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July 22, 2016

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

Attention: Mr. Paul Davis, P.E., City Engineer

Re: Water Booster Pumping Station #2
Proposal for Design Services

HRC Job No. 20150021.07

Dear Mr. Davis:

Thank you for considering Hubbell, Roth and Clark, Inc. (HRC) to provide Design Services for the Water Booster Pumping Station #2 (BPS #2) replacement project. We propose to complete this work in accordance with our 2015 Agreement for Professional Engineering Services. Our understanding of the work and scope of services are based on the results of the previously completed Feasibility Study, preliminary design discussions with your staff and key project stakeholders and the agreed upon location and aesthetics of the proposed BPS #2. In summary, the work includes providing a topographic survey of the project area, preparing a complete set of construction contract documents, conducting review meetings at specific stages during design, and assisting with the bidding process. A more detailed description of the scope of services follows:

Scope of Services:

HRC will conduct a topographic survey of the proposed project area to assure that the above-ground booster station facility fits into the existing topographic features of the site. In addition, HRC will provide assistance to the City and their preparation of easement acquisition documents for the location of the proposed booster station.

HRC will work and coordinate with pre-fabricated pump station manufacturers to assure that they are aware of the impending project bidding and gather full product availability, options, sample system layouts, and architectural veneers that meet the proposed design criteria. HRC will then provide all services required to provide a complete biddable set of construction contract documents for the improvements identified during the Feasibility Study and Preliminary Design discussions. This effort will include any necessary meetings, field work, preparation of permit applications, and identified draft submittals. HRC proposes a series of four (4) meetings as the design progresses. A kickoff meeting to discuss project goals and delivery timelines is necessary to program the design process. Owner review meetings would be facilitated at approximately the 50% and 90% design stages to allow opportunity for City staff input into design details such as equipment selection, performance specifications, and sequence of construction. Meeting agendas, notes, attendance sheets, and other project communications would be provided by HRC. Additionally, during the bidding process, HRC would assist the City with the pre-bid meeting.

Three (3) hard copies and a digital copy of each review set will be provided. Support and assistance with the preparation of any necessary permit applications and addressing comments and concerns from regulatory agencies and other interested parties that may be warranted is also included. It is planned for the City's front-end specifications and utility standard details to be utilized so HRC will provide up to 20 hard copies and a digital copy of all final construction drawings and technical specifications to the City's Financial Department for the bidding and procurement process. Included in the 90% review submittal and the final contract submittal will be an engineer's opinion of probable cost and an estimated construction schedule. Support throughout the bidding process would include the preparation of any necessary addendums, preparation of answers to contractor questions, bid evaluation, and recommendation of award for the construction Contract.

Our proposed Tasks and the estimated hours and fees to complete the work have been identified in Table 1 (attached). As shown, we have budgeted 600 hours for a proposed not-to-exceed fee of \$69,000 for our Design Engineering Services for this project. It is our understanding that the City will utilize their existing engineering services agreement with a geotechnical sub-contractor to evaluate the subsurface conditions of the project area and requests that HRC coordinate with this sub-contractor for the geotechnical work required. As noted previously, all work would be completed under the terms and conditions of our Agreement for Professional Engineering Services.

HRC estimates that the Design for this project can be completed within 5 to 6 months following your authorization to proceed. We understand that the City desires to have this booster station online by June-August 2017; however, the project construction schedule depends largely on the lead time for the manufacturing of the pre-fabricated booster station. Through the preliminary design effort, it was determined that delivery of the pre-fabricated booster station to the project site would take approximately 32-36 weeks from the date of authorization to proceed. HRC will work towards an expedited design timeline so that final construction drawings and technical specifications would be delivered to the City closer to the lower end of the estimated timeline (which would require accelerated City review time for the two (2) draft submittals). However, based on our experience, typical timelines for procurement and bidding through the City require 6 to 8 weeks which may slide the award of the Contract and authorization to proceed into March of 2017. It is advised that other project delivery options, such as the pre-purchase of pre-fabricated booster station, be considered to expedite the construction schedule in order to provide facility start-up by June-August 2017.

If you have any questions regarding this proposal, please contact the undersigned. Should you concur with this proposal, please sign below to serve as our authorization to proceed. Once again, we thank you for this opportunity and look forward to our continued services to the City of Rochester Hills.

Mr. Paul Davis, P.E.
July 22, 2016
HRC Job Number 20150021
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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; A. Schneck, T. Balint
HRC; File

Recommended by:
CITY OF ROCHESTER HILLS

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

Date: _____

Approved by:
CITY OF ROCHESTER HILLS

Bryan K. Barnett, Mayor

Date: _____

**CITY OF ROCHESTER HILLS
WATER BOOSTER PUMPING STATION #2
DESIGN ENGINEERING SERVICES**

**TABLE 1
ESTIMATED HOURS AND FEES**

July 22, 2016

HRC Job No. 20150021.07

Task Description	Rate Classification & Estimated Hours												Total Hours
	Principal	Associate/ Project Manager	Associate/Proje ct Engineer	Associate/Proce ss Engineer	Sr. Project Engineer (Electrical)	Dept. Manager (Arch)	Staff Engineer	CADD Technician	Survey Office Supervisor	Survey Party Chief	Survey - Instrument Person	ROW Specialist	
1 Meetings (3)	4	15	6	-	-	-	9	-	-	-	-	-	34
2 Topographical Survey & Processing	-	2	-	-	-	-	-	-	6	10	10	-	28
3 Geotechnical Investigation Coordination	-	4	-	-	-	-	-	-	-	-	-	-	4
4 Schematic Design (50%)	2	24	16	8	8	4	36	56	-	-	-	8	162
5 Coordination w/ Pre-Fabricated BPS Manufacturers	2	16	4	12	4	-	-	-	-	-	-	-	38
6 Architectural Finishes/Exterior Veneer Specifications	-	4	-	-	-	12	-	-	-	-	-	-	16
7 Design Development (90%)	4	34	12	8	8	-	40	36	-	-	-	-	142
8 Constructability QA/QC, Equip. Selection, Sequencing	4	16	16	12	4	-	-	-	-	-	-	-	52
9 Final Design (incl. schedule, cost estimate, & CD delivery)	1	24	8	4	2	-	30	22	-	-	-	-	91
10 Bidding and Procurement Assistance	1	16	4	-	-	-	8	4	-	-	-	-	33
SUBTOTALS	18	155	66	44	26	16	123	118	6	10	10	8	600
PROJECT TOTALS	18	155	66	44	26	16	123	118	6	10	10	8	600



ESTIMATED FEE SUMMARY

PERSONNEL	HOURS	RATE	TOTAL
Principal	18	\$ 160.00	\$ 2,880.00
Associate/ Project Manager	155	\$ 125.00	\$ 19,380.00
Associate/Project Engineer	66	\$ 152.25	\$ 10,050.00
Associate/Process Engineer	44	\$ 130.00	\$ 5,720.00
Sr. Project Engineer (Electrical)	26	\$ 130.00	\$ 3,380.00
Dept. Manager (Arch)	16	\$ 120.00	\$ 1,920.00
Staff Engineer	123	\$ 80.00	\$ 9,840.00
CADD Technician	118	\$ 104.00	\$ 12,270.00
Survey Office Supervisor	6	\$ 116.00	\$ 700.00
Survey Party Chief	10	\$ 106.00	\$ 1,060.00
Survey - Instrument Person	10	\$ 74.00	\$ 740.00
ROW Specialist	8	\$ 132.00	\$ 1,060.00
TOTAL LUMP SUM NOT-TO-EXCEED			\$ 69,000.00