PART III

FORM OF PROPOSAL

INDEX

PART III

Invitation to Bid No. 68-2025

Jacks Creek Pike Slope Repair

1. FORM OF PROPOSAL

Place: Lexington, Kentucky

Date: 5-22-25

The following Form of Proposal shall be followed exactly in submitting a proposal for this Work.

This Proposal Submitted by GEOSPECIALTIES, LLC

1060 ELIZABETH ST., SUITE 8, NICHOLASVILLE, KY 40356

(Name and Address of Bidding Contractor)

(Hereinafter called "Bidder"), organized and existing under the laws of the State of KENTUCKY, doing business as GEOSPECIALTIES, LLC "a corporation," "a partnership", or an "individual" as applicable.

To: Lexington-Fayette Urban County Government
(Hereinafter called "OWNER")
Office of the Director of Purchasing
200 East Main Street, 3rd Floor
Lexington, KY 40507

Gentlemen:

The Bidder, in compliance with your Invitation for Bids for **Jacks Creek Pike Slope Repair** project having examined the Plans and Specifications with related documents, having examined the site for proposed Work, and being familiar with all of the conditions surrounding the construction of the proposed Project, including the availability of materials and labor, hereby proposes to furnish all labor, materials, and supplies, and to construct the Project in accordance with the Contract Documents, within the time set forth therein, and at the lump sum and/or unit prices stated hereinafter. These prices are to cover all expenses incurred in performing the Work required under the Contract Documents, of which this proposal is a part.

The Bidder hereby acknowledges receipt of the following addenda:

Addendum No. _____ Date NONE

Addendum No. _____ Date _____

Addendum No. _____ Date _____

Addendum No. _____ Date _____

Addendum No. _____ Date _____

Addendum No. _____ Date _____

Addendum No. _____ Date _____

Addendum No. _____ Date _____

Insert above the number and the date of any Addendum issued and received. If none has been issued and received, the word "NONE" should be inserted.

2. LEGAL STATUS OF BIDDER

Bidder GEOSPECIALTIES, LLC

Date MAY 23, 2025

* 1. A corporation duly organized and doing business under the laws of the State of KENTUCKY, for whom JUSTIN ANDERSON, bearing the official title of PRESIDENT, whose signature is affixed to this Bid/Proposal, is duly authorized to execute contracts.

* 2. A Partnership, all of the members of which, with addresses are: (Designate general partners as such)

N/A

* 3. An individual, whose signature is affixed to this Bid/Proposal (please print name)

N/A

*(The Bidder shall fill out the appropriate form and strike out the other two.)

3. **BIDDERS AFFIDAVIT**

Comes the Affiant, Justin Anderson, and after being first duly sworn, states under penalty of perjury as follows:

1. His/her name is Justin Anderson and he/she is the individual submitting the bid or is the authorized representative of GeoSpecialties, the entity submitting the bid (hereinafter referred to as "Bidder").

2. Bidder will pay all taxes and fees, which are owed to the Lexington-Fayette Urban County Government at the time the bid is submitted, prior to award of the contract and will maintain a "current" status in regard to those taxes and fees during the life of the contract.

3. Bidder will obtain a Lexington-Fayette Urban County Government business license, if applicable, prior to award of the contract.

4. Bidder has authorized the Division of Procurement to verify the above-mentioned information with the Division of Revenue and to disclose to the Urban County Council that taxes and/or fees are delinquent or that a business license has not been obtained.

5. Bidder has not knowingly violated any provision of Chapter 25 of the Lexington-Fayette Urban County Government Code of Ordinances, known as the "Ethics Act."

6. Bidder acknowledges that "knowingly" for purposes of this Affidavit means, with respect to conduct or to circumstances described by a statute or ordinance defining an offense, that a person is aware or should have been aware that his conduct is of that nature or that the circumstance exists.

Signature

Justin Anderson
Printed Name

President
Title

5/22/25
Date

Company Name GEOSPECIALTIES

Address 2060 Elizabeth St, Unit 8, Nicholasville, KY 40356

Subscribed and sworn to before me by Justin Anderson (Affiant)

President (Title)

of GeoSpecialties (Company Name) this 22nd day of May, 20 25.

Kathryn Hopkins
Notary Public

[seal of notary]

My commission expires: 01/03/2027

KATHRYN HOPKINS NOTARY PUBLIC KYNP89085 MY COMM. EXP. 01/03/2027 STATE AT LARGE, KY

4. BID SCHEDULE – SCHEDULE OF VALUES

The Bidder agrees to perform all the Work described in the Specifications and shown on the Plans for the following proposed lump sum and/or unit prices, if applicable, which shall include the furnishing of all labor, materials, supplies, equipment and/or vehicle usage, services, all items of cost, overhead, taxes (federal, state, local), and profit for the Contractor and any Subcontractor involved, within the time set forth herein. If unit prices are applicable, Bidder must make the extensions and additions showing the total amount of bid.

If a unit price is omitted, the bid may be determined nonresponsive.

For a unit price based bid, the sum of the item totals is the bid amount the Division uses for bid comparison.

The LFUCG's decision on the bid amount is final.

Pricing should be submitted on the Excel Spreadsheet and submitted in Excel format on IonWave. Page P-8 must be fully executed and attached to bid submission or bid will be considered non-responsive.

DESCRIPTION	KYTC Item #	QUANTITY	UNIT
ENGINEERING/Surveying/Steaking	Note #1	1	LS
Mobilization	110	1	LS
Asphalt Surface	403	60	Ton
Asphalt Base	403	120	Ton
DGA	302	120	Ton
Maintenance of Traffic	112	1	LS
Clearing & Grubbing	202	1	LS
Excavation / Benching	204	1200	Cuyds
Contractor Cribbing	Note #2	5920	sqft
Backfill	603	1500	Cuyds
Geotextile Fabric(backfill)	843	2000	Sqyd
Set up for Drill	Note #2	180	EA
Drilling	Note #2	3600	LF
Steel (24 feet deep)	811	3600	LF
Under Drain for Back Fill	704	10	EA
Concrete base - Guardrail	613	25	Cuyds

Steel for base - Guardrail	607	600	lbs.
Guardrail End Treatments	719	2	EA
Guardrail	719	220	LF
Class II channel lining	703	200	Ton
Reconstruct Concrete Drive	507	1	LS
Drop Inlet for culvert Pipe	710	2	LS
24" Culvert Pipe	701	80	LF

Submitted by:

GEOSPECIALTIES, LLC
Firm

1060 ELIZABETH ST., SUITE 8
Address

NICHOLASVILLE, KY 40356
City, State & Zip

Bid must be signed:
(original signature)

Signature of Authorized Company Representative – Title

JUSTIN ANDERSON
Representative/s Name (Typed or Printed)

859-583-0732
Area Code – Phone –Fax #

JUSTIN.ANDERSON@GEOSPECIALTIES.COM
E-Mail Address

OFFICIAL ADDRESS:

1060 ELIZABETH ST., SUITE 8

NICHOLASVILLE, KY 40356

_____

_____ (Seal if Bid is by Corporation)

By signing this form you agree to ALL terms, conditions, and associated forms in this bid package

5. STATEMENT OF BIDDER'S QUALIFICATIONS

The following statement of the Bidder's qualifications is required to be filled in, executed, and submitted with the Proposal:

1. Name of Bidder: GEOSPECIALTIES, LLC f/k/a Guardian Fence and Construction

2. Permanent Place of Business: NICHOLASVILLE, KY

3. When Organized: 2020

4. Where Incorporated: Kentucky

5. Construction Plant and Equipment Available for this Project:

1060 Elizabeth St, Nicholasville, KY 40356

(Attach Separate Sheet If Necessary)

6. Financial Condition:

If specifically requested by the OWNER, the apparent low Bidder is required to submit its latest three (3) years audited financial statements to the OWNER'S Division of Procurement within seven (7) calendar days following the bid opening.

7. In the event the Contract is awarded to the undersigned, surety bonds will be furnished by:

Melissa Propst (Surety)

Signed: _____ (Representative of Surety)

See Next Page

AIA® Document A310™ – 2010

Bid Bond

CONTRACTOR:
(Name, legal status and address)
Guardian Fence and Construction LLC dba GeoSpecialties
1060 Elizabeth St Suite 8
Nicholasville, KY 40356

SURETY:
(Name, legal status and principal place of business)
Merchants National Bonding, Inc
P.O. Box 14498
Des Moines, IA 50306

OWNER:
(Name, legal status and address)
Lexington/Fayette Urban County Government
200 E. Main St., 3rd Fl
Lexington, KY 40507

BOND AMOUNT: 5% of Amount Bid

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.

PROJECT:
(Name, location or address, and Project number, if any)
Jacks Creek Pike Slope Repair

The Contractor and Surety are bound to the Owner in the amount set forth above, for the payment of which the Contractor and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, as provided herein. The conditions of this Bond are such that if the Owner accepts the bid of the Contractor within the time specified in the bid documents, or within such time period as may be agreed to by the Owner and Contractor, and the Contractor either (1) enters into a contract with the Owner in accordance with the terms of such bid, and gives such bond or bonds as may be specified in the bidding or Contract Documents, with a surety admitted in the jurisdiction of the Project and otherwise acceptable to the Owner, for the faithful performance of such Contract and for the prompt payment of labor and material furnished in the prosecution thereof; or (2) pays to the Owner the difference, not to exceed the amount of this Bond, between the amount specified in said bid and such larger amount for which the Owner may in good faith contract with another party to perform the work covered by said bid, then this obligation shall be null and void, otherwise to remain in full force and effect. The Surety hereby waives any notice of an agreement between the Owner and Contractor to extend the time in which the Owner may accept the bid. Waiver of notice by the Surety shall not apply to any extension exceeding sixty (60) days in the aggregate beyond the time for acceptance of bids specified in the bid documents, and the Owner and Contractor shall obtain the Surety's consent for an extension beyond sixty (60) days.

If this Bond is issued in connection with a subcontractor's bid to a Contractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

When this Bond has been furnished to comply with a statutory or other legal requirement in the location of the Project, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

Signed and sealed this 23rd day of May 2025

Witness: Kathryn A. Perkins

Witness: Emma Harney

Guardian Fence and Construction LLC dba GeoSpecialties
(Principal) *(Seal)*

(Title)

Merchants National Bonding, Inc
(Surety) *(Seal)*

Melissa Propst
(Title) Melissa Propst, Attorney-in-Fact

CAUTION: You should sign an original AIA Contract Document, on which this text appears in RED. An original assures that changes will not be obscured.

Init.
/

MERCHANTS NATIONAL BONDING, INC. INCORPORATED -0- 2003

MERCHANTS BONDING COMPANY™

POWER OF ATTORNEY

Know All Persons By These Presents, that MERCHANTS BONDING COMPANY (MUTUAL) and MERCHANTS NATIONAL BONDING, INC., both being corporations of the State of Iowa, d/b/a Merchants National Indemnity Company (in California only) (herein collectively called the "Companies") do hereby make, constitute and appoint, individually,

Adam Harris; Alex M Rechtin; Brian L Sewell; Emma Harvey; Kenny Albert; Lakala Carter; Melissa Propst; Steven M Baas

their true and lawful Attorney(s)-in-Fact, to sign its name as surety(ies) and to execute, seal and acknowledge any and all bonds, undertakings, contracts and other written instruments in the nature thereof, on behalf of the Companies in their business of guaranteeing the fidelity of persons, guaranteeing the performance of contracts and executing or guaranteeing bonds and undertakings required or permitted in any actions or proceedings allowed by law.

This Power-of-Attorney is granted and is signed and sealed by facsimile under and by authority of the following By-Laws adopted by the Board of Directors of Merchants Bonding Company (Mutual) on April 23, 2011 and amended August 14, 2015 and April 27, 2024 and adopted by the Board of Directors of Merchants National Bonding, Inc., on October 16, 2015 and amended on April 27, 2024.

"The President, Secretary, Treasurer, or any Assistant Treasurer or any Assistant Secretary or any Vice President shall have power and authority to appoint Attorneys-in-Fact, and to authorize them to execute on behalf of the Company, and attach the seal of the Company thereto, bonds and undertakings, recognizances, contracts of indemnity and other writings obligatory in the nature thereof."

"The signature of any authorized officer and the seal of the Company may be affixed by facsimile or electronic transmission to any Power of Attorney or Certification thereof authorizing the execution and delivery of any bond, undertaking, recognizance, or other suretyship obligations of the Company, and such signature and seal when so used shall have the same force and effect as though manually fixed."

In connection with obligations in favor of the Florida Department of Transportation only, it is agreed that the power and aut hority hereby given to the Attorney-in-Fact includes any and all consents for the release of retained percentages and/or final estimates on engineering and construction contracts required by the State of Florida Department of Transportation. It is fully understood that consenting to the State of Florida Department of Transportation making payment of the final estimate to the Contractor and/or its assignee, shall not relieve this surety company of any of its obligations under its bond.

In connection with obligations in favor of the Kentucky Department of Highways only, it is agreed that the power and authority hereby given to the Attorney-in-Fact cannot be modified or revoked unless prior written personal notice of such intent has been given to the Commissioner-Department of Highways of the Commonwealth of Kentucky at least thirty (30) days prior to the modification or revocation.

In Witness Whereof, the Companies have caused this instrument to be signed and sealed this 13th day of March , 2025 .

MERCHANTS NATIONAL BONDING, INC. -o- 2003

MERCHANTS BONDING COMPANY (MUTUAL) INCORPORATED -o- 1933

MERCHANTS BONDING COMPANY (MUTUAL)
MERCHANTS NATIONAL BONDING, INC.
d/b/a MERCHANTS NATIONAL INDEMNITY COMPANY

By Larry Taylor
President

STATE OF IOWA
COUNTY OF DALLAS ss.

On this 13th day of March 2025 , before me appeared Larry Taylor, to me personally known, who being by me duly sworn did say that he is President of MERCHANTS BONDING COMPANY (MUTUAL) and MERCHANTS NATIONAL BONDING, INC.; and that the seals affixed to the foregoing instrument are the Corporate Seals of the Companies; and that the said instrument was signed and sealed in behalf of the Companies by authority of their respective Boards of Directors.

NOTARIAL SEAL IOWA

Penni Miller
Commission Number 787952
My Commission Expires
January 20, 2027

Notary Public

(Expiration of notary's commission does not invalidate this instrument)

I, Elisabeth Sandersfeld, Secretary of MERCHANTS BONDING COMPANY (MUTUAL) and MERCHANTS NATIONAL BONDING, INC., do hereby certify that the above and foregoing is a true and correct copy of the POWER-OF-ATTORNEY executed by said Companies, which is still in full force and effect and has not been amended or revoked.

In Witness Whereof, I have hereunto set my hand and affixed the seal of the Companies on this 23rd day of May , 2025.

MERCHANTS NATIONAL BONDING, INC. -o- 2003

MERCHANTS BONDING COMPANY (MUTUAL) INCORPORATED -o- 1933

Secretary

MERCHANTS NATIONAL BONDING, INC. -o- 2003

POA 0018 (6/24)

8. The following is a list of similar projects performed by the Bidder: (Attach separate sheet if necessary).

NAME	LOCATION	CONTRACT SUM
SEE ATTACHED STATEMENT OF QUALIFICATIONS FOR GEOSPECIALTIES AND APS GEO		

9. The Bidder has now under contract and bonded the following projects:

NAME	LOCATION	CONTRACT SUM
GFC240008 Leeco Rd Phase II	Leslie Co. KY	602,151.8
GEO250001 CNY315 I-40	Cocke Co. TN	7,132,295.92
GEO240035	Mason Co. KY	488,873.77
GED240029 CNY172	Tennessee	897,109.38
GED240028	Ballatin, TN	173,725.00

10. List Key Bidder Personnel who will work on this Project.

NAME	POSITION DESCRIPTION	NO. OF YEARS WITH BIDDER
SEE ATTACHMENTS		

11. DBE Participation on current bonded projects under contract:

	SUBCONTRACTORS (LIST)	PROJECT (SPECIFIC TYPE)	DBE	% of WORK
	Louisville Paving	Paving/MOT/Drainage		19%
TENTATIVE	George B. Stone	Guardrail		2%

(USE ADDITIONAL SHEETS IF NECESSARY)

12. We acknowledge that, if we are the apparent low Bidder, we will submit to the OWNER within 7 calendar days following the Bid Opening, a sworn statement on the OWNER'S form regarding all current work on hand and under contract, and a statement on the OWNER'S form of the experience of our officers, office management and field management personnel. Additionally, if requested by the OWNER, we will within 7 days following the request submit audited financial statements and loss history for insurance claims for the 3 most recent years (or a lesser period stipulated by the OWNER)—all in accordance with the Bid Documents.

Respectfully submitted:

Geospecialties
(Name of Contracting Firm)

BY: Justin Anderson

TITLE: President

DATE 5/22/25

6. LIST OF PROPOSED SUBCONTRACTORS

The following list of proposed subcontractors is required by the OWNER to be executed, completed and submitted with the BIDDER'S FORM OF PROPOSAL. All subcontractors are subject to approval of the Lexington-Fayette Urban County Government. Failure to submit this list completely filled out may be cause for rejection of bid.

BRANCH OF WORK-LIST	DBE Work	% of EACH MAJOR ITEM
LOUISVILLE PAVING AND CONSTRUCTION	PAVING	19%
GEORGE B. STONE	GUARDRAIL	2%

LIST OF MATERIALS/ SUPPLIERS

Bidders are hereby advised that this list must be complete and submitted with the Bid.

Listing "as per plans and specifications", will not be considered as sufficient identification. Where more than one "Make or Brand" is listed for any one item, the Owner has the right to select the one to be used.

Item	Brand Name, Manufacturer and/or Supplier
SOILNAIL/NUTS/COUPLER/PLATE	FOOTHILLS DRILLING EQUIPMENT
REBAR/STEEL MESH	BYER STEEL
HORIZONTAL DRAINS	BUFFALO WELL PRODUCTS
STRIP DRAINS	AMERICAN WICK DRAINS
SHOTCRETE	SRM CONCRETE

7.

LEXINGTON

MINORITY BUSINESS ENTERPRISE PROGRAM

Sherita Miller, MPA, CPSD
Minority Business Enterprise Liaison
Division of Procurement
Lexington-Fayette Urban County Government
200 East Main Street
Lexington, KY 40507
smiller@lexingtonky.gov
859-258-3323

OUR MISSION: The mission of the Minority Business Enterprise Program (MBEP) is to facilitate the full participation of minority and women owned businesses in the procurement process and to promote economic inclusion as a business imperative essential to the long- term economic viability of Lexington-Fayette Urban County Government.

To that end the urban county council adopted and implemented Resolution 272-2024 – a Certified Minority and Women Business Enterprise seventeen percent (17%) minimum goal including minimum subgoals of five percent (5%) for Minority Business Enterprises (MBE) and a subgoal of twelve percent (12%) for Women Business Enterprises (WBE); a three (3%) minimum goal for Certified Veteran-Owned Small Businesses and/or Certified Service- Disabled Veteran Owned Businesses; and a goal of utilizing Disadvantaged Business Enterprises (DBE), where applicable, for government contracts.

The resolution states the following definitions shall be used for the purposes of reaching these goals:

Certified Disadvantaged Business Enterprise (DBE) *– a business in which at least fifty-one percent (51%) is owned, managed and controlled by a person(s) who is socially and economically disadvantaged as define by 49 CFR subpart 26.*

Certified Minority Business Enterprise (MBE) *– a business in which at least fifty-one percent (51%) is owned, managed and controlled by an ethnic minority (i.e. Black American, Asian American, Hispanic American, Native American)*

Certified Women Business Enterprise (WBE) *– a business in which at least fifty-one percent (51%) is owned, managed and controlled by a woman.*

Certified Veteran-Owned Small Business (VOSB) *– a business in which at least fifty-one percent (51%) is owned, managed and controlled by a veteran who served on active duty with the U.S. Army, Air Force, Navy, Marines or Coast Guard.*

Certified Service -Disabled Veteran Owned Small Business (SDVOSB) *– a business in which at least fifty-one percent (51%) is owned, managed and controlled by a disabled veteran who served on active duty with the U.S. Army, Air Force, Navy, Marines or Coast Guard.*

The term "Certified" shall mean the business is appropriately certified, licensed, verified, or validated by an organization or entity recognized by the Division of Procurement as having the appropriate credentials to make a determination as to the status of the business.
The following certifications are recognized and accepted by the MBEP:

Kentucky Transportation Cabinet (KYTC), Disadvantaged Business Enterprise (DBE)
Kentucky Minority and Women Business Enterprise (MWBE)
Women's Business Enterprise National Council (WBENC)
National Women Business Owners Corporation (NWBOC)
National Minority Supplier Development Council (NMSDC)
Tri-State Minority Supplier Development Council (TSMSDC)
U.S. Small Business Administration Veteran Small Business Certification (VetCert)
Kentucky Service- Disabled Veteran Owned Small Business (SDVOSB)

To comply with Resolution 272-2024, prime contractors, minority and women business enterprises, veteran owned small businesses, and service-disabled veteran owned small businesses must complete monthly contract compliance audits in the Diverse Business Management Compliance system, https://lexingtonky.diversitycompliance.com/

A list of organizations that certify and/or maintain lists of certified businesses (i.e. DBE, MBE, WBE, VOSB and/or SDVOSB) is available upon request by emailing, Sherita Miller, smiller@lexingtonky.gov.

LEXINGTON

LFUCG MWDBE PARTICIPATION FORM
Bid/RFP/Quote Reference # 68-2025

The MWDBE and/or veteran subcontractors listed have agreed to participate on this Bid/RFP/Quote. If any substitution is made or the total value of the work is changed prior to or after the job is in progress, it is understood that those substitutions must be submitted to the Division of Procurement for approval immediately. **Failure to submit a completed form may cause rejection of the bid.**

MWBE Company, Name, Address, Phone, Email	DBE/MBE WBE/VOSB/SDVOSB	Work to be Performed	Total Dollar Value of the Work	% Value of Total Contract
1. N/A				
2.				
3.				
4.				

The undersigned company representative submits the above list of MDWBE and veteran firms to be used in accomplishing the work contained in this Bid/RFP/Quote. Any misrepresentation may result in the termination of the contract and/or be subject to applicable Federal and State laws concerning false statements and false claims.

Geospecial Inc
Company

5-23-25
Date

Company Representative

President
Title

LEXINGTON

LFUCG MWDBE SUBSTITUTION FORM

Bid/RFP/Quote Reference # 68-2025

The substituted MWDBE and/or veteran subcontractors listed below have agreed to participate on this Bid/RFP/Quote. These substitutions were made prior to or after the job was in progress. These substitutions were made for reasons stated below and are now being submitted to the Division of Procurement for approval. By the authorized signature of a representative of our company, we understand that this information will be entered into our file for this project. **Note: Form required if a subcontractor is being substituted on a contract.**

SUBSTITUTED DBE/MBE/WBE/VOSB Company Name, Address, Phone, Email	DBE/MBE/WBE/VOSB/SDVOSB Formally Contracted/ Name, Address, Phone, Email	Work to Be Performed	Reason for the Substitution	Total Dollar Value of the Work	% Value of Total Contract
1. N/A					
2.					
3.					
4.					

The undersigned acknowledges that any misrepresentation may result in termination of the contract and/or be subject to applicable Federal and State laws concerning false statements and false claims.

Geospecialists
Company

5-23-25
Date

Company Representative

President
Title

LEXINGTON

DOCUMENTATION REQUIRED FOR GOOD FAITH EFFORTS AND OUTREACH PLANS

As affirmed in Resolution Number 272-2024, the Urban County Council has adopted an annual aspirational goal of utilizing at least seventeen percent (17%) of public funds spend from certain discretionary agreements with certified Minority Business Enterprises (MBEs) and certified Woman Business Enterprises (WBEs); utilizing at least three percent (3%) of public funds from certain discretionary agreements with Certified Veteran-Owned Small Business and Certified Service-Disabled Veteran-Owned Small Businesses (VOSBs); and utilizing Disadvantaged Business Enterprises (DBEs) where applicable. Bidders should make every effort to achieve these goals.

Therefore, as an element of the responsiveness of the bid, all Bidders are required to submit documentation of their good faith and outreach efforts to ensure all businesses, including small and disadvantaged businesses such as minority-, woman-, and veteran-owned businesses, have an equal opportunity to compete for and participate in the performance of any subcontracts resulting from this procurement. Examples of good faith and outreach efforts that satisfy this requirement to encourage the participation of, DBEs, MBEs, WBEs, VOSBs and/or SDVOSBs include:

1. Advertised opportunities to participate in the contract in at least two (2) publications of general circulation media; trade and professional association publications; small and minority business or trade publications; and publications or trades targeting minority, women, and disadvantaged businesses not less than fifteen (15) days prior to the deadline for submission of bids to allow, DBEs, MBEs, WBEs, VOSBs and/or SDVOSBs to participate.

2. Attended LFUCG Procurement Economic Inclusion Outreach event(s) within the past year to meet new small businesses, DBEs, MBEs, WBEs, VOSBs and/or SDVOSBs to partner with on LFUCG contracts and procurements.

3. Attended pre-bid/pre-proposal meetings that were scheduled by LFUCG to inform small businesses, DBEs, MBEs, WBEs, VOSBs and/or SDVOSBs of subcontracting opportunities.

4. Sponsored Economic Inclusion event to provide networking opportunities for prime contractors and small businesses, DBEs, MBEs, WBEs, VOSBs and/or SDVOSBs.

5. Requested a list of certified small, DBE, MBE, WBE, VOSB and/or SDVOSB subcontractors or suppliers from LFUCG and showed evidence of contacting the companies on the list(s).

6. Contacted organizations that work with small, DBE, MBE, WBE, and VOSB companies for assistance in finding certified DBEs, MBEs, WBEs, VOSB and/or SDVOSBs to work on this project. Those contacted and their responses must be a part of the bidder's outreach efforts documentation.

7. Sent written notices, by certified mail, email, or facsimile, to qualified, certified small businesses, DBEs, MBEs, WBEs, VOSBs and/or SDVOSBs soliciting their participation in the contract not less than seven (7) days prior to the deadline for submission of bids to allow them to participate effectively.

8. Followed up initial solicitations by contacting small businesses, DBEs, MBEs, WBEs, VOSBs and/or SDVOSBs via tailored communications to determine their level of interest.

9. Provided the interested small businesses, DBEs, MBEs, WBEs, VOSBs and/or SDVOSBs with adequate and timely information about the plans, specifications, and requirements of the contract.

10. Selected portions of the work to be performed by small businesses, DBEs, MBEs, WBEs, VOSBs and/or SDVOSBs in order to increase the likelihood of subcontracting participation. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate small, DBE, MBE, WBE, VOSB and/or SDVOSB participation, even when the prime contractor may otherwise perform these work items with its own workforce.

11. Negotiated in good faith with interested small businesses, DBEs, MBEs, WBEs, VOSBs and/or SDVOSBs, not rejecting them as unqualified without sound reasons based on a thorough investigation of their capabilities. Any rejection must be so noted in writing with a description as to why an agreement could not be reached.

12. Included documentation of quotations received from interested small businesses, DBEs, MBEs, WBEs, VOSBs and/or SDVOSBs that were not used due to uncompetitive pricing or were rejected as unacceptable and/or copies of responses from firms indicating that they would not be submitting a bid.

    a. Bidder has to submit sound reasons why the quotations were considered unacceptable. The fact that the bidder has the ability and/or desire to perform the contract work with its own forces will not be considered a sound reason for rejecting a small business', DBE's MBE's, WBE's, VOSB's and/or SDVOSB's quote. Nothing in this provision shall be construed to require the bidder to accept unreasonable quotes in order to satisfy the participation goals.

13. Made an effort to offer assistance to or refer interested small businesses, DBEs, MBEs, WBEs, VOSBs and/or SDVOSBs to obtain the necessary equipment, supplies, materials, insurance and/or bonding to satisfy the work requirements of the bid proposal.

14. Made efforts to expand the search for small businesses, DBEs, MBEs, WBEs, VOSBs and/or SDVOSBs beyond the usual geographic boundaries.

15. Other – any other evidence that the bidder submits that may demonstrate that the bidder has made reasonable efforts to include small, DBE, MBE, WBE, VOSB and/or SDVOSB participation.

Bidder must document, with specificity, each of the efforts it made to include small businesses, DBEs, MBEs, WBEs, VOSBs and/or SDVOSBs as subcontractors in the procurement, including the date on which each effort was made, the medium through which each effort was made, and the outcome of each effort.

> **Note: Failure to submit the documentation requested in this section may be cause for rejection of bid. Bidders may include any other documentation deemed relevant to this requirement which is subject to review by the MBE Liaison. Documentation of Good Faith and Outreach Efforts must be submitted with the Bid, regardless of the proposed level of small, DBE, MBE, WBE, VOSB and/or SDVOSB participation in the procurement. If the Good Faith and Outreach Effort documentation is not submitted with the bid response, the bid may be rejected.**

OUTREACH EFFORTS EVALUATION

Outreach efforts demonstrated by the bidder or respondent will be evaluated on a pass/fail basis.

ATTACHMENT A – SMALL AND DISADVANTAGED, MINORITY-, WOMEN-, AND VETERAN-OWNED BUSINESS OUTREACH PLAN

Proposer Name:	GEOSPECIALTIES	**Date:**	5/23/2025
Project Name:	TALKS CREEK SLOPE REPAIR	**Project Number:**	68-2025
Contact Name:	MATT WILLIAMS	**Telephone:**	859-494-2121
Email:	MATT.WILLIAMS@GEOSPECIALTIES.COM		

The mission of the Minority Business Enterprise Program is to facilitate the full participation of disadvantaged businesses, minority-, women-, veteran-, and service-disabled veteran-owned businesses in the procurement process and to promote economic inclusion as a business imperative essential to the long -term economic viability of Lexington-Fayette Urban County Government.

To that end, small and disadvantaged businesses, including minority-, woman-, veteran-, and service-disabled veteran-owned businesses, must have an equal opportunity to be utilized in the performance of contracts with public funds spent from certain discretionary agreements. By submitting its offer, Bidder/Proposer certifies that it has taken, and if there are further opportunities will take, reasonable steps to ensure that small and disadvantaged businesses, including minority-, woman-, veteran-, and service-disabled veteran-owned businesses, are provided an equal opportunity to compete for and participate in the performance of any subcontracts resulting from this procurement.

The information submitted in response to this clause will not be considered in any scored evaluation. Failure to submit this form may cause the bid or proposal to be rejected.

Is the Bidder/ Proposer a certified firm? Yes ☐ No ☑

If yes, indicate all certification type(s):

DBE ☐ MBE ☐ WBE ☐ SBE ☐ VOSB/SDVOSB ☐

and supply a copy of the certificate and/or certification letter if not currently listed on the city's Minority Business Enterprise Program's (MBEP) certified list.

1. Include a list of firms that Bidder/ Proposer has had a contractual relationship with within the last two years that are minority-owned, woman-owned, veteran-owned or small businesses, regardless of their certification status.

Click or tap here to enter text.

2. Does Bidder/Proposer foresee any subcontracting opportunities for this procurement?

Yes ☒ No ☐ GUARDRAIL

If no, please explain why in the field below. Do not complete the rest of this form and submit this first page with your bid and/or proposal. Click or tap here to enter text.

If yes, please complete the following pages and submit all pages with your bid and/or proposal.

Describe the steps Bidder/Proposer took to solicit small and disadvantaged businesses, including MBEs, WBEs, VOSBs, and SDVOSBs, for subcontracting opportunities for this procurement.

3. Check the good faith and outreach efforts the Bidder/Proposer used to encourage the participation of small and disadvantaged businesses including, MBEs, WBEs, VOSBs and SDVOSBs:

- ☐ Bidder placed advertisements in search of prospective small businesses, DBEs, MBEs, WBEs, VOSBs and/or SDVOSBs for the solicitation.
- ☐ Bidder attended LFUCG Procurement Economic Inclusion Outreach event(s) within the past year.
- ☐ Bidder attended pre-bid and/or pre-proposal meetings for this solicitation.
- ☐ Bidder sponsored an Economic Inclusion Outreach event.
- ☐ Bidder requested a list of certified small, DBE, MBE, WBE, VOSB and/or SDVOSB subcontractors or suppliers from LFUCG.
- ☒ Bidder contacted organizations that work with small, DBE, MBE, WBE, VOSB and/or SDVOSB companies.
- ☒ Bidder sent written notices to certified small, DBE, MBE, WBE, VOSB and SDVOSB businesses.
- ☐ Bidder followed up to initial solicitations with interested small, DBE, MBE, WBE, VOSB and/or SDVOSB.
- ☒ Bidder provided small, DBE, MBE, WBE, VOSB and/or SDVOSB businesses interested in performing the solicited work with prompt access to the plans, specifications, scope of work, and requirements of the solicitation.
- ☒ Bidder made efforts to segment portions of the work to be performed by small businesses, DBEs, MBEs, WBEs, VOSBs and/or SDVOSBs, including dividing sub-bid/partnership opportunities into economically feasible units/parcels, to facilitate participation.

☐ Bidder negotiated in good faith with interested small, DBE, MBE, WBE, VOSB and/or SDVOSB businesses.

☐ Bidder provided adequate rationale for rejecting any small business', DBEs, MBEs, WBEs, VOSBs or SDVOSBs for lack of qualifications.

☐ Bidder offered assistance in obtaining bonding, insurance, financial, equipment, or other resources to small businesses, DBEs, MBEs, WBEs, VOSBs and/or SDVOSBs, in an effort to assist them in meeting project requirements.

☐ Bidder made efforts to expand the search for small businesses, DBEs MBEs, WBEs, VOSBs and/or SDVOSBs beyond the usual geographic boundaries.

☒ Bidder made other reasonable efforts to include small businesses, DBEs, MBEs, WBEs, VOSBs and/or SDVOSBs participation.

4. Bidder/Proposer must include documentation, including the date each effort was made, the medium through which each effort was made, and the outcome of each effort with this form, regardless of the level of small, DBE, MBE, WBE, VOSB and/or SDVOSB participation. Examples of required documentation include copies of email communications, copies of newspaper advertisements, or copies of quotations received from interested small businesses, DBEs, MBEs, WBEs, VOSBs or SDVOSBs.

Click or tap here to enter text.

For detailed information regarding outreach efforts that satisfy the MBE Program's requirements, please see "Documentation Required for Good Faith Efforts and Outreach Plans" page.

Note: The Bidder/Proposer must be willing to report the identity of each subcontractor and the value of each subcontract to MBEP if awarded a contract from this procurement.

Failure to submit the documentation requested may be cause for rejection of the bid. Bidders may include any other documentation deemed relevant to this requirement, which is subject to review by the MBE Liaison. Documentation of Good Faith and Outreach Efforts must be submitted with the bid, regardless of the proposed level of SBEs, DBEs, MBEs, WBEs, VOSBs and/or SDVOSBs participation in the procurement. If the Good Faith and Outreach Effort Form and associated documentation is not submitted with the bid response, the bid may be rejected.

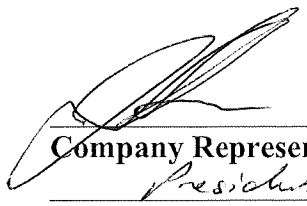
The undersigned acknowledges that all information is accurate. Any misrepresentations may result in termination of the contract and/or be subject to applicable Federal and State laws concerning false statements and claims.

Geospecia Inc

Company

5-23-25

Date



Company Representative

President

Title

4870-1925-6809, v. 1

8. AUTHENTICATION OF BID AND STATEMENT OF NON-COLLUSION, NON-CONFLICT OF INTEREST

I hereby swear (or affirm) under the penalty for false swearing:

1. That I am the Bidder (if the Bidder is an individual), a partner of the Bidder (if the Bidder is a partnership), or an officer or employee of the bidding corporation having authority to sign on its behalf (if the Bidder is a corporation);

2. That the attached bid has been arrived at by the Bidder independently, and has been submitted without collusion with, and without any agreement, understanding or planned common course of action, with any other contractor, vendor of materials, supplies, equipment or services described in the Invitation to Bid, designed to limit independent bidding or competition;

3. That the contents of the bid or bids have not been communicated by the Bidder or its employees or agents to any person not an employee or agent of the Bidder or its surety on any bond furnished, with the bid or bids, and will not be communicated to any such person, prior to the official opening of the bid or bids;

4. That the Bidder is legally entitled to enter into the contracts with the Lexington-Fayette Urban County Government, and is not in violation of any prohibited conflict of interest;

5. (Applicable to corporation only) That as a foreign corporation, we are registered with the Secretary of State, Commonwealth of Kentucky, and authorized to do business in the State ___ or, that as a domestic corporation, we are in good standing with the Secretary of State, Commonwealth of Kentucky ✓. Check the statement applicable.

6. This offer is for 60 calendar days from the date this bid is opened. In submitting the above, it is expressly agreed that, upon proper acceptance by the Lexington-Fayette Urban County Government of any or all items bid above, a contract shall thereby be created with respect to the items accepted.

7. That I have fully informed myself regarding the accuracy of the statements made in this statement.

8. That I certify that Subcontractors have not and will not be awarded to any firm(s) that have been debarred from noncompliance with the Federal Labor Standards, Title VI of the Civil Rights Act of 1964 As Amended, Executive Order 11246 As Amended or any other Federal Law.

9. STATEMENT OF EXPERIENCE

NAME OF INDIVIDUAL: SEE ATTACHMENTS SUBMITTED

POSITION/TITLE: ON FONWAVE

STATEMENT OF EXPERIENCE: _____

NAME OF INDIVIDUAL: _____

POSITION/TITLE: _____

STATEMENT OF EXPERIENCE: _____

NAME OF INDIVIDUAL: _____

POSITION/TITLE: _____

STATEMENT OF EXPERIENCE: _____

NAME OF INDIVIDUAL: _____

POSITION/TITLE: _____

STATEMENT OF EXPERIENCE: _____

_____

_____

NAME OF INDIVIDUAL: _____

POSITION/TITLE: _____

STATEMENT OF EXPERIENCE: _____

_____

_____

NAME OF INDIVIDUAL: _____

POSITION/TITLE: _____

STATEMENT OF EXPERIENCE: _____

_____

_____

* Include all officers, office management's, Affirmative Action officials, and field management personnel. (Attach separate sheets if necessary.)

10. EQUAL OPPORTUNITY AGREEMENT

Standard Title VI Assurance

The Lexington Fayette-Urban County Government, (hereinafter referred to as the "Recipient") hereby agrees that as a condition to receiving any Federal financial assistance from the U.S. Department of Transportation, it will comply with Title VI of the Civil Rights Act of 1964, 78Stat.252, 42 U.S.C. 2000d-4 (hereinafter referred to as the "Act"), and all requirements imposed by or pursuant to Title 49, Code of Federal Regulations, U.S. Department of Transportation, Subtitle A, Office of the Secretary, (49 CFR, Part 21) Nondiscrimination in Federally Assisted Program of the Department of Transportation – Effectuation of Title VI of the Civil Rights Act of 1964 (hereinafter referred to as the "Regulations") and other pertinent directives, no person in the United States shall, on the grounds of race, color, national origin, sex, age (over 40), religion, sexual orientation, gender identity, veteran status, or disability be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity for which the Recipient receives Federal financial assistance from the U.S. Department of Transportation, including the Federal Highway Administration, and hereby gives assurance that will promptly take any necessary measures to effectuate this agreement. This assurance is required by subsection 21.7(a) (1) of the Regulations.

The Law

* Title VII of the Civil Rights Act of 1964 (amended 1972) states that it is unlawful for an employer to discriminate in employment because of race, color, religion, sex, age (40-70 years) or national origin.
* Executive Order No. 11246 on Nondiscrimination under Federal contract prohibits employment discrimination by contractor and subcontractor doing business with the Federal Government or recipients of Federal funds. This order was later amended by Executive Order No. 11375 to prohibit discrimination on the basis of sex.
* Section 503 of the Rehabilitation Act of 1973 States:

  The Contractor will not discriminate against any employee or applicant for employment because of physical or mental handicap.
* Section 2012 of the Vietnam Era Veterans Readjustment Act of 1973 requires Affirmative Action on behalf of disabled veterans and veterans of the Vietnam Era by contractors having Federal Contracts.
* Section 206 (A) of Executive Order 12086, Consolidation of Contract Compliance Functions for Equal Employment Opportunity, states:

  The Secretary of Labor may investigate the employment practices of any Government contractor or sub-contractor to determine whether or not the contractual provisions specified in Section 202 of this order have been violated.

The Lexington-Fayette Urban County Government practices Equal Opportunity in recruiting, hiring and promoting. It is the Government's intent to affirmatively provide employment opportunities for those individuals who have previously not been allowed to enter into the mainstream of society. Because of its importance to the local Government, this policy carries the full endorsement of the Mayor, Commissioners, Directors, and all supervisory personnel. In following this commitment to Equal Employment Opportunity and because the Government is the

benefactor of the Federal funds, it is both against the Urban County Government policy and illegal for the Government to let contracts to companies which knowingly or unknowingly practice discrimination in their employment practices. Violation of the above mentioned ordinances may cause a contract to be canceled and the contractor may be declared ineligible for future consideration.

Please sign this statement in the appropriate space acknowledging that you have read and understand the provisions contained herein. Return this document as part of your application packet.

Bidders

I/We agree to comply with the Civil Rights Laws listed above that govern employment rights of minorities, women, Vietnam veterans, handicapped, and aged persons.

Signature

Name of Business

The Entity (regardless of whether construction contractor, non-construction contractor or supplier) agrees to provide equal opportunity in employment for all qualified persons, to prohibit discrimination in employment because of race, color, religion, sex (including pregnancy, sexual orientation or gender identity), national origin, disability, age, genetic information, political affiliation, or veteran status, and to promote equal employment through a positive, continuing program from itself and each of its sub-contracting agents. This program of equal employment opportunity shall apply to every aspect of its employment policies and practices.

The Kentucky equal Employment Opportunity Act of 1978 (KRS 45.560-45.640) requires that any count, city, town, school district, water district, hospital district, or other political subdivision of the state shall include in directly or indirectly publicly funded contracts for supplies, materials, services, or equipment hereinafter entered into the following provisions:

During the performance of this contract, the contractor agrees as follows:

(1) The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, age or national origin;

(2) The contractor will state in all solicitations or advertisements for employees placed by or on behalf of the contractors that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, age or national origin;

(3) The contract will post notices in conspicuous places, available to employees and applicants for employment, setting forth the provisions of the non-discrimination clauses required by this section; and

(4) The contractor will send a notice to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding advising the labor union or workers' representative of the contractor's commitments under the nondiscrimination clauses.

The Act further provides:

KRS 45.610. Hiring minorities – Information required

(1) For the length of the contract, each contractor shall hire minorities from other sources within the drawing area, should the union with which he has collective bargaining agreements be unwilling to supply sufficient minorities to satisfy the agreed upon goals and timetable.

(2) Each contractor shall, for the length of the contract, furnish such information as required by KRS 45.560 to KRS 45.640 and by such rules, regulations and orders issued pursuant thereto and will permit access to all books and records pertaining to his employment practices and work sites by the contracting agency and the department for purposes of investigation to ascertain compliance with KRS 45.560 to 45.640 and such rules, regulations and orders issued pursuant thereto.

KRS 45.620. Action against contractor – Hiring of minority contractor or subcontractor

(1) If any contractor is found by the department to have engaged in an unlawful practice under this chapter during the course of performing under a contract or subcontract covered under KRS 45.560 to 45.640, the department shall so certify to the contracting agency and such certification shall be binding upon the contracting agency unless it is reversed in the course of judicial review.

(2) If the contractor is found to have committed an unlawful practice under KRS 45.560 to 45.640, the contracting agency may cancel or terminate the contract, conditioned upon a program for future compliance approved by the contracting agency and the department. The contracting agency may declare such a contractor ineligible to bid on further contracts with that agency until such time as the contractor complies in full with the requirements of KRS 45.560 – 45.640.

(3) The equal employment provisions of KRS 45.560 to 45.640 may be met in part by a contractor by subcontracting to a minority contractor or subcontractor. For the provisions of KRS 45.560 to 45.640, a minority contractor or subcontractor shall mean a business that is owned and controlled by one or more persons disadvantaged by racial or ethnic circumstances.

KRS 45.630 Termination of existing employee not required, when

Any provision of KRS 45.560 to 45.640 notwithstanding, no contractor shall be required to terminate an existing employee upon proof that that employee was employed prior to the date of the contract.

KRS 45.640 Minimum skills

Nothing in KRS 45.560 to 45.640 shall require a contractor to hire anyone who fails to demonstrate the minimum skills required to perform a particular job.

It is recommended that all of the provisions quoted above to be included as special conditions in each contract. In the case of a contract exceeding $250,000, the contractor is required to furnish evidence that his work-force in Kentucky is representative of the available work-force in the area from which

he draws employees, or to supply an Affirmative Action plan which will achieve such representation during the life of the contract.

11. EQUAL EMPLOYMENT OPPORTUNITY AFFIRMATIVE ACTION POLICY

It is the policy of Geospecialties

to assure that all applicants for employment and all employees are treated on a fair and equitable basis without regard to their race, religion, sex, color, handicap, natural origin or age.

Such action shall include employment, promotion, demotion, recruitment or recruitment advertising, layoff or termination, rates of pay and other forms of compensation, and selection for training, whether apprenticeship and/or on-the-job-training.

Furthermore, this company agrees to make special recruitment efforts to hire the protected class whenever feasible. This company also agrees to adhere to all applicable federal, state, and local laws relating to Equal Employment Opportunity for all individuals.

12. **WORKFORCE ANALYSIS FORM**

Name of Organization: Geospecialties

Categories	Total	White (Not Hispanic or Latino)		Hispanic or Latino		Black or African-American (Not Hispanic or Latino		Native Hawaiian and Other Pacific Islander (Not Hispanic or		Asian (Not Hispanic or Latino		American Indian or Alaskan Native (not Hispanic or Latino		Two or more races (Not Hispanic or Latino		Total	
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Administrators		2	2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2	2
Professionals		4	0													4	0
Superintendents		8	0													8	0
Supervisors		N/A	N/A														
Foremen		N/A	N/A														
Technicians		N/A	N/A														
Protective Service		N/A	N/A														
Para-Professionals		N/A	N/A														
Office/Clerical		N/A	N/A														
Skilled Craft		N/A	N/A														
Service/Maintenance		1	0													1	0
Total:																	

Prepared by: Kathryn Perkins HR/Payroll Manager
(Name and Title)

Date: 05/22/25

Revised 2015-Dec-15

13. EVIDENCE OF INSURABILITY

LEXINGTON-FAYETTE URBAN COUNTY GOVERNMENT CONSTRUCTION PROJECT
(Use separate form for each Agency or Brokerage agreeing to provide coverage)

Names Insured: _____ Employee ID: _____

Address: _____ Phone: _____

Project to be insured: _____

In lieu of obtaining certificates of insurance at this time, the undersigned agrees to provide the above Named Insured with the minimum coverage listed below. These are outlined in the Insurance and Risk Management of Part V (Special Conditions), including all requirements, and conditions:

Section Items	Coverage	Minimum Limits and Policy Requirements	Limits Provided To Insured	Name of Insurer	A.M. Best's Code	Rating
SC-2 – see provisions	CGL	$1,000,000 per occ. And $2,000,000 aggregate	$			
SC-2 – see provisions	AUTO	$1,000,000/per occ.	$			
SC-2 – see provisions	WC	Statutory w /endorsement as noted	$			
SC-2 – see provisions	EXC	$5,000.000 per occ.	$			

Section 2 includes required provisions, statements regarding insurance requirements, and the undersigned agrees to abide by all provisions for the coverage's checked above unless stated otherwise when submitting.

_____ _____
Agency or Brokerage Name of Authorized Representative

_____ _____
Street Address Title

_____ _____
City State Zip Authorized Signature

_____ _____
Telephone Number Date

NOTE: Authorized signatures may be the agent's if agent has placed insurance through an agency agreement with the insurer. If insurance is brokered, authorized signature must be that of authorized representative of insurer.

IMPORTANT: Contract may not be awarded if a completed and signed copy of this form for all coverage's listed above is not provided with the bid.

*See Attached COI

GUARFE-S01 JHEINZ

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 4/3/2025

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 Houchens Insurance Group 505 Wellington Way Lexington, KY 40503	CONTACT NAME: PHONE (A/C, No, Ext): (859) 263-2771 FAX (A/C, No): (859) 263-1999 E-MAIL ADDRESS: policy@higusa.com
INSURED Guardian Fence and Construction LLC dba GeoSpecialties 1060 Elizabeth St. Unit 7 Nicholasville, KY 40356	INSURER(S) AFFORDING COVERAGE — NAIC # INSURER A: Cincinnati Specialty Underwriters Insurance Company — 13037 INSURER B: United Fire & Casualty Company — 13021 INSURER C: BusinessFirst Insurance Company — 11697 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	X COMMERCIAL GENERAL LIABILITY [ ] CLAIMS-MADE [X] OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: X POLICY [X] PRO-JECT [ ] LOC OTHER:			CSU0228471	4/8/2025	4/8/2026	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG	$ 1,000,000 $ 100,000 $ 5,000 $ 1,000,000 $ 2,000,000 $ 2,000,000
B	AUTOMOBILE LIABILITY ANY AUTO OWNED AUTOS ONLY [X] SCHEDULED AUTOS X HIRED AUTOS ONLY [X] NON-OWNED AUTOS ONLY			60542570	4/8/2025	4/8/2026	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)	$ 1,000,000 $ $ $
A	X UMBRELLA LIAB [X] OCCUR EXCESS LIAB [ ] CLAIMS-MADE DED [X] RETENTION $ 0			CSU0228485	4/8/2025	4/8/2026	EACH OCCURRENCE AGGREGATE	$ 1,000,000 $ 1,000,000
C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) Y/N [ ] N/A If yes, describe under DESCRIPTION OF OPERATIONS below			0521-20244	12/22/2024	12/22/2025	X PER STATUTE [ ] OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	$ 1,000,000 $ 1,000,000 $ 1,000,000
B	Property			60542570	4/8/2025	4/8/2026	BPP- Contents	20,000
B	Leased/Rented			60542570	4/8/2025	4/8/2026	Equipment	500,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)
EPL Limit- $250,000

CERTIFICATE HOLDER

Information Purposes Only

CANCELLATION

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

Allen J. Boss

14. DEBARRED FIRMS

PROJECT NAME: Jacks Creek Pike Slope Repair

BID NUMBER: 68-2025

LEXINGTON-FAYETTE URBAN COUNTY GOVERNMENT
LEXINGTON, KY

All prime Contractors shall certify that Subcontractors have not and will not be awarded to any firms that has been debarred for noncompliance with the Federal Labor Standards, Title VI of the Civil Rights Act of 1964 As Amended, Executive Order 11246 As Amended or any other Federal Law.

All bidders shall complete the attached certification in duplicate and submit both copies to the Owner with the bid proposal. The Owner (grantee) shall transmit one copy to the Lexington-Fayette Urban County Government, Division of Community Development, within fourteen (14) days after bid opening.

The undersigned hereby certifies that the firm of Geospecialties has not and will not award a subcontract, in connection with any contract award to it as the result of this bid, to any firm that has been debarred for noncompliance with the Federal labor Standards, Title VI of the civil Rights Act of 1964, Executive Order 11246 as amended or any Federal Law.

Geospecialties
Name of Firm Submitting Bid

Signature of Authorized Official

President
Title

5/22/25
Date

15. DEBARMENT CERTIFICATION

All contractors/subcontractors shall complete the following certification and submit it with the bid proposal.

The contractor/subcontractor certifies in accordance with Executive Order 12549 (Debarment and Suspension 2/18/86) that to the best of its knowledge and belief, that it and its principals:

1) Are not presently debarred, suspended, proposed for debarment, declared negligible, or voluntarily excluded from covered transactions or contract by any Federal department or agency for noncompliance with the Federal Labor Standards, Title VI of the Civil Rights Act of 1964 as amended, Executive Order 11246 as amended or any other Federal law;

    a) Have not within a three year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

    b) Are not presently indicted for or otherwise criminally or civilly charged by a government entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (1)(a) of this certification; and

    c) Have not within a three year period preceding this bid has one or more public (Federal, State or local) transactions or contracts terminated for cause or default.

2) Where the contractor is unable to certify to any of the statements in this certification, such prospective contractors shall attach an explanation to this certification form.

Firm Name: Geospectra/Ites

Project: Jacks Creek Pike Slope Repair

Printed Name and Title of Authorized Representative: Justin Anderson / President

Signature:

Date: 5-22-25

END OF SECTION

Statement of Qualifications

APS GEO specializes in program management for ongoing geohazard identification, evaluation, mitigation, and repairs.

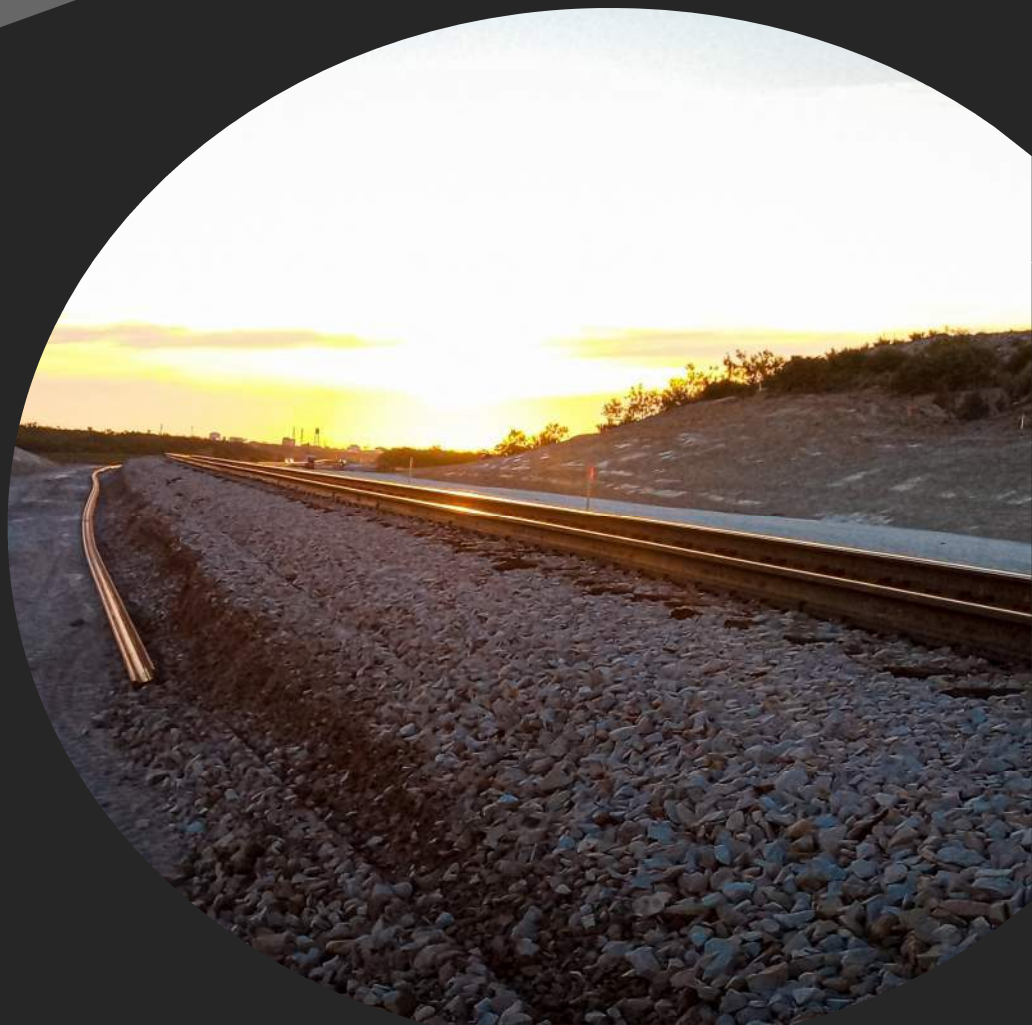
Experts at Geohazard Engineering from evaluation through mitigation design and construction support.

U.S. Government's System for Award Management (SAM) *Small Business Enterprise.*

Corporate Office Location:
1060 Elizabeth St., Unit 7
Nicholasville, KY 40356
Phone: 859.361.2465
www.apsgeo.com

Services:

- General Civil Engineering
- Geotechnical Engineering
  - Earthen Structures & Retaining Walls
  - Ground Improvement
  - Temporary Shoring Design
  - Deep and Shallow Foundations
- Engineering Geology
- Project Cost Estimating
- Public Project Review
- Water Resources
- Environmental Permitting
- Survey
- Subsurface Explorations
- Sampling and Laboratory Testing
- Dam Risk Management
- Rock Slope Hazard Assessments
- Geohazard Repairs
- Emergency Response



Our Team

Our team possesses a valuable combination of geotechnical engineering, engineering geology and design-build construction design experience. We can leverage this industry experience to bring you safe, effective cost-saving solutions.







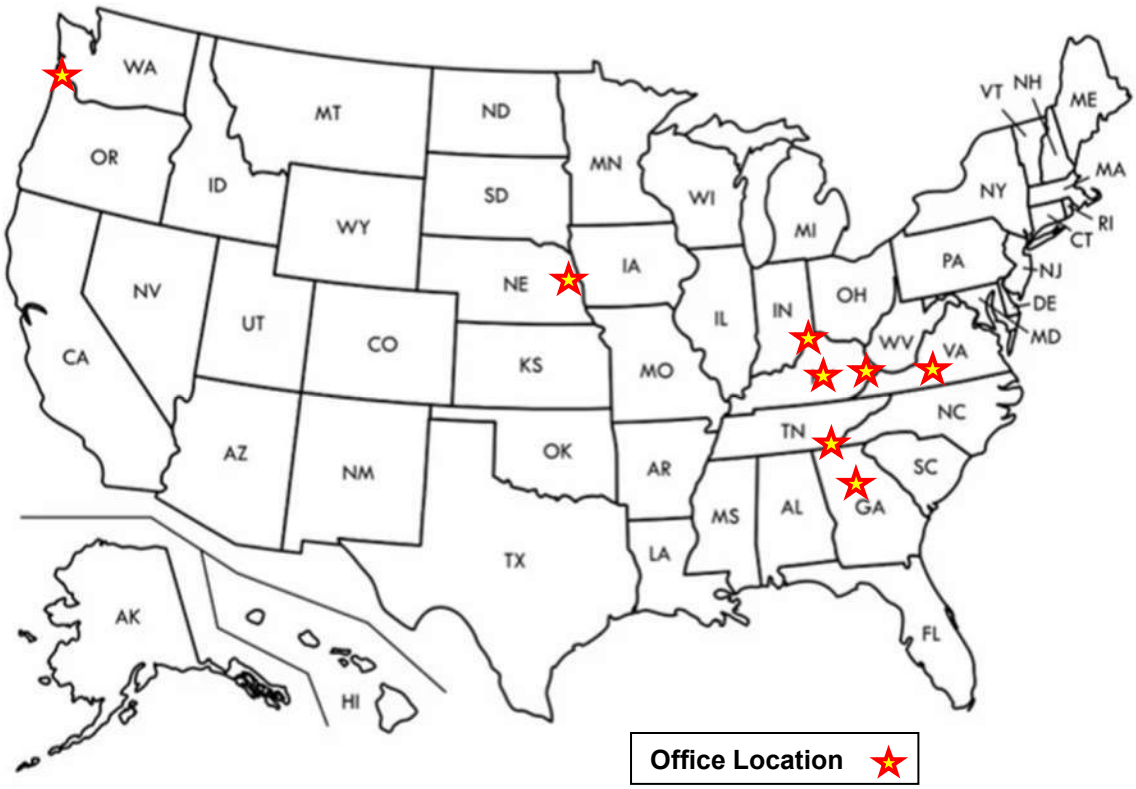





Keys to Success

Our team includes seasoned geotechnical engineers and geologists with a wealth of experience on a full range of small to large-scale complex projects. We have identified the following items as keys to success.

- Depth of Local Resources
- Extension of our Client's Staff
- Technical Expertise & Innovation
- Ability to Deliver on Tight Schedules
- Adding Value through cost risk assessment and value engineering
- Expertise with non-roadway features



About APS GEO

Mission: APS GEO's mission is to *Develop and Implement the Most Efficient and Innovative Solutions* for our clients. APS GEO delivers technically superior services, creates operationally viable solutions, and facilitates a true partnership with our clients that leads to successful projects.

Location: APS GEO's decentralized structure allows for a wide-ranging geographic coverage. This geographic diversity among our key staff provides us with a varied technical background and different approaches to problem solving, which often leads to the most efficient and elegant designs.

Our Team: APS GEO's team is comprised of several senior geotechnical engineers and engineering geologist with a strong background in geohazard mitigation. Combined our key engineers have over 150 years of experience in this specialized field.

Safety: As an employee-owned small business, nothing is more important to us than health and safety of our employees and partners. This is reflected in how we live and work across the country. Safety is an embedded part of our culture and a consistent emphasis on every project. Our goal is that everyone associated with our projects always goes home safe. We understand that no project is the same and develop custom-fit safety plans to address each project's unique needs. Our safety approach focuses on client requirements, avoids accidents that could result in unplanned delays, and reduces client's overall project risk.

APS GEO remains committed to providing the highest level of Health and Safety support for our staff, and in performing all services in a manner that is both safe and in compliance with all regulations and client requirements.

- BROAD GEOGRAPHICAL EXPERIENCE
- HANDS-ON APPROACH TO DESIGN & CONSTRUCTION
- FAMILIARITY WITH CONSTRUCTION ISSUES & METHODS
- PRACTICAL AND COST-EFFICIENT APPROACH
- STREAMLINES DESIGN PROCESS
- AGENCY EXPERIENCE (AREMA, AASHTO, FHWA, USACE, ETC.)

Geohazard Program Management

Strong engineering presence in the Appalachia, Midwest and Southeast.

Familiar with the geohazard issues specific to Appalachia, Midwest and Southeast.

Past experience as landslide repair, rock slope stabilization, and rockfall mitigation contractors.

Experienced at all aspects of rockfall mitigation investigation, design, preparation of bid documents, project cost estimates, and construction.

Expert at understanding construction costs, limitations, and schedule.

Licensed drone pilots on staff to provide both aerial photography and photogrammetric modeling that is critical for communicating with contractors.

Currently providing geohazard evaluation and mitigation services to three major rail companies in North and Central America and several DOTs.

Engineering Geology

We have a team of highly experienced engineering geologist / geotechnical engineers familiar with engineering geology tasks who provide services and support in the following specialist areas:

- Engineering geology (site evaluation; terrain evaluation and classification; materials sources, suitability and resource estimates; quarry site selection; route evaluation and selection);
- Geological mapping of cliff lines and excavation faces for rock fall, wedge failure, residential, commercial and recreational developments in hazardous coastal areas, and deep basements; and
- Assessment and monitoring of deep landslides and design of engineered slopes to rectify long term site stability.
- Specialty rockfall hazard mitigation designs.

Mining Engineering

- Mining engineering (design of pit slopes and slope stabilization; shafts, tunnels and underground rock mechanics; subsidence estimation; tailings dams and management systems; infrastructure; mine floor stability);

Geotechnical Exploration

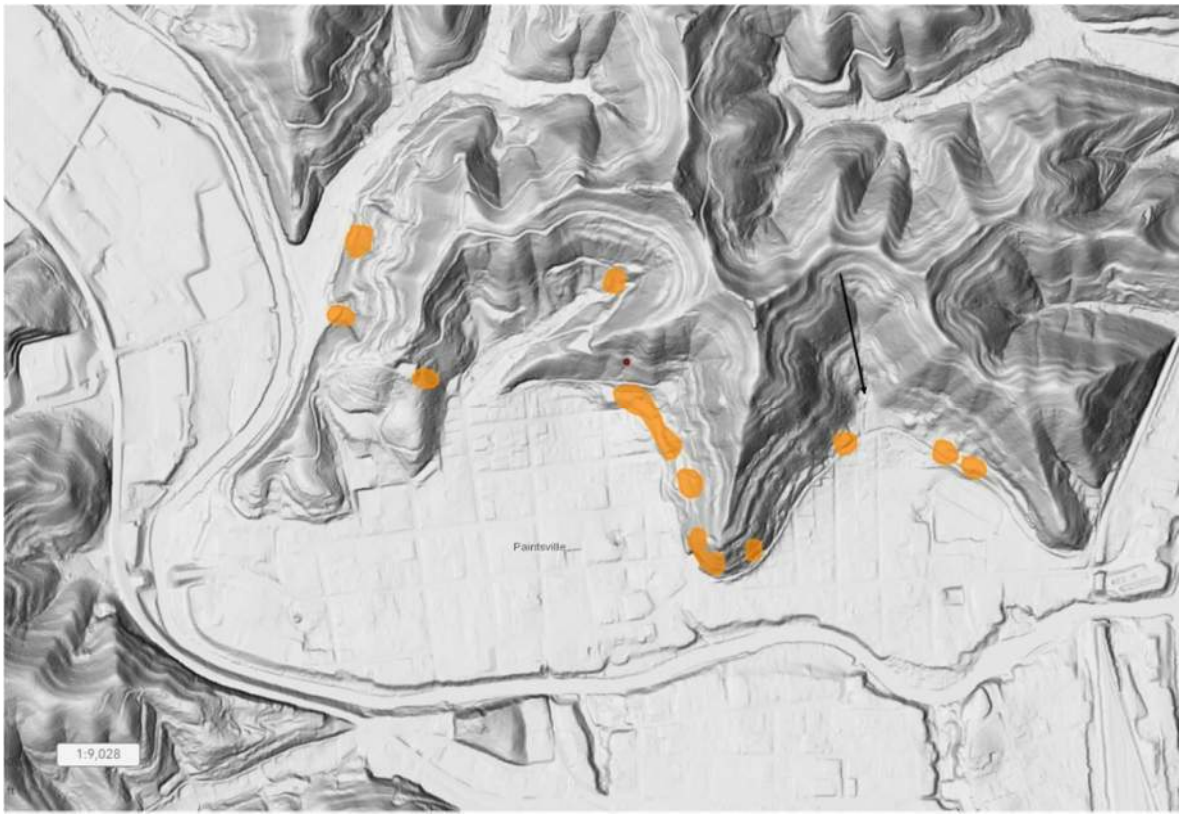
In-house drilling services

Subcontract drilling as needed for specialty access

Increased safety control with in-house personnel

Site Characterization

- Prior to site investigation, our team reviews available subsurface information from past projects and develops a field exploration location plan to supplement this information.
- An aerial photo map and site plan showing the borings are typically created and used in permit applications and for staking the borings in the field prior to drilling.
- Publicly available geotechnical and geologic data is reviewed and incorporated into the planning of geotechnical subsurface investigations.



Laboratory Testing

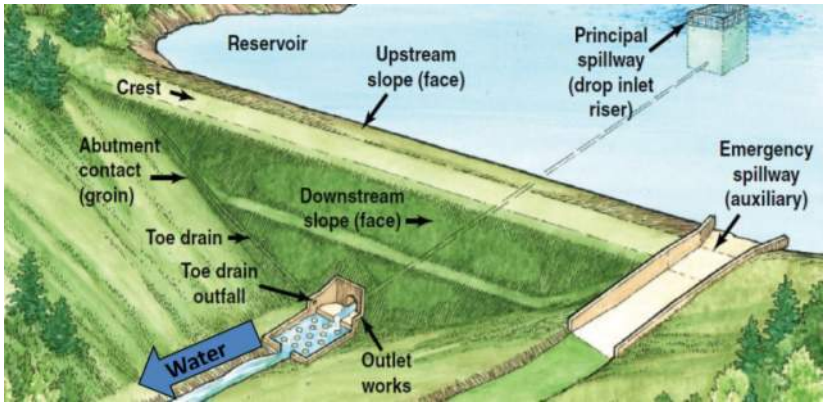
We offer geotechnical soils testing in our in-house laboratory. We can provide clients with the following tests:

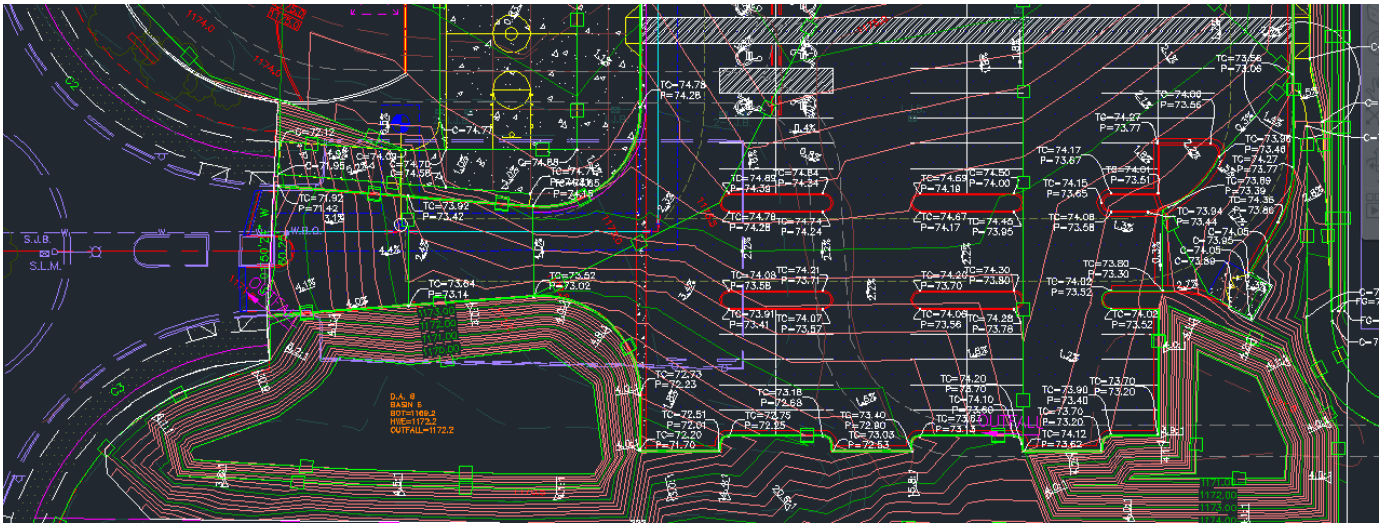
Test Method	AASHTO Designation
Dry preparation of samples	R 58-11
Particle Size Analysis of Soils by Hydrometer	AASHTOT 88
Liquid Limit of Soils (Atterberg Limits)	AASHTO T 89
Plastic Limit of Soils (Atterberg Limits)	AASHTO T 90
Moisture-Density (Proctor) of Soils, Standard Method	AASHTO T 99
Specific Gravity of Soils	AASHTO T 100
Unconfined Compression Strength of Soils	AASHTO T 208
Permeability of Granular Soils	AASHTO T 215
One-Dimensional Consolidation of Soils	AASHTO T 216
Moisture Content of Soils	AASHTO T 265
Organic Content in Soils by Loss on Ignition	AASHTO T 267
pH Testing of Soils	AASHTO T 289
Unconsolidated, Undrained Triaxial Compression	AASHTO T 296
Consolidated, Undrained Triaxial Compression	AASHTO T 297
Determination of Calcium/Magnesium Carbonate Content in Soils Using Sequential Loss on Ignition test	ITM No. 507-15T
Determining Sulfate content in soil BY Coloimetric	ITM No.510-13T
Fine Aggregate	AASHTO T 11
Coarse Aggregate	AASHTO T 27

Civil/Site Engineering & Land Development

APS provides total infrastructure solutions that help clients manage complex projects in the following areas:

- Civil / Site Development
- Project Development & Due Diligence
- Project Management & Planning
- Mixed Use Design
- Public Involvement & Local Agency Coordination
- Site & Master Planning
- Utilities
- Permitting
- Storm Water Management
- Transportation
- Parking / Traffic Access & ADA Accessibility
- Commercial Development
- Design-Build
- Community Planning & Urban Design
- Construction Services
- Sustainable Design

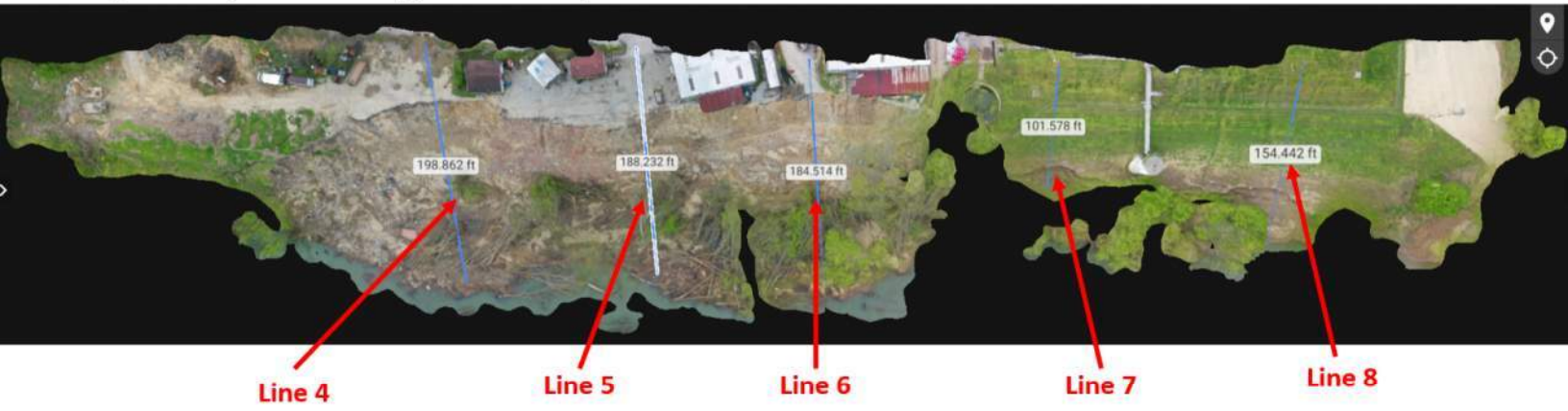




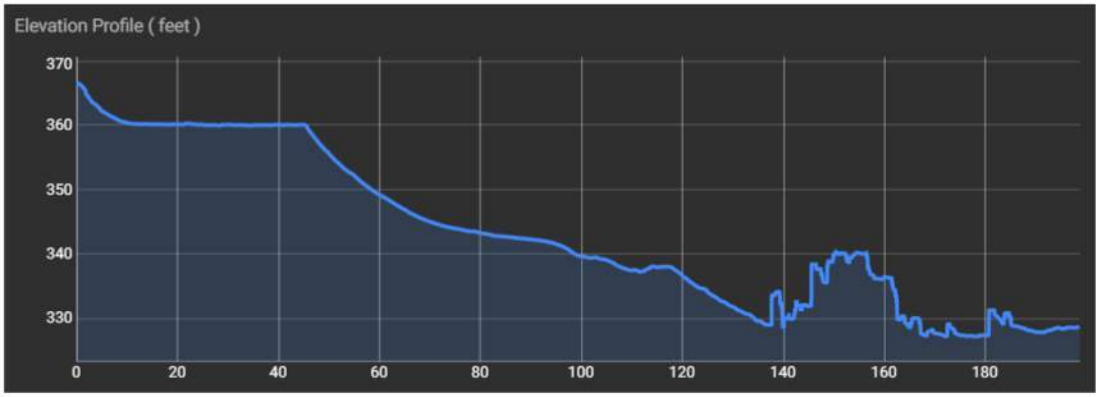
Unmanned Aircraft System (UAS) Services

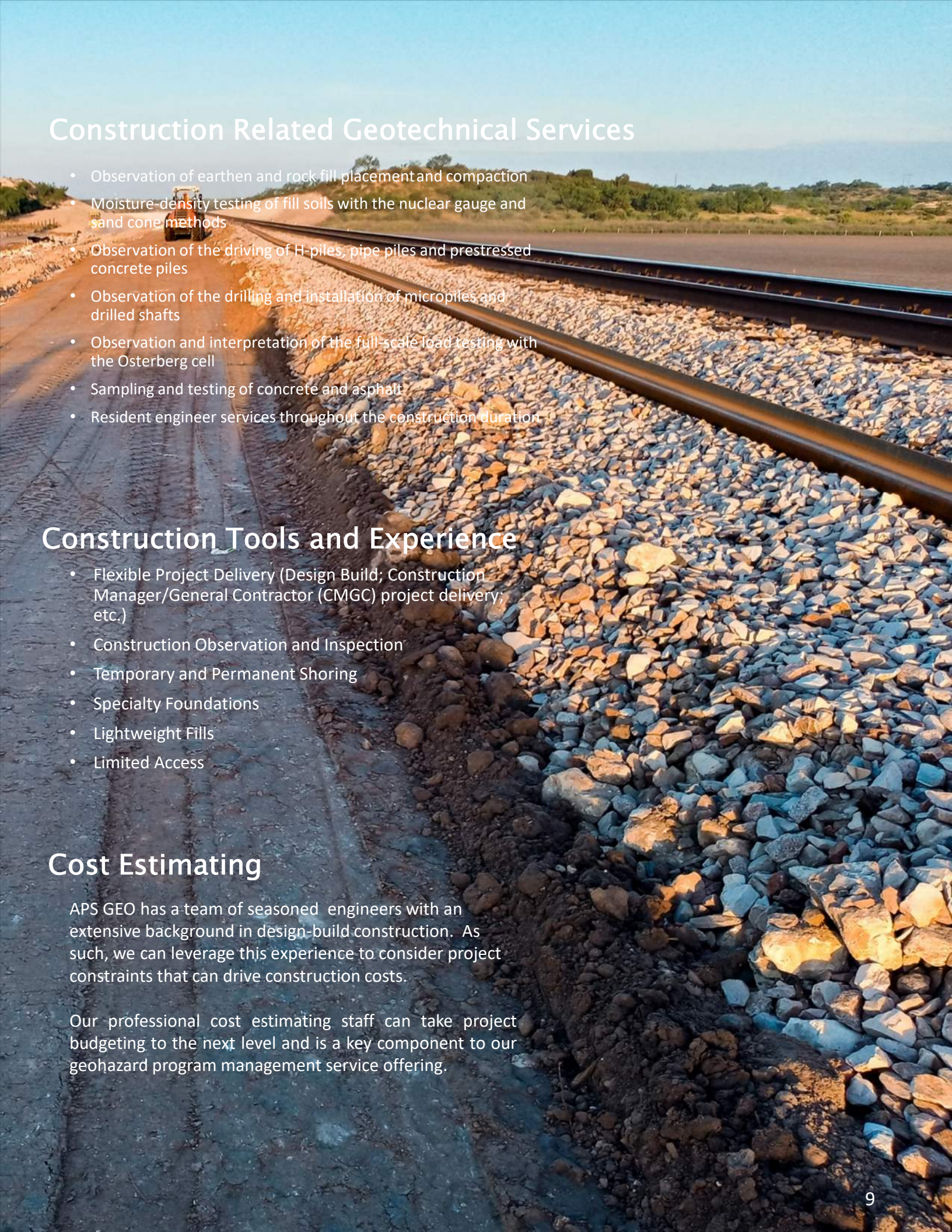
- FAA licensed UAS pilots ready to support your project needs.
- Surveys can be critical to planning, development of repair options and data collection for design.
- Expedited data collection, oftentimes during our first visit to the site.
- Detailed maps and figures as well as detailed engineering reports and designs.
- Save time and money.

Photogrammetry Model and Approximate Slope Cross-sections



Services listed includes fully qualified engineering personnel to gather the information, provide in-depth and detailed maps and figures as well as detailed engineering reports and designs.





Construction Related Geotechnical Services

- Observation of earthen and rock fill placement and compaction
- Moisture-density testing of fill soils with the nuclear gauge and sand cone methods
- Observation of the driving of H-piles, pipe piles and prestressed concrete piles
- Observation of the drilling and installation of micropiles and drilled shafts
- Observation and interpretation of the full-scale load testing with the Osterberg cell
- Sampling and testing of concrete and asphalt
- Resident engineer services throughout the construction duration

Construction Tools and Experience

- Flexible Project Delivery (Design Build; Construction Manager/General Contractor (CMGC) project delivery; etc.)
- Construction Observation and Inspection
- Temporary and Permanent Shoring
- Specialty Foundations
- Lightweight Fills
- Limited Access

Cost Estimating

APS GEO has a team of seasoned engineers with an extensive background in design-build construction. As such, we can leverage this experience to consider project constraints that can drive construction costs.

Our professional cost estimating staff can take project budgeting to the next level and is a key component to our geohazard program management service offering.

Survey

Frequently, as a complement to our geotechnical and civil engineering services, APS conducts site surveys for nearly all of our projects requiring field data. These surveys are executed by our engineers and professional land surveyor. This saves our clients time and money by consolidating this effort.

We feel that getting “boots on the ground” gives our engineers invaluable insight and understanding for each project’s design requirements. Many designs hinge on key site features and the ability to identify and survey these features that often require the eye of a trained engineer or geologist. Our staff has the knowledge and experience to perform detailed geotechnical, geological and other civil engineering assessments.

At APS, we are capable of performing both conventional type surveying, typically favored by construction crews, as well as Global Navigation Satellite System (GNSS) and scanning total station surveys for engineering design. For many of our projects, we provide the only survey for the project, capturing hydraulic, structural, environmental, and construction data requirements. If preferred by the client, we establish the project control and survey baseline through physical control points that tie into geodetic coordinate systems. By performing the site survey and collecting all necessary data, our staff can tailor survey requirements for each individual project, eliminating any “data gaps” and minimizing project costs.

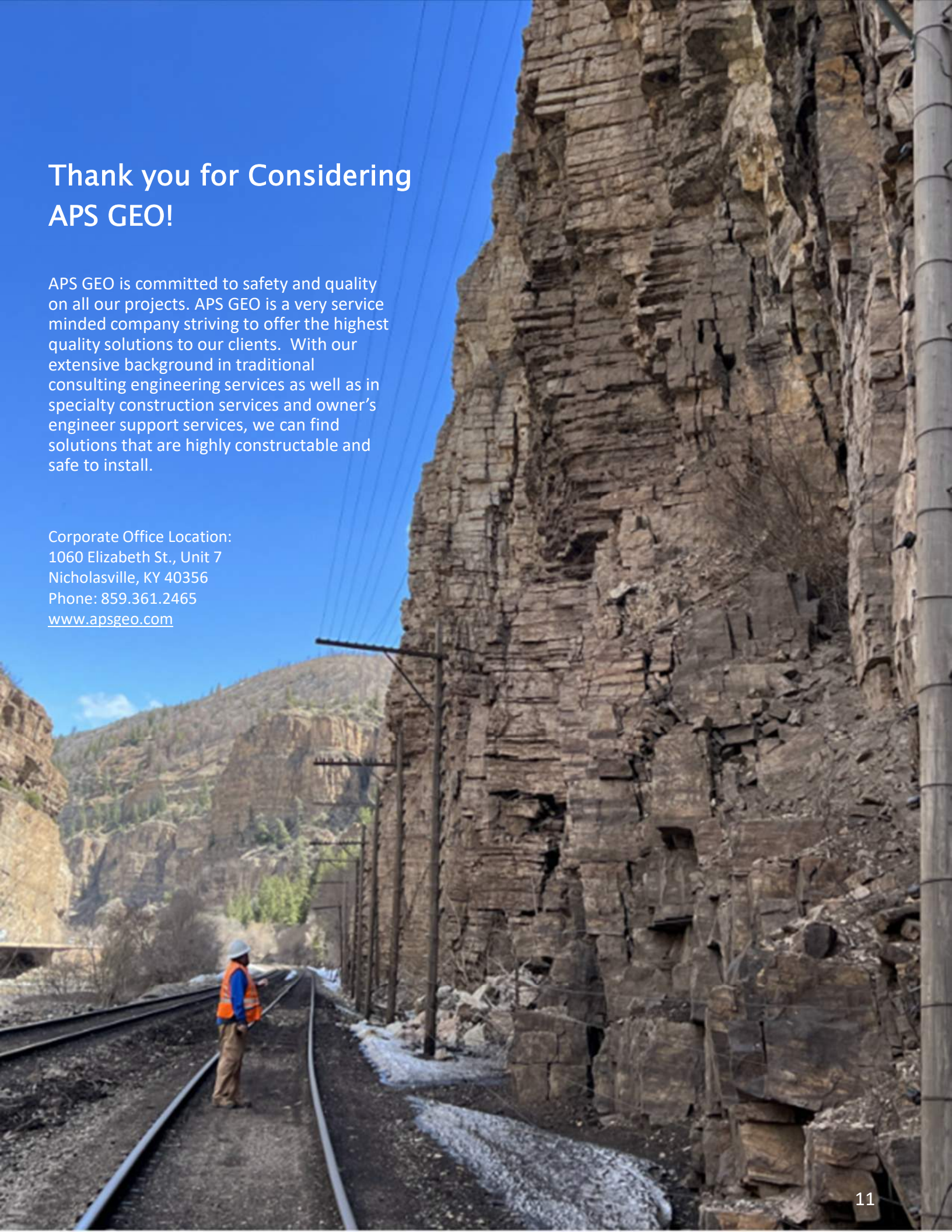
Following a site visit, survey data is incorporated into CADD software, where other available data, such as LiDAR point clouds, are also collected and included into the design. Combining the survey with other available data sets provides our staff with a complete and streamlined understanding of the project. From this seamless foundation, our projects can advance efficiently from survey into design, avoiding typical downtime and disconnect that other project approaches may experience.

Our staff is comfortable and accustomed to accessing difficult locations. We require minimal equipment to conduct our detailed surveys, often traveling long distances to remote project locations. In addition, our staff is well acclimated to diverse weather conditions making us well suited to work at nearly any location in a moment’s notice.

Thank you for Considering APS GEO!

APS GEO is committed to safety and quality on all our projects. APS GEO is a very service minded company striving to offer the highest quality solutions to our clients. With our extensive background in traditional consulting engineering services as well as in specialty construction services and owner's engineer support services, we can find solutions that are highly constructable and safe to install.

Corporate Office Location:
1060 Elizabeth St., Unit 7
Nicholasville, KY 40356
Phone: 859.361.2465
www.apsgeo.com



Capability Statement

Company Overview: GeoSpecialties is a leading specialty geotechnical construction firm dedicated to delivering innovative, efficient, and reliable solutions to complex challenges. Anchored by our "Safety Above All" mission and a relentless focus on client needs, we deliver cutting-edge expertise and practical solutions tailored to projects of every scale. Our team combines decades of expertise with cutting-edge technology to serve as a one-stop resource for geohazard mitigation, foundation installation, and specialty construction. With our sister company APS GEO, we can provide innovative solutions to the most difficult geotechnical problems.

Core Competencies:

- **Foundation Installation:** Micropiles, Helical piles, Driven piles, Drilled shafts.
- **Shoring Systems:** Soil nail walls, Tieback and anchored systems, shotcrete or sheet pile facings.
- **Geohazard Mitigation:** Landslide repairs, Compaction and permeation grouting, Slope stabilization.
- **Specialized Construction Services:** Retaining walls and ground support systems, Earthwork and grading solutions, Rockfall protection and barriers.

Key Differentiators:

- **Turnkey Solutions:** From design evaluation to project execution, we manage every phase to ensure seamless delivery.
- **Safety-First Culture:** A rigorous commitment to safety for our team, clients, and stakeholders.
- **Experienced Team:** Licensed professionals with a proven track record in specialty geotechnical and civil construction.
- **Innovative Techniques:** Advanced methodologies and equipment to tackle challenging environments.
- **Client-Focused:** Long-term partnerships based on trust, transparency, and consistent excellence.

Past Performance Highlights:

- **Slope Stabilization Projects, Eastern KY** Design and installation of stabilization and shoulder repair with soil nail installation, reinforced shotcrete, drainage improvements, and GRS shoulder buildout.
- **Abandoned Mine Land Project, Eastern KY**: Large-scale slide repair for Kentucky Abandoned Mine Lands, involving earthwork, geosynthetics, drainage, retaining walls, and roadway improvements.
- **Roadway Stabilization Project, Eastern Ohio**: Roadway embankment failure repair on State Route 536 in Ohio with soil nail installation and steel mesh facing for stabilization.
- **Roadway Stabilization Project, Eastern Indiana**: Embankment repair along county roadway using soil nails, reinforced shotcrete, and horizontal drains to stabilize a 780-linear-foot slide.
- **Lightweight Fill for Vault Remediation, Northeast Ohio**: Abandonment of basement vaults under sidewalks, using lightweight cellular concrete to stabilize and prevent collapse.
- **Streambank Stabilization, Eastern Indiana**: Design and installation of stabilization using sheet piles and soil nails to address erosion and prevent roadway failure.
- **Temporary Shoring, Central Kentucky**: Design and Installation of temporary soil nail and shotcrete wall for excavation shoring at a manufacturing facility.
- **Tieback Installation, Southeast Indiana**: Installation of 64 tiebacks in a drilled shaft retaining wall along State Route 1 in Indiana to mitigate landslide risks.
- **Sinkhole Repair, Northeast Tennessee:** Construction of a sinkhole repair consisting of a reverse filter to prevent future subsidence.

Corporate Data:

- **DUNS:** 087108426
- **CAGE Code:** 9WMX5
- **NAICS Codes:** 237990 (Other Heavy and Civil Engineering Construction), 238910 (Site Preparation Contractors), 541330 (Engineering Services)
- **Service Areas:** Nationwide, with a focus on the Eastern Region United States

Casey Prine – General Superintendent

Executive Summary/Profile

Casey Prine is a seasoned superintendent in geotechnical construction with extensive experience managing complex slope stabilization, retaining wall construction, micropile installation, and subsurface grouting projects. He serves as General Superintendent for GeoSpecialties, overseeing multiple crews, ensuring rigorous safety standards, and delivering successful project outcomes. Casey has supervised the installation of over 10,000 soil nails and rock bolts, more than 100,000 SF of soil nail walls, and successfully completed the installation of over 1000 micropiles and substantial grouting projects within the past five years. He is highly skilled in shotcrete, compaction grouting, rock bolts, micropiles, and various geotechnical mitigation techniques and has repaired dozens of geohazards with these methods over his career.

Professional Experience

General Superintendent
GeoSpecialties | Nicholasville, KY (March 2023 – Present)

- Oversees multiple construction crews, safety compliance, hiring, training, scheduling, and material ordering.

Detailed Project Highlights:

- **Danville Tennis Facility**: Project included 3650 SY rough and fine grading, installation of extensive storm drainage infrastructure, asphalt paving (1210 SY), concrete curb installation (3464 LF), pedestrian paving (16,676 SF), retaining walls (200 LF), tennis courts surfacing (42,729 SF), fencing (1300 LF), and comprehensive landscaping and site amenities.
- **Casey County Track and Field Renovation**: Managed extensive earthwork (6190 CY rough grading, 500 CY fine grading), storm drainage systems, pedestrian paving (4100 SF), asphalt paving (935 tons), trench drains (1612 LF), fencing (1100 LF), and athletic surface installations (5440 SY).
- **Lower Dillsboro Rd Slide Repair, Dearborn County, IN ($1.3M)**: Led installation of 11,400 SF sheet piles, 7,240 LF soil nails, and drainage systems.
- **KY 197 Slide Repairs, Pike Co, KY ($520K total)**: Managed multiple slope stabilization projects totaling over 440 LF using soil nails, reinforced shotcrete walls, and horizontal drains.
- **Good Sam Electrical Vault TER, Cincinnati, OH ($67K)**: Installed soil nails and shotcrete facing to stabilize excavation.
- **Wake Rd Slide Repair, Jefferson County, IN ($145K)**: Directed stabilization with soil nails, shotcrete, guardrails, and roadway reconstruction.

- **Herman Grigsby Slide Repair, KY AML ($1.06M)**: Comprehensive stabilization including drilled shafts, gabions, reinforced concrete, erosion control, and roadway restoration.
- **INDOT B-42528 Temp Shoring, IN ($35K)**: Implemented driven sheet piling temporary shoring for infrastructure project.
- **MOE-536-10.90, ODOT, OH ($95K)**: Installed soil nails and steel mesh to remediate roadway embankment failure.
- **Sagamaw Rd, Dearborn County, IN ($788K)**: Designed and constructed 780 LF soil nail and reinforced shotcrete walls, including drainage improvements.
- **3219 Old State Road 1, Franklin County, IN ($453K)**: Remediated embankment erosion using sheet piles and soil nails.
- **Thai Summit Temporary Shoring, Bardstown, KY ($350K)**: Executed 4,000 SF soil nail and reinforced shotcrete shoring for excavation support.
- **TDOT CNY312 SR-36, Unicoi County, TN ($160K)**: Constructed two permanent retaining walls using soil nails, shotcrete, and drainage systems to address embankment erosion.
- **Federal Street Basement Vault Remediation, Youngstown, OH ($350K)**: Managed grouting operations utilizing lightweight cellular concrete for structural stabilization.

Senior Superintendent
GeoStabilization International | Williamsburg, KY (2014 – 2022)

- Managed geotechnical construction projects valued from $50K to $3M.
- Directed extensive slope stabilization and geohazard mitigation projects across Kentucky, managing large-scale shotcrete and soil nail installations.

Key GeoSpecialties Project Highlights (2023 - Present):

- **Lower Dillsboro Rd Slide Repair, Dearborn County, IN** ($1.3M): Designed and installed 11,400 SF sheet pile, 7,240 LF soil nails, placed 355 CY backfill, and installed box inlets for extensive landslide repair.
- **KY 197 Slide Repairs, Pike Co, KY** ($117K-$240K): Executed multiple slope stabilizations up to 242 LF in length, including excavation, 20-ft soil nails, reinforced shotcrete facing (up to 8-inch thickness), and horizontal drains for enhanced slope stability.
- **Good Sam Electrical Vault TER** ($67K): Installed 15-ft soil nails with reinforced shotcrete facing (32 LF x 13-ft height).
- **Wake Rd Slide Repair, Jefferson County, IN** ($145K): Conducted slope stabilization with soil nails, shotcrete facing, installed guardrails, culvert improvements, and roadway resurfacing.
- **Herman Grigsby Slide Repair, KY AML** ($1M): Comprehensive stabilization including drilled shafts (720 LF), gabion retaining walls (1,272 CY), extensive concrete structures, erosion control (450 SY), roadway stabilization (700 tons bituminous), and revegetation.
- **INDOT B-42528 Temp Shoring, IN** ($35K): Implemented temporary shoring solution using 80 LF driven sheet piling.
- **MOE-536-10.90, ODOT, OH** ($95K): Stabilized embankment with 20-ft soil nails and steel mesh facing covering 98 LF, addressing significant slope failure.
- **Sagamaw Rd, Dearborn County, IN** ($788K): Designed and installed 780 LF soil nails and reinforced shotcrete wall (8-inch thickness) with horizontal drainage system for roadway embankment stabilization.

- **3219 Old State Road 1, Franklin County, IN** ($453K): Repaired roadway embankment using 181 LF sheet piles and soil nails, addressing ongoing creek erosion.
- **Thai Summit Temporary Shoring, Bardstown, KY** ($350K): Installed 4,000 SF soil nails and reinforced shotcrete (8-inch thickness) for excavation support, including horizontal drainage.
- **TDOT CNY312 SR-36 Unicoi County, TN** ($160K): Constructed two permanent retaining walls using 20-ft soil nails, shotcrete facing, and horizontal drains to repair roadway embankment failure caused by hurricane-related erosion.

Education

- Jelico High School, 2008

Certifications

- ACI Certified Nozzleman
- OSHA 10 & OSHA 30 Certified
- First Aid and CPR Certified
- Forklift Certified
- Commercial Driver's License (CDL)

Key Skills

- Geotechnical Construction Management
- Slope Stabilization & Retaining Walls
- Micropiles and Deep Foundations
- Shotcrete and Soil Nail Installation
- Safety Compliance and Management

Brian Miller - General Superintendent

Executive Summary/Profile

Brian Miller is a results-driven and detail-oriented Superintendent with extensive experience in managing construction and geotechnical stabilization projects. With a proven record of overseeing project teams, ensuring safety compliance, and optimizing project timelines and budgets, Brian excels at delivering quality outcomes even in challenging environments. Brian has installed thousands of soil nails and rock bolts over his career, including over 200,000 SF of soil nailed walls and more than 12,000 soil nails and rock bolts in the past five years. He has also spearheaded the company's grouting operations, demonstrating expertise in compaction grouting, permeation grouting, and deep injection methods.

Professional Experience

GeoSpecialties | General Superintendent (2024 – Present)

- Supervise multiple construction crews, coordinating daily activities to achieve project milestones efficiently.
- Oversee adherence to safety regulations, industry standards, and quality control practices.
- Develop and maintain project schedules, optimizing workflow and resource allocation.
- Communicate effectively with clients, engineers, and subcontractors to ensure smooth project execution.
- Conduct site inspections, address project challenges proactively, and maintain high productivity.

Detailed Project Highlights with GeoSpecialties:

- **20250 Mt. Pleasant Road – Slide Repair** (June–July 2024, $804,780): Managed comprehensive slide repair, completing project within scheduled time.
- **11429 West Laughery Rd. – Slide Repair** (December 2024, $136,600): Efficiently led project, reducing estimated time by 50%.
- **14400 West Laughery Rd. – Slide Repair** (February 2025, $286,000): Delivered significant stabilization project with minor extension to original timeline.
- **4300 E. Laughery Rd. – Slide Repair** (January–February 2025, $299,475): Executed rapid completion, significantly ahead of schedule.
- **Johnson Fork Rd – Slide Repair** (November–December 2024, $815,913.50): Managed large-scale slide repair, finishing ahead of schedule, demonstrating effective leadership and planning.
- **Federal Street Basement Vault Remediation, Youngstown, OH** (April–June 2024, $350,500): Managed grouting operations using lightweight cellular concrete flowable fill to remediate existing building vaults beneath sidewalks.

Superintendent

GeoStabilization International (GSI), Kentucky (March 2022 – March 2024)

- Supervised daily site operations, ensuring projects met goals effectively and safely.
- Managed construction crews, project scheduling, safety compliance, and quality control.

- Facilitated communication with clients, engineers, and subcontractors, maintaining productive stakeholder relationships.
- Conducted site inspections and effectively addressed project challenges.

Laborer
GeoStabilization International (GSI), Kentucky (June 2014 – March 2022)

- Supported various stabilization and construction projects, gaining comprehensive hands-on experience.
- Operated and maintained specialized geotechnical stabilization equipment.
- Consistently adhered to safety standards and contributed to effective teamwork and project success.

Skills & Competencies

- Project Management
- Team Leadership
- Safety Compliance
- Scheduling & Coordination
- Budget Management
- Quality Control
- Risk Assessment
- Effective Communication & Problem-Solving

Certifications & Training

- OSHA 30 Certified
- CPR Certified

James Bevard - Superintendent

Executive Summary/Profile

James Bevard is an experienced Geotechnical Driller with over 20 years of expertise specializing in geotechnical and environmental drilling. He has a proven record of efficiently managing drilling operations, performing precise soil and rock sampling, and ensuring stringent safety compliance. James is dedicated to delivering high-quality work in support of complex geotechnical projects. Mr. Bevard has extensive experience with casing drilling for micropiles and tiebacks, as well as many years of experience with compaction grouting and slurry grouting.

Professional Experience

GeoSpecialties | Geotechnical Driller (2024 – Present)

- Conduct geotechnical drilling operations, performing soil and rock sampling for geotechnical assessments.
- Ensure rigorous adherence to safety protocols and regulatory compliance.

Key Project Highlights:

- **SR 1 Slide Correction, Dearborn County, IN (July-August 2024):** Managed tieback installation project, completing ahead of schedule in 21 working days.
- **2116 to 2118 Kemper Lane Wall Stabilization, Cincinnati, OH (Nov-Dec 2024):** Oversaw efficient wall stabilization project, finishing in 12 working days.
- **9500 Hogan Rd, Dearborn County, IN (Aug-Oct 2024):** Directed extensive drilling operations for a major slope stabilization project, significantly under scheduled timeline.
- **Sinkhole Remediation, Elizabeth Ct, Gallatin, TN (Oct-Nov 2024):** Executed drilling and sampling for sinkhole repair, coordinating closely with city officials and engineers.

SAAB Electric | Geotechnical Driller (2023 – 2024)

- Executed precise drilling operations for comprehensive geotechnical site assessments.
- Collaborated with engineering teams to ensure accurate data collection and equipment maintenance.

GeoStabilization International (GSI) | Geotechnical Driller (2016 – 2023)

- Led drilling projects supporting geotechnical analyses and infrastructure stabilization.
- Managed safety compliance and field operations, providing critical data for engineering evaluations.

C & W Drilling | Geotechnical Driller (2009 – 2016)

- Conducted drilling for geotechnical and environmental projects, collecting samples for laboratory analysis.
- Ensured operational integrity of drilling equipment through routine maintenance.

Hayward Baker | Geotechnical Driller (2008 – 2009)

- Operated specialized drilling equipment for foundation stabilization and soil improvement projects.

- Supported detailed geotechnical investigations ensuring compliance with safety and technical standards.

C & W Drilling | Geotechnical Driller (2002 – 2008)

- Performed geotechnical drilling and sampling operations, assisting engineers in soil condition analyses.
- Maintained high standards of safety and equipment maintenance.

Skills & Certifications

- Geotechnical and environmental drilling expertise
- Soil and rock sampling techniques
- Drilling equipment maintenance and troubleshooting
- OSHA safety compliance
- Project coordination and team leadership
- Analytical and problem-solving abilities

Education & Training

- Industry-specific safety training and certifications
- Extensive on-the-job technical training in drilling operations

Jeff Bonaventura – Project Manager

Executive Summary/Profile

Jeff Bonaventura is an experienced Project Manager with over 18 years in civil engineering and construction management, specializing in geotechnical construction, slope stabilization, and infrastructure projects. He excels in project budgeting, scheduling, construction oversight, and quality assurance, successfully managing multimillion-dollar projects from inception through completion.

Education

- Bachelor of Science, Civil Engineering, Fairmont State University (2008)

Professional Experience

GeoSpecialties | Project Manager (2024 – Present)

Detailed Project Highlights:

- **TDOT CNY312 Roadway Stabilization, Unicoi County, TN** (Dec 2024): Managed stabilization of roadway embankment failures using soil nails, reinforced shotcrete, horizontal drains, and flowable fill after hurricane-induced damage.
- **Herman Grigsby Slide Repair, Kentucky AML** (Jan 2024 – Present): Directed comprehensive slide repair involving drilled shafts, gabion retaining walls, reinforced concrete structures, erosion control measures, and roadway reconstruction.
- **Johnson Fork Road Extension, Dearborn County, TN** (Dec 2024): Coordinated design and field implementation of roadway stabilization using sheet piles and soil nails, ensuring project specifications were met.
- **Mary Ingles Highway (KY 8) Slide Repair, Mason County, KY** (Jan 2025): Managed stabilization project with multiple rows of soil nails and shotcrete wall installation under active traffic conditions, ensuring compliance with stringent safety and quality standards.

Respec | Project Manager of Construction Services (2023 – 2024)

- Managed financials for AML construction contracts in WV and PA, provided technical review and on-site geotechnical support, and coordinated closely with AML personnel.

GeoStabilization International | Project Manager (2020 – 2023)

- Successfully completed 232 slope stabilization and infrastructure reinforcement projects for the West Virginia Department of Highways.
- Specialized in managing projects involving soil nails, grouting, shotcrete, and Geosynthetically Reinforced Soil (GRS) walls.

- Developed and managed detailed project budgets and schedules, conducted site meetings, and oversaw daily construction operations, including quality control, cost tracking, and safety compliance.

Kleinfelder | Construction Coordinator (2019 – 2020)

- Acted as primary liaison for active construction projects, performed construction monitoring and quality assurance, coordinated survey teams, and provided detailed reporting to project stakeholders.

Waste Management | West Virginia Area Engineer II (2012 – 2019)

- Managed capital projects, reviewed construction documentation, provided cost analyses, scheduling, and oversight of landfill infrastructure projects, ensuring cost-effectiveness and regulatory compliance.

Thrasher Engineering Inc. | Staff Engineer & Field Inspector (2005 – 2012)

- Conducted engineering analyses, prepared design specifications, performed field inspections, and managed construction teams for water and sewer infrastructure projects, ensuring adherence to project specifications and timelines.

Certifications

- Safeland Training for Oil/Gas

Key Skills

- Project Budgeting & Financial Management
- Construction Planning & Scheduling
- Geotechnical Engineering & Stabilization
- Quality Assurance & Compliance
- Team Leadership & Communication
- Microsoft Excel, Outlook, PowerPoint, Word, and CAD proficiency

Martin Woodard – Sr. Rockfall Engineer and Geologist

Executive Summary/Profile

Dr. Martin Woodard is a seasoned engineering geologist and professional engineer with over 25 years of experience in geotechnical investigations, rock slope stability, and landslide remediation. His expertise encompasses rock mass characterization, rockfall hazard assessment, and the development of remediation techniques for unstable soil and rock slopes. Dr. Woodard has authored significant publications, including the "Development of a Rockfall Hazard Rating Matrix for the State of Ohio," and has contributed to national committees focused on geohazard management. His extensive project experience spans North America, South America, and Hawaii, involving over 500 landslide and rock slope investigations.

Education

- **PhD in Engineering Geology**, Kent State University, 2004
- **MS in Environmental and Engineering Geosciences**, Radford University, 1998
- **BA in Geology**, State University of New York at Potsdam, 1994

Licenses & Certifications

- **Professional Engineer (PE)**: Virginia
- **Professional Geologist (PG)**: Virginia
- **Fall Protection Awareness Certification**
- **MSHA New Miner Part 48 Surface Certification**
- **OSHA 10 - Instructor Led Certification**
- **WHMIS 2015 Canada Certification**

Professional Organizations & Achievements

- **Member**, Transportation Research Board: Engineering Geology Committee
- **Member**, Transportation Research Board: Rockfall Subcommittee
- **Member**, Association of Environmental and Engineering Geologists
- **Member**, Association of Geohazard Professionals
- **Member**, American Society of Civil Engineers

Professional Experience

GeoSpecialties (January 2025 – Present)

- Conduct geotechnical investigations and manage rock slope stabilization and geohazard mitigation projects.

- Lead engineering efforts and provide technical oversight for various infrastructure stabilization projects.

APS GEO (September 2023 – Present)

- Perform geotechnical engineering and geological investigations for diverse projects across multiple sectors.
- Develop remediation strategies for complex slope stability issues and rockfall hazards.

GeoStabilization International (2013–2022)

- **Director of Rockfall Services (2021-2022)**: Oversaw rockfall group performance, managing engineering, estimating, project management, and operations.
- **Chief Rockfall Engineer (2017-2021)**: Directed engineering of rockfall projects, training engineers, and supporting client relations.
- **Rockfall Division Engineer (2014-2017)**: Responsible for the engineering and technical oversight of rockfall projects.
- **Northeast Regional Engineer (2013-2014)**: Managed engineering projects and client relations across the northeastern United States.

Haley & Aldrich, Senior Engineering Geologist (2010-2013): Provided senior technical review and training on engineering geology projects.

Fisher & Strickler Rock Engineering, Senior Engineering Geologist (2008-2009): Conducted geological assessments and remediation design for rock slope stability.

Kleinfelder, Senior Engineering Geologist (2006-2008): Led geotechnical analysis and business development for engineering geology services.

Michael Baker Jr. Inc., Geotechnical Specialist (2003-2006): Performed geotechnical analyses and assisted in client relationship management.

Radford University, Assistant Professor of Geology (2001-2003): Instructed advanced courses in Engineering Geology, Rock Mechanics, and Environmental Geology.

Representative Projects

- **Development of a Rock Slope Rating Matrix for Ohio**, Ohio Department of Transportation
  Conducted research to develop a rockfall rating system specific to Ohio, performing geotechnical reconnaissance on over 140 rock slopes and conceptual designs for approximately 100 slopes statewide.
- **SR 1460 Shotcrete Armoring**, Pikeville, KY
  Managed the shotcrete armoring of a 2,000-foot-long slope, reaching heights up to 95 feet, ensuring the protection of a historic cemetery above the roadway.
- **Ferguson Slide Mitigation Investigation**, Caltrans, SR 140, CA
  Coordinated with Caltrans to investigate alternative mitigations for a landslide affecting SR

140 near Yosemite National Park, performing site reconnaissance and coordinating subsurface investigations.

- **Rock Slope Mitigations**, Tennessee Department of Transportation
  Conducted investigations and managed the implementation of rock slope mitigations, including emergency work on I-75 and various design-build projects statewide, totaling several million dollars annually.
- **Rock Slope Mitigations**, Virginia Department of Transportation
  Led investigations and managed rock slope mitigation projects, including emergency work on I-81, I-77, RT 460, and RT 250 corridors, with projects totaling several million dollars annually.
- **Stillwater Rock Slope Project**, Stillwater, MT
  Managed an ENR award-winning project involving the design and construction of scaling and reinforcement of a rock slope along the Stillwater River for the Montana Department of Transportation.
- **Rockfall Mitigation**, West Virginia University, Morgantown, WV
  Led an ENR award-winning project for West Virginia University and the West Virginia Department of Highways, involving post-rockfall hazard mitigation of a slope in Morgantown.
- **Highwall Maintenance**, DeBeers Victor Mine, Ontario, Canada
  Provided engineering support for highwall maintenance, including removal of large blocks, stability assessments, design and construction of pinned and draped mesh systems, and inspection of retaining walls.
- **Highwall Stability Investigation**, Fairfax Quarry, Luck Stone Corporation, VA
  Conducted field investigations, including 3D photogrammetric and LiDAR surveys, to obtain geologic structure information and developed recommendations for long-term highwall stability.
- **Ground Control Plan Development**, Mine No. 1, Mountain Mining Company, VA
  Developed an MSHA Ground Control Plan to ensure safe highwall design during surface mining practices, involving rock mass characterization, stability analysis, rockfall assessments, and excavation constraints development.
- **Rockfall Hazard Mitigation**, Amtrak, Various Locations in the Northeast and Pennsylvania
  Served as the subject matter expert for multiple projects, including MP 85 in Pennsylvania, involving multi-million-dollar mitigation projects that included scaling
- **Tennessee and Virginia Departments of Transportation**: Conducted numerous rock slope stabilization projects involving emergency and planned remediation strategies along major transportation corridors (I-75, I-81, I-77, RT 460, RT 250).
- **West Virginia University Rockfall Project**, Morgantown, WV: Directed award-winning emergency rockfall hazard mitigation.
- **Ferguson Slide Investigation**, Caltrans SR 140, CA: Coordinated landslide mitigation investigations near Yosemite National Park.
- **Railroad Geohazard Mitigation** (Amtrak, BNSF, Union Pacific): Led large-scale rock slope mitigation and emergency response projects.
- **San Felipe Mining Project**, Sonora County, Mexico: Directed comprehensive geological investigations supporting underground mining operations.

Publications & Notable Contributions

- **Rockfall Hazard Rating Matrix and Rock Slope Design Manual**, Ohio Department of Transportation

Matt Birchmier – COO / Project Manager / Sr. Engineer

Executive Summary/Profile

Matt Birchmier is a licensed Professional Engineer with over two decades of extensive experience in geotechnical engineering, construction operations, and geohazard mitigation. He specializes in managing complex projects involving slope stabilization, retaining walls, micropile foundations, and subsurface grouting. His expertise encompasses detailed geotechnical analyses, engineering design, construction oversight, and effective project management.

Education

- Master of Science, Geotechnical Engineering, Iowa State University
- Bachelor of Science, Civil Engineering, Iowa State University

Professional Registrations

Licensed Professional Engineer: NC, GA, AL, AR, CO, CT, DE, ID, IL, IN, IA, KS, KY, LA, ME, MD, MA, MI, MN, MS, MO, MT, NH, OK, PA, RI, TN, VA, WV

Professional Experience

GeoSpecialties, Greater Atlanta, GA | August 2023 – Present
Senior Geotechnical Engineer / Project Manager
Detailed GeoSpecialties Project Highlights:

- **Lower Dillsboro Road Slope Stabilization, Dearborn County, IN** (Sept 2023): Provided engineering design and construction oversight for landslide stabilization involving sheet piles and soil nails.
- **KY 197 Slide Repair, Pike County, KY** (Oct 2023): Managed stabilization of a 108 LF roadway segment using soil nails and reinforced shotcrete under active traffic.
- **Tertiary Clarifier Rehabilitation Project, Princeton, IN** (Mar 2024): Oversaw installation of 246 micropiles (up to 65 ft deep) for foundation stabilization addressing buoyancy concerns.
- **SR 1 Slide Correction – Des No. 1900348, Dearborn County, IN** (Sept 2024): Directed field installation and verification of 64 tiebacks supporting a drilled shaft wall system under traffic conditions.
- **Elizabeth Court Sinkhole Repair, Gallatin, TN** (Nov 2024): Assisted in design and implementation of a reverse filter fill system to mitigate sinkhole hazards in a residential setting.
- **TDOT CNY312 Roadway Stabilization, Unicoi County, TN** (Dec 2024): Reviewed drainage requirements and managed field compliance for stabilization efforts using flowable fill, soil nails, and shotcrete.

- **Johnson Fork Road Extension, Dearborn County, TN** (Dec 2024): Conducted field reviews and design adjustments for roadway stabilization involving sheet piles and soil nails.
- **Mary Ingles Highway (KY 8) Slide Repair, Mason County, KY** (Jan 2025): Supervised high-traffic roadway stabilization with soil nails and shotcrete, ensuring stringent QA/QC compliance.

APS GEO, Woodstock, GA | 2022 – 2023
Principal Geotechnical Engineer

- **FEMA Landslide Design & Pricing, KY:** Conducted slope stability analyses and developed preliminary designs for numerous FEMA-funded landslide repairs.
- **Ferromex Geotechnical Asset Management Plan, Mexico**: Developed strategic asset management for rockfall and geotechnical risks across major rail corridors.

GeoStabilization International, Woodstock, GA | 2010 – 2021
Vice President – Operations | Chief Engineer

- **Keeler-Tillamook Transmission Line Access Road Stabilization, OR (2011)**: Led stabilization involving 600 soil nails/rock anchors, 60 micropiles, high-strength mesh, and GCS walls.
- **I-75 Rockfall Mitigation, Jellico, TN (2013)**: Managed rock scaling and installation of Rolled Cable Netting (RCN) and Pinned Mesh systems.
- **Jay Cooke Hwy & SR 23 Landslide Stabilization, Duluth, MN (2012)**: Directed emergency design-build stabilization including GCS/GRS walls and soil nail systems.
- **Mankato Slope Stabilization, Union Pacific Railroad, MN (2020)**: Designed and supervised tiered soil nail wall construction addressing large landslide impacts.
- **SR 111 Slope Stabilization, Floyd County, IN (2019)**: Oversaw stabilization of 2,000 LF along the Ohio River using sheet piling and soil nails.
- **TDOT SR 70 Emergency Landslide Repair, Hawkins County, TN (2019)**: Reviewed design and compliance of deep-seated slide repair involving rock buttress and soil nail/mesh systems.
- **UK Spline Temporary Shoring, Lexington, KY (2019)**: Provided design oversight for deep utility shoring adjacent to critical infrastructure.

Yenter Companies, Denver, CO | 2008 – 2010
Project Engineer

- **Ritz Carlton Temporary Shoring, Vail, CO (2008-2009)**: Managed complex shoring system using micropiles, soil nails, and shotcrete for deep excavation.
- **Keystone Resort Landslide Stabilization, Keystone, CO (2009)**: Developed designs and oversaw tiebacks and retaining structure installations.

Certifications

- Lean Six Sigma Green Belt Certified
- eCornell Critical Thinking Certificate

Key Skills

- Geotechnical Design & Engineering

- Slope Stabilization & Retaining Walls
- Micropile Foundations
- Construction Oversight & Project Management
- Safety and Quality Assurance

Justin Anderson – President / Estimator / Sr. Engineer

Executive Summary/Profile

Justin S. Anderson is a seasoned leader in geotechnical engineering and specialty construction, with over two decades of experience managing and delivering complex projects across transportation, water, energy, and infrastructure sectors. As President of APS GEO and GeoSpecialties, Justin oversees the analysis, design, and construction of deep foundations, retaining walls, earthworks, and geohazard mitigation solutions. His expertise spans foundation engineering, slope stability, flood control systems, subgrade stabilization, and rockfall management. He excels in managing multidisciplinary teams, field and laboratory investigations, geotechnical report preparation, construction planning, and cost estimation. A recognized innovator in his field, Justin drives client-focused, safety-first solutions that enhance resilience and reliability for diverse infrastructure systems.

Education

- Master of Science, Civil Engineering, University of Kentucky, 2006
- Bachelor of Science, Civil Engineering, University of Kentucky, 2005

Professional Engineer Registrations

- Indiana No. 11400025
- Iowa No. 21165
- Kentucky No. 28732
- Nebraska No. E-13335
- Texas No. 146875
- Tennessee No. 125093
- Virginia No. 065095
- Ohio No. 83548
- Minnesota No. 59706

Contractor Licenses

- West Virginia License No. WV063306
- Tennessee License No. 80311
- North Carolina License No. 105523

Professional Experience

- **President**, APS GEO (January 2021 – Present)
- **President**, GeoSpecialties (January 2021 – Present)
- **Senior Project Development Engineer**, GeoStabilization International (January 2016 – January 2021)
- **Senior Geotechnical Engineer**, HDR Engineering, Inc., Lexington, KY (January 2007 – December 2015)
- **Project Engineer**, Gray Construction, Lexington, KY (August 2006 – December 2006)
- **Management Trainee**, Norfolk Southern, Knoxville, TN (May 2006 – August 2006)

- **Research Assistant**, University of Kentucky, Lexington, KY (August 2004 – December 2006)
- **Project Engineer**, Free Contracting, Inc., Lexington, KY (May 2003 – August 2004)

Professional Affiliations

- American Society of Civil Engineers (ASCE), Member (2001 – Present)
- American Railway and Maintenance of Way Association (AREMA), Member (2006 – Present, Committee 1)

Key Skills

- Leadership & Team Management
- Geotechnical Design & Analysis
- Geohazard Mitigation & Risk Management
- Construction Planning & Cost Estimation
- Business Development & Client Engagement

Industry Awards

- 2015 University of Kentucky Young Civil Engineer of the Year.
- 2018 ENR Midwest's Best Projects – Specialty Construction: Fayette County Historic Courthouse Underpinning.
- 2020 National Rail Constructors (NRC) Small Project of the Year : Union Pacific Mankato Minnesota Permanent Landslide Repair Project.

Publications

- *Design and Construction of Underseepage Pressure Relief Wells along a Federal Levee* – ORVSS, 2014
- *Ingenious Infill* – Civil Engineering Magazine, 2013
- *Freestanding Expanded Polystyrene Roadway Embankment in Downtown St. Louis* – GeoCongress, 2013
- *Geotechnical Engineering for Railroads at HDR* – AREMA Seminar, 2012
- *Innovative Design for the Colton Flyover Grade Separation* – AREMA Conference, 2012
- *Seismic Design for Lightweight Cellular Concrete Embankments* – GeoCongress, 2012
- *In-Situ Test Measurement Techniques Within Railway Track Structures* – ASME/ASCE Joint Rail Conference, 2008

Presentations

- *Union Pacific Flyover Structures* – ASCE Kentucky Section, 2015
- *Underseepage Pressure Relief Wells* – KSPE Annual Convention, 2015
- *Expanded Polystyrene Roadway Embankment* – ASCE-Lexington, 2014
- *Freight Embankment Seismic Design* – HDR Geotechnical Webinar, 2014
- *Long-Term Performance of Rail Track Structures* – TRB 88th Annual Meeting, 2009

Notable Accomplishments

- Led the successful development and execution of multimillion-dollar geotechnical engineering projects.
- Recognized for industry innovation and excellence in civil engineering by peers and professional organizations.

- Founder of APS GEO (2021)
- Founder of Guardian Construction d/b/a GeoSpecialties (2021)
- Patent Holder – “System and Method for Subgrade Stabilization of Railroad Bed”, Patent Number 11118315, Tomasz Szynakiewicz, Justin Anderson, Robert W. Hollinger.

Representative Project Highlights

Geohazard Mitigation

- **Extensive experience (2016–2020) leading and contributing to over 700 geohazard repair and slope stabilization projects across the United States and Canada totaling over $154M in design/construction costs.**
- **Specialized in soil nail and shotcrete wall construction** for roadway stabilization, retaining wall repairs, and geotechnical slope reinforcement on critical transportation corridors and infrastructure.
- **Collaborated on diverse project types**, including bridge approaches, roadway embankments, culverts, and stormwater management improvements, ensuring timely completion and adherence to engineering standards.
- **Demonstrated expertise in managing complex field conditions** and coordinating with multidisciplinary teams to deliver durable and efficient geotechnical solutions.
- **Managed diverse slope stabilization projects** across highways, residential, and commercial sites, with project values ranging from $15K to over $1.2M.
- **Executed soil nailing, shotcrete wall repairs, and gabion wall installations**, ensuring long-term stability and erosion control.
- **Supervised large-scale earth retention systems**, including temporary and permanent shoring, for critical infrastructure projects like bridges, ramps, and roadways.
- **Delivered tailored solutions** for complex geotechnical challenges, including slope failure mitigation, culvert stabilization, and retaining wall construction.
- **Coordinated multi-disciplinary teams** and resources to successfully complete over 100 slope stabilization projects, maintaining timelines and budgets.
- **Utilized innovative techniques and materials**, such as shotcrete, soil nails, and gabion systems, to enhance structural integrity and prevent future geohazards.
- **Ensured compliance with state and federal regulations**, prioritizing safety and environmental sustainability in all geotechnical construction efforts.

Subgrade Stabilization Projects:

Completed a wide range of subgrade stabilization projects using advanced techniques such as compaction grouting, jet grouting, and slurry grouting. Notable projects include:

- **Milk River Sub Station Rail Jet (MT)**: $490,245.50
- **CAMA 81.2 (NY)**: $154,113.00
- **US 127 Bridge Approach (KY)**: $168,950.00
- **CP MP 513.6 Portal Sub (ND)**: $201,992.55
- **UP Cuero Sub (TX)**: $655,290.20
- **Lafarge Terminal Track RailJET (ND)**: $156,387.50

- **UPRR Canyon MP 237.8–267.28 (CA)**: $436,200.00
- **Indiana Harbor Railroad (IN)**: $368,749.61
- **UPRR Baytown Sub (TX)**: $160,780.00
- **CP M293.9 Carrington Sub (ND)**: $255,805.00
- **UPRR Ayer Sub MP 291.23 (WA)**: $341,403.00
- **Lakeside Subdivision Tunnel #4, MP 569 (NV)**: $521,040.00
- **UPRR Cuero Sub MP 18.85–19.30 (TX)**: $369,996.00
- **Baytown Sub MP 36.5 (TX)**: $81,350.00

Rockfall Hazard Mitigation Construction Projects:

- **West Fork Dam Tailwater Slope Stabilization (OH)** – Rock Bolts and Mesh; Contract: 190610OH01; $289,150.00
- **MEG-124-32.10 (OH)** – Rock Bolts and Shotcrete; $286,910.00
- **Newport Pavilion (KY)** – Rock Bolts and Shotcrete; Contract: 200500KY01; $2,688,340.50
- **Portsmouth Bypass Rock Scaling (OH)** – Rock Scaling; Contract: 180442OH01; $425,935.00
- **US 23, MP 1.52 (KY)** – Rock Scaling and Draped Mesh; $50,000.00
- **SR 124 Emergency Rockfall (OH)** – Scaling; Contract: 170079OH01; $19,904.75
- **UPRR Canyon Sub MP 237.8 and MP 255.0 (CA)** – Scaling; Contract: 170330CA01; $19,200.00
- **UPRR Canyon MP 237.8 to 267.28 (CA)** – Subgrade Stabilization; $436,200.00

Bridge Foundation Repair

- **I-65 SB MP 133.85 Bridge over E Hill St (KY)** – Compaction Grout/Soil Nails; Contract: 190603KY01; $116,736.75
- **Weisenberger Mill Bridge Rehab (KY)** – Micropile and Soil Nail Repair; Contract: 190493KY01; $181,813.80
- **New Salem Circle Bridge (KY)** – Micropiles and Soil Nail Repair; Contract: 190044KY01; $185,831.60
- **2070 Clarkston (KY)** – Micropiles and Soil Nail Repair; Contract: 190575KY01; $69,258.50
- **1000 Churchill Dr. (KY)** – Micropiles and Soil Nail Repair; Contract: 190509KY01; $54,259.80
- **9300 N. E. Prong Rd (IN)** – Micropile Foundations; Contract: 180006IN01; $133,422.00

Additional Geohazard Project Examples:

Lower Dillsboro Rd Slide Repair, Dearborn County, IN ($1.3M): Oversaw design and construction of roadway landslide repair including 11,400 SF of sheet pile wall installation, 7,240 LF of soil nails, 355 CY of backfill placement, and construction of two box inlets.

KY 197 Slide Repairs, Pike Co, KY ($117K-$240K): Managed multiple slope stabilization projects with detailed excavation processes, installation of soil nails up to 20-ft long, reinforced shotcrete facings up to 8 inches thick, and strategic horizontal drainage to enhance long-term stability.

Good Sam Electrical Vault TER ($67K): Directed soil stabilization involving 15-ft long soil nails and reinforced shotcrete (32 LF, 13-ft high), ensuring structural integrity and long-term performance.

Wake Rd Slide Repair, Jefferson County, IN ($145K): Led comprehensive slope repair involving installation of soil nails, reinforced shotcrete facing, new guardrail systems, culvert installation, ditch clearing, and complete roadway regrading and resurfacing.

Herman Grigsby Slide Repair, KY AML ($1M): Provided oversight for complex geohazard mitigation including site preparation (3 acres), installation of drilled shafts (720 LF total), gabion retaining walls (1,272 CY), concrete structures, erosion control measures (450 SY erosion control blanket), substantial roadway repairs (500 tons roadway stone, 200 tons bituminous), and extensive revegetation efforts.

INDOT B-42528 Temp Shoring, IN ($35K): Led design and construction of temporary shoring solution with driven sheet piling (80 LF), enabling safe excavation for permanent retaining wall construction.

MOE-536-10.90, ODOT, OH ($95K): Managed embankment stabilization with excavation, installation of 20-ft soil nails, steel mesh facing (1260 SF), and galvanized bearing plates along a 98 LF slope to repair critical roadway failure.

Sagamaw Rd, Dearborn County, IN ($788K): Directed large-scale stabilization project involving installation of soil nails, reinforced shotcrete facing (7800 SF over 780 LF), and horizontal drains to stabilize roadway embankment.

3219 Old State Road 1, Franklin County, IN ($453K): Managed critical creek-side embankment stabilization, involving installation of sheet piles (181 LF) and soil nails, mitigating ongoing erosion impacting existing infrastructure.

Thai Summit Temporary Shoring, Bardstown, KY ($350K): Oversaw construction of temporary shoring system, consisting of drilled soil nails (up to 15-ft) and reinforced shotcrete facing (4000 SF, 8-inch thick), supporting excavation activities and site development.

TDOT CNY312 SR-36 Unicoi County, TN ($160K): Managed construction of two permanent retaining walls with soil nails (up to 20-ft long), reinforced shotcrete facings, and horizontal drains, stabilizing embankments damaged by erosion from Hurricane Helene. Coordinated closely with primary contractors for phased excavation and construction.

2021 FEMA Disaster Recovery, Eastern Kentucky. This project involved performing site assessments and acting as the owner's engineer for over 400 sites across various counties in Eastern Kentucky, which were impacted by flooding following the spring rains of 2021. Mr. Anderson was responsible for overseeing the design analyses and preparing preliminary estimates for each impacted site. This work required coordination with local sponsors, FEMA, and third-party grant writers.

Union Pacific's Mankato, 90.5 Permanent Landslide Repair, Mankato, Minnesota. Landslide issues at this site date back to 1908 when tiered, stone-block retaining walls were constructed along the slope to stabilize hillside failures. Although the walls were reinforced over time, excessive winter

precipitation in 2020 caused the slope to slump, threatening a significant landslide. Under the direction of Construction Manager Justin Anderson, PE, the project team implemented a tiered stabilization system. This included a lower wall to enhance global stability and protect the railroad from slide debris impacting the tracks' right-of-way, and an upper wall to prevent progressive failures that could impact the cemetery property line at the top of the slope.

INDOT SR 7 Slide Repair, Madison, Indiana. This landslide correction project, funded by INDOT, involved constructing a soil nail and shotcrete wall along the existing roadway. The project was completed on time and within budget. Mr. Anderson was responsible for overseeing the design analyses and managing the construction aspects of the repair.

INDOT SR 250, RP 67.7, Patriot, Indiana. This emergency landslide repair project involved constructing a soil nail wall along an embankment for a total length of 615 feet. The project was completed on time and within budget. Mr. Anderson was responsible for overseeing the design analyses and managing the construction aspects of the repair.

INDOT US 50, RP 151.85, Dillsboro, Indiana. This emergency landslide repair project involved constructing a soil nail wall along the existing embankment for a total length of 84 feet. The project was completed on time and within budget. Mr. Anderson was responsible for overseeing the design analyses and managing the construction aspects of the repair.

INDOT SR 262, 4.3, Ohio County, Indiana. This emergency landslide repair project involved constructing a soil nail wall along the embankment for a total length of 425 feet. The project was completed on time and within budget. Mr. Anderson was responsible for overseeing the design analyses and managing the construction aspects of the repair.

INDOT US 52, RP 162.8, Brooksville, Indiana. This emergency landslide repair project involved constructing a soil nail wall along the embankment for a total length of 380 feet. GSI completed both the design and construction for this project, which was completed on time and within budget. Mr. Anderson was responsible for overseeing the design analyses and managing the construction aspects of the repair.

Aviation Projects

BGA ARFF Building - Lexington, KY (BGA). The Blue Grass Airport proposed constructing a new Aircraft Rescue and Fire Fighting (ARFF) facility, requiring an embankment fill of approximately 30+ feet in maximum height above existing grade. The facility was designed to be situated between Aviator Road and Taxiway A, with the embankment material extending into the existing Aviator Road embankment. Several existing utilities and communication lines were located within the proposed fill footprint. Responsibilities included overseeing foundation design and managing field and laboratory subsurface investigations, including geophysical surveys, borings, test pits, and soil classification, compaction, and strength testing.

Replacement of Taxiway Sierra and Whiskey - Joint Base Andrews, Maryland (AFCEE). This project involved engineering services to deliver a 100% design for taxiway replacements at Joint Base

Andrews, MD, in accordance with Air Force criteria for modified heavy-load aircraft. Responsibilities included leading the geotechnical investigation and preparing geotechnical design reports. Additional tasks included addressing grading, drainage, and erosion control issues to eliminate standing water problems and correct existing drainage concerns.

Repair/Replacement of Collapsed Storm Drains on Airfield - Joint Base Andrews, Maryland (AFCEE). Engineering services were provided to develop a complete 100% design for repairing or replacing collapsed storm drains on the airfield at Joint Base Andrews, MD. Responsibilities included leading the geotechnical investigation and preparing geotechnical design reports. Additional project tasks focused on correcting drainage and erosion problems to eliminate standing water issues.

Mountain Home Air Force Base Runway Rehab and Taxiway Repair - Elmore County, Idaho This project involved the mill and overlay of Runway 12/30 at Mountain Home AFB in accordance with current DOD UFC design standards. Responsibilities included quality control of the geotechnical design reports and ensuring compliance with design requirements throughout the project, which progressed through conceptual narrative (15%), 65%, 95%, and 100% design phases.

Lackland Air Force Base, Texas. Six separate comprehensive Area Development Plans (ADPs) were completed for various areas of Lackland AFB, including the 37th Training Group and intelligence-related mission tenants. Responsibilities included providing geotechnical foundation recommendations for caissons supporting parking structures.

Travis Air Force Base, California. This redevelopment project for the new South Gate at Travis Air Force Base involved designing a new security building and associated pavement sections. The proposed structure was supported on shallow continuous footings, with site development encompassing grading, building pad preparation, utility installation, and paving (asphalt or PCC). Responsibilities included quality control reviews of geotechnical subconsultant reports and preparation of earthwork specifications, incorporating lime stabilization and geotextile subgrade improvements.

Dam & Levee

Levee Periodic Inspections, Missouri River Levee System (MRLS) Units 400-L, 408-L, 440-R, 448-443-L – Missouri. The U.S. Army Corps of Engineers (USACE) Kansas City District required levee periodic inspections along four units of the Missouri River Levee System. The systems span 48.1 miles of agricultural levees, requiring thorough geotechnical evaluation. Responsibilities included serving as the geotechnical lead for inspections, preparing the inspection report, and conducting the Levee Safety Officer out-briefing.

Levee Periodic Inspections, Abilene, Kansas. The USACE Kansas City District conducted levee periodic inspections along the Abilene Unit Left and Right Banks, covering approximately 3.5 miles of levee systems. This included multiple stormwater infrastructure installations and earthwork improvements. Responsibilities involved leading geotechnical inspections, preparing the inspection report, and providing the Levee Safety Officer out-briefing.

Levee Periodic Inspections, Clyde, Kansas. The USACE Kansas City District required levee periodic inspections along the Clyde Levee System, located on the right bank of Elk Creek near its confluence with the Republican River. The levee spans approximately 1.1 miles. Responsibilities included serving as the geotechnical lead for inspections, preparing the inspection report, and conducting the Levee Safety Officer out-briefing.

Levee Periodic Inspections, Missouri River Levee System, Units L-611-614, L-624-627, L-611-616, Council Bluffs, Iowa. The USACE Omaha District required levee periodic inspections along three levee systems in Council Bluffs, Iowa, spanning over 30 miles. Responsibilities included leading the geotechnical inspections, preparing the inspection report, and conducting the Levee Safety Officer out-briefing.

City of Council Bluffs Industrial Park Levee Phase I – Damage Assessment, Council Bluffs, Iowa. The City of Council Bluffs needed a damage assessment of its Industrial Park Levee to evaluate required improvements before the 2012 Missouri River flood season. Responsibilities included geotechnical field inspection and preparation of the report with findings and recommendations.

City of Council Bluffs Industrial Park Levee Phase III – Certification Analysis, Council Bluffs, Iowa. The City of Council Bluffs required geotechnical investigations for FEMA certification of its Industrial Park Levee. Responsibilities included geotechnical planning for field investigations and preparation of the geotechnical analyses report to support certification efforts.

City of Riverside L-385 Levee Redevelopment Area, Riverside, Missouri. The City of Riverside needed an assessment of the current conditions and conceptual development plan for a 2,200-acre area for redevelopment, aiming to improve the city's image and facilitate industrial, retail, office, and green space development. Responsibilities included preparation of Minor 408 permit submittals to the USACE Kansas City District for proposed trail improvements along the existing levee system.

Hydropower International Services, Lee Creek Water Project, Arkansas. Hydropower International Services needed a Potential Failure Mode Analysis (PFMA) for the Lee Creek Water Project as part of the 2007 Part 12D inspection. Responsibilities included evaluating potential failure modes and performing stability analyses in compliance with FERC guidelines.

City of Cedar Rapids, WPCF Flood Protection Study, Cedar Rapids, Iowa. The City of Cedar Rapids required a study to identify flood protection measures for the Water Pollution Control Facility (WPCF) following the 2008 flood. Responsibilities included evaluating flood protection scenarios and setting priorities for improvements, along with preliminary design of levee systems.

Papio-Missouri River NRD Low Flow Channel Re-Stabilization, Omaha, Nebraska. The Papio-Missouri River NRD needed to re-stabilize a portion of Big Papillion Creek's channel, previously stabilized with gabions. Responsibilities included geotechnical design, plan preparation, and construction support for the re-stabilization effort.

Papio-Missouri River NRD, Papillion Creek Watershed Structure S-32 Seepage Repairs, Omaha, Nebraska. The Papio-Missouri River NRD required seepage repairs at Structure S-32 to control seepage issues. Responsibilities included developing repair alternatives, preparing construction plans and specifications, and providing construction observation.

Papio-Missouri River NRD, Planning Study and Preliminary Design of Dam Site 15A, Omaha, Nebraska. The Papio-Missouri River NRD needed planning, permitting, and preliminary design for a regional detention basin at Dam Site 15A. Responsibilities included conducting subsurface investigations and performing settlement and slope stability analyses to inform preliminary design.

Williamstown Lake Dam Existing Condition Assessment, Williamstown, Kentucky. The City of Williamstown needed an assessment of Williamstown Lake Dam's existing condition. Responsibilities included project management, geotechnical design, and preparation of the engineering report, including recommendations for improvements.

Russell Street Reconstruction from Westport Avenue to Minnesota Ave., South Dakota. The South Dakota Department of Transportation required preliminary and final design plans for Russell Street reconstruction. Responsibilities included conducting geotechnical analyses and preparing a Minor 408 submittal to the USACE for proposed drainage structure construction.

Rosehill Dam Reconstruction, South Dakota. The South Dakota Department of Transportation required a geotechnical investigation and conceptual design for the reconstruction of Rosehill Dam. Responsibilities included site investigation, hydraulic modeling, and preliminary design of a new earthen dam and spillway.

Papillion Creek Watershed Regional Detention Structure WP RB-5, Sarpy County, Nebraska. The Papio-Missouri River NRD required planning, permitting, and design services for a regional detention basin at West Papillion Creek. Responsibilities included geotechnical design for a 45-foot tall main dam over soft alluvium, two water quality basin dams, and auxiliary spillway stability.

Papillion Creek Watershed Dam Rehabilitation, Sarpy County, Nebraska. The Papio-Missouri River NRD required geotechnical analysis and design for the rehabilitation of multiple watershed dams. Responsibilities included conducting slope stability and settlement analyses and preparing design reports for rehabilitation efforts.

Highways

Council Bluff Interstate System Reconstruction, Segment 3 - Council Bluffs, IA (IaDOT). The Council Bluffs Interstate System (CBIS) Segment 3 involves the reconstruction of railroad infrastructure to improve traffic flow. The project requires the construction of full-height embankments, the widening of existing embankments, and placement of shallow fills for additional rail lines. Several new drainage culverts, including reinforced concrete box culverts and corrugated metal pipes, will be installed. Responsibilities included overseeing the foundation design and managing field and laboratory subsurface investigations, including geophysical surveys, borings, test pits, and soil classification, compaction, and strength testing.

Council Bluff Interstate System Reconstruction, Segment 2 - Council Bluffs, IA (IaDOT). This project involves the relocation of 1.4 miles of the Council Bluffs Levee Unit for the reconstruction of the Interstate 29 and 80 interchange in Pottawattamie County, Iowa. Responsibilities included performing slope stability, consolidation and elastic settlement calculations, and finite difference underseepage analyses in the design of the relocated levee system. Assistance was provided in the preparation of the geotechnical report and Section 408 Permit submittal to the USACE.

US 65 Bridge over the Iowa River - Iowa Falls, IA (IaDOT). The replacement of the US 65 Iowa Falls Oak Street arch bridge involves the design and construction of micropile foundations and a deadman drilled shaft tieback system for retaining structures. Lightweight backfill behind the abutments is also included. Project responsibilities encompassed design and construction observation.

US 34 Final Bridge Design - Omaha, NE (IaDOT). This project consists of the design for a 3,182-foot, 86'-3" bridge crossing the Missouri River. The bridge uses a three-span, 1,299-foot-long steel plate girder unit over the main river channel, and the east and west approaches use pre-stressed beam units. Responsibilities included lateral and axial pile analyses for deep foundations at abutments and river pier bents.

Council Bluffs Interstate System – Railroad Consolidation Study - Council Bluffs, IA (IaDOT) This study assesses the railroad consolidation and proposed improvements to the Council Bluffs Interstate System (CBIS) in Sarpy County, NE. Responsibilities included evaluating the existing levee system and assessing the impacts of construction activities within the levee section.

I-29 Sioux City Interstate, Segment 1 Design - Sioux City, IA (IaDOT). Design services were provided for the reconstruction of a segment of I-29 in Sioux City, IA. Responsibilities included creating a subsurface profile to guide the laboratory testing program and locating necessary supplemental borings. Slope stability analyses, MSE wall stability analyses, and consolidation settlement estimates were performed based on test results.

SCI-823-0.00/6.80 Portsmouth Bypass - Scioto County, OH (ODOT District 9). This project involves the development of the Portsmouth Bypass, a four-lane highway in mountainous terrain around the city. Responsibilities included slope stability and settlement analyses, rockfall catchment design, wick drain design, and a conceptual construction schedule for staged embankment construction over soft soils. Foundation design for two bridges along the alignment was also provided.

ODOT District 11, TUS-212-6.7 - Tuscarawas, OH. Geotechnical engineering and design analyses were provided for remediating a slope failure in Tuscarawas County, OH. The scope included reviewing geologic information, performing laboratory testing on selected soil and rock samples, evaluating subsurface conditions, stability analyses for a proposed rock-cut slope, and designing remediation measures. This included the design of an 1,800-foot-long soldier pile and lagging retaining wall.

ODOT District 11, Mall Road - St. Clairsville, OH. A geotechnical review was conducted for the Red Flag Study of Mall Road and the surrounding area. Responsibilities included the compilation and review of existing geotechnical data, site reconnaissance, and identification of geotechnical concerns and geologic hazards.

North Tucker Boulevard, Phase II - St. Louis, MO. This project involved the replacement of the North Tucker Bridge in St. Louis, MO. Responsibilities included designing EPS embankments to support various loads, including service and seismic loading.

Grand Avenue Bridge over Mill Creek Valley - St. Louis, MO. Geotechnical support was provided for the rehabilitation/replacement of the Grand Avenue Viaduct over Mill Creek Valley.

Responsibilities included the design of pile/drilled shaft foundations and soil plugs for lateral resistance to seismic loading, and preliminary design of ground improvement elements, including geopiers or stone columns, to support soil plugs over soft clay soils.

US 75 Bellevue to Plattsmouth Final Design - Bellevue, NE. Final design bridge plans were prepared for the US 75 Plattsmouth to Bellevue project. Responsibilities included evaluating the safe bearing loads (LRFD) of existing H-piles based on original pile drawing records.

I-270 Bridges Over Chain of Rocks Canal - St. Louis, MO. A Phase I study was conducted on the twin truss bridges carrying I-270 over the Chain of Rocks Canal. Responsibilities included assessing the existing bridge condition, identifying rehabilitation requirements, and developing a cost-effective solution for replacement in phases.

Virginia Department of Transportation, US 460 Connector - Breaks, VA. Geotechnical services were provided for the realignment of US 460 at the Virginia/Kentucky border. Responsibilities included field boring inspection, Rock Mass Rating (RMR), and testing of soil and rock samples in faulted mountainous terrain. Support was provided for spread footing design for two bridge foundations along US 460 and Route 80.

Power and Energy

Duke Energy Oconee Substation: The project involved the expansion of a 24kV Retail Substation in Oconee County, South Carolina, located near the Oconee Nuclear Facility. The expansion included widening the substation pad and relocating the access road. A reinforced soil slope was designed, with a 1.5H:1V slope on the south side transitioning to 3H:1V on the east and west sides. Geotechnical design, construction plans, and specifications were provided for this project.

Kenzig Rd. Soil Nail Wall - New Albany, IN (LG&E/KU): A permanent soil nail wall was designed along a proposed cut slope at the Kenzig Road Substation in New Albany, Indiana, to create a proper footprint for the substation. The wall will block views of the substation from nearby development, with the aim of blending it into the landscape. The soil nail wall will be about 42 feet high and 720 feet long. Design services and construction plans were provided for the soil nail wall.

LG&E/KU Crouch Property, LaGrange, Kentucky: A geotechnical assessment was conducted for a substation site near LaGrange, Kentucky. The assessment included site reconnaissance, geophysical surveys, risk assessments, and foundation evaluations for the proposed substation construction.

LG&E/KU E.W. Brown Generating Station 10 MW Photovoltaic Solar Electric Generation System, Mercer County, Kentucky: Geotechnical support was provided for the development of a 10 MW photovoltaic solar system at the E.W. Brown Generating Station in Mercer County, Kentucky. This included the construction of steel structures for mechanical tracking assemblies and equipment pads for switchgear. Foundations for the solar panels required piles socketed into shallow bedrock. Geotechnical investigations and design and construction oversight were provided for the project.

LG&E/KU Cane Run Combined Cycle: Geotechnical foundation design recommendations were provided for a new Generator Step-up (GSU) transformer slab at the Cane Run Combined Cycle site in Kentucky. This involved conducting a test pit investigation to inform the design recommendations.

LG&E/KU Grapevine Breaker Addition: This project involved the addition of a new breaker at a substation near Madisonville, Kentucky. A geotechnical investigation, design, and construction oversight were provided for the project.

Omaha Public Power District, Fort Calhoun Station 2011 Flood Services - Plant and Facility Geotechnical and Structural Assessment, Fort Calhoun, NE: A post-flooding assessment was conducted for Fort Calhoun Station to determine physical changes from the 2011 Missouri River flood. This involved a visual inspection, establishing a site baseline, and preparing a report with findings and recommendations regarding the flood's impact on site structures and systems.

T-20 PowerTracker Foundation System Design, Alamosa, Colorado: Engineering services were provided for the T-20 Power Tracker foundation system at a solar project site in Alamosa, Colorado. This included lateral pile analyses for the solar panel foundations.

Railroads

BNSF Asphalt Underlayment Specification Review, Glasgow and Hillsboro Subdivisions, ND. BNSF Railway contracted for the review and editing of their current specification 03700 Hot-Mix Asphalt Roadbed – Standard Construction Specifications to assess its appropriateness for use in the North Dakota Region, with specific application to the Glasgow and Hillsboro Subdivisions. The current specification, originally developed for soils in the southern United States, was assessed to determine its applicability for use in the more northern regions, which experience severe winter conditions. Suggested revisions were provided to tailor the specification to work effectively in North Dakota and other northern climates.

BNSF Expansion of Mendota Subdivision Siding MP96 to 97, Zearing, Illinois. BNSF Railway contracted to prepare design plans for the construction of a siding expansion along their Mendota Subdivision between Mileposts 96 and 97 near Zearing, Illinois. Project responsibilities included managing geotechnical investigations and preparing a geotechnical design report.

CSX Osborn Yard Master Retarder Replacement, Louisville, Kentucky. Design services were provided for the construction of a new Master Retarder at the Osborn Yard in Louisville, Kentucky. The construction involved replacing the existing 6-span at-grade bridge with 3 new 60-foot precast spans, as well as resurfacing the lead tracks into the lower group retarders leading into the bowl.

Canadian Pacific Bensenville Yard DDG Load-Out Facility. Canadian Pacific Railroad contracted for the preparation of a geotechnical report and design plans for the construction of a new dried distiller's grain load-out facility in their existing Bensenville Yard near Chicago, Illinois. Project responsibilities involved managing geotechnical investigations and preparing pavement and foundation design reports.

Canadian Pacific CP303 Sheldon Sub Bridge Replacements, North Central Iowa. Canadian Pacific Railroad contracted to prepare design and plans for the replacement of timber approach spans with new standard precast spans or culverts. The project included geotechnical investigations at 15 locations, hydraulics and hydrology studies at all locations, field surveys, and engineering design. Project responsibilities included managing geotechnical investigations and preparing foundation design reports.

Canadian Pacific Marquette Sub Bridge Replacements, Minnesota. Canadian Pacific Railroad contracted to prepare design and plans for the replacement of existing bridges with new standard precast spans or culverts. The project included geotechnical investigations at 7 locations, hydraulics and hydrology studies at all locations, field surveys, and engineering design. Project responsibilities included managing geotechnical investigations and preparing foundation design reports.

Canadian Pacific Ottumwa Sub Bridge Replacements, Iowa. Canadian Pacific Railroad contracted to prepare design and plans for the replacement of existing bridges with new standard precast spans or culverts. The project included geotechnical investigations at 2 locations, hydraulics and hydrology studies at all locations, field surveys, and engineering design. Project responsibilities included managing geotechnical investigations and preparing foundation design reports.

Canadian Pacific Mason City Sub Bridge Replacements, Iowa. Canadian Pacific Railroad contracted to prepare design and plans for the replacement of existing bridges with new standard precast spans or culverts. The project included geotechnical investigations at 2 locations, hydraulics and hydrology studies at all locations, field surveys, and engineering design. Project responsibilities included managing geotechnical investigations and preparing foundation design reports.

Charlotte Area Transit System (CATS) Terminal Area, Charlotte, North Carolina. Geotechnical and structural design services were provided for the Charlotte Area Transit System (CATS) commuter rail station in Charlotte, NC. Project responsibilities included coordinating subsurface investigations, preparing design subsurface profiles, and designing geopier foundations, MSE walls, soil nail walls, and secant drilled shaft walls to support both freight and passenger rail traffic through this corridor.

CSXT Bridge OZA 140.8, Cayuga, Indiana. This project involved engineering assessment and design for replacement alternatives for the existing south abutment. The repair design included a single-track ballast deck and a new permanent shallow jump span. Foundation alternatives were analyzed and repaired as required. The new drilled shaft foundation, saddle caps, existing span, and new span were to be built/modified under traffic. Project responsibilities included subsurface investigation, field survey coordination, foundation design, and ballast deck design.

CSXT Bridge CA 520.4, Ashland, Kentucky. This project involved replacing the existing superstructure and making repairs to the substructure of the bridge at milepost CA 520.4 on the Kanawha Subdivision near Ashland, KY. The bridge consists of two steel spans with an open timber deck, and the foundation consists of concrete abutments with a steel tower support near the center of the spans. The abutments, tower, and spans are skewed at 45 degrees to the roadway. Project responsibilities included design of an embankment fill slope, foundation pier, and retaining wall.

CSXT Bridge 00H 293, Breton, Kentucky. This project involved converting the existing steel span to a ballast deck and re-profiling the track on the entire structure. The bridge consists of seventeen

ballast deck precast concrete slab spans supported on concrete caps and piles. The steel span is 48'-6" and consists of two girders at 9'-0" centers with longitudinal raising timbers and timber ties. The steel beams and concrete piers are skewed approximately 60° to the track alignment. Project responsibilities included the design of the timber deck and curb extension along the steel span.

CSXT Bridge QDS 5.22, Cleveland, Ohio. This project involved engineering assessment and repair design for a double-track ballast deck through-plate girder bridge supported on concrete abutments with intermediate steel columns. The steel columns and footer blocks were analyzed and repaired as necessary. New footers were built under traffic using staged construction and work windows. Project responsibilities included inspecting existing footing and drainage conditions, conducting a subsurface investigation, and designing repair alternatives.

CSXT Bridge 0HR21.9, Kathryn, Kentucky. Construction assistance was provided for a CSX Railroad Bridge over the Salt River near Louisville, KY. Micropiles were used to found a bridge pier through an existing pier encountered during construction in the riverbed at the proposed pier location. Project responsibilities included reviewing alternate micropile designs and observing micropile installation during construction.

CSXT Bridge BI 24.0, Tiffin, Ohio. This project involved converting the existing bridge to a ballast deck. The bridge consists of two open-deck through-plate girder spans supporting both the WB and EB track. The TPG spans are flanked on the west by an open deck plate girder span crossing Water Street and on the east by an open deck plate girder span and two open deck beam spans crossing River Street. The bridge crosses over the Sandusky River. Project responsibilities included designing the timber deck along all six spans, as well as preparing plans and specifications.

CSXT, Proposed Pedestrian Underpass, Kennesaw, Georgia. Engineering analyses were conducted for the proposed ground freezing technique for constructing a pedestrian tunnel underpass beneath four active CSXT railroad tracks in Kennesaw, GA. The existing specifications were reviewed and recommendations regarding the applicability of the ground freezing process were provided.

CSXT Transflo – Retaining Wall Replacement, Atlanta, Georgia. Design services were provided for the replacement of a timber lagging wall with a 600-foot long soil nail wall at the CSX Trans-Flo Facility in Atlanta, GA. Responsibilities included designing the temporary and permanent wall facings, and soil nails for each wall.

Duke Lee Rail Spur Reconstruction Project, Gaffney, South Carolina. Engineering services were provided for the Duke Lee Rail Spur Reconstruction Project, which will provide rail service to the proposed William States Lee III Nuclear Power Station near Gaffney, South Carolina. Geotechnical design recommendations were provided for the design of a tied-back soldier pile wall to support railroad tracks.

Ely Power Nevada Railroad Design, Nevada. Support was provided for subsurface design on a design-build project rehabilitating an abandoned 100-mile trackbed to service Nevada Power Co. Project role included estimating subgrade design strength and required ballast depth based on AREMA standards for two design-build alternatives.

Florida East Coast Railway, Airport Expansion Feasibility Study, St. Augustine, Florida. Geotechnical engineering and design analyses were provided for relocating the FEC railway to allow for the proposed runway extension at the Saint Augustine/Saint John's County Airport. Services included site reconnaissance, field exploration programs, field boring inspection, review of available geologic information, laboratory testing on selected soil samples, evaluation of subsurface conditions, and recommendations regarding the feasibility of the proposed highway and railway relocation.

Ft. Carson Railyard, Colorado (Master IDIQ Louisville District - Wright-Patt AFB). Design services were provided for the expansion of the existing Fort Carson rail head, including six new loading spurs, two storage tracks, an off-post switching lead, and various other infrastructure. The design included a pedestrian overpass and retaining walls, as well as mitigation for impacts to wetland areas. Responsibilities included quality control reviews of geotechnical subconsultant reports and foundation design recommendations.

Intermodal Container Transfer Facility - Phase 1, Garrows Bend, Alabama. Professional design services were provided for the development of a world-class intermodal rail facility at Garrows Bend. Project responsibilities included assisting in the design of loading facility pavement sections for heavy haul loaders.

McAlester Army Ammunition Plant, McAlester, Oklahoma (USACE Tulsa District). Design services were provided for the construction of a new rail connection at the McAlester Army Ammunition Plant, including 2.5 miles of new rail and mitigation for impacts to wetland areas. Responsibilities included reviewing geotechnical and geologic information and coordinating with the design team.

Water

City of Cincinnati MSD Ponderosa Woods, Cincinnati, Ohio. The existing Ponderosa Woods Pump Station had a history of maintenance issues that had resulted in sewer line overflows in the area. Eliminating the existing pump station was recommended by MSDGC's Business Case Evaluation (BCE). Located between Edger Drive and Westonridge Drive in northwest Cincinnati, Ohio, the project consists of 400 linear feet of 8-inch diameter gravity sanitary sewer to be placed along a new sewer alignment to eliminate the Ponderosa Woods Pump Station. Project responsibilities included managing the geotechnical subsurface and laboratory investigation and preparation of the geotechnical engineering report.

City of Cincinnati MSD Mayhew Ave and Leath Ave. Sewer Alignment Project, Cincinnati, Ohio. The project includes abandoning the existing sewer and relocating the new sewer to be further away from 420 Leath Avenue. The proposed sewer replacement will be 399 feet in length and traverses a relatively steep slope with nearby retaining structures. Project responsibilities included managing the geotechnical subsurface and laboratory investigation and preparation of the geotechnical engineering report.

City of Omaha CSO LT Control Plan Program Management, Omaha, Nebraska. As part of the program management team, expertise was provided in project controls, regulatory and community issues, long-term control planning, storage, pumping, and treatment to help the City of Omaha develop a Long-Term Control Plan for its combined sewer overflow/sanitary sewer overflow (CSO/SSO) system. The related Burt-Izard Basin Study, one of the city's largest CSOs, is being led separately. Project responsibilities included assisting in the preparation of a Technical Memorandum discussing impacts of proposed South Interceptor Force Main (SIFM) construction on the existing levee system.

Attachment B – Project Highlights

Project Name: GEO230001 - Lower Dillsboro Rd Slide Repair

Project Owner: Dearborn County Indiana Highway Department

Year(s) Work Performed: September 2023 to October 2023

Total Project Construction Cost: $1.3 Million

Description of Work Performed:
Design and Construction of a roadway landslide repair project. This project included installation of 11,400SF of sheet pile, 7240 LF of soil nails, 355 Cy of backfill, installation of 2 box inlets

Work Was Performed As: Prime Contractor

Key Construction Person(s): Tyler Davis, Casey Prine

Engineer of Record: Justin Anderson, PE and Matt Birchmier, PE

Project Name: GEO230003 - KY 197, MP 5.1 Pike Co

Project Owner: Kentucky Transportation Cabinet

Year(s) Work Performed: October 2023

Total Project Construction Cost: $117,776

Description of Work Performed:
The repairs consisted of excavation of the face for the total of 92 LF up to 8 slope feet in height. We then installed up to 20-ft long soil nails through the excavated face. The repaired area were then covered with a gun finished reinforced shotcrete facing up to 8 inches in thickness. Installed drilled horizontal drains along the repaired area near the base of the reinforced shotcrete wall.

Work Was Performed As: Subcontractor

Key Construction Person(s): Tyler Davis, Casey Prine

Engineer of Record: Justin Anderson, PE

Project Name: GEO230004 - KY 197, MP 5.45 Pike Co

Project Owner: Kentucky Transportation Cabinet

Year(s) Work Performed: October 2023

Total Project Construction Cost: $162,970

Description of Work Performed:
The proposed repairs consisted of excavation of the face for the total of 108 LF up to 10 slope feet in height. We then installed 20-ft long soil nails through the excavated face. The repaired area was then be covered with a gun finished reinforced shotcrete facing up to 8-inches in thickness. We then installed drilled horizontal drains along the repaired area near the base of the shotcrete wall. Up to 30-feet of a geosynthetically reinforced soil (GRS) shoulder buildup was installed where the shoulder had been lost.

Work Was Performed As: Subcontractor

Key Construction Person(s): Tyler Davis, Casey Prine

Engineer of Record: Justin Anderson, PE

Project Name: GEO230006 - KY 197, MP 8.5 Pike Co

Project Owner: Kentucky Transportation Cabinet

Year(s) Work Performed: November 2023

Total Project Construction Cost: $239,920

Description of Work Performed: The proposed repairs consisted of excavation of the face for the total of 242 LF up to 10 slope feet in height.

We installed 20-ft long soil nails through the excavated face. The repaired area was then covered with a gun finished reinforced shotcrete facing up to 8-inches in thickness.

We then installed drilled horizontal drains along the repaired area near the base of the shotcrete wall.

Work Was Performed As: Subcontractor

Key Construction Person(s): Tyler Davis, Casey Prine

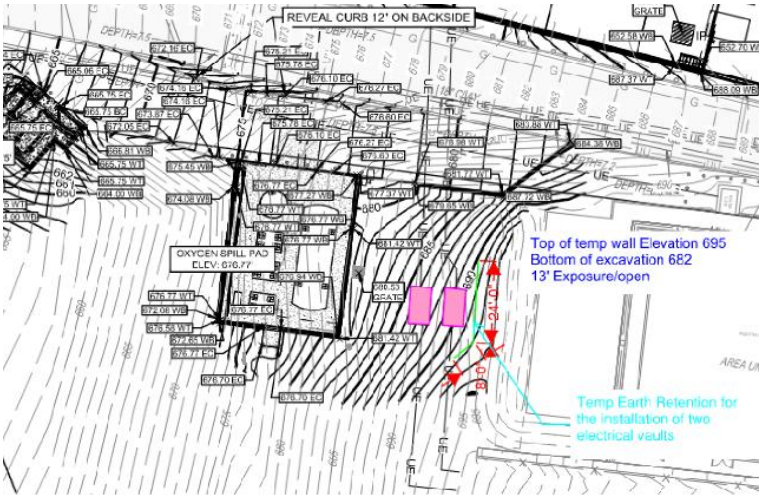
Engineer of Record: Justin Anderson, PE

Statement of Qualifications

Project Name: GEO230008 – Good Sam Electrical Vault TER

Project Owner: Prus Construction

Year(s) Work Performed: November 2023



Total Project Construction Cost: $66,696

Description of Work Performed:
The proposed work consisted of excavation of the face by others for the total of 32 LF up to 13 slope feet in height. We will then install up to 15-ft long soil nails through the excavated face. The repaired area will then be covered with a gun finished reinforced shotcrete facing up to 4 inches in thickness.

Work Was Performed As: Subcontractor

Key Construction Person(s): Jessee Ricker, Casey Prine

Engineer of Record: Justin Anderson, PE

Revised 1/08/2025

Project Name: GEO230007 – Park Ave

Project Owner: Dearborn County Highway Department

Year(s) Work Performed: November 2023

Total Project Construction Cost: $188,896

Description of Work Performed:
This roadway slide repair consisted of driving steel sheet piling along the full length of the wall. The piles were up to 15 feet long. We then excavated along the face of the sheet piles up to a depth of 4 feet below top of wall for the total of 104 LF. We then installed up to 20-ft long soil nail`s through the excavated face/piles. The nails will be secured to the sheets with galvanized bearing plates and nuts.

Before Repairs

After Repairs

Work Was Performed As: General Contractor

Key Construction Person(s): Tyler Davis, Casey Prine

Engineer of Record: Justin Anderson, PE

Project Name: GEO230005 – Wake Rd. Slide Repair

Project Owner: Jefferson County Highway Department

Year(s) Work Performed: September 2023 to October 2023

Total Project Construction Cost: $145,070

Description of Work Performed:
This roadway slide repair consisted of construction of a new soil nail and shotcrete wall, new guardrail, ditch clearing, new culvert, and roadway regrading/resurfacing.

We installed 20-ft long soil nails through the excavated face. The repaired area was then covered with a gun finished reinforced shotcrete facing up to 8-inches in thickness.

We then installed drilled horizontal drains along the repaired area near the base of the shotcrete wall.

Work Was Performed As: General Contractor

Key Construction Person(s): Tyler Davis, Casey Prine

Engineer of Record: Justin Anderson, PE

Before Repairs

After Repairs

Project Name: GEO230010 – RFB-103-24 EEC-AML-Herman Grigsby Slide-BIL

Project Owner: Kentucky Abandoned Mine Lands

Year(s) Work Performed: January 2024 to Present

Total Project Construction Cost: $1,059,860

Description of Work Performed: **T**his was slide repair for the Kentucky Abandoned Mne Lands.

Scope of work: 3 Acre site preparation, 17145 lbs reinforcing steel, 170 Cy concrete formed & finished, 44 CY Concrete non-formed and non-finished, 2080 Sy Filter fabric, 1515 SY geogrid, 5400 Ton Class II Backfill, 750 LF Silt Barrier - Bales & Fence, 1 Silt Trap, 50 hours hoe ram, 1 LS Earthwork, 450 SY erosion control blanket, 449 Ton Class II/III, 390 LF Retaining wall subdrain, 80 LF 18" dia. HDPE Pipe, 1 Concrete Headwall (up to 36") , Drilled Shafts 360 LF Soil, Drilled Shafts 360 LF of rock, 1170 LF railroad rails, 1272 CY Gabion Retaining Wall, 2 Acre revegetation, 1 Acre residential seeding, 500 Ton Roadway Stone, 200 Ton Bituminous Repair, 385 LF Chain Link Fence.

Work Was Performed As: General Contractor

Key Construction Person(s): Jessee Ricker, Casey Prine, Brian Miller

Engineer of Record: Kentucky AML

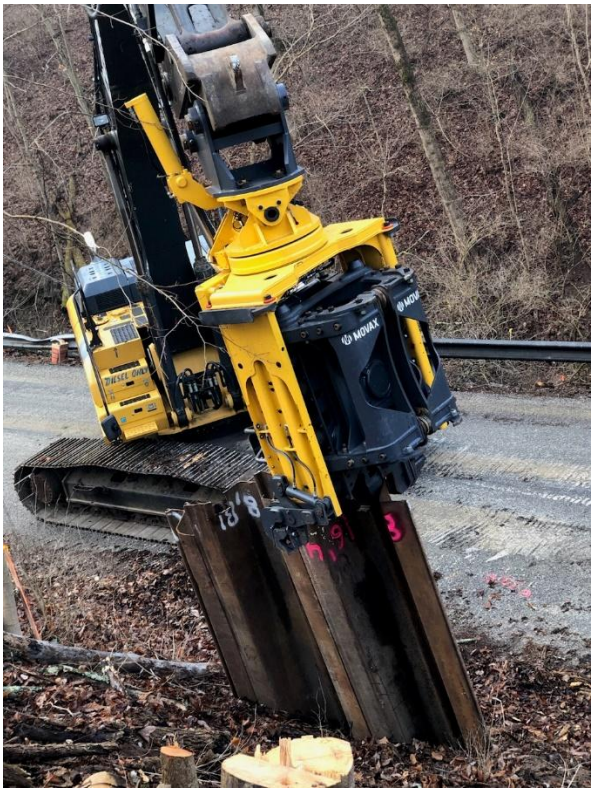
Project Name: GEO240007 - INDOT B-42528 Temp Shoring

Project Owner: Indiana DOT

Year(s) Work Performed: February 2024

Total Project Construction Cost: $35,000

Description of Work Performed: The project involved design and installation of 80 linear feet of driven sheet pling to serve as temporary shoring for this project. The temporary shoring allowed for installation of a reinforced concrete retaining wall (by others).



Work Was Performed As: Subcontractor (to Rohe Asphalt)

Key Construction Person(s): Casey Prine

Engineer of Record: Justin Anderson

Project Name: GEO240008 – MOE-536-10.90

Project Owner: Ohio Department of Transportation

Year(s) Work Performed: March 2024

Total Project Construction Cost: $94,582.50

Description of Work Performed: The project involved design and installation of 1260 square feet of soil nails and steel mesh to repair a roadway embankment failure along State Route 536, Milepost 10.90 near Clarington, Ohio.

The slide that totaled 98 linear feet in length consisted of construction of a drilled soil nail and steel mesh facing wall. The repairs consisted of excavation of the face between STA 10+00 and 10+98 up to 14 slope feet in height. We then installed up to 20-ft long soil nails through the excavated face. The repaired area was then covered with steel mesh facing and secured to the nails with galvanized bearing plates.

Work Was Performed As: General Contractor

Key Construction Person(s): Casey Prine, Tyler Davis, Ed Lisowski

Engineer of Record: Justin Anderson

Project Name: GEO230009 – Sagamaw Rd

Project Owner: Dearborn County Highway Department

Year(s) Work Performed: January 2024 to March 2024

Total Project Construction Cost: $788,260

Description of Work Performed: The project involved design and installation of 7800 square feet of soil nails and reinforced shotcrete to repair a roadway embankment failure along Sagamaw Rd in Dearborn County, Indiana.

The slide that totaled 780 linear feet in length consisted of construction of a drilled soil nail and shotcrete wall. The proposed repairs consist of excavation of the face between STA 10+00 and 12+86 and between 16+60 to 21+54 for the total of 780 LF up to 10 slope feet in height. We will then installed up to 20-ft long soil nails through the excavated face. The repaired area will then be covered with a gun finished reinforced shotcrete facing up to 8 inches in thickness.

Finally, we installed horizontal drains along the repaired area near the base of the shotcrete wall.

Work Was Performed As: General Contractor

Key Construction Person(s): Casey Prine, Tyler Davis

Engineer of Record: Justin Anderson

Project Name: GEO240009 – Federal Street Basement Vault Remediation

Project Owner: City of Youngstown, Ohio

Year(s) Work Performed: April 2024 to June 2024

Total Project Construction Cost: $350,500

Description of Work Performed: The project involved filling/abandoning existing building vaults that were situated under the sidewalks at various locations in downtown Youngstown, Ohio.

The vaults were filled with over 850 CY of light weight cellular concrete flowable fill up to the bottom elevation of the sidewalk.

Work Was Performed As: General Contractor

Key Construction Person(s): Brian Miller, Ed Lisowski

Engineer of Record: Justin Anderson

Statement of Qualifications

Project Name: GEO240012 – 3219 Old State Road 1

Project Owner: Frankline County Indiana Highway Department

Year(s) Work Performed: May 2024 to June 2024

Total Project Construction Cost: $452,860

Description of Work Performed: The project involved design and installation of 181 linear feet (measured along wall alignment) of sheet piles and soil nails to repair a roadway embankment failure along Old SR 1 Rd in Franklin County, Indiana.

The slide was resulting from ongoing erosion of the roadway embankment by the adjacent creek. The slide is situated upstream of the existing bridge connecting new SR 1 to Old SR 1. An existing soil nailed wall has been constructed along part of this stretch but is being undermined and flanked by the adjacent creek (see photo to right).

The proposed repairs include a primary repair length of 66 LF with an optional additional repair length of 115 LF (to further extend the repair through the erosive bend and terminate into the tangent portion and bolster the stability of the existing soil nailed wall).

Work Was Performed As: General Contractor

Key Construction Person(s): Casey Prine, Greg Chambers, Tommy Smiddy

Engineer of Record: Justin Anderson

Revised 1/08/2025

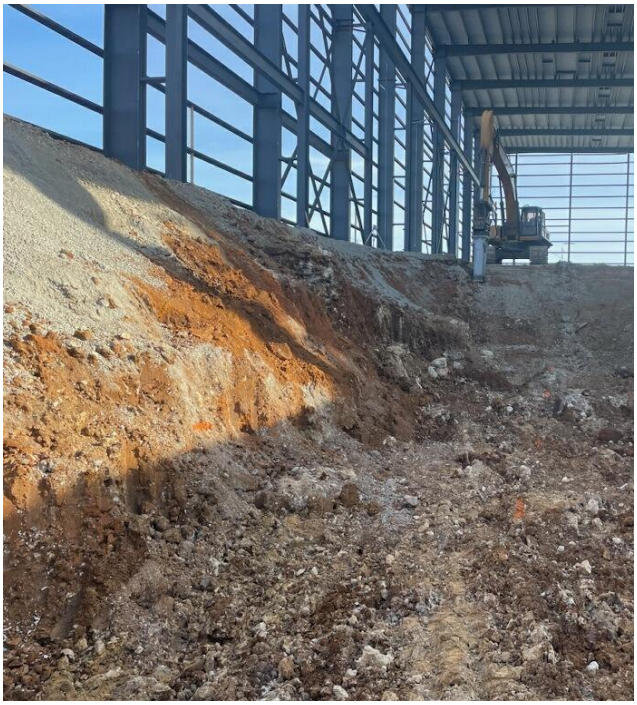
Project Name: GEO240013 – Thai Summit Temporary Shoring

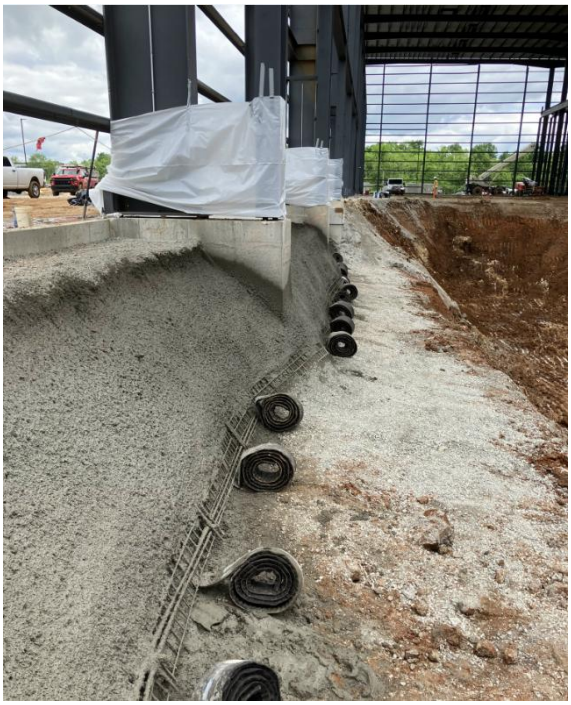
Project Owner: Thai Summit (Bardstown, KY)

Year(s) Work Performed: March to June 2024

Total Project Construction Cost: $350,000

Description of Work Performed: The project involved design and installation of over 4000 square feet of soil nails and reinforced shotcrete to shore an excavation made as part of the Thai Summit Manufacturing facility in Bardstown, Kentucky. The shoring consisted of drilled soil nails up to 15 feet long with a reinforced shotcrete facing that averaged 8 inches in thickness. We then installed drilled horizontal drains along the repaired area near the base of the shotcrete wall.





Work Was Performed As: General Contractor

Key Construction Person(s): Tommy Smiddy, Casey Prine

Engineer of Record: Justin Anderson

Project Name: GEO240037 – TDOT CNY312 Unicoi County SR-36

Project Owner: State of Tennessee Department of Transportation

Year(s) Work Performed: December 2024

Total Project Construction Cost: $160,000

Description of Work Performed: GeoSpecialties served as a subcontractor to Summers-Taylor, Inc., to design and install two permanent retaining walls to repair a roadway embankment failure along State Route 36 in Unicoi County, Tennessee. This failure was caused by the heavy rains and erosion associated with Hurricane Helene. The project scope included the construction of two retaining walls with soil nails and reinforced shotcrete facings. Wall #1 measured 484 square feet, and Wall #2 measured 626 square feet. The retaining walls consisted of multiple rows of soil nails up to 20 feet long, with a permanent shotcrete facing that averaged8 inches in thickness. Horizontal drains were installed at the base of the walls to manage groundwater and enhance stability.

The project also required collaboration with Summer-Taylor, Inc. who performed excavation in lifts of up to 5 feet to facilitate wall installation. GeoSpecialties then installed the soil nail systems, completed reinforced shotcrete applications, and ensured quality control of all construction processes.

Before Repairs

After Repairs

Work Was Performed As: Subcontractor (to Summers-Taylor, Inc.)

Key Construction Person(s): Jessee Ricker, Casey Prine

Engineer of Record: Justin Anderson

Matt Williams, P.E.
www.geospecialties.com | 859.494.2121
matt.williams@geospecialties.com

May 23, 2025

Lexington Fayette Urban County Government
Department of Environmental Quality and Public Works
Phone: 859.228.3320
Email: sstone@lexingtonky.gov

Subject: Proposal for Bid No. 68-2025 – Jacks Creek Pike Slope Repair

GeoSpecialties is pleased to offer this Proposal for the referenced project. This proposal is exclusively for the Lexington Fayette Urban County Government, herein known as the "Owner", to consider. The site is located near 7000 Jacks Creek Pike, in Lexington, KY near GPS point 37.861871° N 84.372103° W.

Typical views of the site are included below in Figures 1 and 2.

FIGURE 1 - TYPICAL VIEW OF FAILURE (SOUTH END)

FIGURE 2 - TYPICAL VIEW OF FAILURE (LOOKING SOUTH)

I. Project Background

In early April 2025, a significant landslide occurred along Jacks Creek Pike in southeastern Fayette County, Kentucky. The slope failure, which resulted in the loss of substantial portions of the roadway and left the one way in / one way out roadway down to one lane that is not safely passable. This failure was the direct result of a combination of severe hydrological and geotechnical conditions that developed during the late March and Early April.

This area of Fayette County is near the Kentucky River in an area underlain by interbedded Ordovician shale and limestone bedrock, also known as the Clays Ferry Formation.

The slope is mantled by clay-rich residual soils (Eden series), colluvium, and saturated alluvium near the creek's edge. Bedrock elevations in the area range from approximately 680-700 feet along the riverine area, with overburden thicknesses varying from 10 feet to more than 40 feet in this area.

From March 30 – April 10, 2025, the Lexington region experienced exceptionally heavy rainfall, totaling more approximately 9.56 inches—well over twice the monthly average. This rainfall led to widespread saturation of soils and caused the Kentucky River and its tributaries, to crest at near-historic levels. The USGS gauge at Lock 9 recorded a crest of 41.55 feet on April 6.

This rapid intense saturation is widely recognized as a critical trigger for slope instability. As the river and creek levels receded, the hydrostatic support on the saturated slope was lost, while elevated pore pressures within the soil mass remained. This condition likely activated a deep-seated failure along a preexisting weakness in the slope and below the existing concrete retaining wall.

The failure mechanism appears consistent with a rotational slump, where upper slope soils detached and moved downward toward the creek, removing vegetation and displacing large soil masses. Visual

inspection confirmed that multiple large trees and portions of the road have “sat down”. The slope will likely continue to move as additional rainfall hits the region.

Regional geotechnical studies confirm that the site’s underlying soils are prone to instability when saturated, particularly where perched water tables form above shallow bedrock. The excessive rainfall and prolonged saturation levels likely created a critical condition that overwhelmed the natural stability of the slope.

GeoSpecialties has developed a conceptual design and construction approach that addresses site access, slope reinforcement, long-term stability, and environmental protection.

II. Design Approach and Methodology

The proposed stabilization design for Jacks Creek Pike was developed in accordance with current geotechnical engineering best practices and federal design guidelines. The selected remedial approach addresses both global slope stability and long-term structural resilience, especially given the location along critical infrastructure and the presence of saturated, erosion-prone soils in the river valley.

Design Objectives

- Achieve a minimum global factor of safety (FS) of 1.3, consistent with AASHTO LRFD Bridge Design Specifications for slopes below abutments and retaining structures.
- Stabilize the roadway platform to resist sliding, settlement, and scour-related erosion near the toe of the slope.
- Accommodate long-term corrosion and groundwater conditions using durable structural materials and protection measures.

Stability Analysis

Slope stability modeling was conducted using the Rocscience Slide2 platform. Multiple soil layers were defined based on field reconnaissance and regional subsurface data:

- **Overburden (CL/CH)**: Silty clay with unit weight of 120 pcf, cohesion of 10 psf and $\varphi = 28°$
- **Rock**: Cohesion of 1000 psf and $\varphi = 32°$, unit weight 140 pcf.

Based on this stratigraphy and assumed pore water conditions during high water and rapid drawdown, the designed slope configuration achieves an FS of ≥ 1.3, as shown in the Slide2 output. This margin of safety was selected deliberately to mitigate not only rotational failure but also to reduce the potential for post-construction settlement.

Structural Configuration

The stabilization system is composed of:

- A **Geosynthetically Reinforced Soil (GRS)** along the roadway area that has been displaced. The GRS is designed per the FHWA Publication FHWA-HRT-11-027. This will restore the roadway platform.
- A **soil nail wall with shotcrete facing** along the face of the existing wall. This wall will extend approximately 10’-12’ below the existing pavement elevation.

Design Standards and References

This design approach is informed by FHWA GEC No. 7: Soil Nail Walls and follows recommendations for:

- Adequate bond strength between nail and grout.
- Nail spacing and length to maintain internal stability.
- Shotcrete facing to resist shallow sloughing and erosion.
- Consideration of groundwater influence and wall drainage.

Additionally, AASHTO LRFD guidance for Factors of Safety for slopes supporting roadways has been applied as a governing design criterion.

Corrosion and Durability
Given the site's proximity to surface water and the potential for long-term saturation, all permanent steel elements (soil nails) will be designed with sacrificial steel thicknesses to accommodate anticipated corrosion losses over the design life. Protective measures such as epoxy coatings or galvanization may be considered as supplemental protection, but the design conservatively assumes corrosion is ongoing and unmitigated to ensure long-term reliability.

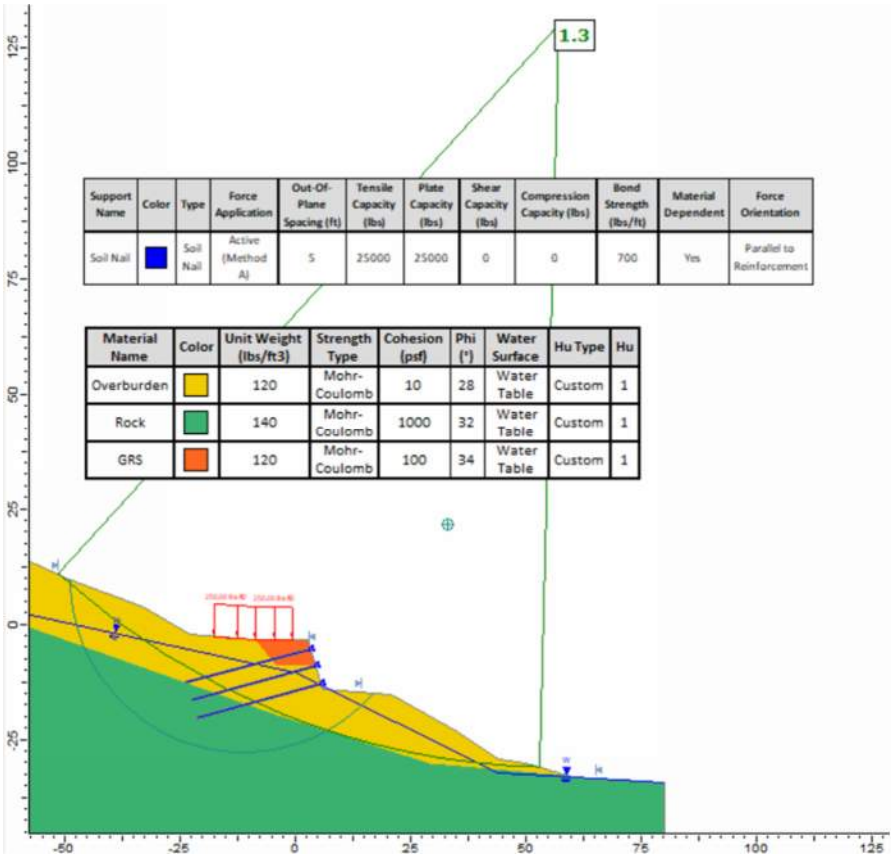


FIGURE 3 – PROPOSED REPAIR GLOBAL STABILITY

III. Proposed Scope of Work

GeoSpecialties proposes a comprehensive slope stabilization system for the site along Jacks Creek Pike in Lexington, KY, to remediate the failure that occurred in April, 2025. The primary stabilization will include a dual system: a GRS wall for the roadway and a soil nail and shotcrete wall along the face. The upper portion will consist of multiple layers of geotextile fabric and well graded stone to restore the roadway platform. Then multiple rows of 30-foot-long drilled soil nails will be installed through the GRS and existing concrete retaining wall into underlying soils, terminated in an 8-inch-

thick layer of reinforced shotcrete facing. These nails will serve as the primary stabilization mechanism for the slope. Horizontal drains up to 20-ft long will be installed along the base of the wall and strip drains will be placed behind the shotcrete to relieve pore pressure.

The system design will include integrated structural connections between the two systems, such as couplers and plate-and-nut fastenings, enabling staged tie-in between the shotcrete and the GRS system. The stabilization zone will be cleared of trees and debris to allow construction and monitoring access. Upon completion of the stabilization, the roadway will be paved, and guardrail will be placed to restore for active service.

Our proposed conceptual cross section is provided below in Figures 5.

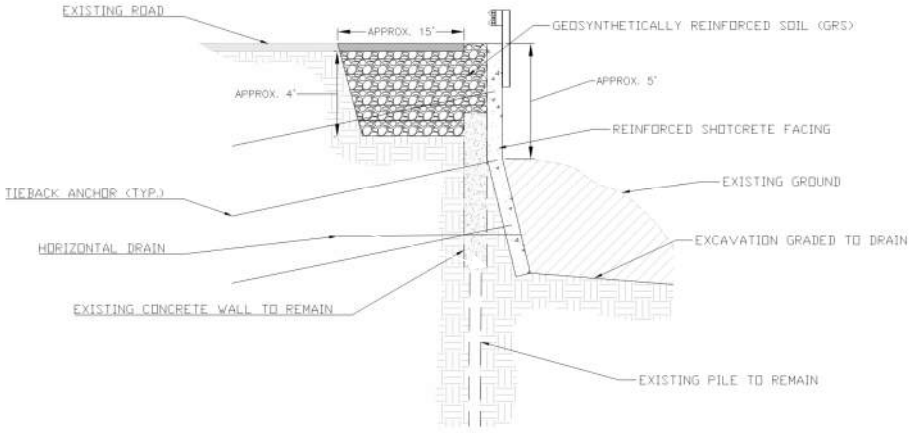


FIGURE 5 – PROPOSED DESIGN CROSS SECTION

IV. Roles and Responsibilities

GeoSpecialties will provide a complete design-build package, which includes:

- Engineering design sealed by a Kentucky-licensed Professional Engineer
- Labor, tools, equipment, and materials for wall installation
- Installation up to 30-ft drilled soil nails and 8-inch reinforced shotcrete facing
- Installation of the GRS system
- Integration of wall systems with structural couplers and tie plates
- Coordination with LFUCG

If the stabilization height or anchorage depth must exceed the proposed values due to unforeseen field conditions, unit cost adjustments may apply.

The **client will be responsible for the following**:

- Obtaining any necessary rights-of-way, easements, or access permissions
- Facilitating coordination with other stakeholders
- Provide timely reviews of submittals

V. Key Assumptions, Clarifications and Exclusions

The following are additional key assumptions made in the preparation of this proposed scope and fee.

- No permitting is included. If this is required, then that can be completed with an additional fee.
- The cost of a bond premium is included in the GeoSpecialties' price.
- Prevailing wages are not included in GeoSpecialties' price.
- Buy America/American Material Requirements are not included in GeoSpecialties' price.

VI. Anticipated Schedule

GeoSpecialties estimates that the work described above can be completed in approximately **6 weeks**. The approximate delivery schedule below assumes timely delivery of information and review comments from the Contractor.

All construction work is based on a work schedule of Monday through Friday, up to 10 hours per day as weather and daylight permits. GeoSpecialties can mobilize to the site within a mutually negotiated timeframe from GeoSpecialties receiving an executed contract, approved submittals, and a written notice to proceed.

VII. Pricing

Our scope of work includes labor, tools, and equipment to perform the work described herein based on the prices listed below. The prices included herein are based and expressly conditioned on continuous unobstructed work beginning the day GeoSpecialties mobilizes on the site. Should the work not proceed as continuous unobstructed work, the price to perform the work may likely increase. We propose to perform the above scope of work per the following fee breakdown.

Table 1 – Cost Estimate

Item	Description	Qty	Unit	Unit Price	Total
1	Engineering / Surveying / Staking	1	LS	$15,000.00	$15,000.00
2	Mobilization	1	LS	$50,000.00	$50,000.00
3	Asphalt Surface	60	TON	$330.00	$19,800.00
4	Asphalt Base	120	TON	$220.00	$26,400.00
5	DGA	120	TON	$145.00	$17,400.00
6	Maintenance of Traffic	1	LS	$20,000.00	$20,000.00
7	Clearing & Grubbing	1	LS	$8,000.00	$8,000.00
8	Excavation / Benching	500	CY	$50.00	$25,000.00
9	Soil Nail & Shotcrete Wall (Note 1)	260	LF	$1,850.00	$481,000.00
10	Geosynthetically Reinforced Soil (GRS) (Note 1)	900	SF	$97.00	$87,300.00
11	Guardrail	220	LF	$43.75	$9,625.00
12	Guardrail End Treatments	2	EA	$5,000.00	$10,000.00
13	Class II Channel Lining	200	Ton	$140.00	$28,000.00
14	Reconstruct Concrete Drive	1	LS	$12,000.00	$12,000.00
15	Drop Inlet for Culvert Pipe	2	LS	$10,000.00	$20,000.00
16	24" Culvert Pipe	80	LF	$250.00	$20,000.00
					$ 849,525

Note 1: Items 9 & 10 above are intended to replace items 18-23 in the published bid schedule.

VIII. Closure

Thank you for the opportunity to propose this especially important project. If you have any questions or would like any additional information, please don't hesitate to contact me.

Sincerely,

GeoSpecialties
Matt Williams, PE
matt.williams@geospecialties.com
c: 859.494.2121

Accepted by: _____
(Signature)

Accepted by: _____
(Printed name/title)

Date: _____

Attachment A – Standard Terms and Conditions

1. Standard of Care
GeoSpecialties will perform its services in a manner consistent with the level of care and skill ordinarily exercised by professionals practicing under similar conditions in the same geographic area. These services are subject to the time, budgetary, and physical constraints applicable to the project. No express or implied warranties are provided under this Agreement.

2. Invoices and Payment Terms
GeoSpecialties will submit monthly progress invoices and a final invoice upon completion of services. Payment is due upon receipt. Any unpaid balance will be considered past due after thirty (30) days from the invoice date. A finance charge of two percent (2%) per month, or the maximum rate allowed by law, will apply to all past due amounts. The Client agrees to pay any and all attorneys' fees, legal costs, and other collection expenses incurred by GeoSpecialties in recovering overdue payments.

3. Delays and Force Majeure
GeoSpecialties shall not be held liable for damages or delays in performance resulting from causes beyond its reasonable control. Such causes may include, but are not limited to, actions or inactions by the Client or its representatives, delays by governmental authorities, labor unrest, natural disasters, acts of terrorism, internet outages, supply interruptions, or other events that are unforeseen or not reasonably preventable.

4. Limitation of Liability
The Client must notify GeoSpecialties in writing of any actual or suspected deficiencies arising from GeoSpecialties' services. Failure to provide such notice will relieve GeoSpecialties of any further responsibility. To the extent permitted by law, all liability arising from GeoSpecialties' work shall expire no later than one (1) year from the date of the error, act, or omission, or by the applicable statute of limitations—whichever is earlier. In no event shall GeoSpecialties' liability exceed the total fee received for the services performed. The Client also acknowledges the inherent limitations of engineering evaluations of subsurface conditions, which may not reflect unknown site conditions or changes over time. GeoSpecialties shall not be liable for damages arising from such unknown or changed conditions.

5. Insurance
GeoSpecialties maintains professional liability insurance and will provide a certificate of insurance upon request. GeoSpecialties' liability is limited to the terms, exclusions, and coverage amounts stated in its insurance policy. Should the Client require additional project-specific coverage beyond existing limits, GeoSpecialties will obtain such insurance at the Client's expense, based on the premium differential.

6. Professional Work Product
All reports, plans, field notes, laboratory data, drawings, and electronic media created by GeoSpecialties are considered its professional work product and remain the sole property of GeoSpecialties. These documents are intended for one-time use on the specific project for which they were prepared and may not be reused on any other project without prior written consent. Unauthorized reuse shall be at the Client's risk, and the Client agrees to defend, indemnify, and hold GeoSpecialties harmless from any liability or damages arising from such reuse.

7. Data and Information
The Client shall provide all relevant project information, including reports, studies, plans, specifications, and other documentation necessary for the execution of services. GeoSpecialties is entitled to rely on the accuracy and completeness of the information provided and assumes no responsibility for verifying or supplementing that data.

8. Right of Entry
The Client shall provide right of entry for GeoSpecialties, its subcontractors, and equipment as needed to perform the contracted services. If the Client is not the property owner, it is the Client's responsibility to secure the appropriate permissions. The Client acknowledges that some surface damage may result from normal activities and that such restoration is not included in GeoSpecialties' scope unless specifically noted.

9. Control of Work and Jobsite Safety
GeoSpecialties is responsible only for the safety of its own employees and subcontractors. Jobsite safety for all other personnel, contractors, and visitors remains the responsibility of the Client and other consultants. GeoSpecialties does not supervise or control safety conditions at the jobsite and shall not be held liable for any jobsite incidents or injuries beyond its own personnel.

10. Disputes
Any disputes, claims, or controversies arising out of or related to this Agreement shall first be submitted to mediation prior to initiating litigation or arbitration. The parties agree to make a good faith effort to resolve issues through this non-binding process.

11. Termination
This Agreement may be terminated by either party for material breach, provided the breaching party fails to begin and continue corrective actions within seven (7) days of receiving written notice. Upon termination, GeoSpecialties shall be paid for all services rendered through the termination date, along with any reimbursable costs, including those related to subcontractors, consultants, materials, and travel. GeoSpecialties shall not be held liable for delays caused by suspension of services, and Client payment shall not be withheld based on project financing or third-party reimbursements.

12. Electronic Media
Electronic versions of documents provided by GeoSpecialties are subject to inadvertent alteration, degradation, or corruption due to software or transmission errors. These files are submitted for informational purposes only and are valid for review and acceptance for a period of thirty (30) days. Any defects must be promptly reported. GeoSpecialties makes no warranties regarding the fitness of such media. Unauthorized reuse, modification, or adaptation of these documents is prohibited, and the Client assumes all risk and liability for doing so.

13. Hazardous Materials and Contaminants
This Agreement does not include the assessment, identification, or remediation of hazardous substances such as asbestos, oil, or radioactive materials. GeoSpecialties is not responsible for designing or implementing systems to manage, remove, or treat such contaminants.

14. Miscellaneous Terms
This Agreement supersedes all prior agreements and contains the full understanding between the parties. Any amendment must be in writing and signed by both parties. Neither party may assign this Agreement without the other's consent, and no third-party beneficiaries are created. GeoSpecialties may engage affiliated or independent subconsultants, for whose work GeoSpecialties remains responsible under the limitations of liability stated herein. No waiver of any provision shall be deemed a waiver of future rights, and all rights and obligations (including those related to liability) shall survive termination.

The Client agrees not to use GeoSpecialties' name or any references to its work in public-facing materials without express written consent. If any provision is found unenforceable, the remainder shall remain in effect. This Agreement is governed by the laws of the Commonwealth of Kentucky unless another jurisdiction is required for enforcement. The individual signing on behalf of the Client warrants full authority to bind the Client to this Agreement.

15. Additional Conditions
If site readiness or project delays beyond GeoSpecialties' control cause lost time after crew mobilization, the Client agrees to pay a fee of $600 per crew-hour. Any retainage held shall be released to GeoSpecialties within thirty (30) days of its work completion. GeoSpecialties shall not be held responsible for liquidated damages, delay damages, or other schedule-related penalties outside its control.

GeoSpecialties assumes no liability for disturbances caused by construction vibrations, ground movement, settlement, or unmarked utilities. The Client or Contractor shall indemnify GeoSpecialties for any resulting claims and take appropriate precautions, including vibration monitoring or other mitigation. Furthermore, the Client is responsible for ensuring utilities are located prior to mobilization; potholing, relocation, or removal of utilities is not included.

This proposal shall remain valid for **thirty (30) days** from the date of transmittal.

16. Changes and Site Readiness
If the contract scope is modified after GeoSpecialties has delivered materials or commenced work, or if the project site is not ready for GeoSpecialties to begin work as scheduled, or if other delays occur that are outside the control of GeoSpecialties (including but not limited to coordination issues, third-party delays, or site inaccessibility), the Client agrees to compensate GeoSpecialties at a rate of **$600.00 per crew-hour** for lost time. This charge shall apply to each hour a mobilized crew is unable to perform work due to such circumstances.