

TO: Committee of the Whole - PU

FROM: Zac Bonesz

DATE: February 25, 2022

RE: Resolution 22-036R
Approving Task Order #29 with RJN Group for Engineering Design Services for
Improvements to Randall Road Lift Station

The Randall Road Lift Station is located between Wilson Street and McKee Street on the west side of Randall Road in front of the Target store. The structural components of the lift station are in good condition and only require standard rehabilitation. However, the mechanical and electrical components need to be replaced.

The lift station currently has suction lift non-clog pumps. RJN Group staff will work with us regarding this option, however most lift station retrofit projects use submersible pumps. Submersible pumps require less maintenance and energy cost, as well as greater availability. This option requires a portion of the force main to be replaced and a new valve vault to be installed next to the wet well, requiring more design effort and including a soil boring and geotechnical report. The additional costs to evaluate and design the submersible option is included in the pricing in Exhibit B. RJN staff is open to utilizing the submersible pump option if the City chooses.

RJN Group will provide a preliminary site plan and a technical memorandum on the design at the end of Phase 1. Upon City approval, RJN Group will move forward with Phase 2 the final design and bidding.

RJN Group has provided a proposal to the City to provide Design Engineering Services for the improvements at Randall Road Lift Station.

The City's 2022 budget includes \$210,000 for Improvements to the Randall Road Lift Station. The proposed amount by RJN Group of \$69,800 will be utilized in Phase 1 and Phase 2 will incorporate the remaining budget amount.

Recommended Actions:

Approval of Resolution 22-036R authorizing Task Order #29 with RJN Group to provide engineering design service for improvements of Randall Road Lift Station not to exceed \$69,800.

**AUTHORITY OF BATAVIA, ILLINOIS
RESOLUTION 22-036R**

AUTHORIZING EXECUTION OF TASK ORDER #29 WITH RJN GROUP

WHEREAS, the City of Batavia Randall Road Lift Station is in good structural condition requiring standard rehabilitation, and

WHEREAS, the City of Batavia Randall Road Lift Station needs complete mechanical and electrical repair, and

WHEREAS, RJN Group will work with the City of Batavia regarding submersible pumps if this proves to be the preferred option for the Randall Road Lift Station and,

WHEREAS, RJN Group can provide preliminary site plan and technical support for the design in Phase 1 and upon City approval, will move forward with Phase 2 consisting of the final design and bidding.

NOW, THEREFORE, BE IT RESOLVED, by the Mayor and City Council of the City of Batavia, Kane and DuPage Counties, Illinois, as follows:

SECTION 1. That the Mayor and City Council hereby authorize staff to execute Task Order # 29 with RJN Group for an amount not to exceed \$69,800.00, attached as Exhibit A

CITY OF BATAVIA, ILLINOIS, RESOLUTION 22-036R

PRESENTED to the City Council of the City of Batavia, Illinois, this 21st day of March, 2022.

PASSED by the City Council of the City of Batavia, Illinois, this 21st day of March, 2022.

APPROVED by me as Mayor of said City of Batavia, Illinois, this 21st day of March, 2022.

Jeffery D. Schielke, Mayor

Ward	Alderman	Aye	Nay	Abstain	Absent
1	Baerren				
1	Solfa				
2	Lehman				
2	Wolff				
3	Ajazi				
3	Chanzit				
4	Connelly				
4	Malay				
5	Uher				
5	Beck				
6	Cerone				
6	Russotto				
7	Vogelsinger				
7	Miller				
Mayor	Schielke				
		AYES	NAYS	ABSTAIN	ABSENT
	TOTALS				

total holding office: Mayor and 14 Aldermen

ATTEST:

Kate Garrett, City Clerk

EXHIBIT "A"

TASK ORDER NO. 29

REGARDING GENERAL AGREEMENT BETWEEN CITY OF BATAVIA

AND

RJN GROUP, INC.

Project Description: RJN Group to provide design engineering services for improvements to the Randall Road Lift Station.

Scope of Services: See Attachment A- Proposal

Not-to-Exceed Fee for Services: \$69,800.00

Proposed: _____

Date

Approved: _____

City of Batavia
City Approver

Date



February 23, 2022

Mr. Zac Bonesz
Superintendent of Wastewater
City of Batavia
400 South Shumway Avenue
Batavia, Illinois 60510

Subject: Randall Road Lift Station Improvements – Design Services

Dear Mr. Bonesz:

RJN Group is pleased to submit this proposal to the City of Batavia (City) to provide design engineering services for improvements to the Randall Road Lift Station.

The Randall Road lift station is located in a landscape area on the west side of Randall Road between Wilson Street and McKee Street in front of the Target store. The structural components of the lift station are in good condition and should only require standard rehabilitation. The mechanical and electrical components of the station need complete replacement. The planned improvements are as follows:

- Inspect the structural components and determine needed rehabilitation
- Evaluate lift station capacity and replace the lift station pumps
- Replace the internal lift station piping
- Replace the lift station controls and electrical system and coordinate SCADA connection
- Add an external standby generator
- Site and landscaping improvements

There are some open questions and items to evaluate before we know exactly what will be included in the design. Therefore, we plan to start with a short evaluation phase before moving into the final design. We plan to address the following topics in this phase:

- Determine the type of pumps that will be installed
- Determine the rehabilitation needs on the lift station structures
- Complete a topographic survey and clarify property boundaries and easements around lift station
- Determine if there will be any impact to area drainage that might involve Kane County
- Develop a preliminary site plan to determine modification to grading and landscaping as well as the location of the new generator
- Determine which entities and property owners will need to provide formal or informal approval

The lift station currently has suction lift non-clog pumps. The City has indicated a preference to remain with this style of pumps. Most lift station retrofit projects utilize submersible pumps and City staff has indicated that they are open to that option. RJN staff is open to remaining with the suction lift pumps if this remains the City's preference. The submersible pump option would require a portion of the force main to be replaced and a new valve vault to be installed next to the wet well, which would require more design effort and would also require a soil boring and geotechnical report. Remaining with the suction lift pumps would reduce the design cost. The additional costs to evaluate and design the submersible option are included with our pricing in Exhibit B.

We will submit a preliminary site plan and technical memorandum on the design elements at the end of Phase I. Upon City approval we will move forward with Phase II final design and bidding.

Assuring Quality and Safety

RJN is committed to providing **quality** deliverables. RJN's internal quality control (QC) tools within in our in-house data management software, as well as our corporate training and QC processes in place will ensure the project will provide value for the City.

As an employee-owned firm, RJN's commitment to the **safety** of our employees and of City employees and customers is paramount. That commitment to safety is demonstrated in our internally developed and audited safety program where our goal is to have all field staff, engineers, and project managers "RJN Safety Certified." Included in the certification is confined-space entry training, temporary traffic control, OSHA 10-hour, fall protection, and many more. Every project follows an RJN Health and Safety Plan (HASP) when completing any field work.

Price and Schedule Summary

This project will be invoiced on a time and material basis for a total not-to-exceed fee of \$60,900. Additional effort is required if the City wants to pursue a submersible pump option as outlined in Exhibit B. Complete Scope of Services, Pricing and Schedule are provided in the following exhibits:

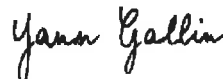
- Exhibit A – Scope of Services
- Exhibit B – Pricing
- Exhibit C – Schedule

We are looking forward to the opportunity to work with the City of Batavia on this important project. It is our pleasure to submit this proposal to you. Please feel free to contact Mike at 630-682-4700 x1314 if you would like to discuss this proposal or have any questions.

Sincerely,



Michael N. Young, P.E.
Senior Vice President



Yann Gallin
Senior Project Manager



EXHIBIT A

SCOPE OF SERVICES

RJN is proposing the following scope of services to provide final design for the Randall Road Lift Station Improvements for the City of Batavia.

PHASE I – SYSTEM EVALUATION AND RECOMMENDATIONS

1. Complete topographic survey of the lift station site and immediate surrounding area. Includes parcel ownership identification and limits of any existing easements.
2. Obtain JULIE locates of site utilities. Incorporate utility information provided into the site plans. Determine the gas line extension needed to provide natural gas for the planned standby generator.
3. Complete site review of existing components:
 - a. Condition of existing structural components and needed rehabilitation
 - b. Performance of the existing lift station
 - c. Electrical and control system
 - d. Site layout and accessibility
4. Develop a project sequencing plan to keep system in operation during construction.
5. Evaluate pump options. There are two alternatives for this scope as noted below and the additional costs are provided in the fee if the second alternative is chosen.
 - a. Alternative 1 - Only evaluate replacing the pumps with a similar suction lift system
 - b. Alternative 2 - Evaluate both suction lift and submersible options, including additional improvements that would be required with a submersible system.
6. Complete preliminary design of the lift station components and site improvements, including the new generator. Prepare a preliminary site plan.
7. Provide a list of all permit and other approvals anticipated to be required.
8. Provide a preliminary opinion of probable construction cost.
9. Prepare a technical memorandum summarizing our evaluation and recommendations. Include the preliminary site plan and opinion of probable construction cost. Submit a pdf of the technical memorandum to City staff. City comments will be incorporated into the final design phase.

PHASE II – FINAL DESIGN

10. Finalize the design of the lift station pumps and piping. Complete buoyancy calculations.
11. If a submersible pump option is selected, complete design of a separate valve vault. Obtain the services of a geotechnical firm to take a soil boring at the vault location and prepare a geotechnical report. Note that this task is not needed for a suction lift system, so the cost is split out separately in Exhibit B.
12. Finalize the remaining elements of the lift station design, including:
 - a. Wet well structural improvements
 - b. Construction phasing, including bypass pumping



- c. Final equipment and material selection
 - d. Site improvements, including grading modification and drainage improvements if necessary
13. Provide electrical design, including load calculations, generator sizing and selection, control diagrams, one-line diagram, and integration into the City's SCADA system.
 14. Prepare the following Contract Plans:
 - a. Cover Sheet
 - b. General Notes and Quantities
 - c. Phasing and Demolition Plan
 - d. Lift Station Site Plan
 - e. Lift Station Pump and Piping Plan
 - f. Lift Station Electrical Plans
 - g. Erosion Control Plan
 - h. Details
 15. Utilize the standard City front end documents or RJN standard front end documents and modify for this project.
 16. Provide technical specifications, including electrical specifications.
 17. Provide an updated opinion of probable construction costs with each submittal.
 18. Submit 90% design documents for City review. Submittal will include contract plans, technical specifications, opinion of probable construction cost, and other contract documents.
 19. Prepare and submit permit application to construct, own and operate to the Illinois Environmental Protection Agency (IEPA). Include the required plans and specifications. Address up to two rounds of IEPA review comments.
 20. Assist the City in coordinating the improvements with Kane County. This includes completion of a simple permit form if required. It does not include addressing easements or drainage improvements that the County may require.
 21. Assist the City in coordinating the work and obtaining approval from the property owner(s). This does not include any modification to existing easements.

PHASE III – BIDDING SERVICES

22. Submit electronic bid documents to the City, including the bid advertisement. Either the City or RJN will post them on a bidding services website.
23. Provide assistance to City staff during the bidding phase, including preparation of addenda and attending the bid opening (if requested). Review the bids and provide a bid tabulation and recommendation of award letter to the City.

PHASE IV – PROJECT MANAGEMENT

24. Provide project management services for the duration of the project. Attend up to three meetings with City staff, including site visit and 90% review meeting.

Items Requested from the Village

1. GIS geodatabases and/or shape files for the project area.
2. Available records for the existing lift station.
3. Assistance with County and property owner coordination.



EXHIBIT B PRICING

Pricing for the Randall Road Lift Station Improvements Final Design project is as follows.

Pricing Terms for Invoicing: Time and Material

Not-To-Exceed Total Cost: \$60,900

This is the base cost for replacement with a similar suction lift pump option. It includes subconsultant work for surveying and electrical design. These services will be invoiced at actual cost plus 10%.

Fee Schedule

Task Description	Hours	Cost
Preliminary Design		
Topographic Survey and JULIE locates*	5	\$4,200
Site Visit*	8	\$2,800
Preliminary Design Evaluations*	16	\$4,000
Preliminary Design Plan and Report	36	\$5,000
Final Design		
Final Design Evaluations	20	\$3,200
Plans	78	\$11,000
Specifications	32	\$5,000
Cost Opinions	14	\$2,000
Electrical Design*	6	\$13,200
Permits	24	\$3,800
Bidding Services	16	\$2,300
Project Management and Meetings	25	\$4,400
TOTAL	280	\$60,900

The following is a summary of the additional effort for the submersible pump option, which includes a soil boring and geotechnical report. The not-to-exceed total cost if these services are added is \$69,800.

Task Description - Additional Services	Hours	Cost
Preliminary Design	12	\$1,800
Final Design*	20	\$7,100
TOTAL	32	\$8,900

* The hours are just RJN, but the cost includes subconsultant work

Hourly Rate Schedule

Classification		2022 Rates
PD	Project Director	\$245.00
SPM	Senior Project Manager	\$200.00
PM	Project Manager	\$175.00
SCM	Senior Construction Manager	\$170.00
SPE	Senior Project Engineer	\$145.00
PE	Project Engineer	\$130.00
CO	Construction Observer	\$125.00
EI	Engineer Intern	\$115.00
SGA	Senior GIS Analyst	\$110.00
SDA	Senior Data Analyst	\$110.00
GIS	GIS Analyst	\$100.00
FM	Field Manager	\$100.00
DA	Data Analyst	\$90.00
AS	Administrative Support	\$85.00
FT	Field Technician	\$80.00

Notes

- The Hourly Rate Schedule is valid until December 31st, 2022. Following that date, rates may be subject to a 3% annual increase.
- The rates for reimbursables such as travel, postage, document fees, and in-house printings/discs are applied based on the normal on-going charges.

Contract Option

This contract can be amended to include additional work upon joint approval by the City and RJN.



EXHIBIT C PROPOSED SCHEDULE

RJN is prepared to start work immediately upon an Agreement.

The preliminary design will be completed within 8 weeks of a notice to proceed.

The 90% documents will be submitted within 8 weeks of receiving City comments on the preliminary design.

The final bid documents will be submitted within 2 weeks of receiving City comments on the 90% design.