

# CITY OF STEVENS POINT

## BOARD OF PUBLIC WORKS MEETING

Monday, October 8, 2018 – 6:00 p.m.

(or immediately following previously scheduled meeting)

Police Department – 933 Michigan Avenue

Stevens Point, WI 54481

## AGENDA

[A quorum of the City Council may attend this meeting]

### CONSIDERATION AND POSSIBLE ACTION ON THE FOLLOWING:

1. To accept the Director's Report and place it on file.
2. To accept the proposal from Gremmer & Associates for design assistance for the 2019 reconstruction project (Fifth Avenue and Pulaski Place) in the amount of \$137,910.
3. Adjournment.

Any person who has special needs while attending this meeting or needs agenda materials for this meeting should contact the City Clerk as soon as possible to ensure a reasonable accommodation can be made. The City Clerk can be reached by telephone at (715) 346-1569, or by mail at 1515 Strongs Avenue, Stevens Point, WI 54481

Copies of ordinances, resolutions, reports, and minutes of the committee meetings are on file at the office of the City Clerk for inspection during normal business hours from 7:30 A.M. to 4:00 P.M.

City of Stevens Point  
1515 Strongs Avenue  
Stevens Point, WI 54481



## Public Works

Engineering Department:  
Phone: 715-346-1561  
Fax: 715-346-1650

Streets Department:  
Phone: 715-346-1537  
Fax: 715-346-1687

October 3, 2018

DIRECTOR OF PUBLIC WORKS REPORT  
Scott Beduhn

### 1. Engineering Division

- **Sidewalk project – filling the gaps**
  - All concrete items for the 2018 Sidewalk Continuation Project is complete. The contractor is working to restore the surrounding lawns and terraces and pave any asphalt patches where new ramps were installed.
  - The Engineering Department continues to work on the 2019 Sidewalk Continuation project which will be District 7 in the vicinity of Amber Avenue and Windy Way.
  - The Engineering Department is also looking into Alder Dugan request to create a 2020 sidewalk project within District 8 in the area of Washington School.
- **Business 51 (Division Street) and North Point Drive Roundabout Project**
  - Prentice Street pavement from North Point Drive to Scholfield Avenue will be removed and new pavement put down beginning this week and as weather permits.
- **Stanley Street Improvements:**
  - This project is currently awaiting direction on the council's desired means of implementation and if the work is to be done utilizing an external contractor or, with the purchase of additional equipment, completed with internal staff.
- **TAP Grant**
  - A public informational meeting was held September 26, 2018 to provide the public with general information regarding the planned facility improvements. SEH will now work on preparing the preliminary design which will take several months to complete.
- **2018 Reconstruction Project: Isadore Street (Portage to Maria)**
  - All sanitary sewer has been installed and the contractor is working on the installation of storm sewer and water main. Concrete elements are also being installed in areas where utility work has been completed. All remaining utilities should be installed within the next week at which time the contractor will prepare the road surface for pavement. At this time construction remains on schedule for a later October completion.

- **East Park Commerce Center**
  - The 2018 infrastructure improvements project has been placed on hold due to a delay in the construction of the proposed O'so Brewery. The project is anticipated to be rebid this coming winter for an early spring construction start.
- **Full Depth Joint Repair**
  - The contractor is planning to begin work the week of October 8, 2018, weather permitting.
- **2019 Roadway Improvements**
  - The Engineering Department is already preparing for 2019 and 2020 reconstruction and resurfacing projects. 2019 projects currently include (pending budget approval):
    - Fifth Avenue and Pulaski Place (Second Avenue to Franklin Street)
      - Due to the amount of work we have in-house, staff has asked Gremmer & Associates for design assistance for this project.
    - Whiting Avenue (Water Street to Riverview Avenue)
    - Reserve Street (Ellis Street to Dixon Street)
- **Additional Ongoing Director\City Engineer\City Surveyor Projects:**
  - The Engineering Department continues to work on improving the decision making and planning for future capital projects. Staff is working to create prioritization tools for pavement rehabilitation activities.
  - The City Surveyor continues to work on several Certified Survey Maps for proposed and potential developments.
  - Engineering and Streets staff continue to look for other city infrastructure and service improvements, many to address alder and constituent questions and concerns. Some of the improvements staff is looking into include:
    - Pavement repair and installation of curbs along the radii of select rural cross-section roadways.
    - Shoulder repairs and shaping to preserve pavement and improve drainage.
    - Evaluate the potential need for additional pavement markings and signage at intersections to better delineate travel lanes to avoid confusion for travelers.

## 2. Streets Division

- **Street work**
  - Continued Garbage and Recycling operations.
  - Sign work continued.
  - Street lamp maintenance continued.
  - Building maintenance and repair.
  - Patching Continued.
  - Repairs of Snow Equipment Continued.
  - Concrete repairs continued.
  - Crack Fill Operations continued.
  - Re-Contoured SE Corner of Sandpiper and Brillowski.

- **Equipment maintenance/garage**

- There were a total of 130 repair orders completed in the month of September. When broken down by department there were;

Water	6
Engineering	1
Inspection	0
Police	8
Parks	36
Fire	5
Streets	74

- **Signs, posts, barricades, and flags**

- 60 signs were replaced or added, 30 were updated, 1 because of an accident, 13 were replaced, 4 were moved and 10 because of vandalism.
- 12 poles were replaced or added, 6 for usual maintenance, 4 were moved and 2 for vandalism.
- Trimmed branches that were blocking 2 signs.
- Put up and took down flags for Labor Day and September 11<sup>th</sup>.
- Set up road closure for Gus Maker.
- Replaced 14 walk/don't walk lights and replaced 1 green traffic light bulb.

- **Garbage/recycling/yard waste/drop-off**

- Garbage and recycling carts repaired/replaced/distributed as needed.
- Regular solid waste collection completed.
- Regular recycling collection completed.
- City drop-off operations were completed.

- **Leave**

- 3 funeral days, 9 days 6 hours sick, 52 days 4 hours of vacation and 2.5 hours of work comp. were utilized.

September 25, 2018

City of Stevens Point  
 1515 Strongs Avenue  
 Stevens Point, WI 54481

Attention: Mr. Scott Beduhn, Director of Public Works  
 Mr. Joel Lemke, Public Utilities Director

Subject: Agreement for Engineering Services  
 2019 Street Reconstruction Projects

Dear Mr. Beduhn and Mr. Lemke:

Thank you for the opportunity to work with the City of Stevens Point on the 2019 street reconstruction improvements project. We look forward to assisting the City with the design phase of this project and in providing quality, efficient, and personal service that you can expect when working with Gremmer & Associates.

The following is our Agreement to provide engineering services for the project. Hereinafter, the City of Stevens Point will be referred to as the OWNER, and Gremmer & Associates, Inc., as the ENGINEER.

**Project Description**

The proposed project is the reconstruction of various streets in the west central portion of the City of Stevens Point, including replacement of the existing sanitary sewer, watermain, and storm sewer systems. Following is a list of the proposed street improvements:

Street	Limits	Length
Sixth Avenue	Second St. to Union St.	1,020 LF
Fifth Avenue	Second St. to Pulaski Place (not including Union St. intersection)	1,504 LF
Third Street	Fourth Ave. to Sixth Ave.	1,020 LF
Meadow Street	Fourth Ave. to Fifth Ave.	352 LF
Pulaski Place	Franklin St. to Fifth Ave. (not including Fourth Ave. intersection)	914 LF
<b>Total</b>		<b>4,810 LF (0.91 miles)</b>

The streets will be replaced in-kind with generally the same horizontal and vertical alignments and widths. A segment of the Sixth Avenue and Pulaski Place will be 1' wider and a segment of Fifth Avenue will be 4' narrower. The sanitary and watermain facilities will be replaced in-kind, with generally the same locations and depths and some segments of upsizing. No proposed additional right-of-way needs are anticipated.

### **Scope of Work**

The following is our scope of work for the project described above. Items of work not specifically listed below are considered extra services.

#### **I. Design Phase**

- A. Survey** (all field work, survey data, and existing basemapping provided by the OWNER)
  - 1. Obtain data from OWNER
  - 2. Review/compile data for design
  - 3. Coordinate additional survey needs, if required, for OWNER to complete
  
- B. Preliminary Design**
  - 1. Administration and coordination
  - 2. Agency and utility coordination
    - a. City of Stevens Point
    - b. Adjacent property owners
    - c. WDNR - initial coordination
    - d. Utility coordination
  - 3. Reports
    - a. Soils Report (by subconsultant)
    - b. Erosion control report
    - c. Stormwater management report
  - 4. Preliminary plans
    - a. Typical sections (utilize sections provided by OWNER)
    - b. Utility plan & profiles
    - c. Storm sewer plan & profiles
    - d. Roadway plan & profiles
    - e. Cross sections
  - 5. Preliminary construction cost estimate
  
- C. Final Design**
  - 1. Final plans
    - a. Title sheet
    - b. General notes sheet
    - c. Project overview sheet
    - d. Typical sections
    - e. Construction detail sheets
    - f. Permanent signing and marking plan



- g. Erosion control plan
- h. Utility plan & profiles
- i. Storm sewer plan & profiles
- j. Roadway plan & profiles
- k. Cross sections
- 2. Traffic control
  - a. Construction phasing / staging / detour plans
- 3. Final construction cost estimate
- 4. Specifications and bidding documents
- 5. Project permits
- D. Meetings**
  - 1. Up to three design review / coordination meetings with OWNER and other project stakeholders
  - 2. Conduct one public involvement meeting

## **II. Bidding Phase**

### **A. Advertisement for Bids (utilizing Quest)**

- 1. Bidder coordination
- 2. Planholders' list

### **B. Bid Opening**

- 1. Bid reviews
- 2. Bid tabulations

### **C. Contractor Selection**

- 1. Contractor review
- 2. Recommend contractor

### **D. Construction Agreement**

- 1. Notice of award
- 2. Agreement execution
- 3. Notice to proceed

## **III. Construction Phase**

### **A. Preconstruction Meeting**

### **B. Construction Staking**

- 1. Initial reference staking
- 2. Utility staking
- 3. Storm sewer staking
- 4. Subgrade staking
- 5. Base staking
- 6. Curb & gutter staking
- 7. Misc. staking



**C. Construction Management**

1. Materials and testing
2. Observation
3. Quantities
4. Administration / pay requests
5. Project close out

**Assumptions / Additional Services**

The scope of work and design costs are based on the following assumptions:

1. Hazardous material investigations and reporting are not required and are considered extra services.
2. Archaeological and architectural/historical investigations, coordination, and reporting are not required and are considered extra services.
3. OWNER will provide all survey field work, survey data, existing basemapping, and additional survey work as required.
4. WDNR / ACOE coordination for wetland impacts and delineations are not required and are considered extra services.
5. Proposed right-of-way services are not required and are considered extra services. OWNER will determine the existing roadway right-of-way. Proposed right-of-way FEE, PLE, TLE, and legal description or easements are considered extra services.
6. Environmental studies, document, and coordination are not required and are considered extra services.
7. Currently project funding for design and construction are 100% City funds. WisDOT, other agency, or other funding design process requirements are considered extra services.
8. Existing sanitary sewer system will be replaced generally in-kind, with all gravity sewers and no lift station involvement. OWNER will provide any system modeling and proposed pipe sizing requirements.
9. Existing watermain system will be replaced generally in-kind with no booster pump requirements. OWNER will provide any system modeling, pressure/flow data, and proposed pipe sizing requirements.





10. For WNDR stormwater management purposes, this project is considered a recondition type improvement and is exempt from any post-construction stormwater requirements. Post-construction stormwater design and coordination is not required and is considered extra services.
11. The proposed horizontal alignment will be the same as the existing. Intersections will also remain the same for geometry and traffic conditions.
12. Existing stormwater and drainage outlet(s) are adequate and will remain. No additional discharge outlet research / reconnaissance is required and is considered extra services.
13. Traffic signal, street lighting and landscaping plans, design, and coordination are not required and are considered extra services.

**Owner’s Responsibility**

The OWNER will provide the following:

1. As-built plan data and previous right-of-way plats, if available.
2. Traffic counts / forecasts, if available.
3. Bicycle and pedestrian traffic amounts (existing / anticipated).
4. Review and approval of preliminary plans.
5. Payment of all review / advertisement fees.
6. Bidding documents requirements and City of Stevens Point standards.
7. Construction / contractor insurance requirements.
8. Adjacent property owner list / contact data.

**Compensation**

Following are our fees based on the above project description, scope of work, and assumptions:

<b>I.</b>	<b>Design Phase</b>	
	ENGINEER’s lump sum fee, including reimbursables:	\$134,000
<b>II.</b>	<b>Bidding Phase</b>	
	ENGINEER’S time and material costs, as requested by OWNER:	Hourly
<b>III.</b>	<b>Construction Phase</b>	
	ENGINEER’s time and material costs, as requested by OWNER:	Hourly
	<b>Soils Borings / Report</b>	
	(by subconsultant, Nummelin Testing), lump sum fee:	\$3,910



Services will be invoiced monthly by the ENGINEER based on the percent complete for lump sum services and for services provided for time and material cost services.

OWNER shall pay invoices within 30 days of receipt.

Time and material costs, and extra or additional services, if requested by the OWNER, shall be billed according to the attached Professional Services Fee Schedule, Exhibit A.

**General Terms and Conditions**

All services will be performed according to the attached Gremmer & Associates’ General Terms and Conditions, Exhibit B.

**Change of Scope / Project Schedule**

If the execution of this agreement is delayed past November 1, 2018, due to factors beyond the control of the ENGINEER, or if the OWNER changes the scope of the work, the ENGINEER and the OWNER will agree to renegotiate the timing and the compensation of this agreement.

Following is a proposed tentative project schedule based on a 2019 construction season:

<b>Task</b>	<b>Date</b>
Approved Engineering Agreement	October 16, 2018
Survey Review / Compile Basemapping	October 2018
Agency / Utility Coordination	October – December 2018
50% Preliminary Plans / Estimate	December 2018
90% Pre-final Plans / Estimate / Specs	January 2019
Final Bid Documents	February 2019
Project Bidding Phase	February – March 2019
Construction	Spring – October 15, 2019



**Authorization and Timing**

The receipt of a signed copy of this Agreement shall be considered as authorization to proceed with the services described. The ENGINEER will complete the work based on the schedule identified above.

If you have any comments, questions, or would like to meet to discuss our Agreement, please contact me at (715) 341-4363.

GREMMER & ASSOCIATES, INC.



David L. Glodowski, PE  
Project Manager

If this Agreement is acceptable, please sign below and return one copy to me for our files.

**Project: 2019 Street Reconstruction Projects**

\_\_\_\_\_  
Representative for City of Stevens Point

\_\_\_\_\_  
Date

\_\_\_\_\_  
Title

\_\_\_\_\_  
Representative for City of Stevens Point

\_\_\_\_\_  
Date

\_\_\_\_\_  
Title



**Exhibit A**



**PROFESSIONAL SERVICES FEE SCHEDULE**

**May 1, 2018 to April 30, 2019**

Project Manager .....	\$130.00/hour
Project Engineer / Senior Designer .....	\$115.00/hour
Civil Engineer V.....	\$102.00/hour
Professional Land Surveyor / Survey Crew Chief .....	\$95.00/hour
One-man Survey Crew with GPS / Robotic Total Station .....	\$120.00/hour
Civil Engineer IV / Engineering Specialist V .....	\$92.00/hour
Civil Engineer III / Engineering Specialist IV .....	\$84.00/hour
Civil Engineer II / Engineering Specialist III.....	\$78.00/hour
Civil Engineer I / Engineering Specialist II.....	\$73.00/hour
Engineering Specialist I / Civil Engineering Technician III .....	\$66.00/hour
Civil Engineering Technician II .....	\$60.00/hour
Civil Engineering Technician I .....	\$55.00/hour
Office Services.....	\$53.00/hour
Mileage.....	Current IRS rate
Meals, lodging, air travel, telephone, supplies, postage.....	At Cost
Printing Services (In-house)	
Photocopies (black & white) .....	\$0.10/impression
Photocopies (color) .....	\$0.25/impression
Large Format Plots (black & white) .....	\$1.00/S.F.
Large Format Plots (color).....	\$2.00/S.F.
Mylar.....	\$2.00/S.F.
Printing Services (Outside Service).....	At Cost
Expert Witness .....	\$200.00/hour

Note: Office Services, Civil Engineering Technician, and Engineering Specialist I-III are paid time and one-half their actual wage for overtime. The respective billed rate will be approximately 19% higher than the published rate to account for the overtime rate.



Exhibit B



**GENERAL TERMS AND CONDITIONS**

**May 1, 2018 to April 30, 2019**

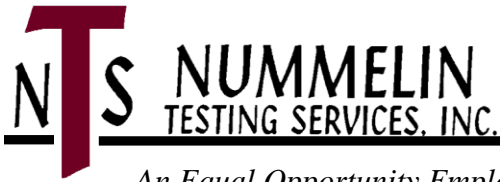
1. This agreement, upon execution by both parties hereto, can be amended only by written instrument signed by both parties. As the project progresses, facts uncovered may reveal a change in direction, which may alter the scope. Gremmer & Associates, Inc., will promptly inform the Owner in writing of such situations so that changes in this agreement can be negotiated as required. In the event the Owner orders additional work to be performed and a written instrument is not executed by both parties, the Owner shall be responsible for all costs associated with the additional work.
2. Costs and schedule commitments shall be subject to renegotiation for delays caused by the Owner's failure to provide specified facilities or information, or for delays caused by unpredictable occurrences, including without limitation, fires, floods, riots, strikes, unavailability of labor or materials, delays or defaults by suppliers of materials or services, shutdowns, acts of God or the public enemy, or acts or regulations of any governmental agency. Temporary delay of services caused by any of the above, which results in additional costs beyond those outlined, may require renegotiation of this agreement.
3. Payment is due to Gremmer & Associates, Inc., upon 30 days of receipt of the invoice for professional services rendered. Failure to make any payment when due is a breach of this Agreement and will entitle Gremmer & Associates, Inc., at its option, to suspend or terminate the Agreement and the provisions of the Scope of Work. Interest of 1.5 percent per month (18 percent per annum) will accrue on accounts overdue by 30 days.
4. The Owner shall make available to Gremmer & Associates, Inc., all relevant information or data pertaining to the project which is required to perform the Scope of Work.
5. Gremmer & Associates, Inc., will provide and exercise the standard of care, skill and diligence required by customarily accepted professional practices normally provided in the performance of the services at the time and the location in which the services were performed.
6. Gremmer & Associates, Inc., will maintain insurance coverage in the following amounts:

Worker's Compensation	Statutory
General Liability	
General Aggregate	\$2,000,000
Operations / Injury	\$1,000,000
Automobile Liability	
Liability / Injury	\$1,000,000
Property Damage	Value or Repair
Professional Liability Insurance	\$1,000,000
Umbrella Liability Insurance	\$2,000,000



7. Termination of the agreement by the Owner or Gremmer & Associates, Inc., shall be effective upon seven (7) days written notice to the other party. The written notice shall include the reasons and details for termination. Gremmer & Associates, Inc., will prepare a final invoice showing all charges incurred through the date of termination. The Owner agrees to pay Gremmer & Associates, Inc., for the services performed to the date of termination.
8. Gremmer & Associates, Inc., intends to serve as the Owner's professional representative for those services as defined in this agreement and to provide advice and consultation to the Owner as a professional. Any opinions of probable project costs, approvals, and other decisions made by Gremmer & Associates, Inc., for the owner are rendered on the basis of experience and qualifications and represent our professional judgment. The Owner recognizes that Gremmer & Associates, Inc., does not have control over the costs of labor, materials or equipment, or over competitive bidding methods. Accordingly, Gremmer & Associates, Inc., does not make any commitment or assume any duty to assure that bids or negotiated prices will not vary from any cost opinions prepared by Gremmer & Associates, Inc.
9. This agreement shall not be construed as giving Gremmer & Associates, Inc., the responsibility or authority to direct or supervise construction means, methods, techniques, sequence, or procedures of construction selected by contractor or subcontractors, or the safety precautions and programs incident to the work of the contractors or subcontractors.
10. The Owner releases Gremmer & Associates, Inc., from any liability and agrees to defend, indemnify and hold Gremmer & Associates, Inc., harmless from any and all claims, damages, losses, and/or expenses, direct or indirect, or consequential damages, including but not limited to attorney's fees and charges, and court and arbitration costs, arising out of, or claimed to arise out of, the performance of the services, except liability arising from the negligence of Gremmer & Associates, Inc.





An Equal Opportunity Employer

CENTRAL WISCONSIN AREA:
3217 Whiting Avenue
P.O. Box 127
Stevens Point, WI 54481
(715) 341-7974 • Fax (715) 341-8654

MADISON AREA:
5620 Woodland Drive
Waunakee, WI 53597
(608) 849-9120 • Fax (608) 849-9122

September 18, 2018

Gremmer & Associates, Inc
120 Wilshire Blvd
Stevens Point, WI 54481

NTS Proposal No: SP2018-0242

Attention: David Glodowski, PE
d.glodowski@gremmerassociates.com

RE: PROPOSAL - Subsurface Soil Investigation
2019 Stevens Point Roadway Projects
Stevens Point, WI

We are pleased to submit this proposal for the geotechnical subsurface soil investigation for the above-named project. If authorized, boring would begin within several days after utilities at the site have been marked, but would be dependent on weather. The final report will follow within two weeks of the completion of the borings. We propose to do the subject underground exploration and engineering report in accordance with the standard rates itemized below:

- 1. Soil borings: Perform nine soil borings, each to a depth of 15 feet, for a total of 135 feet of exploration. Standard penetration testing (SPT) will be performed in all borings according to ASTM D1586 every 2.5 feet in the top 10 feet, then every 5 feet thereafter. Estimate nine 15-foot borings @ \$180/boring. \$ 1620.00
Mobilization/demob of drill crew, rig, all materials to sites and return. Estimate 1 @ \$250/mobilization. \$ 250.00
The bore holes will be backfilled in accordance with DNR requirements. Estimate 135 feet @ \$4/ft. \$ 540.00
Additional standard penetration borings to depths of up to 15 feet will be performed at the rates shown in this quote. \$ 00.00
Drilling of bedrock or hard material (>50 blows/ft) with augers is not included in the above drilling costs, and will be performed at an additional rate of \$10/foot. Drilling will be terminated at auger refusal or scheduled boring depth, whichever occurs first. \$ 00.00
2. Contact of Diggers Hotline by NTS: Estimate 5 @ \$25/locate. \$ 125.00

A private utility locate is not included in this item but is recommended if private utilities occur at the site(s). NTS can subcontract a private utility locator at-cost if requested.

3.	Marking of boring locations by NTS: Estimate 1 marking by NTS @ \$100/marketing. A tape measure, wheel, or GPS unit will be used.	\$ 100.00
4.	Elevations of boring locations will not be determined by NTS Estimate 0 surveys @ \$300/survey. A temporary benchmark will be established, if necessary.	\$ 00.00
5.	Project coordination, administration, set-up and planning. Estimate 2 hour @ \$150/hr.	\$ 150.00
6.	Stand-by time associated with site access: Estimate 0 hours @ \$250/hour.	\$ 00.00
7.	Storm Water Infiltration Analysis: 0 borings @ \$150/boring.	\$ 00.00
8.	Penetration of concrete (10" or less): Estimate 0 @ \$30/ea.	\$ 00.00
9.	Traffic control, signs & cones only: Estimate 1 days @ \$150/day.	\$ 150.00
10.	Patches: Estimate 9 Cold-Mix Asphalt @ \$25/patch and 0 Concrete @ \$65/patch.	\$ 225.00
11.	Clean up and disposal of drill cuttings. Drill cuttings will be pushed off the pavement. No charge.	\$ 00.00
12.	Laboratory Analysis: None proposed.	\$ 00.00
13.	Per Diem (2 man crew): 0 days @ \$ 250/day.	\$ 00.00
14.	All-terrain vehicle: 0 days @ \$400/day.	\$ 00.00
15.	Engineering report to include, but not be limited to, a summary of findings and observations noted on the boring logs, interpretation of available project information, and recommendations regarding water table depth, modulus of subgrade reaction, site preparation, compaction, pavement design parameters, potential groundwater problems, and specialty concerns as needed. Estimate 1 report	\$ 750.00



@ \$750/report.

OTHER ITEMS OF CONCERN

16. This proposal assumes normal access to the boring locations with a truck-mounted drilling rig. If a rubber-tired ATV rig is required, contact Nummelin Testing Services, Inc for an additional estimate. No additional allowances are made for special site preparation to gain access with drill rigs. Nummelin Testing Services, Inc. will not be responsible for any tire ruts, tire marks, damage to any pavement surface or lawn, caused by the normal, prudent operation of a drill rig. One rig-day is assumed in the above estimate. Additional borings requiring a return to the site, may require an additional mob/demob charge. If a drill rig gets stuck, we will charge for all down time as stand-by time and we will charge the cost of any tow truck or bulldozer needed.
17. It is assumed that landowners will be contacted by others before arrival of the drill crew. The drill crew will attempt to contact owner/occupants before entering property, if requested. Telephone numbers of land owners/occupants would be helpful.
18. Mud-rotary drilling may be substituted for the hollow stem auger method if deemed necessary by Nummelin Testing Services, Inc.
19. Borings will be performed to the specified depth or to auger refusal. An attempt will be made to contact client if subsurface conditions may warrant a change in specified boring depth(s). Item 1 above includes costs for the maximum depth of boring anticipated. If shallower borings are performed, because of auger refusal or other reason, Nummelin Testing Services, Inc. will use their discretion when determining the final billing amount. Nummelin Testing Services, Inc. will contact client if cost of boring is anticipated to exceed this estimate.
20. A Monday-Friday daylight only working schedule will be employed. In the event of adverse weather conditions, Nummelin Testing Services, Inc. will use their discretion in scheduling borings.
21. Payment for this work will be due within thirty days after the submission of our invoice, following completion of the work. A service charge of 1.5% per month (18.0% per year) will be charged on all remaining balances.
22. The submitted quote will be valid for thirty days after the date of the submission of the proposal. Following the thirty days, we reserve the right to renegotiate the figures if the work has not been authorized within that time period.

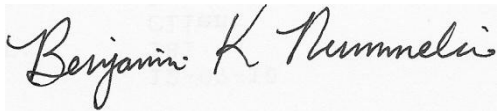
The work as itemized above will be accomplished for a lump sum total of **\$3,910.00**. If authorized, boring would begin within several days after utilities at the site have been marked, but would be dependent on weather. The final report would follow within two weeks of completion of the borings.

Our professional services will be performed, our findings obtained, and our recommendations prepared in accordance with generally accepted engineering principles and practices. No other warranty, either expressed or implied, is made.

We look forward to working with you on this project. Please let us know if you have any questions regarding this submittal. You may indicate your authorization for us to proceed with this work by signing one copy of this proposal and returning it to us.

Sincerely,

Authorized by:



Benjamin K. Nummelin, PE  
**NUMMELIN TESTING SERVICES, INC.**

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Printed Name and Title

\_\_\_\_\_  
Date

## **SUBSURFACE INVESTIGATION REPORTS**

A general overview of Subsurface Investigation Reports provided by Nummelin Testing Services, Inc. includes the following:

- i) Summary of Site Work: Standard Penetration Tests, Split Spoon Sampling, Water Table Measurements, Surface Conditions, General Area Topography
- ii) Records Review: Review Available Geological Maps Of Area, General Subsurface Conditions, Past Experiences In Area
- iii) Soil Profile: Review Boring Logs, Describe/Classify Soils
- iv) Site Preparation: Recommend Site Preparation, Grade Raising/Lowering, Soil Removal, Compaction Requirements
- v) Foundation: Recommend Foundation Types, Foundation Preparation
- vi) Pavement: Recommend Pavement Design, Sub-grade Preparation
- vii) Water Table: Drainage, De-watering, Excavation Below Water Table, Fluctuations
- viii) Soil Parameters: Estimate/Determine Soil Parameters, CBR, Lateral Earth Pressures, Soil Support Values, Soil Bearing Capacity, Pavement Design Group Index, Frost Susceptibility

Please note that some soil parameters are based on past experience with similar soils, therefore field/laboratory testing may not be required for each project. Where it is found that laboratory/field testing is required for a specific project, a per item cost will be included in the proposal or with client's approval performed at our current fee schedule rate.

Subsurface Investigation Reports are site specific. Each report may contain some, all, or more items than found in the preceding list. Other work performed as requested.