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May 1, 2017

City of Rochester Hills
1000 Rochester Hills Drive
Rochester Hills, Michigan 48309

Attention: Mr. Allan Schneck, P.E., DPS Director

Re: Booster Pumping Station #2
Replacement Project
Proposal for Construction Engineering Services

HRC Job No. 20150021.09

Dear Mr. Schneck:

We are pleased to offer our construction engineering services to the City of Rochester Hills for the Booster Station #2 Replacement Project. It is noted that Hubbell, Roth & Clark, Inc. (HRC) is pre-approved to provide the City these services in accordance with our Professional Engineering Services Contract. Our understanding of the project is based the construction plans and specifications prepared by HRC and our recent discussions throughout the planning and design processes with you and other City staff.

Our proposed construction engineering services consist of the following primary tasks:

1. Proposal Review & Ranking

Review the Proposal packages submitted by the responsive contractors and provide criteria scores to the City for inclusion into the evaluation of their recommendation for award. Provide technical assistance to the City for any questions on the submittal packages.

2. Contract Administration

Includes services throughout construction such as attending the preconstruction meeting, regular status meetings and site visits by a project engineer to oversee and supervise the observation staff. The engineer will be responsible for ordering appropriate materials testing, reviewing progress payments, preparing meeting minutes and resolving any interpretations or problems which may arise with the plans and specifications. The engineer will also prepare monthly construction pay estimates in a timely manner to meet project deadlines for estimate approval, review contractor's construction progress for compliance with the approved project schedule, and prepare change orders, if required. The project engineer will be responsible to resolve all complaints and contractor's claims for extra compensation. A digital copy of all documentation developed under this task will be provided to the City.

3. Field Layout

Will consist of bringing control to the site and staking for line and elevation of specific contract items such as the building foundation pad and stormwater management structures. A final survey to document location of as-built structures is included.

4. Shop Drawing Reviews

Log and review shop drawings for materials supplied for conformance with the design concept and compliance with the contract documents. Copies of all final approved shop drawings will be provided to the City.

5. Construction Observation

Completion of daily field reports documenting pay item quantities and general progress for the day. Provide documentation verifying compliance with the project drawings and specifications. Where necessary, line and elevation will be checked. HRC observation staff will provide daily phone calls to the Project Manager and regular communication with City staff as necessary to continually keep all project staff aware of the construction status. A digital copy of all daily inspection sheets and construction photos will be delivered to the City.

6. Facility Start-up

A minimum of two (2) full 8-hour days have been allocated in the project specifications for system start-up. The engineer and necessary technical support staff will take part in the system start-up to assure the system meets contractual requirements for performance.

7. Project Closeout

Provide final walkthroughs and punchlist updates to the City. Complete record drawings utilizing observation staff documentation. This will consist of final dimensions and approved shop drawings showing any significant field changes to underground utilities and/or structures, including final measured quantities. A digital copy (in PDF format) and up to two (2) hard copies of the plans will be delivered to the City.

We are proposing Mr. Bradley Shepler, P.E. as the Project Manager. Mr. Shepler acted in this capacity on the design of the project and has served in similar roles on numerous other construction engineering projects. Mr. Tom Maxwell will provide QA/QC for the administration of the Contract and brings over 25 years' experience in the management of construction projects for municipal infrastructure. We can provide their resumes upon request, but believe you and the other City staff are very familiar with their experience, qualifications, and capabilities.

An estimate of the hours and associated fees for each task are broken down in the attached Table 1. As shown, the total not-to-exceed cost proposed is \$202,170.00 and the work would be completed under the terms and conditions of our Agreement for Professional Engineering Services. At this time, we feel this is an adequate budget for this project and we can monitor the contractor's operations appropriately to protect the City's interests. However, as you are aware, the level of engineering services required to properly manage a construction project and duration of construction observation services is often influenced by the contractor's operations.

HRC has a multitude of qualified staff that can provide full time observation services on this project. It is our intention to provide the City with one (1) single point of contact on this project from beginning to end. When the need for construction observation on-site approaches, we will present the City with 2 to 3 recommended observation staff that would be available through the duration of the project for your review.

It is noted that the contract documents identify a construction schedule of 189 calendar days (approximately 27 weeks) following Notice of Award to Substantial Completion and, assuming a Notice to Proceed by mid-July, a Final Completion date of 18 weeks (June 1, 2018) past Substantial Completion. Assuming that fabrication of the packaged booster pumping system and facility will take approximately 20 weeks, we anticipate providing observation services for the following estimated schedule;

- Four (4) weeks of site preparation prior to booster pumping facility delivery
- Four (4) weeks of site work after booster pumping facility delivery
- Two (2) weeks of system start-up and operational adjustments
- Two (2) weeks of existing booster station abandonment and valve replacement
- Five (5) non-consecutive weeks of site grading, paving, restoration, cleanup, & project closeout.

We have estimated 850 hours for Observation (17 weeks at 50 hours/week), however, the duration of observation services is directly dependent on the contractor's efficiency, communication, and scheduling. We plan to provide full-time observation for the major site preparation items of work (i.e. foundation installation, utility service installation, and water main work), work through Substantial Completion, existing booster station abandonment and site paving, but have assumed only part-time observation for a number of operations such as mobilization, site grading, cleanup, and final restoration, that can be reviewed and measured after completion.

We feel the services detailed in this proposal are the most cost effective means to meet the needs of the City for this project. and have proposed a budget that is under 17% of the \$1,250,000.00 estimated construction cost.

Once again, we thank you for this opportunity and look forward to our continued services to the City of Rochester Hills.

If you have any questions regarding this proposal, please contact the undersigned.

Mr. Allan Schneck, P.E.
May 1, 2017
HRC Job Number 20150021.09
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Should you concur with this proposal, please sign below to serve as our authorization to proceed.

If you have any questions or require any additional information, please contact the undersigned.

Very truly yours,

HUBBELL, ROTH & CLARK, INC.



Daniel W. Mitchell, P.E.
Vice President



Bradley Shepler, P.E.
Associate

pc: Rochester Hills; Paul Davis, Tracey Balint
HRC; T. Maxwell, K. Chapman, J. Nagle, File

Recommended by:
CITY OF ROCHESTER HILLS

Allan E. Schneck, P.E., DPS Director

Date: _____

Approved by:
CITY OF ROCHESTER HILLS

Brian K. Barnett, Mayor

Date: _____

**CITY OF ROCHESTER HILLS
BOOSTER PUMPING STATION #2 REPLACEMENT PROJECT
CONSTRUCTION ENGINEERING SERVICES**

**TABLE 1
ESTIMATED HOURS AND FEES**

May 1, 2017

HRC Job No. 20150021.09

Task Description	Rate Classification & Estimated Hours												Total Hours
	Principal	Associate/ Project Manager	Sr. Associate/ Process Engineer	Graduate Engineer	Sr. Project Engineer (Electrical)	Dept. Manager (Arch)	Structural Engineer	Construction Engineer	Survey Office Supervisor	Survey Party Chief	Survey - Instrument Person	Construction Observer	
1 Meetings (12)	8	36	24	24	12	6	6	6	-	-	-	6	128
2 RFP Review & Recommendations	2	16	12	-	12	4	4	4	-	-	-	-	54
3 Shop Drawing Reviews	-	44	24	20	24	24	16	-	-	-	-	-	152
4 Construction Layout	-	12	8	8	-	-	4	8	16	32	32	-	120
5 Contract Administration	10	120	52	60	40	16	16	20	-	-	-	-	334
6 Construction Observation	-	-	-	-	-	-	-	-	-	-	-	850	850
7 Facility Start-up	2	16	16	8	16	-	-	8	-	-	-	16	82
8 Project Closeout	2	16	8	24	8	4	4	-	-	-	-	-	66
SUBTOTALS	24	260	144	144	112	54	50	46	16	32	32	872	1,786
PROJECT TOTALS	24	260	144	144	112	54	50	46	16	32	32	872	1,786



ESTIMATED FEE SUMMARY

PERSONNEL	HOURS	RATE	TOTAL
Principal	24	\$ 160.00	\$ 3,840.00
Associate/ Project Manager	260	\$ 132.00	\$ 34,320.00
Sr. Associate/Process Engineer	144	\$ 158.00	\$ 22,750.00
Graduate Engineer	144	\$ 90.00	\$ 12,960.00
Sr. Project Engineer (Electrical)	112	\$ 130.00	\$ 14,560.00
Dept. Manager (Arch)	54	\$ 120.00	\$ 6,480.00
Structural Engineer	50	\$ 105.00	\$ 5,250.00
Construction Engineer	46	\$ 155.00	\$ 7,130.00
Survey Office Supervisor	16	\$ 120.00	\$ 1,920.00
Survey Party Chief	32	\$ 106.00	\$ 3,390.00
Survey - Instrument Person	32	\$ 74.00	\$ 2,370.00
Construction Observer	872	\$ 100.00	\$ 87,200.00

TOTAL LUMP SUM NOT-TO-EXCEED \$ 202,170.00