



GILES

ENGINEERING ASSOCIATES, INC.

GEOTECHNICAL, ENVIRONMENTAL & CONSTRUCTION MATERIALS CONSULTANTS

- Dallas, TX
- Los Angeles, CA
- Manassas, VA
- Milwaukee, WI

August 17, 2022

MSA
1230 South Boulevard
Baraboo, WI 53913

Attention: Mr. Zachary Adams
Graduate Engineer I

Proposal for: Geotechnical Engineering Exploration and Analysis
Proposed STH 113 Utility Improvements
City of Lodi, Wisconsin
Giles Proposal No. 1GP-2208043

Dear Mr. Adams:

Giles Engineering Associates, Inc. ("Giles") is pleased to submit this proposal to conduct a *Geotechnical Engineering Exploration and Analysis* for the proposed project. The *Geotechnical Engineering Exploration and Analysis* will include a geotechnical subsurface exploration program, geotechnical laboratory services, and geotechnical engineering. Service areas are briefly discussed herein and are based on our understanding and assumptions about the proposed project. The purpose of the *Geotechnical Engineering Exploration and Analysis* is to provide geotechnical-related recommendations for the proposed utility improvements. This proposal is based on the request for proposal (dated August 4, 2022) provided by MSA.

GEOTECHNICAL SUBSURFACE EXPLORATION PROGRAM

As requested, eight 15-foot test borings are planned to be conducted for the project. Therefore, the geotechnical subsurface exploration program will consist of ± 120 lineal feet of drilling and sampling. Depending on the subsurface conditions that are encountered, it might be necessary to perform additional test borings or extend the test borings deeper than planned. However, additional or deeper test borings will only be conducted after receiving authorization to proceed.

A Standard Penetration Test ("SPT") will be conducted at various depth intervals within each test boring for sample collection and to determine a Standard Penetration Resistance value ("N-Value"), used to develop geotechnical-related design parameters. Immediately after sampling, a select portion of each SPT sample will be placed in a container that will be sealed and labeled at the site for identification.

Boreholes from the test borings will be backfilled and will be capped with asphalt-concrete cold patch; however, the backfill materials might settle or heave, creating a hazard that can injure people and animals. Test boring areas should, therefore, be carefully and routinely monitored by the property owner or by others; settlement and heave of backfill materials should be repaired immediately. Giles will not monitor or repair boreholes.

Excess soil from the test borings will be left in the area of the test borings or will be hauled by wheelbarrow to a nearby location specified by our client. Offsite disposal of soil will be at an extra cost.

This proposal does not include the use of special OSHA or hazardous drilling techniques or drill-crew protection. Complete rights-of-entry and access to the site are expected to be provided to us and our subcontractors, if any, as a function of this proposal.

Prior to our fieldwork, Diggers Hotline®, the public utility locator service, will be contacted to “clear” the test boring areas for public utilities. Even with this service, “private” utilities (which are typically not identified by the public utility locator) could exist in the test boring areas. If desired, a private utility locator could be hired at an additional cost to help locate unknown private utility lines. Contact Giles for the cost of private utility locating, if desired. It is important to note that even with a private utility locator service, unknown private utilities could be damaged. Giles will not be responsible for damage to any unknown or unmarked underground utilities.

GEOTECHNICAL LABORATORY SERVICES

Soil samples that are retained from the test borings will be transported to Giles’ geotechnical laboratory where the samples will be classified using descriptive terms and particle-size criteria and by using the Unified Soil Classification System (ASTM D 2488) as a general guide. The classifications will be noted on *Test Boring Logs* that will be included in the geotechnical report, which is discussed below. Field-related information pertaining to the test borings will also be shown on the *Test Boring Logs*.

Giles’ “standard” testing program is planned for this project. This testing program consists of performing unconfined compression (without measured strain), calibrated penetrometer resistance, vane shear, and moisture content tests on select soil samples. Test results will be reported on the *Test Boring Logs* that will be included in the geotechnical report. Because SPT samples will be used, which are categorized as disturbed samples, results of the strength-related tests (unconfined compression, penetration resistance, and vane shear) will be approximate. If specialized laboratory testing is needed, it will only be conducted after receiving authorization to proceed.

GEOTECHNICAL ENGINEERING SERVICES

Results of the *Geotechnical Subsurface Exploration Program* and the results of the *Geotechnical Laboratory Services* will be used to develop geotechnical recommendations for the proposed project. The recommendations will be provided in a geotechnical report

that will be signed and sealed by a professional engineer. The report will include the following items, along with other recommendations that may be appropriate.

- A general description of the field and laboratory procedures will be provided in the report. The report will include a *Test Boring Location Plan*, which will illustrate approximate locations of the test borings.
- The report will include a general description of the subsurface conditions at the test boring locations, including the soil and groundwater conditions. Groundwater conditions will be estimated based on the colors and moisture conditions of retained soil samples and the depth to groundwater within the test borings, if groundwater is encountered.
- Geotechnical-related information will be provided regarding installation of the water piping.

SPECIAL CONSIDERATIONS

Field activities will be performed with a reasonable standard of care. However, because the test borings will be conducted using heavy drilling equipment, disturbance and damage to surface materials should be expected in grassy areas and where surface materials are soft, loose, or otherwise unstable. Surface materials might need to be repaired after the test borings are conducted. Giles will not repair damage/disturbance to landscaping or to other surface materials.

PROPOSED FEES

The total fee to perform the services outlined above is five thousand six hundred fifty-five and 00/100 dollars (\$5,655.00). Itemized costs are shown on the attached *Breakdown of Proposed Fees*. Additional work required over and above the proposed scope will be billed in accordance with the *Schedule of Standard Fees*. The attachments, listed below, are part of this proposed agreement.

SCHEDULE

Assuming we are authorized to proceed with the project between September 7 and 21, it is estimated that our fieldwork will be completed within about 10 to 15 business days and the geotechnical report will be issued within about 5 business days thereafter. However, the schedule depends on weather conditions, site access, and utility clearance. Giles will provide verbal updates during our services, if needed.



CLOSING

Thank you for the opportunity to offer our service. We look forward to working on the project. Please acknowledge receipt and acceptance of this proposal by signing and returning one copy for our files. The individual or individuals that sign this agreement on behalf of the client warrant that they are duly authorized agents of the client.

Respectfully submitted,

GILES ENGINEERING ASSOCIATES, INC.

Anthony C. Giles, P.E.
Vice President

ACCEPTED: CITY OF LODI

BY: _____
(Signature) (Printed Name)

TITLE: _____ **DATE:** _____

Enclosures: Breakdown of Proposed Fees; 1GP-2208043
Schedule of Standard Fees; 1GP-2208043
General Conditions; 1GP-2208043
Important Information about This Geotechnical Engineering Proposal

Distribution: MSA
Attn: Mr. Zachary Adams (zadams@msa-ps.com)



BREAKDOWN OF PROPOSED FEES

Geotechnical Engineering Exploration and Analysis

Proposed STH 113 Utility Improvements

City of Lodi, Wisconsin

Giles Proposal No. 1GP-2208043

DESCRIPTION	ESTIMATED QUANTITY	UNIT RATE	ESTIMATED TOTAL
GEOTECHNICAL SUBSURFACE EXPLORATION PROGRAM			
1. Mobilization/Demobilization of Drill Rig	1	\$450.00	\$450.00
2. Utility Clearance/Project Setup	Lump Sum	\$95.00	\$95.00
3. Soil Borings	120 LF	\$12.60/LF	\$1,512.00
4. Borehole Abandonment	120 LF	\$4.00 LF	\$480.00
5. Asphalt-concrete cold patch (per boring)	8	\$25.00	\$200.00
6. Additional SPTs	16	\$14.00	\$224.00
7. Traffic control	Lump Sum	\$1,300.00	1,300.00
Total Fee for Geotechnical Subsurface Exploration Program			\$4,261.00
GEOTECHNICAL LABORATORY SERVICES			
1. Visual Classification of Retained Soil Samples	48	\$3.00 each	\$144.00
2. Standard Laboratory Testing	Lump Sum	\$200.00	\$200.00
Total Fee for Geotechnical Laboratory Services			\$344.00
GEOTECHNICAL ENGINEERING SERVICES			
1. Report Review	1.5 hours	\$120.00/hour	\$180.00
2. Evaluation/Report Preparation	8.0 hours	\$100.00/hour	\$800.00
3. CAD	1.0 hour	\$70.00/hour	\$70.00
Total Fee for Geotechnical Engineering Services			\$1,050.00
TOTAL COST			\$5,655.00



SCHEDULE OF STANDARD FEES
Geotechnical Engineering Exploration and Analysis
Proposed STH 113 Utility Improvements
Lodi, Wisconsin
Giles Proposal No. 1GP-2208043
Page 1 of 3

I. CONSULTING - GEOTECHNICAL, ENVIRONMENTAL AND CONSTRUCTION MATERIALS

A) Principal of Firm	\$150.00/HR
B) Technical Consultant/Regional Manager I/Regional and Division Manager II	\$120.00/HR
C) Senior Professional/Project Manager I/Regional and Division Manager I.....	\$110.00/HR
D) Project Professional II (8+ years experience).....	\$100.00/HR
E) Project Professional I (4-8 years experience).....	\$90.00/HR
F) Staff Professional II (2-5 years experience).....	\$75.00/HR
G) Field Professional/Staff Professional I (0-3 years experience)	\$65.00/HR
H) Senior Field Technician.....	\$53.00/HR
I) Associate Field Technician.....	\$43.00/HR
J) Field Technician II	\$38.00/HR
K) Field Technician I	\$32.50/HR

II. SUBSURFACE EXPLORATION

A) Mobilization of Truck Mounted Drill Equipment (\$2.00/Mile One Way) Minimum.....	\$250.00 Lump Sum
B) Usage of All-Terrain Equipment (When Necessary for Access)	Quote/Project
C) Rental of Equipment for Access or Backhoe for Test Pits.....	Cost +15%
D) Moving Time (2 Hours + Between Borings) or Standby Time	\$125.00/HR
E) Per Diem (Site Over 75 Miles from Office) (Per Person).....	\$70.00/DAY
F) Support Vehicle Transportation.....	\$0.50/MI
G) Boring Layout and Approximate Elevations (Two-Member Crew) and Utility Coordination by Drilling Supervisor.....	\$65.00/HR
H) Drilling Overburden (N Less Than 100) Hole Advance by 3/4-inch I.D. or Smaller Hollow Stem Auger, Includes Soil Sampling with Standard Penetration Test (ASTM D-1586) Performed at 5-Foot Intervals	

DEPTH RANGE FEET	DRILLING UNIT PRICE (1)		ADDITIONAL SPT
	ORDINARY SOIL (2)	HARD SOIL (3)	
GS-20	\$12.60	\$14.60	\$14.00
20-40	\$13.30	\$15.30	\$17.00
40-60	\$14.00	\$16.00	\$20.00
60-80	\$14.70	\$16.70	\$22.00
80-100	\$15.40	\$17.40	\$25.00
100-120	\$16.10	\$18.10	\$28.00
120-140	\$16.80	\$18.80	\$31.00

- (1) Drive Casing and/or Wash Boring to Advance Borings \$4.00/LF Additional
- (2) Ordinary Soil: N Less Than 50 or qu Less Than 4.5 tsf
- (3) Hard Soil: N Greater Than 50 or qu Greater Than 4.5 tsf
- (4) Large H.S. Auger Surcharge
 - a) 4-inch I.D. \$1.00/LF Additional
 - b) 6-inch I.D. \$3.00/LF Additional
 - c) 12-inch I.D. by Special Hourly Rate

I) 2 1/2-inch Diameter Ring Sampling (Replacing SPT) Additional	\$4.00/EA
J) Undisturbed Tube Soil Sampling 2-inch O.D.	\$45.00/EA
(Piston Sampler \$40.00 Additional) 3-inch O.D.....	\$50.00/EA
K) Disturbed Soil Sampling (Bulk)	\$40.00/EA
L) Auger-Drilling (No Drive Samples, Auger Samples Only)	\$8.50/LF
M) Drilling and Sampling Rock and Overburden with N Greater Than 100 <ul style="list-style-type: none"> 1) Rock Boring (3-inch Rock Roller Bit) 2) Rock Coring (3-inch O.D. Diamond Bit-NX) 3) Rock Coring and Boring Set-Up Charge..... 	\$20.00/EA \$29.00/LF \$110.00/HOLE
N) Special Field Tests and Installation (Soil and Rock Instrumentation, etc.) <ul style="list-style-type: none"> 1) Drill Rig and Crew (Two-Member)..... 2) Supplies and Material..... 	\$125.00/HR Cost +15%
O) Pressuremeter Tests (Including Test Equipment and Operator, Drill Rig Billed Per Item II,P) (4 or Less Per Day)	\$400.00/EA
(More Than 4 Per Day)	\$300.00/EA

SCHEDULE OF STANDARD FEES
Geotechnical Engineering Exploration and Analysis
Proposed STH 113 Utility Improvements
Lodi, Wisconsin
Giles Proposal No. 1GP-2208043
Page 2 of 3

III. SPECIAL ENVIRONMENTAL SERVICES

A) Environmental Specialist (Engineer, Geologist, Hydrogeologist, Scientist) for Drilling Supervising, Well Development and Sampling.....	\$70.00/HR
B) Decontamination Support Vehicle.....	\$160.00/DAY
C) Use of Decontamination Equipment During Field Exploration.....	\$160.00/DAY
D) Drilling Equipment Decontamination Before/After Exploration.....	\$85.00 Lump Sum
E) Groundwater Monitoring Well Installation (Drilling and Soil Samples Cost Included Under Item II)	
1) 2-inch Diameter, 0.20 Machine Slotted PVC Screen with Threaded Connection, Filter Pack Around Screen and Bentonite Seal.....	\$22.00/LF
2) 2-inch Diameter Solid PVC Riser with Threaded Connection.....	\$18.00/LF
3) Bentonite/Cement Grout Slurry Backfill Around PVC Riser.....	\$4.00/LF
4) Well Security Caps and Flush Manhole Covers With Concrete Collars.....	\$160.00/EA
F) Asbestos Containing Material (ACM) Microscopic Identification (Including Appropriate Handling).....	\$55.00/EA
G) Volatile Organic Compound (VOC) Detection in Soil (Photoionization Detection (PID) Meter Calibrated to Benzene, Measuring in Parts per Million (ppm))	
1) Field.....	\$125.00/DAY
2) Lab.....	\$125.00 Lump Sum
H) DOT Approved Drilling Spoil Drums (55 Gallon) Left On-Site.....	\$45.00/EA
I) Borehole Impervious Backfill for Environmental Considerations	
1) 2¼-inch I.D. Hollow-Stem Auger.....	\$3.00/LF
2) 3¼-inch I.D. Hollow-Stem Auger.....	\$4.00/LF
3) Larger Diameter on Time and Materials Basis	
J) Monitoring Well Abandonment (Does Not Include Equipment Mobilization)	
1) 2-inch I.D. Well.....	\$3.50/LF
2) 3-inch I.D. Well.....	\$4.50/LF
3) Larger Diameter on Time and Materials Basis	

IV. SOIL LABORATORY TESTING SERVICES

A) Soil Preparation	
1) Extrude/Prepare Tube Sample for Testing and Classification.....	\$20.00/EA
2) Preparation of Remolded Specimen for Testing.....	\$35.00/EA
3) Preparation of Rock Core Samples for Testing.....	\$18.00/EA
B) Identification and Physical Properties	
1) Visual Classification by Geotechnical/Environmental Professional.....	\$3.00/EA
2) Moisture Content Determination (ASTM D-2216).....	\$4.00/EA
3) Unit Weight Undisturbed Sample.....	\$12.50/EA
4) Organic Content by Combustion (Loss-On-Ignition).....	\$40.00/EA
5) pH Determination by Meter or Litmus Paper.....	\$10.00/EA
6) Atterberg Limits	
a) Liquid Limit (ASTM D-423).....	\$35.00/TEST
b) Plastic Limit (ASTM D-429).....	\$35.00/TEST
c) Shrinkage Limit (ASTM D-427).....	\$40.00/TEST
7) Specific Gravity (ASTM D-854).....	\$50.00/TEST
8) Grain-Size Determination (Complete with Curve)	
a) Mechanical Analysis.....	\$45.00/TEST
Including Material Passing No. 200 Sieve.....	\$55.00/TEST
b) Hydrometer Analysis.....	\$50.00/TEST
c) Mechanical and Hydrometer Analysis (ASTM D-422).....	\$90.00/TEST
d) Material Passing No. 200 Sieve Only, No Curve (ASTM D-1140).....	\$30.00/TEST
9) Permeability (Reactive, Corrosive or Hazardous Fluid Additional \$150.00/TEST)	
a) Constant Head (Granular Soil) (ASTM D-2434).....	\$150.00/TEST
b) Constant/Falling Head (Rigid Wall Permeameter).....	\$175.00/TEST
c) Constant/Falling Head (Flexible Wall Permeameter).....	\$200.00/TEST
10) Moisture Density Relationship (Complete with Curve)	
a) Standard Proctor (ASTM D-698/AASHTO T-99).....	\$110.00/TEST
b) Modified Proctor (ASTM D-1557/AASHTO T-180).....	\$120.00/TEST
c) Maximum-Minimum Relative Density (ASTM D-2049).....	\$195.00/TEST
11) CBR or R-Value (Without Proctor or Other Associated Tests) (ASTM D-1883)/(California Test Procedure 301).....	\$195.00/TEST



SCHEDULE OF STANDARD FEES
Geotechnical Engineering Exploration and Analysis
Proposed STH 113 Utility Improvements
Lodi, Wisconsin
Giles Proposal No. 1GP-2208043
Page 3 of 3

IV. SOIL LABORATORY TESTING SERVICES (continued)

C) Strength and Compressibility	
1) Unconfined Compression	
a) Without Controlled Strain-SPT Soil Sample.....	\$3.00/TEST
b) Calibrated Penetrometer Resistance (Average of 3)-Soil.....	\$2.75/TEST
c) Controlled Strain with Stress-Strain Curve (Undisturbed Tube Soil Sample).....	\$45.00/TEST
d) Controlled Strain (No Curve) (Undisturbed Tube Soil Sample).....	\$30.00/TEST
e) Without Controlled Strain-Rock.....	\$50.00/TEST
2) Vane-Shear, Torvane (Average of 3)-Soil.....	\$3.00/TEST
3) Triaxial (Including 3 Mohr Circles)-Soil	
a) Unconsolidated-Undrained (U-U).....	\$500.00/SET
b) Consolidated-Undrained (C-U).....	\$600.00/SET
c) Consolidated-Drained (C-D).....	\$700.00/SET
4) Direct Shear (Including 3 Points)-Soil.....	\$250.00/SET
5) Consolidation-Soil (Including Curve)	
a) Conventional With Maximum 16 tsf Loading in 8 Increments and 4 Rebound Points.....	\$260.00/TEST
b) Additional Load Increments and Rebound Points.....	\$35.00/EA
c) Single Point.....	\$55.00/TEST
d) Collapse (Metastable Soil).....	\$75.00/TEST
6) Swelling Percent and Pressure of Expansive Soils.....	\$195.00/TEST
7) EI (Expansive Index) Test of Expansive Soils (UBC Standard 29-2).....	\$135.00/TEST

V. GENERAL NOTES (APPLICABLE TO ALL SERVICES)

Direct non-salary expenses for engineering and technical personnel charged at cost + 15%. Engineering services transportation time charged portal/portal and automobile travel at \$0.35/mile, other modes of transportation charged at cost + 10%. Normal construction monitoring services workday 7:00 a.m. to 5:00 p.m., overtime rates (150%) applicable for services performed outside these hours, over 8 hours per day, and Saturdays, Sundays and Holidays. Minimum monitoring fee 3 hours per trip.

Personnel compensation rates for court/arbitration related services for expert consultation in accordance with the rates indicated herein, with the exception of services performed in which the individual is placed in an adversary position such as testimony or deposition which will be charged at 150% of the standard hourly rates. A minimum \$1,000.00 retainer and an indemnification agreement are also typically required for these services.

Invoices submitted once a month during period of contract and/or at completion of our services. Payment is due 15 days after receipt of invoice. Invoices remaining unpaid beyond 30 days accrue interest at 1.5% for each month delinquent or at the maximum rate allowed by law. Reasonable attorney fees incurred to collect over due invoices will be reimbursed at cost. Litigation required to collect over due invoices will be filed in and under the laws of Waukesha County, Wisconsin.

Subsurface exploration unit rates include labor and materials incidental to usage of drilling equipment. Support services such as location and elevation surveys, clearance of utilities and permits charged at standard hourly rates and expenses at cost + 15%. Minimum drilling fee of \$795.00 per project. Soil drilling and rock coring charges based on nominal auger and diamond wear. Excessive wear due to hard and/or difficult formations charged at actual cost. Drilling and coring below 80-foot depth on hourly basis or at unit price quoted upon request.

Unit prices in this proposal remain in effect for 3 months after date of proposal and subject to change without notice thereafter.



**GENERAL CONDITIONS OF GEOTECHNICAL, DRILLING,
ENVIRONMENTAL AND/OR MATERIALS TESTING AGREEMENT**

Proposed STH 113 Improvements
Lodi, Wisconsin
Giles Proposal No. 1GP-2208043
Page 1 of 2

SECTION 1: FORMATION OF CONTRACT – These General Conditions shall be incorporated into and become a binding, integral part of any correspondence, proposal, or contract to which they are initially attached. Together they form an Agreement to be entered into by and between Giles Engineering Associates, Inc. (“Giles”) and the party for whom Giles is to perform its services (“Client”). Conflicting terms or conditions that appear on an acceptance copy of any Agreement document, or subsequently issued document, are hereby objected to and shall be invalid, unless accepted in writing by all parties to the Agreement. Ordering, reliance upon, or acceptance of Giles’ services by Client, including additional work orders, shall constitute Client’s acceptance of the terms of the Agreement, including these General Conditions, regardless of whether Client delivers an executed copy of the Agreement document prior to the commencement of Giles’ services. The Agreement, including these General Conditions, shall extend to the benefit of, and be binding upon, the successors, assigns, directors, officers, employees, agents, subcontractors, representatives, and consultants of Giles and Client. Client shall communicate these General Conditions to any third party or principal for whom, or to whom, Client conveys any part of Giles’ services. Giles shall have no duty or obligation to any third party or principal greater than what is set forth herein.

SECTION 2: SITE ACCESS AND PROPERTY CARE – Client will arrange right of entry for Giles to complete the services. Client warrants and represents that it has authority and permission to grant Giles access. Client will also arrange permission for Giles to photograph the site. Client will provide Giles with sufficient documentation to enable Giles to avoid trespass and damage to on-site, neighboring, restricted, or prohibited areas.

SECTION 3: DEGREE OF CERTAINTY IN MATERIALS TESTED – The locations and elevations of in-situ tests will be determined in accordance with the accuracy and proximity of survey control provided by Client or the contractor. Unless noted, locations and elevations will be determined by pacing and hand level methods. Observation and testing services will be provided in such a manner as to have reasonable certainty that the services essentially comply with project requirements.

SECTION 4: STANDARD OF CARE – Services performed under this Agreement will be conducted in a manner consistent with the level of care and skill ordinarily exercised by members of the profession currently practicing at this time, under similar conditions, and in the same locale. No other warranty, express or implied, is made.

SECTION 5: DELAY AND FORCE MAJEURE – Giles will be excused for delay in the performance of services under this Agreement if caused by acts of God; inclement weather; acts of utility companies, unions, organized labor, or inspectors; or other unforeseen contingencies; beyond Giles’ reasonable control.

SECTION 6: OWNERSHIP OF INSTRUMENTS OF SERVICE – All reports, boring logs, field data, field notes, laboratory test data, calculations, estimates and other documents prepared by Giles are instruments of service, remain the property of Giles, and are protected by copyright, trademark, and other proprietary rights provided under state and federal laws of the United States and/or foreign nations.

SECTION 7: DISPOSITION OF SAMPLES AND MATERIALS – Uncontaminated soil and rock samples will be held for thirty (30) days after the date of Giles’ report, unless advised otherwise by Client. Further storage or transfer can be negotiated at Client’s written request. Should samples and/or materials contain, or be suspected to contain, substances or constituents hazardous to health, safety, or the environment, as defined by applicable laws, Giles will return such samples and/or materials, to Client after completion of testing, or have them disposed of in accordance with applicable laws. Client agrees to pay all costs associated with the transportation and disposal, and storage beyond 30 days. Giles is acting as a bailee and assumes no title to such samples, materials, and/or waste.

SECTION 8: MOLD AND ASBESTOS-CONTAINING MATERIALS (ACM) EXCLUSION – Unless expressly provided, Giles’ scope of services does not include any investigation, analysis, consultation, or representation with respect to the risk, prevention, presence, or remediation of mold, mildew, fungi, spores, other microbes, or ACM. It is therefore agreed that Giles has no responsibility or liability for claims, damages, losses, or expenses attributable to any such exposure, contamination, growth, release, or dispersal.

SECTION 9: INSURANCE – Giles maintains a complete insurance package, including workman’s compensation, commercial general liability, and professional liability insurance. Giles also maintains contractors pollution liability coverage of \$5,000,000.00 for each pollution incident, with an annual aggregate limit of \$5,000,000.00. Certificates of insurance shall be provided upon request.

SECTION 10: LIMITATIONS OF LIABILITY – Client agrees to limit Giles’ total aggregate liability to Client and all construction contractors, subcontractors and those named on the project arising from Giles’ professional acts, errors or omissions, or breaches of contract to the lesser of either \$250,000.00 or four times Giles’ fee for services on the project.

SECTION 11: INDEMNIFICATION – To the fullest extent permitted by law, Client shall hold harmless, indemnify, and defend Giles from and against all claims and causes of action for bodily injury, death, and property damage that may arise from the performance of services under this Agreement, except where such bodily injury, death, or property damage arises directly from the sole negligence, errors, or omissions of Giles.

SECTION 12: LITIGATION SUPPORT – If Giles is required by operation of law, subpoena, or other legal process to appear, participate, or give testimony as an expert or fact witness, in any legal discovery, administrative, or court proceeding, as a result of the performance of services under this Agreement, Client agrees to compensate Giles pursuant to Giles’ current fee and rate schedule, and to reimburse Giles for all reasonable costs and expenses Giles may incur in connection with such activities, including the fees of any attorney that Giles may retain on its own behalf.



**GENERAL CONDITIONS OF GEOTECHNICAL, DRILLING,
ENVIRONMENTAL AND/OR MATERIALS TESTING AGREEMENT**

Proposed STH 113 Improvements
Lodi, Wisconsin
Giles Proposal No. 1GP-2208043
Page 2 of 2

SECTION 13: INVOICES AND PAYMENT – Payment of invoices is due upon receipt of invoice and is past due thirty (30) days from invoice date. Client agrees to pay a late payment service charge of 1½% per month, or 18% per year, for past due invoices. Client agrees the balance as stated on the invoice is correct, conclusive, and binding unless Client within ten (10) days from the date of invoice notifies Giles in writing of the item alleged to be incorrect. Should a dispute over payment arise, Client agrees to pay all invoiced amounts except those amounts in dispute; stipulates to using the Waukesha County Circuit Court, Wisconsin, as the venue; and agrees to pay all court costs and attorney fees associated with the collection of disputed sums. Attorney fees shall be at the actual cost or at Giles' in-house counsel rate of \$150.00 per hour.

SECTION 14: NOTICE OF LIEN RIGHTS – AS REQUIRED BY STATE CONSTRUCTION LIEN LAWS, OWNER IS HEREBY NOTIFIED THAT PERSONS OR COMPANIES FURNISHING LABOR OR MATERIALS FOR CONSTRUCTION ON OWNER'S LAND MAY HAVE LIEN RIGHTS IF NOT PAID. THOSE ENTITLED TO LIEN RIGHTS, IN ADDITION TO GILES, ARE THOSE WHO CONTRACT DIRECTLY WITH OWNER OR THOSE WHO GIVE OWNER NOTICE WITHIN SIXTY (60) DAYS AFTER THEY FIRST FURNISH PROFESSIONAL SERVICES. OWNER MAY NEED TO NOTIFY ITS MORTGAGE LENDERS OF THESE LIEN RIGHTS.

SECTION 15: TERMINATION – This Agreement may be terminated by either party upon seven (7) days written notice. In the event of termination, Giles shall be paid for all services performed prior to the termination date.

SECTION 16: GOVERNING LAW AND SURVIVAL – The laws of the State of Wisconsin will govern the validity of these terms, their interpretation, and performance. Client consents to venue in the Waukesha County Circuit Court, State of Wisconsin, for all claims and disputes. The terms of this Agreement shall survive the completion of Giles' services.

DRILLING or GEOTECHNICAL

SECTION 17: SITE ACCESS AND PROPERTY CARE – Giles will take reasonable precautions to minimize damage to the property. In the normal course of work, some damage may occur. The correction of such damage is not part of the Agreement, unless specified in the proposal. Giles will backfill borings and other types of ground penetrations. Soil backfill at access points and test locations may settle over time. Giles is not responsible for checking, maintaining, or repairing the backfill after leaving the project site.

SECTION 18: UTILITIES – Giles will contact the local one-call public utility locator service and take reasonable precautions to avoid damage or injury to identified underground public structures or utilities. Client shall provide any documents necessary or helpful in locating all private underground structures and utilities. Client shall assume responsibility for the accuracy of any information provided. Client agrees to hold harmless, defend, and indemnify Giles for any damages to underground structures and utilities, and any damage, injury, or death arising directly or indirectly there from, which were not identified on the documents furnished, or by local utility identification agencies.

SECTION 19: ENVIRONMENTAL – On Geotechnical projects, Environmental and Hazardous Materials will not be considered.

CONSTRUCTION MATERIALS TESTING

SECTION 20: RESPONSIBILITIES – The presence of Giles' field representative(s) will be for the purpose of providing observation and/or field testing. Giles' services will not include the supervision or direction of the work of the contractor or the contractor's employees or agents. Contractor should be so advised, and informed that neither the presence of Giles' field representative nor the observation and testing shall excuse contractor in any way for defects discovered in contractor's work. An opinion will be developed from observations and tests as to whether the work essentially complies with the project requirements.

SECTION 21: SAFETY – The construction contractor and/or owner shall, without limitation, assume sole and complete responsibility for job site conditions during construction of the project, including the safety of all persons and property. The trenching and shoring safety shall be the full responsibility of the contractor. If a geotechnical engineer (P.E., not a technician) is brought to the site for soils evaluation, we can make recommendations for the slope of the excavated trench walls. If not, the sloping of side walls, trenching and shoring safety shall all be the full responsibility of the contractor.

ENVIRONMENTAL

SECTION 22: HAZARDOUS MATERIALS – When hazardous materials are known, assumed, or suspected to exist at a site, Giles will take appropriate actions to protect the health and safety of personnel, to comply with applicable laws and regulations, and to implement procedures to minimize physical risks to employees and the public. Client must inform Giles of any known or suspected hazardous materials. The discovery of unanticipated hazardous materials constitutes a changed condition requiring renegotiation of the scope of services or termination of the Agreement. Client agrees to compensate Giles for additional costs of working to protect employee and/or public health and safety. Client waives any claim against Giles, and agrees to hold harmless, indemnify, and defend Giles from and against any claim or liability for injury, death, or loss arising directly or indirectly from the discovery of unanticipated hazardous materials. Client also agrees to compensate Giles for time spent, and expenses incurred, in defense of any such claim, based upon Giles' prevailing fee schedule and expense reimbursement policy relative to the direct project costs.

SECTION 23: GEOTECHNICAL – On Environmental and Hazardous Materials projects, Geotechnical issues will not be considered.

Important Information about This

Geotechnical Engineering Proposal

Subsurface problems are a principal cause of construction delays, cost overruns, claims, and disputes.

While you cannot eliminate all such risks, you can manage them. The following information is provided to help.

Participate in Development of the Subsurface Exploration Plan

Geotechnical engineering begins with the creation of an effective subsurface exploration plan. This proposal starts the process by presenting an initial plan. While that plan may consider the unique physical attributes of the site and the improvements you have in mind, it probably does not consider your unique goals, objectives, and risk management preferences. Subsurface exploration plans that are finalized without considering such factors presuppose that clients' needs are unimportant, or that all clients have the same needs. *Avoid the problems that can stem from such assumptions* by finalizing the plan and other scope elements directly with the geotechnical engineer you feel is best qualified for the project, along with the other project professionals whose plans are affected by the geotechnical engineer's findings and recommendations. If you have been told that this step is unnecessary; that client preferences do not influence the scope of geotechnical engineering service or that someone else can articulate your needs as well as you, you have been told wrong. No one else can discuss your geotechnical options better than an experienced geotechnical engineer, and no one else can provide the input you can. Thus, while you certainly are at liberty to accept a proposed scope "as is," recognize that it could be a unilateral scope developed without direct client/engineer discussion; that authorizing a unilateral scope will force the geotechnical engineer to accept all assumptions it contains; that assumptions create risk. *Manage your risk. Get involved.*

Expect the Unexpected

The nature of geotechnical engineering is such that planning needs to *anticipate the unexpected*. During the design phase of a project, more or deeper borings may be required, additional tests may become necessary, or someone associated with your organization may request a service that was not included in the final scope. During the construction phase, additional services may be needed to respond quickly to unanticipated conditions. In the past, geotechnical engineers commonly did whatever was required to oblige their clients' representatives and safeguard their clients' interests, taking it on faith that their clients wanted them to do so. But some, evidently, did not, and refused to pay for legitimate extras on the ground that the engineer proceeded without proper authorization, or failed to submit notice in a timely manner, or failed to provide proper documentation. *What are your preferences? Who is permitted to authorize additional geotechnical services on your project? What type of documentation do you require? To whom should it be sent? When? How?* By addressing these and similar issues sooner rather than later, you and your geotechnical engineer will be prepared for the unexpected, to help prevent molehills from growing into mountains.

Have Realistic Expectations; Apply Appropriate Preventives

The recommendations included in a geotechnical engineering report are *not final*, because they are based on opinions that can be verified only during construction. For that reason, most geotechnical engineering proposals offer the construction observation services that permit the geotechnical engineer of record to confirm that subsurface conditions are what they were expected to be, or to modify recommendations when actual conditions were not anticipated. *An offer to provide construction observation*

is an offer to better manage your risk. Clients who do not take advantage of such an offer; clients who retain a second firm to observe construction, can create a high-risk “Catch-22” situation for themselves. *The geotechnical engineer of record cannot assume responsibility or liability for a report’s recommendations when another firm performs the services needed to evaluate the recommendations’ adequacy.* The second firm is also likely to disavow liability for the recommendations, because of the substantial and possibly uninsurable risk of assuming responsibility for services it did not perform. Recognize, too, that no firm other than the geotechnical engineer of record can possibly have as intimate an understanding of your project’s geotechnical issues. As such, reliance on a second firm to perform construction observation can elevate risk still more, because its personnel may not have the wherewithal to recognize subtle, but sometimes critically important unanticipated conditions, or to respond to them in a manner consistent with your goals, objectives, and risk management preferences.

Realize That Geoenvironmental Issues Have Not Been Covered

The equipment, techniques, and personnel used to perform a geoenvironmental study differ significantly from those used to perform a geotechnical study. *Geoenvironmental services are not being offered in this proposal. The report that results will not relate any geoenvironmental findings, conclusions, or recommendations.* Unanticipated environmental problems have led to numerous project failures. If you have not yet obtained your own geoenvironmental information, ask your geotechnical consultant for risk management guidance. *Do not rely on an environmental report prepared for someone else.*

Obtain Professional Assistance To Deal with Mold

Diverse strategies can be applied during building design, construction, operation, and maintenance to prevent significant amounts of mold from growing on indoor surfaces. To be effective, all such strategies should be devised for the express purpose of mold prevention, integrated into a comprehensive plan, and executed with diligent oversight by a professional mold prevention consultant. Because just a small amount of water or moisture can lead to the development of severe mold infestations, a number of mold prevention strategies focus on keeping building surfaces dry. While groundwater, water infiltration, and similar issues may be addressed as part of the geotechnical engineering study described in this proposal, the geotechnical engineer who would lead this project ***is not*** a mold prevention consultant; ***none of the services being offered have been designed or proposed for the purpose of mold prevention.***

Have the Geotechnical Engineer Work with Other Design Professionals and Constructors

Other design team members’ misinterpretation of a geotechnical engineering report has resulted in costly problems. Manage that risk by having your geotechnical engineer confer with appropriate members of the design team before finalizing the scope of geotechnical service (as suggested above), and, again, after submitting the report. *Also retain your geotechnical engineer to review pertinent elements of the design team members’ plans and specifications.*

Reduce the risk of unanticipated conditions claims that can occur when constructors misinterpret or misunderstand the purposes of a geotechnical engineering report. Use appropriate language in your contract documents. Retain your geotechnical engineer to participate in prebid and preconstruction conferences, and to perform construction observation.

Read Responsibility Provisions Closely

Clients, design professionals, and constructors who do not recognize that geotechnical engineering is far less exact than other engineering disciplines can develop unrealistic expectations. Unrealistic expectations can lead to disappointments, claims, and disputes. To help reduce the risk of such outcomes, geotechnical engineers commonly include a variety of explanatory provisions in their proposals. Sometimes labeled “limitations,” many of these provisions indicate where geotechnical engineers’ responsibilities begin and end, to help others recognize their own responsibilities and risks, thus to encourage more effective scopes of service. *Read this proposal’s provisions closely.* Ask questions. Your geotechnical engineer should respond fully and frankly.

Rely on Your Geotechnical Engineer for Additional Assistance

Membership in the Geoprofessional Business Association (GBA) exposes geotechnical engineers to a wide array of risk management techniques that can be of genuine benefit to everyone involved with a construction project. Confer with a GBA-member geotechnical engineer for more information. Confirm a firm’s membership in GBA by contacting GBA directly or at its website.



8811 Colesville Road/Suite G106, Silver Spring, MD 20910
Telephone: 301/565-2733 Facsimile: 301/589-2017
e-mail: info@geoprofessional.org www.geoprofessional.org

Copyright 2015 by the Geoprofessional Business Association (GBA). Duplication, reproduction, copying, or storage of this document, in whole or in part, by any means whatsoever, is strictly prohibited, except with GBA’s specific written permission. Excerpting, quoting, or otherwise extracting wording from this document is permitted only with the express written permission of GBA, and only for purposes of scholarly research or book review. Only GBA-Member Firms may use this document as a complement to or as an element of a geotechnical engineering proposal or similar document. Any other firm, individual, or entity that so uses this document without being a GBA-Member Firm could be committing negligent or intentional (fraudulent) misrepresentation.