



# SOIL ENGINEERING AND TESTING CONSULTANTS

411 West Walnut Street, Mount Prospect, Illinois 60056

P: (224) 636 7639 F: (224) 636 7641

## Subsurface Exploration, Geotechnical Engineering and Environmental Services Proposal

Eisenhower Elementary School  
Proposed Addition and Renovations  
1 North Schoenbeck Road  
Mount Prospect, Illinois 60056

SET Proposal No. 1833  
September 22, 2023

**Prepared by:**

Peter Triantafillos, P.E.  
Vice President

Soil Engineering and Testing Consultants, LLC  
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Mount Prospect, Illinois 60056  
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F: 224 636 7641



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September 22, 2023

Sent via e-mail: joe@nicholasquality.com

Mr. Joe Papanicholas  
Vice President  
Nicholas & Associates, Inc.  
1001 Feehanville Drive  
Mount Prospect, Illinois 60056

Re: Subsurface Exploration, Geotechnical Engineering and Environmental Services Proposal  
Eisenhower Elementary School – Proposed Addition and Renovations  
1 North Schoenbeck Road, Mount Prospect, Illinois 60056  
SET Proposal No. 1833

Dear Mr. Papanicholas:

Soil Engineering and Testing Consultants, LLC (SET Consultants) is pleased to provide you with this proposal for Subsurface Exploration, Geotechnical Engineering and Environmental Services for the above-referenced project. Our scope of work and associated not-to-exceed, fixed-fee price is based on information provided by Nicholas & Associates, Inc. (Nicholas) in e-mail dated September 20, 2023 that included a project location site plan exhibit provided by ARCON Associates, Inc. showing the proposed building addition and soil boring locations at Eisenhower Elementary School (referred to as "Site").

Our services will be provided in accordance with the attached scope of work for professional services. We have prepared a not-to-exceed lump sum budget for the project based on the number soil borings and associated depths and request for Site environmental sampling and chemical analyses to characterize Site fill soils for handling, off-site transportation and disposal. The drilling and chemical analytical services presented in this proposal will be performed by a fully-equipped geotechnical drilling company and an Illinois Environmental Protection Agency (IEPA)-accredited laboratory and sub-consultants to SET Consultants. The scope of geotechnical laboratory services presented in this proposal will be performed exclusively by SET Consultants.

If you find this proposal acceptable please execute a copy of the proposal and return one signed original to SET Consultants to formally authorize our services. Electronic correspondence is acceptable. We request a signed contract be provided to us to begin our services. If you have any questions or comments please contact the undersigned. We look forward to working with you on this project.

Respectfully,

Peter Triantafillos, P.E.  
Vice President

Raul E. Dilig  
President

Responsible for payment and accepted by:

Signature: \_\_\_\_\_

Name (please print): \_\_\_\_\_

Title (please print): \_\_\_\_\_

Firm (please print): \_\_\_\_\_

Date: \_\_\_\_\_

**SUBSURFACE EXPLORATION, GEOTECHNICAL ENGINEERING  
AND ENVIRONMENTAL SERVICES PROPOSAL  
EISENHOWER ELEMENTARY SCHOOL – PROPOSED ADDITION AND RENOVATIONS  
1 NORTH SCHOENBECK ROAD, MOUNT PROSPECT, ILLINOIS 60056  
SET PROPOSAL NO. 1833**

**PROJECT DESCRIPTION**

Based on the information and soil boring locations exhibit provided in e-mail correspondence received on September 20<sup>th</sup>, SET Consultants understands that a proposed one-story building addition with an approximate building footprint of 19,000 square feet is to be located east and south adjoining the existing Eisenhower Elementary School building and will consist of new classrooms and a multipurpose room. The proposed construction will consist of conventional shallow spread footings and continuous wall footings, exterior and interior load bearing masonry walls, and open web steel roof joints and metal deck. Additionally, site work consisting of the construction of new parking lot areas and drive lanes along with renovations of the existing playground and baseball field areas will take place east of the existing school building.

A total of eight (8) geotechnical soil borings have been proposed to be advanced within the proposed building addition footprint at the Site. Seven (7) additional soil borings have been proposed to be advanced within the proposed new parking lot areas and existing playground and baseball field areas. Nicholas & Associates is requesting subsurface exploration at the Site in order to assess soils for geotechnical considerations and to assist with the design stage for this project. In addition to the geotechnical soil and groundwater information collected for this project, it is assumed surplus soils will be generated during the planned construction and will need to be removed from the Site. Site fill soil characterization consisting of discrete environmental soil sampling and analyses will be conducted at one (1) of the geotechnical soil boring locations for IEPA LPC-663 Form filing process for acceptance of soils at a regulated uncontaminated fill soil disposal facility.

**SCOPE OF SERVICES**

The scope of work for this project will involve advancing a total of 15 soil borings at the Site using conventional hollow-stem auger drilling and split-spoon sampling. Based on what is known about the Site from the building addition location exhibit provided and on-line aerial photographs, the following is a description of the scope of services SET Consultants will provide for this project. Services not listed or that are requested during the project can be quoted upon request.

**Task A – Perform Subsurface Exploration**

- Prior to performing subsurface exploration activities, the geotechnical drilling company retained by SET Consultants will contact JULIE, the State of Illinois one-call dispatcher, to facilitate underground utility locating at the Site.
- The geotechnical soil borings will be placed within the proposed building addition footprint and existing playground and baseball field areas according to the soil boring location exhibit received by e-mail on September 20<sup>th</sup>.
- Soil drilling will be conducted using either a Central Mine Equipment (CME) or a GeoProbe™ drill rig outfitted with conventional hollow-stem augers and split-spoon sampler.

- A total of 15 geotechnical soil borings will be advanced to meet the scope of services. Eight (8) soil borings will be advanced within the proposed building addition footprints, located at each corner and within the center portions of the proposed building footprint as shown on the provided soil boring location exhibit. Seven (7) soil borings will be advanced to a maximum depth of 20 feet below ground surface (bgs), while one soil boring to be situated within the center portion of the building footprint will be advanced to a maximum depth of 40 feet bgs. These eight geotechnical soil borings will amount to 180 feet in total drilling.
- Four (4) soil borings will be advanced within the proposed new parking lot and drive lane areas, and three (3) additional soil borings will be advanced within the existing playground and baseball field areas. Each of these five soil borings will be advanced to a maximum depth of 15 feet below ground surface, and will amount to 105 feet in total drilling.
- The 15 total soil borings proposed for this subsurface investigation will amount to 285 feet in total drilling.
- Soil samples will be collected at 2.5 foot and 5 foot depths, placed in glass sample jars, and returned to the laboratory for testing. In addition, visual classification and estimated unconfined compressive strength testing of cohesive soils will be performed on 0.5 foot soil sample intervals in the field.
- Soil cuttings will be used to backfill the soil boring holes, and if needed, bentonite chips will be added to the boreholes and hydrated to restore the borehole to existing ground surface.
- The boreholes will be completed using soil cuttings or other like material.

#### **Task B – Soil Laboratory Testing**

- Perform soil classification according to the Unified Soil Classification System (USCS).
- Perform soil moisture content testing per ASTM 2216 - Standard Test Method for Moisture Content.

#### **Task C – Soil Boring Logs and Engineering Report**

- Soil boring logs will be drafted after the laboratory testing is completed and a subsurface exploration and geotechnical engineering report will be prepared. The geotechnical report will consist of the following: Project description, purpose and scope of services; Site description and physical setting; field and laboratory methods of sampling and testing; soil profile descriptions and groundwater observations; soil boring locations diagram; foundation and pavement recommendations; and, general construction considerations.

#### **Task D - Environmental Soil Characterization and LPC-663 Form Filing**

- SET Consultants understands that during the construction activities on-site surplus soil material may need to be hauled from the Site. Before soils are removed from Site an IEPA Uncontaminated Soil Certification Form LPC-663 will be need to be completed and signed by an Illinois P.E. for acceptance at one of the regulated fill soil disposal sites.
  
- The following scope of services will be conducted by SET Consultants:
  - Obtain one (1) discrete soil sample for laboratory analytical testing. Discrete environmental soil sampling will be conducted at one (1) of the geotechnical soil boring locations at an approximate depth between 3-to-5 feet below surface grade within the proposed building addition footprint.
  - Prepare and submit the soil sample to an IEPA-accredited analytical testing laboratory for analyses of volatile organic compounds (VOCs); semi-VOCs; organochlorine pesticides; polychlorinated biphenyls (PCBs); Resource Conservation and Recovery Act (RCRA) total metals; total Cyanide; and, pH.
  - Compare the analytical testing results to the Maximum Allowable Concentrations (MAC) look-up table to determine if the soil is uncontaminated and can be disposed of as fill material at regulated fill soil disposal operation.
  - If the soil concentrations are below MAC values and the soil pH falls within the acceptance range then compliance is met and the LPC-663 Form can be completed and signed.
  - A letter report will be delivered that will include Site physical setting, field activities, analytical testing results and comparison to MAC; and if the analytical data comparison meets compliance then a signed LPC-663 Form will be included.
  - If the analytical testing results and MAC comparison does not meet compliance then the LPC-663 Form will not be signed. In lieu of the completed LPC-663 Form with the report, SET Consultants will provide recommendations on soil management practices including handling, waste profiling, transportation and disposal at a Subtitle D landfill.
  
- Assumptions for this task are as follows:
  - The laboratory analyses of the soil sample will be completed within standard (7-to-10 business day) turn-around time (TAT). If expedited TAT is requested for the laboratory analyses then additional fees will be charged to the project.
  - If additional soil chemical analyses are needed such as metals leaching using Toxicity Characteristic Leaching Procedure (TCLP) to pass MAC comparison and issue LPC-663 Form then additional fees will be charged to the project.
  - The services to be provided does not include the scope of work or the associated costs for soil management, waste profiling and procurement of contractors for the handling, transportation and disposal of soils at either a regulated, uncontaminated fill soil disposal site or Subtitle D landfill.

**LUMP SUM COST & PROJECT ASSUMPTIONS**

SET Consultants will execute the anticipated scope of work outlined in the proposal (Tasks A through D) for a not-to-exceed, fixed-fee price of either **\$13,555.00 (Option 1)**, or **\$15,265.00 (Option 2)**. Our fixed-fee price breakdown by task is below along with project assumptions, field and deliverable schedule. Additional charges may be accrued to the project from out-of-scope requests by Client or Client’s representative, changed Site conditions, or other unforeseen conditions that SET Consultants cannot control such as Site access issues.

Task A - Perform Subsurface Soil Borings (3 field days; 285 feet total drilling)	
<i>Drilling Sub-Consultant (includes mobilization fees)</i>	\$ 7,410.00
<i>Visual Classification &amp; Unconfined Strength Testing</i>	\$ 900.00
Task B - Soil Laboratory Testing	\$ 1,045.00
Task C - Soil Boring Logs and Engineering Report	\$ 2,000.00
Task D – Environmental Soil Characterization and LPC-663 Form Filing (1 Location)	<u>\$ 2,200.00</u>
<b>OPTION 1 - TOTAL FIXED-FEE PRICE (WEEKDAY WORK)</b>	<b>\$ 13,555.00</b>

Task A - Perform Subsurface Soil Borings (3 field days; 285 feet total drilling)	
<i>Drilling Sub-Consultant (includes mobilization fees)</i>	\$ 9,120.00
<i>Visual Classification &amp; Unconfined Strength Testing</i>	\$ 900.00
Task B - Soil Laboratory Testing	\$ 1,045.00
Task C - Soil Boring Logs and Engineering Report	\$ 2,000.00
Task D – Environmental Soil Characterization and LPC-663 Form Filing (1 Location)	<u>\$ 2,200.00</u>
<b>OPTION 2 - TOTAL FIXED-FEE PRICE (WEEKEND WORK)</b>	<b>\$ 15,265.00</b>

This proposal was prepared based on the following assumptions:

- This proposal shall constitute the exclusive services to be performed for this project.
- Site access is the responsibility of the Client or Client’s representative to include clearing vegetated areas, if needed, to allow drilling rig and personnel access to perform the field work in a safe manner.
- The soil boring locations will be placed per the soil boring location exhibits provided by the Client.
- Field work will be performed using OSHA Level D personal protective equipment (PPE).
- It is assumed field work will be conducted during normal business hours, Monday through Friday and will require three (3) field days for the mobilization and field drilling activities (285 feet total). If weekend field work is requested, overtime for Task A will be charged at 1.5 times the specified rate (Option 2).
- Our schedule will be to provide the report deliverables within 20 business days from final completion of all proposed field work.
- One electronic copy of the final written reports will be submitted unless instructed otherwise.
- All project correspondence including report deliverables will be electronic. Hard copy report requests will be considered out-of-scope and additional fees accrued to the project.

- Meetings or other requests for additional correspondence will be considered out of scope and additional fees accrued to the project.
- **Billing and Payment Terms** – Our billings to Client for services completed, unless otherwise indicated in our proposal, will be based on actual accrued time, testing costs, and expenses except as otherwise provided by the Proposal. Client agrees to pay for our services within 30 days of receipt of project deliverables and the project invoice. In the event that payment is not received within 30 days then Client shall pay a service charge of 1.5% per month or 18% per year and the cost collection, including court fees and reasonable Attorney's fees, if collected by law through an Attorney. If Client has any objections to any invoice or part thereof submitted by SET Consultants, it shall so advise us in writing giving specifics of the objection within 14 days of receipt of such invoice. In the event Client does not object within such 14 day period, the invoice will no longer be subject to contest or dispute. Client agrees it will not exercise any right of set-off it may have. No deduction shall be made from SET Consultant's invoice on account of penalty or liquidated damages.
- This proposal is valid only if authorized within 30 days from the proposal date.