	\$171.00	Regular Rate
Civil Engineer IV	\$99.00	\$144.00	Regular Rate
Civil Engineer III	\$84.00	\$120.00	Regular Rate
Civil Engineering Intern II	\$81.00	\$117.00	Regular Rate
Civil Engineering Intern I	\$69.00	\$99.00	Regular Rate
Architect IV	\$114.00	\$150.00	Regular Rate
Architect III	\$105.00	\$126.00	Regular Rate
Architectural Intern II	\$84.00	\$105.00	Regular Rate
Architectural Intern I	\$75.00	\$93.00	Regular Rate
Prof. Land Surveyor Manager	\$96.00	\$135.00	Regular Rate
Prof. Land Surveyor IV	\$84.00	\$120.00	Regular Rate
Prof. Land Surveyor III	\$69.00	\$99.00	Regular Rate
Prof. Land Surveyor (SIT) II	\$63.00	\$87.00	Regular Rate
Prof. Land Surveyor (SIT) I	\$54.00	\$75.00	Regular Rate
Technician IV	\$69.00	\$96.00	1.3 x Regular Rate
Technician III	\$60.00	\$84.00	1.3 x Regular Rate
Technician II	\$54.00	\$72.00	1.3 x Regular Rate
Technician I	\$48.00	\$63.00	1.3 x Regular Rate
* Survey Worker Foreman	\$60.00	\$105.00	1.3 x Regular Rate
* Survey Worker	\$60.00	\$105.00	1.3 x Regular Rate
Administrative Assistant	\$42.00	\$72.00	1.3 x Regular Rate
Expenses and Materials	At Cost		

* The hourly wages of these Classifications may be subject to the Illinois Prevailing Wage Act.

The above hourly rates shall be applicable for a period of one year from the date hereon, after which time they shall be subject to adjustments to reflect payroll cost.

Generally field crews work a nine-hour day, which involves an hour of overtime each day. The rates for field personnel apply office to office exclusive of the lunch period.

TERMS AND CONDITIONS

February 4, 2016

Standard of Care: Services provided by Willett, Hofmann & Associates, Inc., hereinafter referred to as "the Engineer", under this Agreement will be performed in a manner consistent with the human degree of care and skill ordinarily exercised by members of the same profession currently practicing under similar circumstances.

Additional Services: When Additional Services beyond the defined scope are requested, an amendment will be prepared for approval by the Client prior to commencing work. Additional Services shall be performed on a time and material basis at Standard Hourly Rates in effect at the time the services are performed, or for a negotiated fee.

Billing / Payment: The Client agrees to pay for all services performed and all costs incurred by the Engineer. Invoices for services shall be submitted either upon completion of such services or on a monthly or otherwise regular or logical basis. Invoices shall be due and payable within 30 days of invoice date. Client shall notify the Engineer of any objections to the invoice within five (5) working days of receipt. Payment of any invoice indicates Client's acceptance of this Agreement and satisfaction with the services provided. Payment of invoices is in no case subject to unilateral discounting, back charges, or set offs by the Client, and payment is due regardless of suspension or termination of this Agreement by either party. Accounts unpaid 60 days after the invoice date may be subject to a monthly service charge on the unpaid balance. In the event that any portion of an account remains unpaid after 120 days after the invoice date, the Engineer may institute collection action and the Client shall pay all costs of collection, including reasonable attorney's fees.

Termination, Suspension or Abandonment: In the event of termination, suspension or abandonment of the project, the Engineer shall be equitably compensated for services performed. Either the Client or the Engineer may terminate this Agreement after giving no less than seven (7) days' written notice if the other party substantially fails to perform in accordance with the terms of the Agreement.

Indemnification: The Client shall, to the fullest extent permitted by law, indemnify and hold harmless the Engineer, its officers, directors, employees, agents and consultants from and against all damage, liability and cost, including reasonable attorney's fees and defense costs arising out of or in any way connected with the performance of the services under this Agreement, excepting only those damages, liabilities or costs attributable to the sole negligence or willful misconduct of the Engineer.

Certification, Guarantees and Warranties: The Engineer shall not be required to execute any document that would result in certifying, guaranteeing or warranting the existence of any conditions.

Dispute Resolution: Any claims or disputes between the Client and the Engineer arising out of the services provided by the Engineer or out of this Agreement shall be submitted to non-binding mediation. The Client and the Engineer agree to include a similar mediation agreement with all contractors, subconsultants, subcontractors, suppliers and fabricators, providing for mediation as the primary method of dispute resolution among all parties. The laws of the State of Illinois will govern the validity of this Agreement, its interpretation and performance. Any litigation arising in any way from this Agreement shall be brought in the courts of that State.

Construction Means and Methods: The Engineer shall not be responsible for, nor have control over or charge of, construction means, methods, sequence, techniques, or procedures, or for any health or safety precautions required by any regulatory agencies in connection with the project.

Construction Observation: When the Engineer does not provide construction observation services, it is agreed that the professional services of the Engineer do not extend to or include the review or site observation of the Contractor's work, performance, or pay request approval. In this situation, during construction, the Client assumes the role of the engineer and will hold harmless the Engineer for the failure of the Contractor's work to conform to the design intent and the contract documents.

Adjustments, Changes or Additions: It is understood that adjustments, changes, or additions may be necessary during construction. The Client will maintain a contingency fund until construction is completed to pay for field changes, adjustments, or increased scope items. All change order amounts requested by Contractors constructing Engineer designed items shall be submitted to the Engineer for review prior to being approved by contract holder. The Engineer will not approve amounts requested that are above a normal bid amount for the work involved. In no case will costs be assessed to the Engineer at the discretion of the Contractor, the Client, or the Owner without prior agreement and approval of the Engineer. The Engineer shall not be responsible for any cost or expense that provides betterment or upgrades or enhances value of the Project.

Project Signs: Project signs displayed at the construction site shall include "Willett, Hofmann & Associates, Inc. – Consulting Engineers" as the project engineer for the applicable discipline. Articles for publication regarding this project shall acknowledge "Willett, Hofmann & Associates, Inc. – Consulting Engineers" as the project engineer for the applicable discipline.

Electronic Files: The Client hereby grants permission for the Engineer to use information and data provided by the Client, including electronic background information produced or provided by the Client in the completion of the project. The Client also grants permission to the Engineer to release Engineer's documents (including their backgrounds) electronically to Consultants, Contractors, and Vendors as required in the execution of the project. Before release, the Engineer will require an executed waiver of liability for the use of any electronic documents and may charge a fee for this information.

Limitation of Liability: It is agreed that the Engineer's liability for this project for negligent acts, errors, or omissions, and all claims, losses, costs, damages, cost of defense, expenses from any cause, including Client, Contractors, and Attorney fees, is limited to the fees collected by the Engineer.

Use of Documents: Documents prepared by the Engineer are instruments of service for use solely with respect to the project. The Engineer shall retain all common law, statutory and other reserved rights, including the copyright. The Client shall not reuse or permit the reuse of the Engineer's documents except by mutual agreement in writing.