



CIVIL ENGINEERS  
LAND SURVEYORS  
LAND PLANNERS

January 28, 2020

Mr. Paul G. Shumejko, M.S., P.E., PTOE  
Transportation Engineering Manager  
DPS Engineering Division  
City of Rochester Hills  
1000 Rochester Hills Drive  
Rochester Hills, MI 48309

**RE: City of Rochester Hills - 2020 Asphalt Rehabilitation Program  
Surveying Layout, Construction Inspection and Engineering Assistance  
City File No: E20-002; NFE Proposal #9-D062**

Dear Mr. Shumejko:

In response to your request, we have reviewed the project requirements relative to performing construction administration services for the 2020 Asphalt Rehabilitation Program. Pursuant to the progress schedule, this project is scheduled for open to traffic by October 9, 2020 with a final completion no later than November 13, 2020. The estimated cost for construction is \$3,390,000. This project is a part of Rochester Hills 2019-2024 Capital Improvement Plan for street improvements and includes Special Assessment District work for Michelson and Bolinger Roads.

Based on our review of the expected character of work and general understanding of the overall project requirements having completed similar projects in the past, we have identified the following scope of work required to perform construction administration services for the development of these projects:

**SCOPE OF WORK**

**1. Construction Layout**

Perform construction layout services to provide the contractor and inspectors vertical and horizontal control to construct the proposed improvements in accordance with the approved plans. We understand staking is required at 3 foot off back of curb or edge of pavement at a minimum of 50-foot intervals along strait segments or larger radius segments, and 25-foot intervals along small radius curved segments such as a cul-de-sac. Additionally, construction staking is required for proposed ADA ramps where applicable. We will record the location of the offset stakes in case they need to be re-staked and used to compute new slope percentages if needed. We will provide cut sheets for all stakes with the hub grade, existing curb grade, and a cut of fill from the hub to the curb. Below we have prepared an estimated budget of anticipated stakeout costs for this project. Invoices for stakeout will be charged against this budget based upon actual hours worked, as authorized, including travel time and office support, for the various classifications of personnel. Office support is also included in the budget per the job classifications, invoicing rates and anticipated hours of involvement to provide the work. Office support includes scheduling/assigning the survey crews and developing layout coordinates.

***Lump Sum Fee: \$61,874.00***

## **2. Engineering Assistance & Construction Inspection**

Complete all work associated with the Inspection and Construction Administration phase of the project. This phase of the project includes, but is not limited to the following items of work:

- Attend Preconstruction meeting
- Document and resolve public complaints
- Assist with stakeholder coordination throughout construction, such as with the schools, US Postal Service, garbage collectors, police and fire personnel, etc.
- Resolve contractor disputes as may arise during the project
- Assist in resolving contractor claims for additional compensation
- Correspond and coordinate with City staff and officials throughout the project development
- Respond to Contractor's requests for information, review shop drawings and submittals
- Prepare additional drawings and hold site visits to solve problems relative to unforeseen conditions.
- Prepare regular project update summaries for City staff and officials
- Attend project meetings as necessary
- Provide all construction oversight supervision to assure project is constructed in conformance with the plans and specifications.
- Provide all required construction inspection services to document daily operations and quantities of work in an Inspector's Daily Report (IDR).
- Deliver required Notices of Construction to residences & businesses and coordinate with City staff/operations.
- Coordinate with Material Testing Company retained by the City to review, understand and document material related concerns. Implement corrective action plan as necessary. Documents same in an IDR.
- Document and resolve changed field conditions
- Obtain project photos that document the progress of the work
- Prepare project closeout punch list

***Lump Sum Fee: \$421,400.00***

## **3. Reimbursable Expenses**

Reimbursable expenses including costs involving the reproduction of drawings, specifications, presentation boards, etc. required by the project, except those utilized by NFE in the development of the project will be invoiced based on time and materials in accordance with the attached fee schedule.

***Lump Sum Fee: \$500.00***

Based on the work outlined above, we submit the following engineering fee for your approval:

<b><u>WORK</u></b>	<b><u>ESTIMATED FEE</u></b>
Construction Layout	\$61,874.00
Engineering Assistance and Construction Inspection	\$402,400.00
Reimbursable Expenses	\$500.00
<b>TOTAL NOT-TO-EXCEED AMOUNT:</b>	<b><u>\$464,774.00</u></b>

We submit the following cost breakdown as evidence of our expected costs associated with performing construction administration services for this project:

**CONSTRUCTION LAYOUT**

<b><u>Classification</u></b>	<b><u>Description of Work</u></b>	<b><u>Estimate Hours</u></b>	<b><u>Hourly Rate</u></b>	<b><u>Amount</u></b>
2 Person Survey Crew	Construction Layout	350	\$139.00	\$48,650.00
Land Survey Technician	Coordinate Preparation	120	75.00	9,000.00
Survey Coordinator	Scheduling	44	96.00	4,224.00
<b>Subtotal Construction Layout</b>				<b>\$61,874.00</b>

**ENGINEERING ASSISTANCE AND CONSTRUCTION INSPECTION**

<b><u>Classification</u></b>	<b><u>Description of Work</u></b>	<b><u>Estimate Hours</u></b>	<b><u>Hourly Rate</u></b>	<b><u>Amount</u></b>
Engineer II	Construction Engineering	1000	\$78.00	\$78,000.00
Senior Inspection Technician	Site Inspection	1500	72.00	108,000.00
Inspection Technician	Site Inspection	2800	64.00	179,200.00
Associate Principal	Field Review and Oversight	300	100.00	30,000.00
	Review & Coordination	60	120.00	<u>7,200.00</u>
<b>Subtotal Inspection &amp; Construction Management:</b>				<b>\$402,400.00</b>

**REIMBURSABLES**

Blueprinting, delivery charges, etc.	<u>\$500.00</u>
<b>Subtotal Reimbursables:</b>	<b>\$500.00</b>

**TOTAL NOT-TO-EXCEED AMOUNT: \$464,774.00**

Mr. Paul G. Shumejko, Transportation Engineering Manager  
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Please be advised that invoices will be based on actual hours and work required as approved by your office and the not-to-exceed amount will not be exceeded unless authorized by your office. We look forward to working with you on this important project for the City.

If you have any questions or require further information, please feel free to contact me.

Sincerely,  
Nowak & Fraus Engineers



\_\_\_\_\_  
Jeffrey J. Huhta, P.E., P.S.  
Managing Partner

Date: January 28, 2020

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: \_\_\_\_\_