



CIVIL ENGINEERS  
LAND SURVEYORS  
LAND PLANNERS

June 10, 2021

Mr. Allan E. Schneck, P.E.  
Director, Department of Public Services  
City of Rochester Hills  
1000 Rochester Hills Drive  
Rochester Hills, MI 48309

**RE: Project 1 – Old Perch Road – Avon to Walton – City File E21-TBD  
Project 2 – Adams Road Pathway – Powderhorn Ridge to Tienken – City File E21-TBD  
City of Rochester Hills, Michigan  
Proposal #9-D518**

Dear Mr. Schneck:

In response to your request, we have reviewed the project requirements relative to development of plans and specifications for the Old Perch Road Rehabilitation Project and the Adams Road Pathway Gap Project. Both projects are a part of the City's Capital Improvement Program and are scheduled for construction in 2022 with a bid letting date in February of 2022. We understand that time is of the essence regarding the design development for these projects, and our office will work towards meeting all expected time frames in completing our work. To that end, this proposal is to accommodate the design development process through the bidding phase of the project.

**Project 1 – Old Perch Road from Avon Road to Walton Boulevard** is the rehabilitation of approximately 5,800 feet of HMA. The existing road is 40 feet wide from edge of pavement to edge of pavement primarily no curb and gutter, roadside ditches and 3 foot shoulders. Construction budget for this project is \$930,000 which does not include PE or CE.

**Project 2 – Adams Road Pathway** is the construction of approximately 2,600 feet of 8 foot wide pathway along the east side of Adams Road between Powderhorn Ridge Road and Tienken Road (Across Nowicki Park frontage). Also, construct a key walk along the north side of Powderhorn Ridge Road to allow for pedestrians to safely cross Adams Road at the traffic circle. Construction budget is \$348,000 which does not include PE or CE.

Based on our review of the project requirements, we have identified the following scope of work required to develop these projects and advance them to the construction phase:

### **SCOPE OF WORK**

#### **PHASE I SERVICES – PRE-ENGINEERING (applies to both projects)**

- Perform all field investigation and survey services required to support the full design development of the project. Field investigation and survey services will include the following:
  - Perform required field survey of the project development area and prepare existing condition drawings consistent with Rochester Hills requirements.

- Perform ROW Survey to field locate and identify ROW limits. Certify ROW boundary line as necessary
- The addresses of existing businesses/houses within the project limits shall be identified on the plan drawings.
- Existing underground utilities shall be located and identified, including rim elevations and pipe inverts.
- Existing spot grades shall be obtained at 50-foot intervals for road edges and centerline, centerline of driveways and driveway edges, road intersection PC's, and other locations needed for design.
- All existing trees and improvements within the right-of-way and immediately adjacent to the right-of-way, shall be located and identified.
- Perform field engineering analysis to identify construction constraints, conditions and make engineering assessment of current conditions to support design initiatives.

### **PHASE II SERVICES – PRELIMINARY ENGINEERING (applies to both projects)**

- Prepare preliminary construction plans in accordance with City requirements (two different sets of documents). Construction plans to include the following:
  - Cover sheet, including location map
  - Existing Condition Plans including plan and profile
  - Existing and proposed roadway cross sections
  - Preliminary Paving Plans (Plan view and profiles as required) including utility adjustments/extensions
  - Preliminary Typical Detail sheet with existing and proposed cross-sections.
  - Standard Detail Sheet(s)
  - Preliminary Traffic Maintenance Plan (concept and/or narrative)
  - Preliminary Permanent Signing Plans
- Plan sheets will be drawn to a scale of 1"=30' horizontal and 1"=5' vertical. Quantity lists will be provided on each plan sheet
- Identify work items consistent with MDOT Standard Specifications for Construction and prepare preliminary Engineer's Opinion of Construction Cost.
- Coordinate project development with the City and other permitting agencies as required for project permits.
- Identify potential utility conflicts and coordinate with utility companies to resolve utility conflicts.
- Attend project design review meeting to present preliminary design and obtain critical feedback from City staff and departments.
- Attend public hearings, City Commission meeting, etc. as requested

### **PHASE III SERVICES – FINAL ENGINEERING (applies to both projects)**

- Prepare final construction plans in accordance with City requirements (two separate sets of documents). Construction plans to include the following:
  - Existing Condition Plans
  - Final Paving Plans (Plan view and profiles as required) including utility adjustments/extensions

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- Final Typical Detail Sheet with existing and proposed Cross-Sections.
- Standard Detail Sheet
- Final Traffic Maintenance Plan
- Final Permanent Signing Plans
- Identify work items consistent with MDOT Standard Specifications for Construction and prepare final Engineer’s Opinion of Construction Cost.
- Coordinate project development with the City and permitting agencies, as required for project permits. Apply for and obtain all required permits from permitting authorities.
- Prepare construction bid documents including modified Rochester Hills boiler plate, standard specifications for construction
- Submit 90% complete final design package to City for final review and comments.
- Make all necessary changes to final design documents and assist City with project bidding process
  - Review submitted bids for completeness and accuracy and prepare a bid tabulation sheet
  - Review references and prepare a letter recommending award to the desired contractor
- Attend project meetings as required to develop final design consistent with City requirements. Based on the work outlined above, we submit the following engineering fee for your approval:

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

**PROJECT 1 – OLD PERCH ROAD – AVON TO WALTON**

<u>WORK</u>	<u>ESTIMATED FEE</u>
Phase I – Pre-Engineering Services	\$16,272.00
Phase II – Preliminary Engineering Services	\$37,160.00
Phase III – Final Engineering Services	\$38,184.00
Reimbursable Expenses	\$1,000.00
<b>TOTAL NOT-TO-EXCEED AMOUNT PROJECT 1:</b>	<b><u>\$92,616.00</u></b>

We submit the following cost breakdown as evidence of our expected costs associated with the design of the project:

**PHASE I – PRE-ENGINEERING – OLD PERCH**

<u>Classification</u>	<u>Description of Work</u>	<u>Estimate Hours</u>	<u>Hourly Rate</u>	<u>Amount</u>
2 Person Survey Crew	Topographic Survey	48	\$139.00	\$ 6,672.00
Engineering Tech III	Topographic Survey	60	84.00	5,040.00
Engineer II	Field Review/Investigation	40	78.00	3,120.00
Associate	Field Review & Coordination	12	100.00	1,200.00
Principal	Coordination	2	120.00	<u>240.00</u>
<b>Subtotal Phase I</b>				<b>\$16,272.00</b>

**PHASE II – PRELIMINARY ENGINEERING – OLD PERCH**

<u>Classification</u>	<u>Description of Work</u>	<u>Estimate Hours</u>	<u>Hourly Rate</u>	<u>Amount</u>
Engineering Tech. III	Prepare Const. Drawings in CAD	140	\$ 84.00	\$11,760.00
Engineering Tech. III	Prepare Exhibits	60	84.00	5,040.00
Project Engineer	Design of Improvements	80	96.00	7,680.00
Associate Engineer II	Design of Improvements, etc.	56	100.00	5,600.00
	Quantities & Cost Estimate, etc.	60	78.00	4,680.00
Principal	Review & Coordinate	20	120.00	<u>2,400.00</u>
<b>Subtotal Phase II:</b>				<b>\$37,160.00</b>

**PHASE III – FINAL ENGINEERING – OLD PERCH**

<u>Classification</u>	<u>Description of Work</u>	<u>Estimate Hours</u>	<u>Hourly Rate</u>	<u>Amount</u>
Engineering Tech. III	Prepare Const. Drawings in CAD	140	\$ 84.00	\$11,760.00
Project Engineer	Design of Improvements	120	96.00	11,520.00
Associate Engineer II	Design, Specifications, etc.	60	100.00	6,000.00
	Quantities & Cost Estimate, etc.	68	78.00	5,304.00
Principal	Review & Coordinate	30	120.00	<u>3,600.00</u>
<b>Subtotal Phase III:</b>				<b>\$38,184.00</b>

**REIMBURSABLES – OLD PERCH**

Blueprinting, delivery charges, etc.	\$ 1,000.00
<b>Subtotal Reimbursables:</b>	<b>\$ 1,000.00</b>

**TOTAL NOT-TO-EXCEED AMOUNT PROJECT 1: \$ 92,616.00**

**PROJECT 2 – ADAMS ROAD PATHWAY – POWDERHORN RIDGE TO TIENKEN**

<u><b>WORK</b></u>	<u><b>ESTIMATED FEE</b></u>
Phase I – Pre-Engineering Services	\$8,674.00
Phase II – Preliminary Engineering Services	\$13,728.00
Phase III – Final Engineering Services	\$11,904.00
Reimbursable Expenses	\$500.00
<b>TOTAL NOT-TO-EXCEED AMOUNT PROJECT 2:</b>	<b><u>\$34,806.00</u></b>

We submit the following cost breakdown as evidence of our expected costs associated with the design of the project:

**PHASE I – PRE-ENGINEERING - ADAMS**

<u><b>Classification</b></u>	<u><b>Description of Work</b></u>	<u><b>Estimate Hours</b></u>	<u><b>Hourly Rate</b></u>	<u><b>Amount</b></u>
2 Person Survey Crew	Topographic Survey	30	\$139.00	\$ 4,170.00
Engineering Tech III	Topographic Survey	40	84.00	3,360.00
Engineer II	Field Review/Investigation	8	78.00	624.00
Associate	Field Review & Coordination	4	100.00	400.00
Principal	Coordination	1	120.00	<u>120.00</u>
<b>Subtotal Phase I</b>				<b>\$ 8,674.00</b>

**PHASE II – PRELIMINARY ENGINEERING - ADAMS**

<u><b>Classification</b></u>	<u><b>Description of Work</b></u>	<u><b>Estimate Hours</b></u>	<u><b>Hourly Rate</b></u>	<u><b>Amount</b></u>
Engineering Tech. III	Prepare Const. Drawings in CAD	40	\$ 84.00	\$ 3,360.00
Engineering Tech. III	Prepare Exhibits	12	84.00	1,008.00
Project Engineer	Design of Improvements	48	96.00	4,608.00
Associate	Design of Improvements, etc.	24	100.00	2,400.00
Engineer II	Quantities & Cost Estimate, etc.	24	78.00	1,872.00
Principal	Review & Coordinate	4	120.00	<u>480.00</u>
<b>Subtotal Phase II:</b>				<b>\$13,728.00</b>

**PHASE III – FINAL ENGINEERING - ADAMS**

<u>Classification</u>	<u>Description of Work</u>	<u>Estimate Hours</u>	<u>Hourly Rate</u>	<u>Amount</u>
Engineering Tech. III	Prepare Const. Drawings in CAD	40	\$ 84.00	\$ 3,360.00
Project Engineer	Design of Improvements	40	96.00	3,840.00
Associate	Design, Specifications, etc.	36	100.00	3,600.00
Engineer II	Quantities & Cost Estimate, etc.	8	78.00	624.00
Principal	Review & Coordinate	4	120.00	480.00
<b>Subtotal Phase III:</b>				<b>\$11,904.00</b>

**REIMBURSABLES - ADAMS**

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

**TOTAL NOT-TO-EXCEED AMOUNT PROJECT 2: \$ 34,806.00**

The work will be undertaken in accordance with our professional services agreement dated August 5, 2020, and we will proceed with the design work upon your authorization and complete the required construction documents within the following design development schedule:

Pre-Engineering Phase	Completed by August 31, 2020
Preliminary Engineering Phase	Completed by October 29, 2021
Final Engineering Phase	Completed by December 15, 2021
Permits	Completed by January 14, 2022
Bid Package Complete	Completed by January 31, 2022
Bids Received	February, 2022

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 our office. We look forward to working with you on this important project for the city.

Mr. Allan E. Schneck, P.E.  
City of Rochester Hills – City File Nos: E21-TBD  
Proposal #9-D518  
June 10, 2021  
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If you have any questions or require further information, please feel free to contact me.

Sincerely,  
Nowak & Fraus Engineers



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

Date: June 10, 2021

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: \_\_\_\_\_

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