

**BOARD OF PUBLIC WORKS AND SAFETY
Agenda Request Form**

(Form B-01-2012)

Organizations and individuals are asked to submit a request form and supporting documents to be placed on the agenda. You will be contacted by the City confirming the date of the meeting in which your request will be heard. Please make sure that your contact information is accurate in case we need to get in touch with you. The Board of Works meets on the 1st and 3rd Monday of each month at 5:00 p.m. in City Hall located at 70 E. Monroe Street.

Date Submitted:	May 27, 2025	Meeting Date:	June 2, 2025
Contact Information:			
Requested by:	Matt McElroy		
On Behalf of Organization or Individual:		Dept. of Planning & Engineering	
Telephone:	317-736-3631		
Email address:	mmcelroy@franklin.in.gov		
Mailing Address:	70 E. Monroe Street, Franklin, IN 46131		
Describe Request:			
Request approval and execution of Supplemental 1 with CrossRoad Engineers, P.C. for the Graham Road Improvements project.			
List Supporting Documentation Provided:			
Supplement No. 1			
Who will present the request?			
Name:	Joanna Tennell, Planning Director	Telephone:	317-736-3631

In order for an individual and/or agency to be considered for new business on the Board of Works agenda, this reservation form and supporting documents must be received in the Mayor's office no later than 4:00 p.m. on the Wednesday before the meeting.

SUPPLEMENTAL AGREEMENT NO. 1

This supplemental agreement is made and entered into _____, 2025, by and between the CITY OF FRANKLIN, INDIANA, acting by and through its proper officials (hereinafter referred to as "OWNER") and CROSSROAD ENGINEERS, PC (hereinafter referred to as the "CONSULTANT").

WITNESSETH

WHEREAS, OWNER and the CONSULTANT did, on April 1, 2024, enter into a contract for specific professional services for Graham Road Improvements ("Project").

WHEREAS, OWNER desires the CONSULTANT to provide additional professional services necessary to continue the development of the Project as delineated in the supplemental Exhibit 1, which is attached.

WHEREAS, in order to provide for this additional work, it is necessary to amend and supplement the contract.

NOW, THEREFORE, it is agreed by and between the parties as follows:

1. SECTION IV COMPENSATION is amended to read as follows:

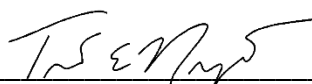
The OWNER shall pay the CONSULTANT for the Services performed under this Contract as set forth in Attachment "B" which is herein attached to and made an integral part of this Contract. The original contract amount of \$741,685 is being increased through this Supplemental Agreement No. 1 by \$261,380.00. Therefore, the maximum amount payable under this Contract shall not exceed \$1,003,065.00.

2. EXHIBIT 4 is amended as attached ATTACHMENT "B".
3. Except as herein modified, changed and supplemented, all terms of the original contract dated April 1, 2024 shall continue in full force and effect.

Non Collusion - The undersigned attests, subject to the penalties for perjury, that he/she is the contracting party, or that he/she is the representative, agent, member or officer of the contracting party, that he/she has not, nor has any other member, employee, representative, agent or officer of the firm, company, corporation or partnership represented by him/her, directly or indirectly, to the best of his/her knowledge, entered into or offered to enter into any combination, collusion or agreement to receive or pay, and that he/she has not received or paid any sum of money or other consideration for the execution of this agreement other than that which appears upon the face of the agreement.

In Witness Whereof, the CONSULTANT and the OWNER have, through duly authorized representatives, entered into this Contract. The parties having read and understand the forgoing terms of this Contract do by their respective signatures dated below hereby agree to the terms thereof.

CROSSROAD ENGINEERS, PC
(CONSULTANT)



Trent E. Newport, President


CITY OF FRANKLIN, INDIANA
Board of Public Works
(OWNER)

Steve Barnett, Mayor

Ken Austin, Member

Tina Jobe, Member

Attest:



Mark A. Beck, Vice-President

Jan Jones, Clerk-Treasurer

Exhibit 1

April 16, 2025



Mr. Matt McElroy, P.E.
City Engineer
City of Franklin
70 E. Monroe Street
Franklin, IN 46131

RE:

Graham Road Improvements
Supplemental No. 1 – Bridge replacement of Johnson Co. Bridge 41-00084 carrying
Graham Road over Canary Ditch
Franklin, Indiana

Dear Matt:

CrossRoad Engineers is pleased to present this Scope of Services and Fee Proposal to provide professional services associated with the project area listed above. Further descriptions of work are as follows:

Graham Road Bridge Replacement: The current road project includes total reconstruction of Graham Road between the roundabout at the intersection of Graham Road and Earlywood Road, and the roundabout at Graham Road and Paul Hand Road. The improvements will be based on conceptual exhibits prepared by our office in 2022 and include two 12' lanes with 3' paved shoulders. This bridge was previously assumed to be an exception to the roadway project; the latest inspection report indicates that the bridge should be replaced.

Graham Road Right-of-way: The current road project includes 11 parcels from which right of way needs procured. While the number of parcels that are affected remain unchanged, the types of appraisals and number of appraisals have changed based on anticipated land costs.

We have based our Fee Proposal on the aforementioned assumptions, and the following scope of work items are included to assist you in the development of this project:

A. TOPOGRAPHIC SURVEY & ROUTE SURVEY

Survey was obtained during the original project activities; no additional survey is required.

B. BRIDGE DESIGN & PLAN PREPARATION

We will prepare preliminary and final sets of construction plans with cost estimates for review by the City. Construction drawings will be prepared in accordance with state and local laws and ordinances and will include the following:

- Title Sheet

- Bridge Construction Details
 - Plan & Profiles
 - Construction Details
 - Cross Sections
- Erosion Control Plan
 - Consistent with local MS4 requirements for CGSP conformance
- Miscellaneous Details and Specifications

For maintenance of traffic, we assume that the improvements on Graham Road will be constructed utilizing a road closure with a marked detour route. It is assumed that the bridge will be constructed under closure with the adjacent roadway segment; therefore, no additional MOT sheets will be required. City standards will be utilized for the pavement sections required; therefore, no pavement design has been included in this proposal. It is anticipated that two submittals will be made for City review – Preliminary Plans (45%) and Final Plans (90%). It is also anticipated that the bridge plans will be submitted to the County for review.

C. GEOTECHNICAL INVESTIGATION

A geotechnical investigation will be necessary. These services will be performed by a subconsultant, Patriot Engineering and Environmental, Inc., and are more specifically defined in their proposal dated April 1, 2025 and attached to this scope of work.

D. UTILITY COORDINATION

Utility Coordination is covered under the current roadway design contract; no additional fees required.

E. PUBLIC INFORMATION MEETING

Public Information meetings are covered under the current roadway design contract; no additional fees required.

F. REGULATORY SUBMITTALS & BIDDING PHASE

An IDEM 401 / ACOE 404 is anticipated due to the replacement of the bridge. It is also anticipated that a legal drain permit will be required through the Johnson County Surveyor. The services of a subconsultant for waters report / wetland delineation was included in the original contract; no supplemental required for that effort.

This phase will include the preparation of an Engineer's Estimate for the overall project. It is anticipated that the bridge will be let at the same time as the roadway; therefore, no additional fees are being requested for the bidding portion of this phase.

G. RIGHT OF WAY ENGINEERING

Right of Way engineering is covered under the current roadway design contract; no additional fees required.

H. RIGHT OF WAY ACQUISITION SERVICES

The number and types of appraisals have been updated based on current land values; see Attachment "B" for detailed breakdown.

I. CONSTRUCTION INSPECTION & AS-BUILT PLANS

Once design is complete, CrossRoad Engineers will perform construction inspection and as-built plans for this project as directed by the City. The construction is expected to occur in 2026 and this work will be provided on an hourly basis per an attached Hourly Billing Rate similar to the one included as Attachment "B". Inspection for the roadway was included within the original agreement; this is adding inspection for the bridge.

J. METHOD FOR PAYMENT OF ENGINEERING FEES

During this work, progress invoices will be prepared for the portions of the work done to date based on the Fee Schedule included with this document as Attachment "B". These invoices will be submitted by the 5th of each month and will become due by the 30th of that same month. Invoices not paid within 30 days after submission to you will accrue interest at a rate of 1.5% per month. Should the City decide to cancel the project at any time, all phases that have been worked on will be invoiced up to that time of project termination.

K. UNDERSTANDINGS

For additional services not covered herein, the work will be performed as authorized by you at a mutually agreed upon rate. Costs incurred due to agency applications for plan review and approval, postage for plan distribution, public notifications, recording fees, and other direct costs shall be invoiced separately as a reimbursable with a 15% administrative charge. Payment for these items will not be the responsibility of CrossRoad Engineers. Acceptance of this proposal is inclusive of the Terms and Conditions included below.

We are ready to begin and appreciate your allowing CrossRoad Engineers to design and inspect this project for you. If you have any questions, please call me at 317-780-1555 ext. 114.

Sincerely,

CrossRoad Engineers, PC

A handwritten signature in black ink, appearing to read 'Trent E. Newport', is written over a horizontal line.

Trent E. Newport, P. E., L.S.
President

ATTACHMENT “B”

FEE SCHEDULE – SUPPLEMENTAL NO. 1

	Function	Graham Road Bridge
A.	Topographic Survey & Route Survey	\$0
B.	Bridge Design & Plan Preparation	\$83,800
C.	Geotechnical Investigation	\$8,300
D.	Utility Coordination	\$0
E.	Public Information Meeting	\$0
F.	Regulatory Submittals & Bidding Phase	\$7,900
G.	Right of Way Engineering	\$0
H.	R/W Acquisition (see info below table for breakdown)	\$11,380
I.	Construction Inspection, utility relocation (as needed) & As-Built plans (hourly NTE)	\$150,000

H. Right-of-Way Acquisition

There are currently 11 parcels from which right of way needs procured; 4 of those need two appraisals due to the anticipated land costs.

Type of Appraisal	Number (original)	Number (Supp. 1)	Difference	Unit Cost	Total Supp. 1
Waiver	1	1	0	\$880	\$0
Value	0	5	5	\$2,430	\$12,150
Short Form	7	4	-3	\$4,290	-\$12,870
Long Form	3	5	2	\$6,050	\$12,100
Totals	11	15			\$11,380

TOTAL ESTIMATED PROJECT FEE

SUPPLEMENTAL NO. 1

\$ 261,380

ORIGINAL CONTRACT

\$ 741,685

TOTAL

\$ 1,003,065

Our Total Estimated Project Fee is divided into the above work components for billing purposes.



HOURLY BILLING RATES

PERSONNEL CLASSIFICATION

HOURLY RATE

DESIGN

Director	\$ 200.00
Senior Project Manager	176.00
Project Manager	157.00
Senior Project Engineer	149.00
Project Engineer	140.00
Assistant Project Engineer	121.00
CADD Manager	140.00
Senior CADD Technician/Assistant CADD Manager	130.00
CADD Technician	121.00
Assistant CADD Technician	103.00
Senior Plan Reviewer	140.00
Plan Reviewer	121.00
R/W Manager	176.00
R/W Buyer	176.00

INSPECTION

Director	\$ 200.00
Senior Project Manager	176.00
Senior Resident Project Representative	167.00
Resident Project Representative	157.00
Asst Resident Project Representative	148.00
Project Inspector	140.00
Assistant Project Inspector	99.00

SURVEY

Survey Manager	\$ 176.00
Assistant Survey Manager	149.00
Survey Crew – 1 Person	145.00
Crew Chief	121.00
Survey Crew Member	97.00
Researcher	109.00
Survey Technician	121.00

MISCELLANEOUS

Mileage (per mile)	Current IRS Rate
Other Direct Costs	at cost +15%

Rates Effective through December 2025

CROSSROAD ENGINEERS, PC

115 N. 17th AVE, BEECH GROVE, IN 46107 // 317.780.1555 // CROSSROADENGINEERS.COM

April 1, 2025

Mr. Mark Beck, P.E.
CrossRoad Engineers, P.C.
115 North 17th Ave
Beech Grove, Indiana 46107

Re: Proposal for Geotechnical Engineering Exploration
Bridge No. 41 Replacement
Franklin, Indiana
Patriot Proposal No.: P25-0744-01G

Dear Mark,

Patriot Engineering and Environmental, Inc. (*Patriot*) appreciates the opportunity to submit this proposal to perform a Geotechnical Engineering Exploration for the above referenced project. Presented in this proposal is an outline of our understanding of the proposed project, our proposed work plan, estimated cost and schedule.

Project Description

The proposed project includes the replacement of a bridge along Graham Road in Franklin, Indiana. We understand that this project will not be subject to review by the Indiana Department of Transportation (INDOT). Please note that deeper borings, additional sampling, testing, and engineering analysis will be required if we need to follow INDOT requirements for the project. A summary of our scope of work is provided below. Additional details about the scope of work and limitations are presented in the attached appendix.

Drilling Services

- *Patriot* will drill a total of two (2) soil borings, for a total of 100 lineal feet of soil drilling. The details of the proposed soil borings are outlined below:
 - Two (2) soil borings to a depth of 50 feet each.
- Split-spoon samples and Standard Penetration Tests values (commonly referred to as the blow-count or N-value) will be obtained in advance of the augers at 2.5 feet intervals to a depth of 10 feet, and 5 feet intervals thereafter per ASTM Method D-1586.
- Shelby tube samples may be obtained in cohesive soil strata-of-interest.
- *Patriot* will monitor the borings for the presence of groundwater during and immediately following completion of the boring.
- Upon completion of the borings, the boreholes will be backfilled with auger cuttings mixed with bentonite prior to demobilization.
- The field drilling work should take one (1) day to complete.

Laboratory Services

- After the fieldwork is completed, we will return samples to *Patriot's* soils laboratory to perform the appropriate laboratory testing. The laboratory testing will include the following:
 - Visual classifications of collected samples
 - Natural moisture contents on cohesive samples
 - Grain Size Distribution
 - Atterberg Limits
 - pH
 - Sulfate Determination
 - Uniaxial Compressive Strength of Rock
- Laboratory testing will be performed in accordance with applicable AASHTO methods.

Engineering Services

- *Patriot* will call public utilities (811) to "clear utilities" within the public domain prior to the start of the subsurface exploration. The "clearing of utilities" outside of the public domain shall be the responsibility of the property owner or manager and coordinated with *Patriot*. **No private utility locate will be performed by *Patriot*.**
- *Patriot* will visit the project site prior to drilling to observe and note ground cover, existing structures, pavement, site access and topographic conditions. During this visit, we will locate and mark boring locations.
- Based on results of the fieldwork and laboratory testing, we will prepare a Geotechnical Engineering Report. The report will present field, soil boring logs and laboratory test data. The report will also include recommendations to aid in design of the proposed structure, as well as providing a discussion regarding potential construction difficulties due to soil and groundwater conditions.
- We would expect to issue our engineering report within approximately thirty (30) days of completing the fieldwork. However, verbal results can be provided shortly after the fieldwork is completed.

Estimated Project Cost

Based upon the information provided and as outlined in our attached work plan, along with our experience with similar projects, we have provided an estimate of the project cost below:

Geotechnical Engineering Exploration

\$6,300.00

(Includes soil borings, field engineering coordination, laboratory testing, engineering evaluation, and geotechnical engineering exploration report.)

Optional Task No. 1 – Traffic Control Services

\$2,000.00

(Includes hiring a subcontractor for traffic control services to safely perform our work within the roadway.)

Work performed outside the Scope of Work discussed in this proposal will be performed at a unit rate basis (Refer to attached Fee Schedule) for the actual work performed. Such work will be considered a change in scope.

As our formal authorization to proceed, please complete and sign the Proposal Acceptance Agreement form included with this proposal, indicating proper billing instructions, and return an executed copy of this acceptance agreement for our files. Also, please note the Terms and Conditions included with this proposal, which is an integral part of this proposal. Alternatively, this work may be authorized by a written purchase order or a letter instructing us to proceed, which provides for the Terms and Conditions herein.

If you have questions regarding this proposal or require additional information, please do not hesitate to contact us.

Sincerely,
Patriot Engineering and Environmental, Inc.



Ben Lauletta, P.E.
Senior Project Engineer



Salim Ilmudeen, P.E.
Senior Principal Engineer

Additional Details of Scope of Work and Limitations

Objectives

The objectives of this geotechnical engineering investigation will be to assess the subsurface conditions within the project area and to provide recommendations to aid in the design and construction of the proposed project.

Utilities

Patriot will be responsible for “clearing utilities” within the public domain prior to the start of any subsurface exploration. The “clearing of utilities” outside of the public domain shall be the responsibility of the property owner or manager and coordinated with *Patriot*. We recommend that the Client hire a private utility locator to clear the boring locations of any underground lines. Alternatively, *Patriot* can employ the use of a private utility locator to “clear” the boring locations prior to drilling for an additional cost.

Backfill Materials

If the boreholes will be backfilled with auger cuttings upon completion of the borings, it should be noted that it is standard practice in drilling test borings to backfill with the auger cuttings. However, sometimes the backfill will settle after the borings have been completed, requiring a return trip to backfill again. If this takes place, an additional fee will be charged for the return trip. As an alternative, for an additional fee, the holes can be backfilled with bentonite or grout to reduce the potential settlement.

Scope of Work Limitations

In preparation of this proposal, we have assumed that the site is accessible to a track-mounted drilling rig. Our drill rig and the field operations may damage landscaping areas. We assume any damage to landscaping areas by our drilling operations will be repaired by the Client. If “clearing” or “grading” of the site is required (i.e. trees, brush, crops etc.), an additional charge will be assessed. Also, we assume that the Client will make arrangements regarding our field work such as access to the drilling locations, etc. We assume that our field work will be performed during normal work hours (not weekend or night hours).

If the borings reveal inconsistent and/or marginal soil conditions requiring additional borings, deeper borings, additional samples, or additional laboratory testing, the Client’s Project Manager will be consulted immediately with regard to the possibility of modifying the proposed subsurface investigation program. Such a modification may be considered a change in scope of the Proposed Work Plan, thereby requiring a possible adjustment to the budget of this Geotechnical Engineering Investigation.

The subsurface investigation outlined in this proposal assumes that there are no hazardous materials in the soil or in the groundwater underlying the site. This investigation is not designed to detect or identify such materials. If it becomes apparent during the field investigation that hazardous materials are present, field operations will temporarily cease. The field investigation could be resumed only after the appropriate health and safety issues are addressed and the scope of our investigation modified to address this change in condition.

ATTACHMENTS

Geotechnical Personnel

Select Resumes

Insurance Certificate

Fee Schedule

Terms and Conditions

Proposal Acceptance Agreement

Patriot Engineering and Environmental, Inc. Geotechnical Division

NAME	EDUCATION	YEARS OF EXPERIENCE
Richard L. Johnson, P.E.	M.S. Geotechnical Engineering	59
William D. Dubois, P.E.	M.S. Geotechnical Engineering	56
Kenneth S. Bosar, P.E.	B.S. Mining Engineering	46
James T. Sherer, P.E.	B.S. Civil Engineering	42
Douglas B. Zabonick, P.E.	B.S. Geological Engineering	42
Timothy N. Tyler, Ph.D., P.E.	Ph.D., C.E. Geotechnical Engineering	38
Salim M. Ilmudeen, P.E.	M.S. Geotechnical Engineering	31
Richard Scruton, P.E.	B.S. Civil Engineering	28
Sean M. Smith, P.E.	B.S. Geotechnical Engineering	26
Jacob J. Vieck, P.E.	B.S. Geotechnical Engineering	19
Akshat Saxena, P.E.	M.S. Geotechnical Engineering	13
Benjamin R. Lauletta, P.E.	B.S. Civil Engineering	13
Christian Cole Pohlar, E.I.	B.S. Civil Engineering	8
Ian Grafe, E.I.	B.S. Civil Engineering	7
Irfan Syed	M.S. Civil Engineering	7
Logan Young, P.E.	M.S. Geotechnical Engineering	5
Mark Jonard, P.E.	B.S. Civil Engineering	4
Daniel Myers, E.I.	B.S. Civil Engineering	4
Azam M Syed	M.S. Civil Engineering	3

NAME	SUPPORT TEAM
Steve Burck	Drilling Division Manager
Sara Vaught-Lauletta	Laboratory Supervisor
James DuMond	Senior CAD / Graphics Technician
Katie Bechman	Project Administrator



Salim M. Ilmudeen, PE Senior Project Engineer

FIELDS OF EXPERTISE

Geotechnical engineering including shallow and deep foundation design; high rise building foundations; slope failures and slope stability analysis; pavement design; deep excavations, underpinning and earth retention systems; geotechnical instrumentation and in-situ testing.

REGISTRATION & CERTIFICATION

Professional Engineer:
Hawaii, PE-8644;
Indiana – PE10606266

EDUCATION

M.S.C.E., Civil Engineering (Geotechnical and Transportation Engineering),
Texas Tech University, Lubbock, TX - 1992

B.Sc., Civil Engineering, University of Peradeniya,
Sri Lanka - 1985

PROFESSIONAL SUMMARY

Mr. Ilmudeen is a Senior Project Engineer with over 20 years of experience in the field of geotechnical engineering. He has performed foundation engineering design and provided geotechnical engineering services for a wide variety of projects. These projects included a new airport terminal complex, power plants, high rise buildings, tunnel, bridge and road construction projects, deep excavations, underpinning, earth retention systems and cut-off walls, landslides, vibration monitoring, etc.

SELECTED PROJECT EXPERIENCE

- Carmel City Center – Phase I, Carmel, Indiana – Geotechnical engineering report review and preparation of supplementary report and design parameters for 3 to 7 story buildings with common basement and a utility tunnel 10 feet below the basement.
- Pedcore Square Buildings 4 & 5, Carmel, Indiana – Dewatering consultations and calculations for 2 buildings with 20-feet deep common basement.
- Rush Memorial Hospital, Rushville, Indiana – Dewatering consultations during construction of a new physician / office building.
- New Terminal Complex for Chicago O'Hare International Airport, Chicago, Illinois – Geotechnical engineering for a multi-level terminal building, a parking structure, airport transit system, elevated highways, bridges, concourse concrete aprons, depressed roadways, retaining walls, utility tunnel and other associated structures.
- Lake Shore East Condominiums, Chicago, Illinois – Geotechnical engineering report and design parameters for a 60-story building with a basement.
- Dept of Transportation 96-inch diameter Concrete Sewer Tunnel, Chicago, Illinois – Geotechnical design calculations, analysis of tunneling options, specifications, and design drawings for tunnel and shafts.
- Minor League Baseball Stadium, Gary, Indiana – Civil drawings and specifications for groundwater cut-off wall design alternatives such as slurry walls and sheet pile walls.
- Samsung S-Project, Seoul, Korea – Geotechnical design parameters for four 22 to 35 story buildings with 6 levels of basement extending to 84 feet below grade.
- Excelon – Calumet 350 MW Peaker Plant, Chicago, Illinois – Geotechnical and geophysical explorations, foundation design parameters, and backfilling and compaction procedures for settlement sensitive areas.





PATRENG-01

KHOLDERMAN

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

4/11/2024

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER License # 0019304-1 Hub International Midwest East 1591 Galbraith Ave SE Grand Rapids, MI 49546	CONTACT NAME:		
	PHONE (A/C, No, Ext): (616) 233-4111	FAX (A/C, No): (616) 233-4110	
INSURED Patriot Engineering & Environmental, Inc. Patriot Engineering & Environmental, LLC 6150 East 75th Street Indianapolis, IN 46250	E-MAIL ADDRESS:		
	INSURER(S) AFFORDING COVERAGE		NAIC #
	INSURER A : Amerisure Mutual Insurance Company		23396
	INSURER B : Lexington Insurance Company		19437
	INSURER C :		
	INSURER D :		
INSURER E :			
INSURER F :			

COVERAGES

CERTIFICATE NUMBER:

REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input type="checkbox"/> PROJECT <input type="checkbox"/> LOC OTHER:			CPP21172760301	4/12/2024	4/12/2025	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 1,000,000 MED EXP (Any one person) \$ 15,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COMP/OP AGG \$ 2,000,000 \$
A	<input checked="" type="checkbox"/> AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS ONLY <input type="checkbox"/> NON-OWNED AUTOS ONLY			CA21172750302	4/12/2024	4/12/2025	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
A	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED <input checked="" type="checkbox"/> RETENTION \$ 0			CU21172770302	4/12/2024	4/12/2025	EACH OCCURRENCE \$ 10,000,000 AGGREGATE \$ 10,000,000 \$
A	<input checked="" type="checkbox"/> WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) <input checked="" type="checkbox"/> Y / N If yes, describe under DESCRIPTION OF OPERATIONS below		N / A	WC21172790301	4/12/2024	4/12/2025	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000
B	Prof & Pollution			031711066	4/12/2024	4/12/2025	Per Claim / Agg 5,000,000
A	Work Comp			WC21172780302	4/12/2024	4/12/2025	Workers Compensation 1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Inland Marine - Policy #CPP2117276 - 04/12/2024 - 04/12/2025

Rented Leased Equipment Limit - \$200,000 / Deductible - \$1,000

CERTIFICATE HOLDER

CANCELLATION

For Informational Purposes Only

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

PATRIOT ENGINEERING AND ENVIRONMENTAL, INC.
Geotechnical Engineering Services
2024 Fee Schedule

	<u>Unit</u>	<u>Unit Cost</u>
<u>PROFESSIONAL SERVICES</u>		
Expert Witness	Hour	\$365.00
Senior Principal Engineer, P.E.	Hour	\$245.00
Principal Engineer, P.E.	Hour	\$220.00
Senior Project Engineer, P.E.	Hour	\$185.00
Project Engineer, P.E.	Hour	\$155.00
Senior Engineer/Geologist	Hour	\$135.00
Geotechnical Engineer/Geologist	Hour	\$115.00
Draftsperson/CAD Technician	Hour	\$105.00
Senior Engineering Technician	Hour	\$80.00
Laboratory Supervisor	Hour	\$90.00
Word Processor	Hour	\$90.00
<u>LABORATORY TESTING</u>		
Water Contents	Each	\$7.50
Atterberg Limits (LL & PL)	Each	\$110.00
Grain Size Distribution	Each	\$180.00
Sieve Analysis (Sand)	Each	\$80.00
Minus #200 Wash	Each	\$65.00
Natural Density	Each	\$40.00
Organic Content	Each	\$65.00
pH Determination	Each	\$40.00
Resistivity – Soil (ASTM G57)	Each	\$105.00
Extrude & Log Shelby Tube Samples	Each	\$60.00
Standard Proctor	Each	\$200.00
Modified Proctor	Each	\$220.00
CBR Test	Each / Point	\$195.00
Unconfined Compressive Strength	Each	\$75.00
Thermal Conductivity (5 Point, Dry Out Curve)	Each	\$315.00
Triaxial Tests (CU - 3 circles)	Each	\$1000.00
Consolidation Test	Each	\$500.00
Expansion Index (Swell Potential)	Each	\$500.00
Permeability Test (Cohesive Soils)	Each	\$400.00
<u>DRILLING SERVICES</u>		
Mobilization of drill rig and crew (Local)	Lump Sum	\$1,250.00
*plus \$4.50 per mile over 60 miles from a Patriot office		
Minimum Charge for drill rig, crew and equipment	Lump Sum	\$3,100.00
Drilling with 3.25" and 4.25" hollow stem augers with standard splitspoon sample intervals		
Under 50 feet depth and under 50 blows per foot	Foot	\$18.00
50 to 75 feet depth and under 50 blows per foot	Foot	\$19.00
Over 75 feet depth or over 50 blows per foot	Foot	\$22.00
Additional splitspoon samples beyond standard intervals	Each	\$18.50
ATV Drilling , Add	Foot	\$3.50
Mud Drilling, Add	Foot	\$7.50
Drilling without splitspoons	Foot	\$12.00
Bulk Samples (50 lb. bag)	Each	\$78.00
Rock Coring	Foot	\$45.50
Equipment, set-up for rock coring	Hole	\$110.00
Shelby Tube Samples (3 in. O.D.)	Each	\$78.00
Standby Time requested by Client or Hauling Water	Hour	\$208.00
Rental of Dozer (to assist drill rig under adverse site conditions)	Cost + 15%	
Asphalt or Concrete Plug of Drill Holes	Hole	\$45.00
Per Diem for Drill Crew per person	Per Day	\$208.00
<u>GENERAL EXPENSES</u>		
Transportation by Company or Personal Car	Mile	\$0.96
Subcontractor Costs / Special Costs	Cost + 15%	

*Other Drilling Services and Lab Testing can be performed per request, above is not a complete list of capabilities