

### NASHnal Soil Testing, LLC.

23856 W. Andrew Road, Plainfield, IL 60585 Ph 630-780-5201, Fax 630-429-9099

Mr. Bruhl Thomas 7/10/2025

Proposal No. 2025-3495-011

City of Naperville-Department of Public Utilities (Electric) Proposal No. 2025-3495-011 1392 Aurora Ave.

Naperville, IL 60540 Phone: 630-305-5222

E-mail: <u>bruhlt@naperville.il.us</u>

RE: Proposal for the Geotechnical Exploration/Feasibility Study Services for the Meadows Substation located at 1087 E 75th Street in Naperville, IL-60540

Dear Mr. Thomas;

We are pleased to submit a proposal for this project. We have reviewed the scope of work you prepared and discussed the project with you as a basis for this proposal. Enclosed please find a description of our understanding of the project, and an estimate of our fee and our fee schedule.

NST is a full-service company, which provides geotechnical investigation, construction inspection, material testing and environmental services (Phase-I & Phase II) to clients in both the private and public sectors. Our principals have over 20 years of combined experience in the related fields. I personally am a registered professional engineer in over 7 states and have been providing subsurface soil investigations, construction inspection and material testing services to developers and contractors in multiple locations.

# **Project Description**

We understand that NASHnal Soil Testing, LLC (NST) will drill soil borings near existing three caissons at the Pebblewood Substation located at 1087 E 75th Street in Naperville, IL. As you have requested, to understand the subsurface soils profile, we will drill 3 soil borings to a depth of 40 feet each at approximately 20 feet away from the three (3) existing caissons at the locations marked by you in order to obtain preliminary geotechnical data to investigate the subsurface conditions.

It is important for you to understand that during the drilling and access to the proposed area, any the existing surface, landscaping and grass in the vicinity and the access area will be damaged by our equipment. NST should not be held responsible for the repair of the damaged grounds/grass and landscaping. Additionally, if due to any unforeseen conditions, additional trips are required to drill the job, an additional mobilization fee will be charged.



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## **Scope of Services**

As you requested, we will drill 3 soil borings to a depth of 40 feet each at approximately 20 feet away from the three (3) existing caissons at the locations specified by you. Our crew will determine the surface elevations at the boring locations referenced to a convenient benchmark on or near the site or by using GPS Coordinates.

Before we drill, we will contact J. U. L. I. E. to locate public underground utilities. J. U. L. I. E., does not charge for this service, but will also not locate private underground utility lines within the property. If there are private underground utility lines where we are to drill, we recommend that your organization contact a private locating company, which will charge for its services. At this time, we have not made an allowance for a private locating firm in our estimate of fees for this project. If we must contact a private locating firm or if private locating firm is hired, we would pass along their fees at cost plus 15%.

We will drill with hollow stem augers or solid stem augers, and sample by the split barrel method (ASTM: D 1586). Our crew will maintain logs noting the drilling and sampling methods and groundwater levels.

Representative samples of the recovered soil will be preliminarily classified in the field, sealed in jars to reduce moisture loss, and sent to our laboratory for testing and final classification by a Soil Engineer. Upon completion of drilling and groundwater measurements, we will backfill the boreholes with soil cuttings at your request and not by Bentonite Grout.

# **Laboratory Testing**

Our laboratory program will be initiated by a Geotechnical Engineer examining the recovered samples to determine the major and minor soil components. We anticipate performing routine testing including moisture content determination and unconfined compressive strength of cohesive samples (by hand penetrometer).

If special testing is required, such as Atterberg Limits tests, gradation tests, organic content tests, or consolidation tests, we would contact you to discuss a modification in the scope of work before proceeding. After completion of the laboratory testing, the Engineer will visually/manually classify each sample based on texture and plasticity in accordance with the Unified Soil Classification System and prepare the boring logs and the geotechnical report.



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## **Geotechnical Report**

In our report, we will provide the bearing capacity of the caissons and lateral resistance. We will not provide any construction recommendations or the structural capacity of the caisson concrete.

#### Fees

Representative samples of the recovered soil will be preliminarily classified in the field, sealed in jars to reduce moisture loss, and sent to our laboratory for testing and final classification by a Soil Engineer. Upon completion of drilling and groundwater measurements, we will backfill the boreholes with cuttings and plug the surface with bituminous cold patch, if required

Based on the scope of work described above, we will charge the following fees.

Drill Rig Daily Minimum charge	\$1,200.00
Mobilization/demobilization of equipment	\$ 600.00
3 borings, 120 total lineal feet of drilling, routine sampling	\$ 4,800.00
Laboratory testing of 48 samples (w% & Qp)	\$ 480.00
Laboratory testing of 6 samples (Unit Weight)	\$ 90.00
Geotechnical Exploration Report & logs	\$1,650.00
Sub Total Geotechnical Exploration	\$ 8,820.00



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If additional borings or deeper borings are needed, or if engineering and testing are requested beyond that required for preparation of the report (i.e., post-report consultation, report revision due to changes in building design or location, specification review, pre-bid or pre-construction meetings), the increase in our fees will be in accordance with the unit prices shown on the enclosed fee schedule. If additional trips are required to drill the job, an additional mobilization fee will be charged.

### **Work Schedule**

The utility locating will require three days following your authorization. We estimate that drilling will take one working day to complete. Laboratory testing will require an additional three days following drilling. We may submit copies of the boring logs at the completion of laboratory work and also provide verbal recommendations to the Structural Engineer to allow them to start on their design prior to receiving our formal report. Following completion of the testing, we would then prepare the soil report. We anticipate starting drilling sometime in the week of 8/3/2025, if that is not possible, we will inform you in writing.

### **Environmental Concerns**

This proposal is presented for engineering services to determine the structural properties of the soil at the specified site. This proposal does not cover an environmental assessment of the site, nor environmental testing of the soil or groundwater. Environmental services can be provided if you desire.



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#### Authorization

We are submitting this proposal in two copies for acceptance. When it is accepted, we ask that one copy be signed by an authorized representative of the party responsible for payment for these services, and that this copy be returned to us as our authorization to proceed.

We have enclosed with this proposal a copy of our General Conditions. The terms contained in the General Conditions are incorporated herein and are an integral part of this contract for professional engineering services. ACCEPTANCE OF THIS PROPOSAL BY AUTHORIZED SIGNATURE, VERBAL AUTHORIZATION, OR ISSUANCE OF A PURCHASE ORDER, INDICATES THAT YOU UNDERSTAND AND ACCEPT THE TERMS AND CONDITIONS CONTAINED IN THIS PROPOSAL, INCLUDING THE GENERAL CONDITIONS.

Mobilization/demobilization for 3 soil borings 120 lineal drilling and sampling, routine laboratory testing, and the geotechnical exploration report with logs \$8,820.00

If you have any questions regarding this proposal, please contact us.

Sincerely,
Engineering Testing Laboratories

Umar T. Ahmad, P.E.
Senior Project Engineer

Enclosures:
Important Information regarding your Geotechnical Engineering Proposal
General Conditions for Geotechnical Engineering

ACCEPTED

DATE:

FIRM: City of Naperville-Department of Public Utilities (Electric)

AUTHORIZED NAME:

WHEN ACCEPTED PLEASE SIGN THIS COPY AND RETURN IT TO OUR OFFICE. THANK YOU.

(Please print)

AUTHORIZED SIGNATURE:



#### IMPORTANT INFORMATION ABOUT YOUR GEOTECHNICAL ENGINEERING PROPOSAL

As the client of a consulting geotechnical engineer, you should know that site subsurface conditions cause more construction problems than any other factor. Following are some suggestions and observations to help you manage your risks.

#### **Have Realistic Expectations**

If you have not dealt with geotechnical issues before, recognize that site exploration identifies actual subsurface conditions only at those points where samples are taken, at the time they are taken. The data derived are extrapolated by consulting geotechnical engineers who then apply their judgment to render an opinion about overall subsurface conditions, how they will react to construction activity, and appropriate design of foundations, slopes, impoundments, and other construction elements. Even under optimal circumstances, actual subsurface conditions may differ from those inferred to exist, because no geotechnical engineer, no matter how qualified, and no subsurface exploration program, no matter how comprehensive, can reveal what is hidden by earth, rock, and time.

#### **Develop The Subsurface Exploration Plan With Care**

The nature of a subsurface exploration program - the types, quantities, and locations of procedures used plays a large role in determining the effectiveness of a geotechnical engineering report and the design based upon it. The more comprehensive a subsurface exploration plan, the more information it provides to the geotechnical engineer, helping the engineer reduce the risk of unanticipated conditions and the attendant risk of costly delays and disputes. Even the cost of subsurface construction may be lowered. Geotechnical design begins with development of the subsurface exploration plan, a task that should be accomplished jointly by you and/or your professional representatives and the geotechnical engineer. Mutual development helps assure that all parties involved recognize one another's concerns and the available technical options. Clients who develop a subsurface exploration plan without the involvement of their geotechnical engineers may be required to assume responsibility - and liability - for the plan's adequacy.

#### **Read General Conditions Carefully**

Most consulting geotechnical engineers include their standard general contract conditions in their proposals, and it is common for one of these conditions to limit the engineer's liability. Known as risk allocation or limitation of liability, this approach helps prevent problems to begin with, and establishes a fair and reasonable framework for handling them should they arise.

Various other elements of the general conditions explain the geotechnical engineer's responsibilities, in order to help prevent confusion and misunderstandings, and assist all parties in recognizing who is responsible for different tasks.

In all cases, read the geotechnical engineer's general conditions carefully. Speak with the geotechnical engineer about any questions you may have.

#### Have The Geotechnical Engineer Work with Other Design Professionals

Costly problems can occur when other design professionals develop their plans based on misinterpretations of a geotechnical engineering report. To help avoid misinterpretations, retain your geotechnical engineer to work with other project design professionals who are affected by the geotechnical report. Ask the geotechnical engineer to explain report implications to those design professionals affected by them, and to review other design professionals' plans and specifications to consider the manner in which they have incorporated geotechnical issues. Although other design professionals may be familiar with geotechnical concerns, none knows as much about them as a competent geotechnical engineer.

#### Realize That Environmental Issues Have Not Been Addressed

If you have requested a geotechnical engineering proposal, it will not include services needed to evaluate the likelihood of the site being contaminated by hazardous materials or other pollutants. Given the liabilities involved, it is prudent practice always to have a site reviewed from an environmental viewpoint. A geotechnical engineer cannot be responsible for failing to detect contaminants when the services needed to perform that function are not being provided.



#### GENERAL CONDITIONS FOR GEOTECHNICAL ENGINEERING

#### I. Scope of Work,

NASHnal Soil Testing, LLC (hereinafter called NST) shall perform the services defined in this contract and shall invoice the client for those services at the rates shown on the attached FEE SCHEDULE. Any estimate of cost to the Client as stated in this contract shall not be considered as a firm figure, but only as an estimate, unless otherwise specifically stated in the contract. NST will provide additional services under this contract, as required to complete the engineering assignment, and/or as authorized by the Client and requested by the Client with charges for those additional services at the stated rates.

#### II. Soil Boring Locations and Elevations

It is desirable for NST to use its expertise in determining the number, depth, and locations of borings. However, it is understood that the Client may specify the number, location, or depth of borings. NST agrees to follow the Client's specifications to the extent practical. If the Client specifies the number, depth or locations of borings, Client agrees to accept the risk associated therewith, and agrees to indemnify and hold harmless NST from the claims of others arising there from. To the extent that the Client does not specify the number, locations, or depth of borings, such will be selected by NST personnel. NST will determine the ground surface elevations at the boring locations. If a benchmark is not available on the site, the elevations may be estimated from the topographic map (if one is provided). In using survey data provided by the Owner (for horizontal and vertical control), NST assumes no liability or responsibility to verify the accuracy of the survey data; we assume the survey data and/or benchmark elevations are correct as given. When NST uses a benchmark provided by the local municipality, county, or the state, we likewise assume no liability or responsibility in verifying the correctness of the elevation.

Since NST does not practice in the profession of land surveying, boring locations will be located in the field within the accuracy feasible. When the property lines are not surveyed and staked it may be necessary to approximately locate the borings by reference to available landmarks and landforms. In some cases, NST will request the Owner to either survey the boring locations before drilling starts, or after the completion of drilling. Such surveying will be carried out at no cost to NST. The boring locations shown on the Soil Boring Location Diagram are to be considered as approximate locations only.

#### III. Access to Site

Unless otherwise agreed, the Client will furnish NST with right-of-access to the site in order to conduct the planned exploration or field service. NST will take reasonable precautions to minimize damage due to its operations. NST has not included in the estimated charges the cost of restoration of any damage resulting from the operations, and will not be liable for such damage, If the Client directs, NST will restore the site and add the cost of restoration to the charges in accordance with personnel and equipment rates indicated on the FEE SCHEDULE.

#### IV. Utilities

In the prosecution of the work, we will take reasonable precautions to avoid damage or injury to subterranean structures or utilities. The client agrees to hold us harmless for any damages to subterranean structures, which are not called to our attention and correctly shown or described on the documents furnished.

#### V. Discovery of Unconfirmed Pollution, Notification to the State

If we observe a substance at the ground surface, in a boring or an excavation, or if we observe a substance in contact with or within the groundwater, which in our professional opinion could potentially pollute surface waters or the groundwater, there is a legal obligation to notify the State of Illinois Emergency Management Agency, in accordance with the provisions of Title 29, Chapter I, Subchapter D, Part 430, (29-IAC-430) "Emergency Response." It is our understanding that this notification must be "immediate," usually interpreted by the Agency to be within 24 hours. We will attempt to notify you, our Client, first to have you do the notification, but if you do not assure us that you will do so, or if we are unable to communicate with you, we will then be obligated to notify the State directly. The requirements of this statute supersede the usual practice of client confidentiality, and Client agrees to hold NST harmless from any consequences arising from such notification.

#### VI. Invoices

a. Invoices will be submitted once a month or services performed during the prior month, Payment is due upon presentation and is past due alter thirty (30) days of receipt of the invoice, unless specifically arranged otherwise in writing. The Client shall provide NST with a clear written statement within fifteen (15) days after the invoice date of any questions with respect to the invoice. Failure to provide NST with a clear written statement within fifteen (15) days shall constitute acceptance of an invoice as submitted. The Client agrees to pay a finance charge of one and one-half percent (1'12%) per month eighteen percent (18%) annually on past due accounts but not to exceed the maximum rate by law. The billing rates as described in the Agreement will be increased on the anniversary of the effective date of this agreement.

b. The Client's obligation to pay for the work contracted is in no way dependent upon the Client's ability to obtain financing, zoning, approval of governmental or regulatory agencies, final adjudication of a lawsuit in which NST is not involved, or upon the Client's successful completion of the project. It is agreed that all expenses incurred by NST in liens or collecting a delinquent amount, including but not limited to reasonable attorneys' fees, financial charges, witness personnel, document duplication, organization and storage costs, court costs, travel and subsistence, shall be paid to NST by the Client in addition to the delinquent amount.

#### VII. Ownership of Documents

NST will furnish two (2) copies of each report to the Client. The Client will be billed for additional copies at the cost of \$25.00 per copy.

All reports, boring logs, field data, field notes, laboratory test data, calculations, estimates, and other documents prepared by NST, as instruments of service, shall remain the property of NST.

Client agrees that all reports and other work furnished to the Client or his agents who are not paid for, will be returned upon demand, and will not be used by the Client for any purpose whatsoever.

NST will not retain any records relating to the services performed following submission of the report.