

Department of Administration Purchasing Division 2019 Washington Street East Post Office Box 50130 Charleston, WV 25305-0130

State of West Virginia Solicitation Response

Proc Folder:	1012594	1012594				
Solicitation Description:	Addendum 4: 6622C049- Slide Repair Using Soil Nail Method					
Proc Type:	Agency Master A	Agency Master Agreement				
Solicitation Closes Solicitation Response			Version			
2022-03-31 14:30		SR 0803 ESR03162200000005657	1			

VENDOR					
00000196157 GEOSTABILIZATION INTERNATIONAL LLC					
Solicitation Number:	ARFQ 0803 DOT2200000027				
Total Bid:	1071835	Response Date:	2022-03-30	Response Time:	17:38:59

Comments:

FOR INFORMATION CONTACT THE BUYER Kristine E James 304-414-7104 kristy.e.james@wv.gov

Vendor Signatur

Signature X

FEIN#

DATE

All offers subject to all terms and conditions contained in this solicitation

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
1 Highway and road maintenance service					1071835.00
Comm	Code Manufacturer		Specifica	tion	Model #

72141003

Specification

Commodity Line Comments:

Extended Description:

Highway and road maintenance service



State of West Virginia Agency Request for Quote Highways

Proc Folder:	1012594		Reason for Modification:			
Doc Description	: 6622C049- Slide Repair	6622C049- Slide Repair Using Soil Nail Method - Statewide				
Proc Type:	Agency Master Agreeme	ent				
Date Issued	Solicitation Closes	Solicitation No	Version			
2022-03-15	2022-03-25 14:30	ARFQ 0803 DOT2200000027	1			

BID RECEIVING LOCATION FINANCE & ADMINISTRATION DIVISION OF HIGHWAYS BLDG 5, RM A-260 1900 KANAWHA BLVD E CHARLESTON WV 25302 US VENDOR

Vendor Customer Code: 000000196157

Vendor Name : GeoStabilization International LLC

Address: 4475 E 74th Ave Suite 100 Commerce City, CO 80022

Street : 4475 E 74th Ave Suite 100

City: Commerce City

State : Colorado	Country : USA	Zip : 80022	
Principal Contact : Lloyd Kuehn			
Vendor Contact Phone: 855-579-0536	Extension:		

FOR INFORMATION CONTACT THE BUYER
Kristine E James
304-414-7104
<pre>kristy.e.james@wv.gov</pre>

Vendor Signature X

Am

FEIN# 52-2379754

DATE 03-28-2022

All offers subject to all terms and conditions contained in this solicitation

ADDITIONAL INFORMATION

THE WEST VIRIGNIA DEPARTMENT OF TRANSPORTATION- BUDGET AND PROCUREMENT DIVISION - SOLICITATION OF SLIDE REPAIR USING SOIL NAIL METHOD - STATEWIDE PER THE ATTACHED DOCUMENTS.

QUESTIONS REGARDING THE SOLICITATION MUST BE SUBMITTED IN WRITING TO KRISTY.E.JAMES@WV.GOV PRIOR TO THE QUESTION PERIOD DEADLINE CONTAINED IN THE INSTRUCTIONS TO VENDORS SUBMITTING BIDS.

*********NOTICE********

WE DO NOT ACCEPT EMAIL BIDS

MUST USE ONE THE FOLLOWING TO SUBMIT A BID: * UPLOAD TO OASIS * HAND DELIVERY * MAIL IN HARD COPY

MAKE SURE YOU DOWNLOAD ALL INFORMATION THE- COMPLETE SOLICITATION-PRICING PAGES-SIGN THE PAGES THAT NEED SIGNED

PLEASE NOTE THAT TO BE AWARDED THIS CONTRACT YOU WILL BE TO A REGISTER VENDOR WITH WV STATE PURCHASING, AND COMPLIANT WITH SEVERAL AGENCIES SUCH AS THE WVSOS, TAX DEPARTMENT, WORKER'S COMPENSATION, AND UNEMPLOYMENT INSURANCE

INVOIC	ЕТО	SHI	РТО		
VARIOUS AGENCY LOCATIONS		LOC	RIOUS AGENCY CATIONS		
AS INDI	CATED BY ORDER	AS	INDICATED BY ORDE	R	
No City	WV	No	City	WV	
US		US			
Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
1	Highway and road maintenance service				
Comm (Code Manufacturer	Spe	cification	Model #	
7214100	03				
Extende	d Description:		,		
Highway	and road maintenance service				
SCHED	ULE OF EVENTS				
Line	Event		Event Date		
1	TECHNICAL QUESTIONS DUE AT 10A	MA	2022-03-18		

	Document Phase	Document Description	Page 3
DOT2200000027		6622C049- Slide Repair Using Soil Nail Method - Statewide	

ADDITIONAL TERMS AND CONDITIONS

See attached document(s) for additional Terms and Conditions

INSTRUCTIONS TO VENDORS SUBMITTING BIDS

West Virginia Division of Highways Operations Division

1. **REVIEW DOCUMENTS THOROUGHLY:** The attached documents contain a solicitation for bids. Please read these instructions and all documents attached in their entirety. These instructions provide critical information about requirements that if overlooked could lead to disqualification of a Vendor's bid. All bids must be submitted in accordance with the provisions contained in these instructions and the Solicitation. Failure to do so may result in disqualification of Vendor's bid.

2. MANDATORY TERMS: The Solicitation may contain mandatory provisions identified by the use of the words "must," "will," and "shall." Failure to comply with a mandatory term in the Solicitation will result in bid disqualification.

3. BID SUBMISSION: All bids must be submitted electronically through wvOASIS or signed and delivered by the Vendor to the Agency at the address listed below on or before the date and time of the bid opening. Any bid received by the Agency staff is considered to be in the possession of the Agency and will not be returned for any reason. The Agency will not accept bids, modification of bids, or addendum acknowledgment forms via e-mail. Acceptable delivery methods include electronic submission via wvOASIS, hand delivery, delivery by courier, or facsimile.

The bid delivery address is: WV Department of Transportation, Budget Procurement 1900 Kanawha Boulevard East, Room 260 Charleston, WV 25305

A bid that is not submitted electronically through wvOASIS should contain the listed information below on the face of the envelope or the bid may be rejected by the Agency.

SEALED BID: 6622C049 - SLIDE REPAIR USING SOIL NAIL METHOD - STATEWIDE BUYER: DUSTY SMITH SOLICITATION NUMBER: ARFQ DOT2200000027 BID OPENING DATE: MARCH 25TH, 2022 BID OPENING TIME: 2:30PM FAX NUMBER: 304-558-0047

4. ADDENDUM ACKNOWLEDGEMENT: Changes or revisions to this Solicitation will be made by an official addendum issued by the Agency. Vendor should acknowledge receipt of all addenda issued with this Solicitation by completing an Addendum Acknowledgment Form, a copy of which is included herewith. Failure to acknowledge addenda may result in bid disqualification. The addendum acknowledgment should be submitted with the bid to expedite document processing.

5. **BID FORMATTING:** Vendor should type or electronically enter the information onto its bid to prevent errors in the evaluation. Failure to type or electronically enter the information may result in bid disqualification.

6. ALTERNATE MODEL OR BRAND: Any model, brand, or specification listed in this Solicitation establishes the acceptable level of quality only and is not intended to reflect a preference for, or in any way favor, a particular brand or vendor. Vendors may bid alternates to a listed model or brand provided that the alternate is at least equal to the model or brand and complies with the required specifications. The equality of any alternate being bid shall be determined by the Agency at its sole discretion. Any Vendor bidding an alternate model or brand should clearly identify the alternate items in its bid and should include manufacturer's specifications, industry literature, and/or any other relevant documentation demonstrating the equality of the alternate items. Failure to provide information for alternate items may be grounds for rejection of a Vendor's bid.

7. EXCEPTIONS AND CLARIFICATIONS: The Solicitation contains the specifications that shall form the basis of a contractual agreement. Vendor shall clearly mark any exceptions, clarifications, or other proposed modifications in its bid. Exceptions to, clarifications of, or modifications of a requirement or term and condition of the Solicitation may result in bid disqualification.

8. COMMUNICATION LIMITATIONS: In accordance with West Virginia Code of State Rules §148-1-6.6, communication with the State of West Virginia or any of its employees regarding this Solicitation during the solicitation, bid, evaluation or award periods, except through the Division of Highways Procurement, is strictly prohibited without prior Division of Highways Procurement approval. Division of Highways Procurement approval for such communication is implied for all agency delegated and exempt purchases.

9. **REGISTRATION:** Prior to Contract award, the apparent successful Vendor must be properly registered with the West Virginia Purchasing Division and must have paid the \$125 fee, or the fee then assessed by said Division, if applicable.

10. UNIT PRICE: Unit prices shall prevail in cases of a discrepancy in the Vendor's bid.

11. PREFERENCE: Vendor Preference may be requested in purchases of motor vehicles or construction and maintenance equipment and machinery used in highway and other infrastructure projects. Any request for preference must be submitted in writing with the bid, must specifically identify the preference requested with reference to the applicable subsection of West Virginia Code § 5A-3-37, and must include with the bid any information necessary to evaluate and confirm the applicability of the requested preference. A request form to help facilitate the request can be found at: <u>http://www.state.wv.us/admin/purchase/vrc/Venpref.pdf</u>.

11A. RECIPROCAL PREFERENCE: The State of West Virginia applies a reciprocal preference to all solicitations for commodities and printing in accordance with W. Va. Code § 5A-3-37(b). In effect, non-resident vendors receiving a preference in their home states, will see that same preference granted to West Virginia resident vendors bidding against them in West Virginia.

Any request for reciprocal preference must include with the bid any information necessary to evaluate and confirm the applicability of the preference. A request form to help facilitate the request can be found at: <u>http://www.state.wv.us/admin/purchase/vrc/Venpref.pdf</u>.

12. SMALL, WOMEN-OWNED, OR MINORITY-OWNED BUSINESSES: For any solicitations publicly advertised for bid, in accordance with West Virginia Code §5A-3- 37(a)(7) and W. Va. CSR § 148-22-9, any non-resident vendor certified as a small, women- owned, or minority-owned business under W. Va. CSR § 148-22-9 shall be provided the same preference made available to any resident vendor. Any non-resident small, women-owned, or minority-owned business must identify itself as such in writing, must submit that writing to the Purchasing Division with its bid, and must be properly certified under W. Va. CSR § 148-22-9 prior to contract award to receive the preferences made available to resident vendors. Preference for a non-resident small, women-owned, or minority owned business shall be applied in accordance with W. Va. CSR § 148-22-9.

13. WAIVER OF MINOR IRREGULARITIES: The Division of Highways Procurement Director reserves the right to waive minor irregularities in bids or specifications in accordance with West Virginia Code of State Rules § 148-1-4.6.

14. ELECTRONIC FILE ACCESS RESTRICTIONS: Vendor must ensure that its submission in wvOASIS can be accessed and viewed by the Agency staff immediately upon bid opening. The Agency will consider any file that cannot be immediately accessed and viewed at the time of the bid opening (such as, encrypted files, password protected files, or incompatible files) to be blank or incomplete as context requires, and therefore deemed unacceptable. A vendor will not be permitted to unencrypt files, remove password protections, or resubmit documents after bid opening to make a file viewable if those documents are required with the bid. A Vendor may be required to provide document passwords or remove access restrictions to allow the Agency to print or electronically save documents provided that those documents are viewable by the Agency prior to obtaining the password or removing the access restriction.

15. NON-RESPONSIBLE: The Agency reserves the right to reject the bid of any Vendor as "Non-Responsible" in accordance with W. Va. Code of State Rules § 148-1- 5.3, when the Division of Highways Procurement Director determines that the vendor submitting the bid does not have the capability to fully perform, or lacks the integrity and reliability to assure good-faith performance.

16. ACCEPTANCE/REJECTION: The Agency may accept or reject any bid in whole, or in part when the Agency determines it is in the best interest of the State and/or in accordance with W. Va. Code of State Rules § 148-1-4.5. and § 148-1-6.4.b.

17. THE BIDS: When the bids are received and the Agency intends to award the work to only one Vendor, the Agency shall break the tie by allowing the tied vendors to make a final offer, flip of a coin, draw of the cards, or any other impartial method considered prudent by the Agency. If the bids are received and the Agency intends to award the bid to multiple vendors, the Agency may award the bid to the number of the tied bidders as Agency deems necessary, using the procedure set forth in this section to establish the number of tied bidders which will be awarded the bid.

YOUR SUBMISSION IS A PUBLIC DOCUMENT: Vendor's entire response to the Solicitation and the resulting Contract are public documents. As public documents, they will be disclosed to the public following the bid/proposal opening or award of the contract, as required by the competitive bidding laws of West Virginia Code §§ 5A-3-1 et seq., 5-22-1 et seq., 5G-1-1 et seq. and the Freedom of Information Act in West Virginia Code §§ 29B-1-1 et seq. Submission of any bid, proposal, or other document to the Agency constitutes your explicit consent to the subsequent public disclosure of the bid, proposal, or document. L abeling any document "confidential," "proprietary," "trade secret," "private," or labeled with any other claim against public disclosure of the documents will not protect that document from public disclosure. All submissions are subject to public disclosure without notice.

DO NOT SUBMIT MATERIAL YOU CONSIDER TO BE CONFIDENTIAL, A TRADE SECRET, OR OTHERWISE NOT SUBJECT TO PUBLIC DISCLOSURE.

18. INTERESTED PARTY DISCLOSURE: In accordance with the West Virginia Code § 6D-1-2 requires that the vendor submit to the Agency a disclosure of interested parties to the contact for all contracts with an actual or estimated value of at least \$1 Million. That disclosure must occur on the form prescribed and approved by the WV Ethics Commission prior to contract award. A copy of that form is included with this solicitation or can be obtained from the WV Ethics Commission. This requirement does not apply to publicly traded companies listed on a national or international stock exchange. A more detailed definition of interested parties can be obtained from the form referenced above.

19. WITH THE BID REQUIREMENTS: In instances where these specifications require documentation or other information with the bid, and a vendor fails to provide it with the bid, the Agency buyer reserves the right to request those items after bid opening and prior to contract award pursuant to the authority to waive minor irregularities in bids or specifications under W.Va. CSR § 148-1-4.d. This authority does not apply to instances where state law mandates receipt with the bid.

20. E-MAIL NOTIFICATION OF AWARD: The Agency will attempt to provide bidders with e-mail notification of contract award when a solicitation that the bidder participated in has been awarded. For notification purposes, bidders must provide the Agency with a valid email address in the bid response. Bidders may also monitor wvOASIS or the Agency's website to determine when a contract has been awarded.

GENERAL TERMS AND CONDITIONS:

1. CONTRACTUAL AGREEMENT: Issuance of an Award Document signed by the Agency and approved as to form by legal counsel for the Agency, if required, constitutes acceptance of this Contract made by and between the Agency and the Vendor. Vendor's signature on its bid signifies Vendor's agreement to be bound by and accept the terms and conditions contained in this Contract.

2. DEFINITIONS: As used in this Solicitation/Contract, the following terms shall have the meanings attributed to them below. Additional definitions may be found in the specifications included with this Solicitation/Contract.

- 2.1. "Agency" means the West Virginia Department of Transportation, Division of Highways. This Contract is entered into by the Agency pursuant to the provisions of West Virginia Code § 17-4-19 and §17-2A-8.
- 2.2. "Bid" or "Proposal" means the vendors submitted response to this solicitation.
- 2.3. "Contract" means the binding agreement that is entered into between the Agency and the Vendor to provide the goods or services requested in the Solicitation. The Contract shall be comprised of the (i) Solicitation and any other document required by the Solicitation (ii) Bid or Proposal (iii) Award Document and (iv) General Terms and Conditions; Instruction to Vendors Submitting Bids, collectively referred to as the "Contract Documents".
- **2.4.** "Award Document" means the document signed by the Agency and approved as to form by legal counsel for the agency, that identifies the Vendor as the contract holder.
- 2.5. "Solicitation" means the official notice of an opportunity to supply the Agency with goods or services.
- **2.6. "State"** means the State of West Virginia and/or any of its agencies, commissions, boards, etc. as context requires.
- 2.7. "Vendor" or "Vendors" means any entity submitting a bid in response to the Solicitation, the entity that has been selected as the lowest responsible bidder, or the entity that has been awarded the Contract as context requires.

3. CONTRACT TERM; RENEWAL; EXTENSION: The term of this Contract shall be determined in accordance with the category that has been identified as applicable to this Contract below:

X Term Contract

Initial Contract Term: This Contract becomes effective on _award______ and extends for a period of ______ one____(1)_____ year(s).

Renewal Term: This Contract may be renewed upon the mutual written consent of the Agency, and the Vendor. Any request for renewal should be submitted in writing to the Agency thirty (30) days prior to the expiration date of the initial contract term or appropriate renewal term. A Contract renewal shall be in accordance with the terms and conditions of the original contract. Renewal of this Contract is limited to <u>three (3)</u> successive one (1) year periods or multiple renewal periods of less than one year, provided that the multiple renewal periods do not exceed thirty-six (36) months in total. Automatic renewal of this Contract is prohibited.

Delivery Order Limitations: In the event that this contract permits delivery orders, a delivery order may only be issued during the time this Contract is in effect. Any delivery order issued prior to the expiration of this Contract shall be effective for no more than one year from the date the delivery order is issued. No delivery order may be extended beyond one year after this Contract has expired.

Fixed Period Contract: This Contract becomes effective upon Vendor's receipt of the notice to proceed and must be completed within ______ days.

Fixed Period Contract with Renewals: This Contract be	comes effective upon Vendor's
receipt of the notice to proceed and that part of the Contract mor	e fully described in the attached
specifications must be completed within	_ days. Upon completion, the
vendor agrees that maintenance, monitoring, or warranty s	services will be provided for
successive one-year periods or multiple	periods of less than one year
provided that the multiple renewal periods do not exceed	months in total.

One Time Purchase: The term of this Contract shall run from the issuance of the Award Document until all goods contracted for have been delivered, but in no event will this Contract extend for more than one calendar year.

Other: See attached.

4. NOTICE TO PROCEED: Vendor shall begin performance of this Contract immediately upon receiving notice to proceed unless otherwise instructed by the Agency. Unless otherwise specified, the fully executed Award Document will be considered notice to proceed.

5. QUANTITIES: The quantities required under this Contract shall be determined in accordance with the category that has been identified as applicable to this Contract below.

Open End Contract: Quantities listed in this Solicitation are approximations only, based on estimates supplied by the Agency. It is understood and agreed that the Contract shall cover the quantities actually ordered for delivery during the term of the Contract, whether more or less than the quantities shown.

Service: The scope of the service to be provided will be more clearly defined in the specifications included herewith.

X Combined Service and Goods: The scope of the service and deliverable goods to be provided will be more clearly defined in the specifications included herewith.

One Time Purchase: This Contract is for the purchase of a set quantity of goods that are identified in the specifications included herewith. Once those items have been delivered, no additional goods may be procured under this Contract without an appropriate change order approved by the Vendor and Agency.

6. **PRICING:** The pricing set forth herein is firm for the life of the Contract, unless specified elsewhere within this Solicitation/Contract by the Agency. A Vendor's inclusion of price adjustment provisions in its bid, without an express authorization from the Agency in the Solicitation to do so, may result in bid disqualification.

7. EMERGENCY PURCHASES: The Agency may purchase goods or services in the open market that Vendor would otherwise provide under this Contract if those goods or services are for immediate or expedited delivery in an emergency and Vendor is unable to provide those goods and services on an immediate or expedited basis in the sole judgment of Agency. Emergencies shall include, but are not limited to, delays in transportation or an unanticipated increase in the volume of work. An emergency purchase in the open market, by the Agency, shall not constitute of breach of this Contract and shall not entitle the Vendor to injunctive relief or to any form of compensation or damages. This provision does not excuse the State from fulfilling its obligations under a One Time Purchase contract.

8. **REQUIRED DOCUMENTS:** All items checked below must be provided to the Agency by the Vendor as specified below.

BID BOND: All Vendors shall furnish a bid bond in the amount of five percent (5%) of the total amount of the bid protecting the State of West Virginia. The bid bond must be submitted with the bid.

PERFORMANCE BOND: The apparent successful Vendor shall provide a performance bond in the amount of ______. The performance bond must be received by the Agency prior to Contract award.

LABOR/MATERIAL PAYMENT BOND: The apparent successful Vendor shall provide a labor/material payment bond in the amount of 100% of the Contract value. The labor/material payment bond must be delivered to the Agency prior to Contract award.

In lieu of the Bid Bond, Performance Bond, and Labor/Material Payment Bond, the Vendor may provide certified checks, cashier's checks, or irrevocable letters of credit. Any certified check, cashier's check, or irrevocable letter of credit provided in lieu of a bond must be of the same amount and delivered on the same schedule as the bond it replaces. A letter of credit submitted in lieu of a performance and labor/material payment bond will only be allowed for projects under \$100,000. Personal or business checks are not acceptable.

MAINTENANCE BOND: The apparent successful Vendor shall provide a two (2) year maintenance bond covering the roofing system. The maintenance bond must be issued and delivered to the Agency prior to Contract award.

INSURANCE: The apparent successful Vendor shall furnish proof of the following insurance prior to Contract award and shall list the State as a certificate holder:

Commercial General Liability Insurance: In the amount of \$1,000,000.00_____ or more.

Builders Risk Insurance: In an amount equal to 100% of the amount of the Contract.

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The apparent successful Vendor shall also furnish proof of any additional insurance requirements contained in the specifications prior to Contract award regardless of whether or not that insurance requirement is listed above.

LICENSE(S) / **CERTIFICATIONS** / **PERMITS:** In addition to anything required under the Section entitled Licensing, of the General Terms and Conditions, the apparent successful Vendor shall furnish proof of the following licenses, certifications, and/or permits prior to Contract award, award, in a form acceptable to the Agency.

[X]WEST VIRGINIA CONTRACTOR'S LICENSE

The apparent successful Vendor shall also furnish proof of any additional licenses or certifications contained in the specifications prior to Contract award regardless of whether or not that requirement is listed above.

9. WORKERS' COMPENSATION INSURANCE: The apparent successful Vendor shall comply with laws relating to worker's compensation, shall maintain worker's compensation insurance when required, and shall furnish proof of workers' compensation insurance upon request.

10. LIQUIDATED DAMAGES: Vendor shall pay liquidated damages in the amount <u>determined</u> per the method detailed in the attached contract Specifications. This clause shall in no way be considered exclusive and shall not limit the State or Agency's right to pursue any other available remedy.

11. ACCEPTANCE: Vendor's signature on its bid, or on the certification and signature page, constitutes an offer to the Agency that cannot be unilaterally withdrawn, signifies that the product or service proposed by vendor meets the mandatory requirements contained in the Solicitation for that product or service, unless otherwise indicated, and signifies acceptance of the terms and conditions contained in the Solicitation unless otherwise indicated.

12. FUNDING: This Contract shall continue for the term stated herein, contingent upon funds being appropriated by the Legislature or otherwise being made available. In the event funds are not appropriated or otherwise made available, this Contract becomes void and of no effect beginning on July 1 of the fiscal year for which funding has not been appropriated or otherwise made available.

13. PAYMENT: Payment in advance is prohibited under this Contract. Payment may only be made after the delivery and acceptance of goods or services. The Vendor shall submit invoices in arrears.

14. TAXES: The Vendor shall pay any applicable sales, use, personal property or any other taxes arising out of this Contract and the transactions contemplated thereby. The State of West Virginia is exempt from federal and state taxes and will not pay or reimburse such taxes.

15. CANCELLATION: The Agency reserves the right to cancel this Contract immediately upon written notice to the vendor if the materials or workmanship supplied do not conform to the specifications contained in the Contract. The Agency may also cancel any purchase or this contract for any reason or no reason upon 30 days written notice to the Vendor.

16. TIME: Time is of the essence with regard to all matters of time and performance in this Contract.

17. APPLICABLE LAW: This Contract is governed by and interpreted under West Virginia law without giving effect to its choice of law principles. Any information provided in specification manuals, or any other source, verbal or written, which contradicts or violates the West Virginia Constitution, West Virginia Code or West Virginia Code of State Rules is void and of no effect.

18. COMPLIANCE: Vendor shall comply with all applicable federal, state, and local laws, regulations and ordinances. By submitting a bid, Vendor acknowledges that it has reviewed, understands, and will comply with all applicable laws, regulations, and ordinances.

19. PREVAILING WAGE: To the extent required by applicable law, Vendor shall be responsible for ensuring compliance with prevailing wage requirements and determining when prevailing wage requirements are applicable.

20. ARBITRATION: Any references made to arbitration contained in this Contract, Vendor's bid, or in any American Institute of Architects documents pertaining to this Contract are hereby deleted, void, and of no effect.

21. MODIFICATIONS: This writing is the parties' final expression of intent. Notwithstanding anything contained in this Contract to the contrary, no modification of this Contract shall be binding without mutual written consent of the Agency and the Vendor.

22. WAIVER: The failure of either party to insist upon a strict performance of any of the terms or provision of this Contract, or to exercise any option, right, or remedy herein contained, shall not be construed as a waiver or a relinquishment for the future of such term, provision, option, right, or

remedy, but the same shall continue in full force and effect. Any waiver must be expressly stated in writing and signed by the waiving party.

23. SUBSEQUENT FORMS: The terms and conditions contained in this Contract shall supersede any and all subsequent terms and conditions which may appear on any form documents submitted by Vendor to the Agency such as price lists, order forms, invoices, sales agreements, or maintenance agreements, and includes internet websites or other electronic documents. Acceptance or use of Vendor's forms does not constitute acceptance of the terms and conditions contained thereon.

24. ASSIGNMENT: Neither this Contract nor any monies due, or to become due hereunder, may be assigned by the Vendor without the express written consent of the Agency and any other government agency or office that may be required to approve such assignments.

25. WARRANTY: The Vendor expressly warrants that the goods and/or services covered by this Contract will: (a) conform to the specifications, drawings, samples, or other description furnished or specified by the Agency; (b) be merchantable and fit for the purpose intended; and (c) be free from defect in material and workmanship.

26. STATE EMPLOYEES: State employees are not permitted to utilize this Contract for personal use and the Vendor is prohibited from permitting or facilitating the same.

27. BANKRUPTCY: In the event the Vendor files for bankruptcy protection, the Agency may deem this Contract null and void, and terminate this Contract without notice.

28. PRIVACY, SECURITY, AND CONFIDENTIALITY: The Vendor agrees that it will not disclose to anyone, directly or indirectly, any personally identifiable information or other confidential information gained from the Agency, unless the individual who is the subject of the information consents to the disclosure in writing or the disclosure is made pursuant to the Agency's policies, procedures, and rules. Vendor further agrees to comply with the Confidentiality Policies and Information Security Accountability Requirements, set forth in:

http://www.transportation.wv.gov/Documents/WVDOT-Privacy-Notice.pdf.

29. YOUR SUBMISSION IS A PUBLIC DOCUMENT: Vendor's entire response to the Solicitation and the resulting Contract are public documents. As public documents, they will be disclosed to the public following the bid/proposal opening or award of the contract, as required by the competitive bidding laws of West Virginia Code §§ 5A-3-1 et seq., 5-22-1 et seq., and 5G-1-1 et seq. and the Freedom of Information Act West Virginia Code §§ 29B-1-1 et seq. Submission of any bid, proposal, or other document to the Agency constitutes your explicit consent to the subsequent public disclosure of the bid, proposal, or document. Labeling any document labeled "confidential," "proprietary," "trade secret," "private," or labeled with any other claim against public disclosure of the documents will not protect that document from public disclosure. All submissions are subject to public disclosure without notice.

DO NOT SUBMIT MATERIAL YOU CONSIDER TO BE CONFIDENTIAL, A TRADE SECRET, OR OTHERWISE NOT SUBJECT TO PUBLIC DISCLOSURE.

30. LICENSING: Vendor must be licensed and in good standing in accordance with any and all state and local laws and requirements by any state or local agency of West Virginia, including, but not limited to, the West Virginia Secretary of State's Office, the West Virginia Tax Department, West Virginia Insurance Commission, or any other state agency or political subdivision. Upon request, the Vendor must provide all necessary releases to obtain information to enable the Agency to verify that the Vendor is licensed and in good standing with the above entities.

31. ANTITRUST: In submitting a bid to, signing a contract with, or accepting an Award Document from Agency, the Vendor agrees to convey, sell, assign, or transfer to the State of West Virginia all rights, title, and interest in and to all causes of action it may now or hereafter acquire under the antitrust laws of the United States and the State of West Virginia for price fixing and/or unreasonable restraints of trade relating to the particular commodities or services purchased or acquired by the State of West Virginia. Such assignment shall be made and become effective at the time the purchasing agency tenders the initial payment to Vendor.

32. VENDOR CERTIFICATIONS: By signing its bid or entering into this Contract, Vendor certifies (1) that its bid or offer was made without prior understanding, agreement, or connection with any corporation, firm, limited liability company, partnership, person or entity submitting a bid or offer for the same material, supplies, equipment or services; (2) that its bid or offer is in all respects fair and without collusion or fraud; (3) that this Contract is accepted or entered into without any prior understanding, agreement, or connection to any other entity that could be considered a violation of law; and (4) that it has reviewed this Solicitation in its entirety; understands the requirements, terms and conditions, and other information contained herein. Vendor's signature on its bid or offer also affirms that neither it nor its representatives have any interest, nor shall acquire any interest, direct or indirect, which would compromise the performance of its services hereunder. Any such interests shall be promptly presented in detail to the Agency. The individual signing this bid or offer on behalf of Vendor certifies that he or she is authorized by the Vendor to execute this bid or offer or any documents related thereto on Vendor's behalf; that he or she is authorized to bind the Vendor in a contractual relationship; and that, to the best of his or her knowledge, the Vendor has properly registered with any State agency that may require registration.

33. PURCHASING CARD ACCEPTANCE: The State of West Virginia currently utilizes an Electronic Funds Transfer (EFT) as well as a Purchasing Card program, administered under contract by a banking institution, to process payment for goods and services. The Vendor must accept the State of West Virginia's Purchasing Card for payment of all orders under this Contract unless the box below is checked.

□Vendor is not required to accept the State of West Virginia's Purchasing Card as payment for all goods and services.

34. VENDOR RELATIONSHIP: The relationship of the Vendor to the State shall be that of an independent contractor and no principal-agent relationship or employer-employee relationship is contemplated or created by this Contract. The Vendor as an independent contractor is solely liable for the acts and omissions of its employees and agents. Vendor shall be responsible for selecting, supervising, and compensating any and all individuals employed pursuant to the terms of this Solicitation and resulting contract. Neither the Vendor, nor any employees or subcontractors of the

Vendor, shall be deemed to be employees of the State for any purpose whatsoever. Vendor shall be exclusively responsible for payment of employees and contractors for all wages and salaries, taxes, withholding payments, penalties, fees, fringe benefits, professional liability insurance premiums, contributions to insurance and pension, or other deferred compensation plans, including but not limited to, Workers' Compensation and Social Security obligations, licensing fees, etc. and the filing of all necessary documents, forms, and returns pertinent to all of the foregoing. Vendor shall hold harmless the State and shall provide the State and Agency with a defense against any and all claims including, but not limited to, the foregoing payments, withholdings, contributions, taxes, Social Security taxes, and employer income tax returns.

35. INDEMNIFICATION: To the fullest extent permitted by law, the Vendor agrees to defend, indemnify, and hold harmless the Agency, its officers, agents and employees from and against all suits, claims, damages, liability, losses, and expenses, including but not limited to attorney's fees and costs of investigations, arising out of, pertaining to or resulting from the performance of work for the above identified Project, including all claims, damages, losses or expenses which are attributable to bodily injury, sickness, disease or death, or to damage to or destruction of property, whether caused either wholly or in part by the negligence, actions or omissions of the Vendor, a Subcontractor or anyone directly or indirectly employed by the Vendor or Subcontractor or for anyone whose acts the Vendor or Subcontractor may be liable, except for any liability or damages due to the willful or intentional unlawful acts or the sole negligence of the Agency or its employees.

36. PURCHASING AFFIDAVIT: In accordance with West Virginia Code § 5A-3-10a, all Vendors are required to sign, notarize, and submit the Purchasing Affidavit stating that neither the Vendor nor a related party owe a debt to the State in excess of \$1,000. The affidavit must be submitted prior to the award but should be submitted with the Vendor's bid. A copy of the Purchasing Affidavit is included herewith.

37. CONFLICT OF INTEREST: Vendor, its officers or members or employees, shall not presently have or acquire an interest, direct or indirect, which would conflict with or compromise the performance of its obligations hereunder. Vendor shall periodically inquire of its officers, members and employees to ensure that a conflict of interest does not arise. Any conflict of interest discovered shall be promptly presented in detail to the Agency.

38. REPORTS: Vendor shall provide the Agency with the following reports identified by a checked box below:

Such reports as the Agency may request. Requested reports may include, but are not limited to, quantities purchased, agencies utilizing the contract, total contract expenditures by agency, etc.

Quarterly reports detailing the total quantity of purchases in units and dollars, along with a listing of purchases by agency. Quarterly reports should be delivered to the Agency via email to the Agency representative specified by Agency.

39. BACKGROUND CHECK: In accordance with W. Va. Code § 15-2D-3, the Director of the Division of Protective Services shall require any service provider whose employees are regularly

employed on the grounds or in the buildings of the Capitol complex or who have access to sensitive or critical information to submit to a fingerprint-based state and federal background inquiry through the state repository. The service provider is responsible for any costs associated with the fingerprint-based state and federal background inquiry. After the contract for such services has been approved, but before any such employees are permitted to be on the grounds or in the buildings of the Capitol complex or have access to sensitive or critical information, the service provider shall submit a list of all persons who will be physically present and working at the Capitol complex to the Director of the Division of Protective Services for purposes of verifying compliance with this provision. The State reserves the right to prohibit a service provider's employees from accessing sensitive or critical information or to be present at the Capitol complex based upon results addressed from a criminal background check. Service providers should contact the West Virginia Division of Protective Services by phone at (304) 558-9911 for more information.

40. PREFERENCE FOR USE OF DOMESTIC STEEL PRODUCTS: Except when authorized by the Director of the Purchasing Division pursuant to W. Va. Code § 5A-3-56, no contractor may use or supply steel products for a State Contract Project other than those steel products made in the United States. A contractor who uses steel products in violation of this section may be subject to civil penalties pursuant to W. Va. Code § 5A-3-56. As used in this section:

- a. "State Contract Project" means any erection or construction of, or any addition to, alteration of or other improvement to any building or structure, including, but not limited to, roads or highways, or the installation of any heating or cooling or ventilating plants or other equipment, or the supply of and materials for such projects, pursuant to a contract with the State of West Virginia for which bids were solicited on or after June 6, 2001.
- b. "Steel Products" means products rolled, formed, shaped, drawn, extruded, forged, cast, fabricated or otherwise similarly processed, or processed by a combination of two or more or such operations, from steel made by the open hearth, basic oxygen, electric furnace, Bessemer or other steel making process. The Purchasing Division Director may, in writing, authorize the use of foreign steel products if:
- c. The cost for each contract item used does not exceed one tenth of one percent (.1%) of the total contract cost or two thousand five hundred dollars (\$2,500.00), whichever is greater. For the purposes of this section, the cost is the value of the steel product as delivered to the project; or
- d. The Director of the Purchasing Division determines that specified steel materials are not produced in the United States in sufficient quantity or otherwise are not reasonably available to meet contract requirements.

41. PREFERENCE FOR USE OF DOMESTIC ALUMINUM, GLASS, AND STEEL: In Accordance with W. Va. Code § 5-19-1 et seq., and W. Va. CSR § 148-10-1 et seq., for every contract or subcontract, subject to the limitations contained herein, for the construction, reconstruction, alteration, repair, improvement or maintenance of public works or for the purchase of any item of machinery or equipment to be used at sites of public works, only domestic aluminum, glass or steel products shall be supplied unless the spending officer determines, in writing, after the receipt of offers or bids, (1) that the cost of domestic aluminum, glass or steel products is unreasonable or inconsistent with the public interest of the State of West Virginia, (2)

that domestic aluminum, glass or steel products are not produced in sufficient quantities to meet the contract requirements, or (3) the available domestic aluminum, glass, or steel do not meet the contract specifications. This provision only applies to public works contracts awarded in an amount more than fifty thousand dollars (\$50,000) or public works contracts that require more than ten thousand pounds of steel products.

The cost of domestic aluminum, glass, or steel products may be unreasonable if the cost is more than twenty percent (20%) of the bid or offered price for foreign made aluminum, glass, or steel products. If the domestic aluminum, glass or steel products to be supplied or produced in a "substantial labor surplus area", as defined by the United States Department of Labor, the cost of domestic aluminum, glass, or steel products may be unreasonable if the cost is more than thirty percent (30%) of the bid or offered price for foreign made aluminum, glass, or steel products. This preference shall be applied to an item of machinery or equipment, as indicated above, when the item is a single unit of equipment or machinery manufactured primarily of aluminum, glass or steel, is part of a public works contract and has the sole purpose or of being a permanent part of a single public works project. This provision does not apply to equipment or machinery purchased by a spending unit for use by that spending unit and not as part of a single public works project.

All bids and offers including domestic aluminum, glass or steel products that exceed bid or offer prices including foreign aluminum, glass or steel products after application of the preferences provided in this provision may be reduced to a price equal to or lower than the lowest bid or offer price for foreign aluminum, glass or steel products plus the applicable preference. If the reduced bid or offer prices are made in writing and supersede the prior bid or offer prices, all bids or offers, including the reduced bid or offer prices, will be reevaluated in accordance with this rule.

42. It is hereby expressly covenanted, agreed and understood by and between the parties hereto, that the Vendor will immediately make payment and refund to the Agency for any and all overpayments made by said Agency to the Vendor on any estimate or estimates, advances ,if applicable ,or partial payments made on this Contract. Agency is given the right and authority to withhold any and all funds in its possession, belonging to, owed by, or which may be owed by it to the Vendor on any agreement or from any other source for the recovery of any overpayment made in connection with this contract. It is further expressly agreed that the statute of limitations will not commence to run against the Agency for such overpayments until the same is discovered and made known to the Agency.

43. In the event of conflicts or discrepancies among the Contract Documents, interpretations will be based on the following priorities in the order listed below with the highest priority being subsection a:

- a. General Terms and Conditions; Instructions to Vendors Submitting Bids,
- b. Solicitation and any documents required by the Solicitation,
- c. Bid or Proposal,
- d. Award Document.

CERTIFICATION AND SIGNATURE PAGE

By signing below, or submitting documentation through the West Virginia Vendor Self Service Portal website, I certify that I have reviewed this Solicitation in its entirety; that I understand the requirements, terms and conditions, and other information contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation for that product or service, unless otherwise stated herein; that the Vendor accepts the terms and conditions contained in the Solicitation, unless otherwise stated herein; that I am submitting this bid, offer or proposal for review and consideration; that I am authorized by the vendor to execute and submit this bid, offer, or proposal, or any documents related thereto on vendor's behalf; that I am authorized to bind the vendor in a contractual relationship; and that to the best of my knowledge, the vendor has properly registered with any State agency that may require registration.

GeoStabilization International LLC (Full Company Name)

(Authorized Signature)

Lloyd Kuehn CFO (Print or Type Name and Title of Signatory) 855-579-0536 (Phone Number)

970-245-7737 (Fax Number)

lloyd@gsi.us (Email address)

03-28-2022 (Date)

Form pre-approved by DOH legal division on July 12, 2016. Attorney signature not required.

ADDENDUM ACKNOWLEDGEMENT FORM SOLICITATION NO.: ARFQ 0803 DOT220000027

Instructions: Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

Acknowledgment: I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

Addendum Numbers Received: (Check the box next to each addendum received)

X Addendum No. 1	Addendum No. 6
X Addendum No. 2	Addendum No. 7
X Addendum No. 3	Addendum No. 8
X Addendum No. 4	Addendum No. 9
Addendum No. 5	Addendum No. 10

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

GeoStabilization International, LLC	
Full Company Name	

Authorized Signature

03-30-2022

Date

NOTE: This addendum acknowledgement should be submitted with the bid to expedite document processing.

SPECIFICATIONS

1. PURPOSE AND SCOPE: The West Virginia Division of Highways is soliciting bids to establish a Statewide open-end contract for labor, equipment, and materials to facilitate "on call" services, as needed, for Slide Repair using the methods of Launched Soil Nails, Permanently Cased Soil Nails, or Self Drilling Soil Nails.

Work shall consist of the Contractor designing plans to stabilize identified slides by internally reinforcing the soil mass with reinforcing elements (Soil Nails) using the installation methods as specified in this solicitation. The stabilization of the slide area shall be constructed from the top of the slide down. The WVDOH will identify locations and direct all work to be performed as specified herein. The Contractor, along with a WVDOH representative, shall review all locations to determine the method to be used as well as applicable design considerations.

WVDOH will provide all permits, guardrail, public notification, site clearing, environmental controls, and obtain access to adjacent property as needed.

- 2. DEFINITIONS: The terms listed below shall have the following meanings assigned to them throughout and for the purpose of this Solicitation. Additional definitions can be found in Section 2 of the General Terms and Conditions.
 - 2.1. "AASHTO" The American Association of State Highway and Transportation Officials is a standard body which publishes specifications, tests protocols, and guidelines that are used in highway design and construction throughout the United States. Reference: <u>www.transportation.org</u>
 - 2.2. "ACI" American Concrete Institute. Reference: <u>www.concrete.org</u>
 - 2.3. "ANSI" American National Standards Institute. Reference: www.ansi.org.
 - 2.4. "ASTM International" and "ASTM" Interchangeable terms used for the international standards organization that develops and publishes voluntary consensus technical standards for a wide range of materials, products, systems, and services, formerly known as the American Society for Testing and Materials. Reference: www.astm.org
 - 2.5. "ATTACHMENT A," "Pricing Pages," and "ATT A" Used throughout this Solicitation for the schedule of prices attached hereto as Attachment A ("ATT A") upon which Vendor should list its pricing for Contract Items.
 - 2.6. "ATTACHMENT B," "Personnel Experience Forms," and "ATT B" Used throughout this Solicitation for the forms attached hereto as Attachment B ("ATT B")

upon which Vendor should enter personnel experience information as identified in Section 3.6 of this Solicitation and referenced throughout.

- 2.7. "ATTACHMENT C," "Sourced Plant Info Form," and "ATT B" Used throughout this Solicitation for the form attached hereto as Attachment C ("ATT C") upon which Vendor should provide its source provider/plant information for Contract Item materials.
- **2.8.** "Contract Item" or "Contract Items" The list of items available for Vendor to provide pricing as identified in Section 3 of this Solicitation and referenced throughout.
- 2.9. "Contractor" or "Vendor" Interchangeably used throughout this Solicitation and in any cited Sections of the West Virginia Department of Transportation, Division of Highways Standard Specifications, Roads and Bridges, adopted latest Standard Specs edition, as amended, including any Supplementals and refers to any entity submitting a bid in response to the Solicitation, the entity that has been selected as the lowest responsible bidder, or the entity that has been awarded the Contract, as context requires.
- **2.10.** "Emergency Work" Work which is required to be done without delay owing to circumstances for which the WVDOH could not have reasonably expected and has been designated as such by a representative of the WVDOH.
- 2.11. "Liquidated Damages" Monetary compensation due from the Vendor in the event the Vendor's performance falls short of contractual stipulation or breaches the contract. Delays in the delivery of goods and/or services or quality failures or corrections by the Vendor may result in the Agency assessing charges for such deficiencies per these contract Specifications, the Standard Specs Section 108.7, as amended, and calculated from the table posted at the WVDOH Contract Administration's Specifications and Documents website, as amended:

https://transportation.wv.gov/highways/contractadmin/specifications/Pages/LiquidDat edDamages.aspx

- 2.12. "MP per MCS&T" Refers to a Materials Procedure per the Materials Control, Soils, and Testing Division of the West Virginia Division of Highways. Reference: https://transportation.wv.gov/highways/mcst/Pages/default.aspx
- 2.13. "OSHA" Occupational Safety and Health Administration. Reference: <u>www.osha.gov</u>.
- **2.14.** "Solicitation" The official notice of an opportunity to supply the State with goods and/or services that is published by the West Virginia Division of Highways.
- 2.15. "Standard Specs" The West Virginia Department of Transportation, Division of Highways Standard Specifications, Roads and Bridges, adopted latest edition, and as amended or modified by any subsequent Supplemental Specifications.

2.16. "WVDOH" and "Agency" - Interchangeable terms for the West Virginia Division of Highways.

3. GENERAL REQUIREMENTS:

3.1. Standard Specifications: The following sections of the Standard Specs, but not limited to, shall apply to the administration of this contract: Sections 101, 102, 103, 104, 105, 106, 107, 108, 109, and 110, as amended.

Materials, equipment, and performance of this contract shall confirm, but are not limited to, the requirements of Standard Specs Sections 636, as amended.

A hard copy of the current Standard Specs may be purchased at a cost of \$20.00 (\$15.00 for the 2017 book plus \$5.00 for the Supplemental Latest Edition) using the **Attachment D ("ATT D") Standard Specifications Order Form**. The completed form should be submitted by email to <u>DOTSpecifications@wv.gov</u> or mailed to:

West Virginia Division of Highways Technical Support Division 1334 Smith Street Charleston, West Virginia 25301

A free electronic copy of the Standard Specs may be obtained by sourcing: http://www.transportation.wv.gov/highways/contractadmin/specifications/2017StandSpec/Pages/default.aspx

- **3.2.** Documentation to be Included with the Bid: The Vendor should carefully read the entire solicitation invitation. The Vendor should include as part of their bid response:
 - Certification and Signature Page
 - Addendum Acknowledgement Form
 - Valid West Virginia Contractor's License, if applicable.
 - Contract Manager Page
 - Attachments included in solicitation package (ATT A, ATT B, etc.)
 - Purchasing Affidavit (properly notarized)
 - Ethics/Disclosure Form (properly notarized), when provided with the solicitation
 - Valid Certificate of Insurance; and,
 - Any other required forms or supporting information as described herein.

Omitting any required forms, attachments, or documentation as described throughout this contract could deem a bid non-responsive and result in the disqualification of the Vendor's bid response.

3.3. Contract Items and Mandatory Requirements: Vendor shall provide Agency with the Contract Items for all methods listed below on an open end and continuing basis. Contract Items must meet or exceed the mandatory requirements as shown below.

At any time during the life of this contract, upon request by the WVDOH, the awarded Vendor shall provide an update of any information requested in Section 3.6

- 3.3.1. Contract Item 1: Launched Soil Nails Vendor shall furnish equipment, all incidentals, and launched galvanized soil nails (hollow steel tubes that have been hot dip galvanized). The launched soil nails shall have a wall thickness of 0.120 inches, nominal outside diameter of 1.5 inches. The strength of the tube shall be 36 ksi. When applicable, Vendor shall provide perforated tubes that can serve as both horizontal drains and tensile elements. Excess cutoffs from previously launched nails are not acceptable. Vendor shall bid one price for each 20-foot length of launched soil nail on Attachment A ("ATT A") Pricing Pages.
 - **3.3.1.1.** Launched soil nails shall be inserted with a single stroke of velocity more than 200 miles per hour. The inserted length and spacing will be determined based upon the WVDOH District Engineer or designee's approved engineering plans. More than 4 inches of exposed soil nails after launching is unacceptable unless first approved by the WVDOH District Engineer or designee. Exposed portion of installed nails must be cut for inclusion into shotcrete or flush to ground in the case of no shotcrete work when not required by the engineering plans. Disposal of the cut-off portions of the soil nails from the right-of-way is the responsibility of the Contractor at no additional cost to the WVDOH. If required, lagging and backfill will be provided by the WVDOH.
- **3.3.2.** Contract Items 2 thru 8: Permanently Cased Soil Nails Vendor shall furnish permanently cased soil nails that are a three stage construction including installation of: 1) an outer tube (minimum 1.5 inch outside diameter, minimum 0.120 inch wall thickness hot-dipped galvanized 36 ksi steel tube that is mechanically deformed, threaded or specially galvanized through a drossing process to produce a plurality of surficial asperities); 2) neat cement grout that completely fills the outer tube; and 3) an inner bar consisting of epoxy coated, #6 (or greater) grade 60 or grade 75 rebar or thread bar, depending on the final design load. When applicable, Vendor shall provide perforated tubes that can be pressure grouted and bid one price for each 20-foot, 30-foot, 40-foot, 50-foot, 60-foot, 70-foot, and 80-foot length of permanently cased soil nails on ATT A.
- **3.3.3.** Contract Items 9 thru 15: Self-Drilling Soil Nails Vendor shall furnish selfdrilling soil nails that consist of a hollow bar with a sacrificial drill bit. Multiple

bars may be coupled to produce final length. Bar outer diameters shall be a minimum of 1.5 inches and maximum 3 inches depending on design load. Vendor shall bid one price for each 20-foot, 30-foot, 40-foot, 50-foot, 60-foot, 70-foot, and 80-foot length of self-drilling soil nails on ATT A.

- **3.3.4.** Contract Item 16: Shotcrete The shotcreting process shall consist of applying one or more layers of concrete conveyed through a hose pneumatically projected at a high velocity against a prepared surface with a nominal thickness of 6 inches with either welded wire fabric or triple twisted galvanized wire mesh approximately 2 inches from the outside surface. Vendor shall furnish shotcrete complying with the requirement of ACI 506.2, except as otherwise specified below. Vendor shall bid one price per square foot on ATT A.
 - **3.3.4.1.** Wet Mix Process: Shall comply with the requirements of ACI 506R and consist of thoroughly mixing all the ingredients except accelerating admixtures but including the mixing water, introducing the mixture into the delivery equipment, and delivering it by positive displacement, to the nozzle. The wet-mix shotcrete shall then be air jetted from the nozzle at high velocity onto the surface.
 - **3.3.4.2.** Dry Mix Process: Shall comply with the requirements of ACI 506R and consist of producing shotcrete by delivering the dry ingredients conveyed pneumatically with the mixing water introduced at the nozzle.
 - **3.3.4.3.** Materials and Application: Vendor shall deliver, store, and handle materials to prevent contamination, segregation, corrosion, or damage. Vendor shall store liquid admixtures to prevent evaporation and freezing.

Materials used to produce shotcrete must meet the following mandatory requirements:

Material	Requirement	
	Shall comply with the requirements of Standard	
Cement	Specs Section 701.1	
Chemical	Fluid type, applied at nozzle, shall comply with	
Admixtures	the requirements of AASHTO M194, ASTM	
Accelerator	C494, and ASTM C1141 Type C or E.	
Course	Shall comply with the requirements of Standard	
Aggregate	Specs Section 703.1 or 703.2.	
Fiber	Shall comply with the requirements of ASTM	
Reinforcement	C1116.	

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r			
	Shall comply with the requirements of Standard		
Fine Aggregate	Specs Section 702.1 (except for gradation).		
	Shall comply with the requirements of Standard		
	Specs Section 707.4.1. Replacement up to 20%		
Fly Ash	by weight of cement.		
Prepackaged	Shall comply with the requirements of ASTM		
Shotcrete	C928.		
	Shall be included with the Shotcrete and comply		
	with the requirements of Standard Specs Sections		
Rebar Mat	709.1 and 709.4.		
	Shall comply with the requirements of AASHTO		
	M194 and ASTM C494 Type B or D Mineral		
Retarders	Admixtures.		
	Shall comply with the requirements of Standard		
	Specs Section 707.4.3. 85% minimum silicon		
	dioxide solids content, not to exceed 8% by		
Silica Fume	weight of cement.		
Water – Clean	Shall comply with the requirements of Standard		
and Potable	Specs Section 715.7.		
Water-Reducer	Shall comply with the requirements of AASHTO		
and	M194/ASTM C494 Type A, D, F, or G.		
Superplastisizer			
Welded Wire	Shall comply with the requirements of AASHTO		
Fabric	M55/ASTM A185 or A497.		

3.3.4.4. Aggregate Material: Aggregate to be used for the shotcrete must meet the strength and durability requirements of AASHTO, as applicable, and the following gradation requirements.

Sieve Size	Percent Passing by Weight	
1/2"	100	
3/8"	90-100	
No. 4	70-85	
No. 8	50-70	
No. 16	35-55	
No. 30	20-35	
No. 50	8-20	
No. 100	2-10	

3.3.4.4.1. The proportion of the shotcrete must be pumpable with the concrete pump furnished for the work, with a cementing materials content of at least 24.3 pounds per cubic foot and water/cement ratio not greater than 0.55. Admixtures not

approved by the WVDOH District Engineer or designee are not acceptable.

- **3.3.4.4.2.** Thoroughly mix admixtures into the shotcrete per the rate specified by the manufacturer. Use only accelerators compatible with the cement, non-corrosive steel and not promoting other detrimental effects such as cracking or excessive shrinkage. The maximum allowable chloride ion content of all ingredients is 0.10% when tested to AASHTO T260.
- **3.3.4.4.3.** Air entrainment is not required for temporary shotcrete construction facings but shall be used in all exposed permanent shotcrete. A minimum 8.5% +/- 2.5% air entrainment shall be in the concrete mixture before shooting for wet-mix shotcrete. Dry-mix shotcrete may be used, provided that the in-place air entrainment shall be checked at least once at the beginning of the operation and once after restarting the shotcrete process after any breaks each day and found that the in-place mixture has a minimum of 4% air entrainment.
- **3.3.4.4.4.** Vendor shall provide shotcrete with a minimum design compressive strength of 2000 psi in three days and 4000 psi in 28 days when tested in accordance with ASTM C1140 and ASTM C42. Results from at least one (1) test panel for each mix design shall be submitted to the WVDOH District Engineer or designee prior to construction unless otherwise directed by the WVDOH District Engineer or designee.
- **3.3.4.4.5.** The batch aggregate and cement by weight or by volume must be in accordance with the requirements of ASTM C94 or AASHTO M241/ASTM C685. The mixing equipment must thoroughly blend the materials in sufficient quantity to maintain placing continuity. Ready Mix shotcrete must comply with AASHTO M157. The batch, delivery and placement of shotcrete must be within 90 minutes of mixing. The use of retarding admixtures may extend application time beyond 90 minutes if approved by the WVDOH District Engineer or designee.
- **3.3.4.5.** <u>Approved Source Plant:</u> After award and prior to each contracted project, the Vendor shall provide a sample and method of placement of shotcrete, meeting all requirements of Section 3.3.4, to the

WVDOH, Materials Controls, Soils and Testing Division for approval. Only after WVDOH approval shall the vendor proceed with shotcrete installation. WVDOH reserves the right to collect samples for testing at any time during the completion of a project.

For each plant it sources for ATT A Contract Items 1 through 25, the Vendor shall supply the Agency with the plant's name, certification status, and physical location on the Attachment C ("ATT C") Source Plant Info Form. Failure to submit ATT C may result in disqualification of Vendor's bid.

- **3.3.4.6.** Shotcrete Installation: The Contractor shall abide by the following shotcrete installation instructions. All installation shall be handled by the Contractor unless otherwise specified herewith:
 - **3.3.4.6.1.** Work shall only begin after receiving approval of the design mix and continue if the specified strengths are obtained. The Contractor is to provide all work required to obtain satisfactory strength tests at no additional cost to WVDOH.
 - **3.3.4.6.2.** The Contractor shall maintain the face of the excavation and other surfaces clean of loose materials, mud, rebound, overspray, or other foreign matter that could prevent or reduce shotcrete bond. Any surface materials that are loosened or damaged, to a sufficient depth should be removed. Any material that loosens during application shall be removed. The adjacent surfaces shall be protected from overspray during shooting. During the excavation and cleaning process, the ground shall not be loosened, cracked, or shattered. Water flow shall be diverted and standing water shall be removed so that shotcrete placement will not be affected.
 - **3.3.4.6.3.** The Contractor shall maintain a clean, dry, oil-free supply of compressed air sufficient for maintaining adequate nozzle velocity, at all times. The equipment shall be capable of delivering the premixed material accurately, uniformly, and continuously through the delivery hose. To prevent sagging or sloughing of freshly applied shotcrete, control must be taken with the application thickness, nozzle technique, air pressure and rate of shotcrete placement.

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- **3.3.4.6.4.** Shotcrete shall be applied from the lower part of the area upward to prevent accumulation of rebound. The placement of the nozzle shall be at a distance and approximately perpendicular to the working face so that rebound will be minimal and compaction will be maximized. Rebound shall not be worked back into the construction. Where shotcrete is used to complete the top ungrouted zone of the nail drill-hole near the face, the nozzle shall be positioned into the mouth of the drill-hole to completely fill the void.
- **3.3.4.6.5.** The shotcrete shall be applied from the lower part of the area upward to prevent accumulation of rebound. The placement of the nozzle shall be at a distance and approximately perpendicular to the working face so that rebound will be minimal and compaction will be maximized. Rebound shall not be worked back into the construction. Where shotcrete is used to complete the top ungrouted zone of the nail drill-hole near the face, the nozzle shall be positioned into the mouth of the drill-hole to completely fill the void.
- **3.3.4.6.6.** A clearly defined pattern of continuous horizontal or vertical ridges or depressions at the reinforcing elements after they are covered with shotcrete will be considered as indication of insufficient reinforcement cover or poor nozzle techniques. In this case, immediately suspend the application of shotcrete and implement corrective measures. Correct the shotcreting procedure by adjusting the nozzle distance and orientation, ensuring adequate cover over the reinforcement, and adjusting the water content of the shotcrete mix or other means.
- **3.3.4.6.7.** Any shotcrete surface defects shall be repaired after placement as soon as possible. Any shotcrete that exhibits segregation, honeycombing, lamination, void or sand pockets, or excessive shrinkage cracking shall be removed and replaced. In-place shotcrete not meeting the specified strength requirement will be subject to remediation. Possible remediation options include placement of additional shotcrete thickness or removal and replacement, at no additional cost to the WVDOH.
- **3.3.4.6.8.** A minimum reinforcement overlap shall be provided at reinforcement splice joints as per industry standards. The

surface of a joint shall be cleaned and wet before adjacent shotcrete is applied. Where shotcrete is used to complete the top ungrouted zone of the nail drill-hole near the face, to the maximum extent practical, clean and dampen the upper grout surface to receive shotcrete, like a construction joint.

- **3.3.4.6.9.** Shotcrete shall not be installed on frozen surfaces or ground. Cold weather protection shall be maintained if the temperature, after placement, is below 32° F until the inplace compressive strength of the shotcrete is greater than 725 psi. Cold weather protection may require blankets, heating under tents, or other means acceptable to the WVDOH. The shotcrete mix shall be deposited at a temperature of not less than 32°F or more than 100°F.
- **3.3.4.6.10.** During high wind or rain, unless suitable protective covers, enclosures or wind breaks are installed, shotcrete application shall be suspended. Any newly placed shotcrete that has been exposed to rain making the shotcrete unacceptable shall be removed and replaced. A polyethylene film or equivalent shall be used to protect the work from exposure to adverse weather. During hot weather or dry, windy conditions, the newly placed shotcrete shall be protected from drying by moisture curing until curing compound can be applied. Curing compound shall be applied with 24 hours of placement.
- **3.3.5.** Contract Item 17: Extra Shoulder Build-up of Shotcrete When required to meet the approved drawings and plans, the Contractor may be required to provide a 24-inch Extra Shoulder Build-up which is shotcrete formed outboard of the wall at the road level. Vendor shall bid one price per linear foot of extra shoulder build-up of shotcrete on ATT A.
- **3.3.6.** Contract Item 18: Concrete Masonry Units Split face Concrete Masonry Units are required to meet ASTM C-90 criteria to construct necessary Geosynthetically Confined Soil (GCS) walls. WVDOH forces, following methods and designs shown on plans, will perform installation. Vendor shall bid one price per concrete masonry unit on ATT A.
- **3.3.7.** Contract Item 19: Geosynthetic Fabric Geosynthetic fabric is a woven polypropylene sheet with a wide width tensile capacity of nominally 175 pounds per inch for GCS walls. WVDOH forces, following methods and designs shown on plans, will perform installation. Vendor shall bid one price per square foot of geosynthetic fabric on ATT A.

- **3.3.8.** Wire Mesh Surface Treatment WVDOH will approve the measurement of wire mesh surface treatment in square feet, properly installed and tensioned to the slope by welding or bolting steel plates with central holes over protruding soil nail tips. Vendor shall bid one price per square foot for the following on ATT A:
 - **3.3.8.1. Contract Item 20: High Tensile Diamond Mesh** Shall meet the following requirements:

Contract Item 20	Requirement	
Wire Diameter	0.120 inches	
	Zinc coated by the Zn/Al process	
Wire Coating	(minimum Zinc Coating 0.80 oz/sf)	
Tensile strength of wire	75 ksi	

3.3.8.2. Contract Item 21: High-Capacity Double Twist Hexagonal Mesh - Shall be manufactured in accordance with ASTM A975.97 and meet the following requirements:

Contract Item 21	Requirement	
Wire Diameter	0.120 inches	
	Hot dip galvanized, finish 5, class-3,	
	Zinc Coating. (ASTM A-641, tested	
Wire Coating	in accordance with ASTM A370-92)	
	Soft temper in accordance with	
Tensile strength of wire	ASTM A641-92	
Weight of Zinc Coating	Determined by ASTM A-90	
of Wire	(normally 0.85 oz/sf)	
	High grade or special high grade in	
Grade of Zinc Coating	accordance with ASTM 8-6, Table 1	
Uniformity of Coating	Determined by ASTM A-239	
	not less than 12% in accordance	
	with ASTM	
Elongation	A370-92	

3.3.9. Contract Item 22: Galvanized Steel Plates (including Bolts) - Shall meet the following requirements:

Contract Item 22	Requirement	
Dimensions	8" x 8" x 3/8" or equivalent	
	Minimum 36 ksi mild steel as required by ASTM A36	
Material	or greater	
Galvanization	Hot dip Zinc Galvanized	

- 3.3.10. Contract Item 23: Strip Drains To eliminate water build-up behind the shotcrete wall, the vendor shall use at a minimum, 4-inch strip drains that are full width of the shotcrete (downslope) at a maximum of 6-foot centers. Drains shall meet the requirements of Standard Specs Section 714.19 and extend beyond the face of the shotcrete at the downhill face. Vendor shall source HDPE manufacturers from the WVDOH Plastics Products approved list. http://www.transportation.wv.gov/highways/mcst/Pages/Listings.aspx
- **3.3.11. Horizontal Drains:** Horizontal drains shall consist of 1.5-inch diameter (or larger) slotted schedule 80 (or thicker) PVC pipe, conforming to the requirements of ASTM Designation: D 1785. These pipes are inserted into drilled holes to reduce water pressures within slide masses.
 - **3.3.11.1. Contract Item 24: Slotted Pipe** Shall have two rows of slots. The rows shall be in the longitudinal direction of the pipe and the slots shall be cut in the circumferential direction of the pipe. The rows shall be centered on two of the third points (120 degrees apart) of the pipe circumference. Each row of slots shall conform to one of the configurations in the following table. Slots shall be spaced uniformly along the pipe. The minimum opening will be measured on the inner surface of the pipe.

Number of Slots (±3) Per Meter (3.0 feet)	Width of Slot Millimeters (inches)	Minimum Opening Per Meter (3 feet) Square Millimeters (in ²)
72	1.27 (0.05)	2110 (3.27)
75	0.51 (0.02)	975 (1.50)
151	0.25 (0.01)	975 (1.50)

3.3.11.2. Contract Item 25: Perforated Pipe - Shall have three rows of perforations with one row on each side of the pipe and the third row in the top. The perforations shall be 10 mm (0.40 in) in diameter spaced at 75 mm (3.0 in) centers with the top perforations staggered in relation with the holes on either side. Fittings for the PVC pipe shall be Schedule 80 Type II PVC solvent weld type fittings conforming to the requirements in ASTM Designation: D 2467. Machined male and female ends may be used in lieu of couplings. Un slotted or un-perforated PVC pipe, between 1 m (3.0 ft) to 9 m (29.5 ft) in length, shall be provided at the outlet of the drain.

3.3.12. Mobilization / Demobilization:

3.3.12.1. Contract Item 26: Standard Projects - The awarded Contractor must have at least three qualified crews readily available for deployment to work in multiple locations simultaneously. Unless otherwise agreed upon by the Contractor and the WVDOH District Engineer or designee, the Contractor shall have 14 working days to perform all work and operations necessary to load and unload equipment, move personnel, supplies and incidentals to and from the project site to accomplish all other miscellaneous associated work items or operations that must be performed, including cost that must be incurred, to mobilize and begin work on a standard project.

Soil nail installation rigs must be capable of either installing launched soil nails or drilling a hole up to 80 feet in length and six inches in diameter.

3.3.12.2. Contract Item 27: Emergency Work – Upon approval by the WVDOH District Engineer or designee, the Contractor shall have 48 hours or an agreed upon timeframe between the WVDOH and the Contractor to perform all work and operations necessary to mobilize and begin work on an emergency project, including all the same procedures as a standard project per Section 3.3.12.1. Emergency Work shall be invoiced by Vendor at 1.25 times the amount bid for Contract Item(s) on the Pricing Pages.

If the equipment can be transported under its own power to an adjacent site within a reasonable distance, as agreed upon by the WVDOH and the Contractor. Mobilization/demobilization will not be paid by the WVDOH for the second site.

- **3.3.13. Contract Items 28-31: Maintenance of Traffic** While undergoing improvement, the project site shall be kept open to traffic in such condition that both local and through traffic will be adequately and safely accommodated. Unless otherwise agreed upon by all parties and included in project proposal, the maintenance of traffic shall be provided by the Contractor.
- 3.4. Plans and Details/Proposal: The awarded Contractor will provide all necessary engineering plans and details/proposals required to successfully repair slides when requested, at the time of need by the WVDOH. Any necessary core drilling, rotary drilling, percussion drilling, auger drilling or driven casing required to produce plans are the responsibility of the Contractor. The awarded Contractor will provide all necessary engineering plans and details/proposal required to successfully repair slides when requested, at the time of need by the WVDOH. Any excavation required will be measured by crew hours (Contract Item 32). The disposal of excavated materials from

the right-of-way is the responsibility of the Contractor and will be paid at the contract unit price per hour. Any necessary core drilling, rotary drilling, percussion drilling, auger drilling or driven casing required to produce plans are the responsibility of the Contractor.

- **3.4.1.** The Contractor shall be responsible for maintaining record of the volume (measured by cubic yard) and location (by GPS coordinates) of material removed from a project site and provide the information upon request. In the event excavated materials are transported to a location other than the failure site, the Vendor shall record the GPS coordinates of the excavated site, the coordinates of the dumped location as well as the type and quantity of materials transported. The Vendor shall also be responsible for ensuring the materials are placed on DOH right-of-way while adhering to any environmental regulations or site-specific conditions.
- **3.4.2.** The engineering plans and details/proposal shall be stamped by a Registered Professional Engineer, licensed in the State of West Virginia, under the full-time employment of the Contractor, who is knowledgeable in the design and implementation of slope stabilization with soil nails and related work. Changes or deviations from the approved submittals must be resubmitted for approval. No adjustments in project time will be allowed due to incomplete submittals. The WVDOH reserves the right to agree to an adjustment in project time when in the best interest of the State of WV. The engineering plans and details/proposal shall include, at a minimum, the following information:
 - A description of the soil nail construction sequence and a schedule for the work.
 - The slip length per foot, the failure width per foot and the failure height (depth) per foot.
 - A description of the size and spacing of the nail to be placed.
 - All necessary details to successfully construct any temporary facing and drainage system.
 - The nail angle entry shall be within plus or minus 3 degrees from the approved plans. The nails shall not extend beyond the limits of the permanent easement or right of way. Subsidence or physical damage by such operations shall be cause for immediate cessation of operations and repairs at the Contractor's expense.
- **3.5.** Equipment Lay Down and Storage: The availability of storage and lay down areas for Vendor equipment, materials, etc., on WVDOH property shall be at the sole discretion of the WVDOH District Engineer or designee. Should placement or storage of Vendor equipment, materials, etc., be permitted, the WVDOH assumes no responsibility for damages, theft, injury, or vandalism to Vendor owned property while stationed or stored WVDOH property.

- **3.6.** Personnel and Equipment Requirements: The Contractor and his personnel shall meet the following requirements and must provide the information requested on the Attachment B Personnel Experience Forms ("ATT B"), which are provided as attachments to the solicitation and must be submitted with the bid. The awarded Contractor must have at least three qualified crews readily available for deployment to work in multiple locations simultaneously. A crew shall minimally consist of no less than one of each of those identified in Sections 3.6.1 through 3.6.4.
 - **3.6.1. Project Manager:** The Project Manager shall have successfully engineered and constructed no less than nine projects (three projects of each nail type bid) within the last three years. All soil nail work must be self-performed to meet this requirement. On the **ATT B -Project Manager** tab, the Contractor shall provide, at a minimum, the name of nine projects (three of each nail type being bid) and the dates of each project.

Supervisor Engineer: The employee shall have successfully stabilized an active landslide on a public roadway and designed no less than nine projects (three projects of each nail type being bid) within the last three years while maintaining traffic on the impacted roadway. <u>All soil nail work must be self-performed to meet this requirement</u>. On the **ATT B - Supervisor Engineer** tab, the Contractor shall provide, at a minimum, the name of one Supervisor Engineer, the name of nine projects of which he was the Supervisor Engineer (three of each nail type being bid) and the dates of each project.

Equipment Operator: Equipment Operators must have successfully operated rigs on no less than nine projects, three of each nail type being bid, within the last three years for which successfully stabilized an active landslide on an active, public roadway while maintaining traffic on the impacted roadway using the nail type bid: Launched Soil Nails, Permanently Cased Soil Nails and Self Drilling Soil Nails. All soil nail work must be self-performed to meet this requirement. On the **ATT B - Equipment Operator** tab, the Contractor shall provide, at a minimum, the name of one Equipment Operator, the name of nine projects of which he was the Equipment Operator, three of each nail type being bid and the dates of each project.

- **3.6.2.** Foreman: The Foreman must have successfully managed no less than three projects within the last three years with this Contractor, which successfully stabilized an active landslide using soil nails on a active, public roadway while maintaining traffic on the impacted roadway. On the ATT B Foreman-Nozzleman tab, the Contractor shall provide, at a minimum, one Foreman's name, the name of three projects of which the named individual was the Foreman, the nail type, and dates of each project.
- **3.6.3.** Nozzleman: Nozzlemen or any worker applying shotcrete must be certified as an ACI Shotcrete Nozzleman as outlined in ACI Certification Publication CP-

60. The Contractor is fully responsible for training, operations and results of work performed by the Nozzleman. On the ATT B - Foreman-Nozzleman tab the Contractor shall provide, at a minimum, one Nozzleman's name, the Nozzleman's ACI Certification Number and the number of square feet of shotcrete applied by the named individual in the last three years, including the dates of installation.

- **3.6.4.** In addition to the personnel listed above, all other laborers and workers employed by the Contractor should possess knowledge of installation of soil nails and general roadway maintenance.
- **3.7.** Safety Requirements: The Contractor shall be responsible for meeting all federal, state, and local safety code and accepted industry standard requirements.
 - **3.7.1.** The Contractor's personnel/crew shall obey all traffic and safety rules and regulations and shall not create any hazardous conditions with the operation of the equipment. All Contractor supplied equipment, tools and personal safety equipment shall meet or exceed the safety standards specified for such items by ANSI Z133.1-2017.
 - **3.7.2.** All staff/crew shall wear approved hard hat, protective clothing, ANSI approved safety vests and any other requirements to meet OSHA standards.
- **3.8. Pandemic-Response Safety Protocols:** In addition to the Vendor's established protocols and the WVDOH's established safety protocols outlined in the Standard Specs, as amended, the Vendor and the Vendor's personnel/workers shall adhere to all WVDOH's pandemic response protocols while present at a WVDOH jobsite. Vendors may obtain the WVDOH's pandemic-response by contacting the WVDOH District Engineer or their designee.
- **3.9.** Soil Nail Sampling and Testing: Acceptance of the Soil Nails will be by Contractor's certification to the WVDOH, stating that the material composition and installation conforms to these specifications, combined with visual inspection of the in-place Soil Nail and Shotcrete by the WVDOH District Engineer or designee. The Contractor shall test one soil nail per site. The WVDOH reserves the right to require additional testing by the Contractor. Any requested testing of Soil Nails will follow these procedures:
 - **3.9.1. Equipment:** A dial gauge capable of measuring to 25.4 um (0.001 in) shall be used to measure movement. A hydraulic jack and gauge calibrated as a unit shall be used to apply the test load. The pressure gauge shall be graduated in 690 kPA (100psi) increments or less and used to measure the applied load. The test loads shall be applied incrementally.
 - **3.9.2.** Pull-out testing: Install one nail as a non-service nail and load test to pull-out failure. Pull-out failure is defined as movement more than 1 mm (0.04 in)

between the 1-minute and 10-minute reading of 2 mm (0.08 in) per log cycle of time over a minimum load hold period of 60 minutes. The test nails shall be installed and tested as each level at a rate consistent with construction operations. The test length of nail shall be chosen to cause pull-out failure to steel yield, but it shall not be less than 2.4 m (8 ft) or 2.1 m (7 ft) where construction boundaries shown on the contract plans do not allow 2.4 m (8 ft) nails. A minimum ungrouted zone of 1 m (3 ft) in length to the face shall be provided.

- **3.9.2.1.** Each test soil nail using the drilling method shall be grouted in place as part of a regular production grouting process. After grouting, the nail shall not be loaded for a minimum of three days. Reaction frames should not bear on the shotcrete face within a 1 m (3 ft) radius of the center of the drilled hole.
- **3.9.2.2.** The pull-out test shall be made by incrementally loading the nail. The nail movement shall be measured and recorded to the nearest 25.4 um (0.001 in) with respect to the independent fixed reference point at each increment load. The test shall be monitored with a pressure gauge. The load hold period shall start as soon as the test load is applied. Movement shall be recorded at 0, 1, 2, 3, 4, 5, 6 and 10 minutes. If the load is extended, the nail movement shall be recorded at 15, 25, 30, 45 and 60 minutes. Each increment of load shall be no greater than 25% of the design load of the nail tested. The loading shall be terminated either at failure or earlier at the option of the Contractor, if at least twice the design unit bond stress is demonstrated

3.9.3. Acceptance Criteria:

- **3.9.3.1.** A nail deemed acceptable if the unit bond stress at a failure load or test termination is equal to or greater than twice the design unit bond stress. Unacceptable test results shall result in modifications to design or construction procedures. Any modifications of design or construction procedures shall be at the Contractor's expense and the verification testing procedure shall be repeated as required by the WVDOH. Graphs shall be plotted during the test of deflection against load.
- **3.9.3.2.** Acceptance of installed shotcrete will be by visual inspection by the WVDOH District Engineer or designee. Materials found not in compliance with the requirements of this contract may be rejected, removed, and replaced at the Contractor's expense

4. CONTRACT AWARD:

- **4.1. Contract Award:** The Contract is intended to provide Agencies with a purchase price on all Contract Items. The Contract shall be awarded to the Vendor that provides the Contract Items meeting the required specifications for the lowest overall total cost as shown on **ATT A**.
- **4.2.** Contract Award Transition: Upon the award of this contract, the WVDOH Operations Division will announce the effective date of use of this contract to the Districts and the Vendors, whether it is by the effective date, the completed and encumbered date, or an established date by the WVDOH. Upon the announced effective date of use, any Delivery Order issued prior to the award of the contract shall remain in effect and should not be cancelled until that Delivery Order is filled; however, after ten (10) working days of the Districts and Vendors notice, any Delivery Order that has not been completely filled by the Vendors shall NOT be completed, and a cancellation notice will be sent to that Vendor from the issuing District for cancellation of the balance of that Delivery Order only. No Delivery Orders from prior contracts should be held open by the Districts or Vendors longer than ten (10) working days after the effective date of use is announced for the new contract.

This directive is issued to assist the Districts and the Vendors when fulfilling open Delivery Orders only. It is NOT issued to cause harm or to take contracts from one Vendor to give to another Vendor, but to establish a transition process from one contract into another contract.

- **4.3. Pricing Pages:** Vendor shall complete **Attachment A Pricing Pages ("ATT A")** by providing a Unit price per item. Failure to complete **ATT A** in its entirety may result in the Vendor's bid being disqualified.
 - **4.3.1. ATT A** contains a list of Contract Items and estimated purchase volumes. The estimated purchase volume for each item represents the approximate volume of anticipated purchases only. The approximate quantities on **ATT A** is for evaluation purposes only. Actual quantities will be provided to the awarded vendor on a Delivery Order at the time of need. No future use of the Contract or any individual item is guaranteed or implied.

4.3.2. <u>Each unit price shall include labor, equipment, materials and incidental</u> costs associated with the Contract Item being bid.

4.3.3. <u>Vendor should type or electronically enter the information into ATT A to</u> <u>prevent errors in the evaluation</u>. In most cases, the Vendor can request an electronic copy of the Pricing Pages spreadsheet for bid purposes by sending an email request to the following address: <u>Kristy.E.James@wv.gov</u>.

- **4.3.4.** Changing the Contract Item Descriptions, Units of Measure, or Estimated Quantities on the **ATT** A shall result in the disqualification of altered Contract Item bid. In circumstances when all Contract Items must be bid for evaluation and award purposes, the disqualification of any Contract Item will result in disqualification of the entire bid.
- **4.4. Price Adjustments:** In the event of a significant price increase of component material or rental equipment, if applicable, utilized to perform or under this Contract, that is not the fault of the Vendor, the contract pricing, may be equitably adjusted by change order as more fully described below.
 - **4.4.1.** A change in price is considered significant if the price of the component material or rental equipment increases by 20% or more from the original bid amount.
 - **4.4.2.** Any request for a price increase under this clause must be supported by: price quotes for the component material or rental equipment for which a change is being sought; invoices showing amounts actually paid for the component materials or rental equipment; and any other evidence that supports the increase request.
 - **4.4.3.** The quotes provided to support the price increase request must be the quotes that Vendor actually relied on when submitting its bid and both the quote and the amount ultimately paid must have resulted from an arm's length transaction with an unrelated party.
 - **4.4.4.** Vendor must also show that the significant price increase would have been incurred if the owner had purchased the material or rental equipment directly from the supplier.
 - **4.4.5.** Price adjustments will be granted or denied at the sole and absolute discretion of the State.
 - **4.4.6.** Price adjustments will only be considered annually at the contract expiration/renewal date. Vendor must submit price adjustment requests 60 days prior to the expiration/renewal date to be considered.
 - **4.4.7.** Vendor documentation for price adjustments shall be submitted to <u>DOHOperationsProcurement@wv.gov</u> for initial review.
 - **4.4.8.** Price adjustments shall be established by a written Change Order, which must be reviewed and approved by the Purchasing Division, and as to form by the Attorney General's Office, in order to be effective. Adjusted pricing will not take effect until the effective date of such Change Order and cannot be retroactive.

4.5. Modifications: The WVDOH reserves the right to add new and similar items to the contract, with the consent of the Contractor. If such additions are agreed upon by both parties, the WVDOH will issue a modification. Until such time as the Contractor receives a modification, the Contractor shall not accept Delivery Orders from any agency referencing such items or services.

5. ORDERING AND PAYMENT:

- 5.1. Ordering: Vendor shall accept orders through wvOASIS, regular mail, facsimile, email, or any other written forms of communication. Vendor shall maintain and keep current its phone numbers, fax number, e-mail address, locations, and ordering/billing/ payment addresses with WVDOH and in wvOASIS. Vendor may, but is not required to, accept on-line orders through a secure internet ordering portal/website. If Vendor has the ability to accept on-line orders, it should include in its response a brief description of how Agencies may utilize the on-line ordering system. Vendor shall ensure that its online ordering system is properly secured prior to processing Agency orders online.
- 5.2. Delivery Order: WVDOH will initiate the Delivery Order by identifying locations of need. The Delivery Order will be generated by a WVDOH Engineer or designee. The order should be completed on a WV-39 Blanket Release Order. The order should detail the need and location information of the work to be completed per contract item, as well as the tentative start and end dates, to be agreed upon as the official start and end dates. Emergencies shall be prominently noted on the Delivery Order. Once complete, the Delivery Orders shall be sent to Vendor via fax, email, or postal mail. <u>Any verbal communications to initiate or make modifications to a project from this contract are not acceptable as a Delivery Order.</u>
- **5.3.** Inspection and Approval: The WVDOH will approve payment at such time as the job site work has been completed, in accordance with the provisions of this agreement, and has been verified by the WVDOH Engineer or designee.
- 5.4. Payment: Upon completion of the work indicated on the Delivery Order, Vendor shall accept payment in accordance with the payment procedures of the State of West Virginia. The State of West Virginia currently utilizes a Purchasing Card program, administered under contract by a banking institution, as well as Electronic Funds Transfer as methods to process payment for goods and services. The Vendor shall accept the State of West Virginia's Purchasing Card and Electronic Funds Transfer for payment of orders under this Contract. Electronic Funds Transfer for payment is available through the WV State Auditor's Office. The Vendor may visit the WV State Auditor's website (wvsao.gov) for all necessary forms and instructions. Payment method may be dictated at WVDOH's discretion.

5.4.1. Inspection and Approval: The WVDOH will approve payment at such time as the job site work has been completed, in accordance with the provisions of this agreement, and has been verified by the WVDOH Engineer or designee.

6. PROJECT ACCEPTANCE, DELIVERY, AND RETURN:

- 6.1. Project Acceptance and Written Verification of Receipt: Upon receipt of a WVDOH Delivery Order, the Vendor shall advise the WVDOH in writing within five (5) calendar days of their acceptance or refusal of the Delivery Order. As verification of receipt, Vendor must provide written acknowledgement of any Delivery Orders and any Revisions/Modifications thereto sent by WVDOH. Failure to provide the WVDOH with written acknowledgement of any Delivery Orders/Revisions within five days of the Order being sent shall be considered refusal of the Delivery Order. In the event of refusal, the WVDOH at its own discretion shall cancel the Delivery Order and may seek to cancel the Delivery Order and obtain the goods or services from the next low bid Vendor or proceed with an Emergency Purchase from the open market.
- 6.2. Negotiation of Dates: The WVDOH shall have the option to negotiate with the Vendor, the project's tentative start and end dates. Project work shall be continuous to completion unless otherwise approved in writing by the WVDOH District Engineer or designee.
- **6.3. Delivery Time:** Vendor shall deliver standard orders no later than fourteen (14) working days or an agreed upon acceptable date by the WVDOH and Vendor, after Vendor's receipt of a Delivery Order. There shall be a minimum aggregate order quantity of twenty-five (25) nails per job site, unless otherwise grouped with additional nearby sites as placed on the Delivery Order and agreed upon by the WVDOH and the Contractor. Vendor shall deliver emergency orders within 48 hours or an agreed upon acceptable date by the WVDOH and the Vendor, after a Delivery Order is received by the Vendor.

Starting times and scheduled hours may vary and will be at the discretion of the WVDOH District Engineer or designee. All work performed under this contract shall be performed Monday through Friday. Saturday work may be performed if approved in advance by the WVDOH District Engineer or designee. Work will not be performed on any state or federal holiday unless approved in advance by the WVDOH District Engineer or designee.

6.4. Adverse Weather Conditions: Unsuitable/adverse/inclement weather conditions may dictate the work schedule. It is preferred that operations be suspended immediately when an inclement weather event begins or if the WVDOH District Engineer or their designee determines that an inclement weather event is imminent. If working conditions are dangerous or unsuitable for the WVDOH, Vendor, or general public, work shall be suspended by the WVDOH Engineer/designee. If needed, revision to the

project's start and end date may be negotiated by the Vendor and the WVDOH Engineer/designee. After a weather-related suspension of work, the WVDOH District Engineer or their designee shall determine and convey in writing, such Delivery Order changes and when work shall resume, followed by the Vendor's written acknowledgement, per Sections 6.2 of this Contract Solicitation.

6.5. Late Delivery: The Agency placing the order under this Contract must be notified in writing if orders will be delayed for any reason. Any delay in delivery that could cause harm to an Agency will be grounds for cancellation of the delayed order, and/or obtaining the items ordered from a third party. The Agency placing the Delivery Order under this Contract mut be notified in writing by the Vendor no later than five (5) business days prior to the scheduled start date from the Agency's order. Any failure to notify, acknowledge receipt of WVDOH's written Delivery Orders/Revisions resulting in delivery delay, or failure to start or complete the project per the WVDOH scheduled due dates may be determined by the WVDOH at its sole discretion as harmful to the Agency and as such, shall result in WVDOH's cancellation of the Delivery Order and application of Liquidated Damages.

Any Agency seeking to obtain items from a third party under this provision must first obtain approval of the WVDOH Finance & Administration Division, Budget & Procurement Division.

- **6.5.1.** Liquidated Damages: If the Vendor's work completion or corrections of deficient work exceeds the Delivery Order completion due date/timeframe, the Vendor shall agree that no extension of contract time will be granted unless Liquidated Damages are applied by the WVDOH in the form of an off-set reduction to the total amount of the Vendor's final invoice. The WVDOH shall calculate Liquidated Damages per project beginning on day one (1) after the WVDOH's specified Delivery Order due date, in accordance with this Section, the Contract's Terms and Conditions, and the Standard Specs Section 108.7, as amended.
- 6.6. Delivery Payment/Risk of Loss: Standard order delivery shall be F.O.B. destination to the Agency's location. Vendor shall include the cost/discount of standard order delivery charges in its bid pricing and is not permitted to charge the Agency separately for such delivery. The Agency will pay delivery charges on all emergency orders provided that Vendor invoices those delivery costs as a separate charge with the original freight bill attached to the invoice.

Deliveries made by the Vendor shall be comprised only of contract items intended for delivery at that location and specified in the pricing pages, contract specifications, or WV-39 Blanket Release Order.

6.7. Return of Unacceptable Items: If the Agency deems the Contract Items to be unacceptable, the Contract Items shall be returned to Vendor at Vendor's expense and

with no restocking charge. Vendor shall either make arrangements for the return within five (5) days of being notified that items are unacceptable or permit the Agency to arrange for the return and reimburse Agency for delivery expenses. If the original packaging cannot be utilized for the return, Vendor will supply the Agency with appropriate return packaging upon request. All returns of unacceptable items shall be F.O.B. the Agency's location. The returned product shall either be replaced, or the Agency shall receive a full credit or refund for the purchase price, at the Agency's discretion.

6.8. Return Due to Agency Error: Items ordered in error by the Agency will be returned for credit within thirty (30) days of receipt, F.O.B. Vendor's location. Vendor shall not charge a restocking fee if returned products are in a resalable condition. Items shall be deemed to be in a resalable condition if they are unused and in the original packaging. Any restocking fee for items not in a resalable condition shall be the lower of the Vendor's customary restocking fee or 5% of the total invoiced value of the returned items.

7. VENDOR DEFAULT:

- 7.1. The following shall be considered a Vendor default under this Contract:
 - 7.1.1. Failure to provide Contract Items in accordance with the requirements contained herein.
 - 7.1.2. Failure to comply with other specifications and requirements contained herein.
 - **7.1.3.** Failure to comply with any laws, rules, and ordinances applicable to the Contract Services provided under this Contract.
 - 7.1.4. Failure to remedy deficient performance upon request.
- 7.2. The following remedies shall be available to Agency upon default:
 - 7.2.1. Immediate cancellation of the Contract.
 - 7.2.2. Immediate cancellation of one or more release orders issued under this Contract.
 - 7.2.3. Any other remedies available in law or equity.

8. MISCELLANEOUS:

- **8.1.** No Substitutions: Vendor shall supply only Contract Items submitted in response to the Solicitation unless a contract modification is approved in accordance with the provisions contained in this Contract.
- 8.2. Vendor Supply: Vendor must carry sufficient inventory of the Contract Items being offered to fulfill its obligations under this Contract. By signing its bid, Vendor certifies that it can supply the Contract Items contained it its bid response.
- **8.3. Reports:** Vendor shall provide quarterly reports and annual summaries to the Agency showing the Agency's items purchased, quantities of items purchased, and total dollar value of the items purchased. Vendor shall also provide reports, upon request, showing the items purchased during the term of this Contract, the quantity purchased for each of those items and the total value of purchases for each of those items. Failure to supply such reports may be grounds for cancellation of this Contract.
- 8.4. Contract Manager: During its performance of this Contract, Vendor must designate and maintain a primary contract manager responsible for overseeing Vendor's responsibilities under this Contract. The Contract manager must be available during normal business hours to address any customer service or other issues related to this Contract. Vendor should list its Contract manager and his or her contact information below.

Contract Manager: _John Soderbe	rg
Telephone Numbers: 855-579-05	36
Fax Number: <u>970-245-7737</u>	
Email Address: john.soderberg@g	gsi.us

Vendor shall inform the Agency in writing of any changes to the information provided above within ten (10) calendar days of such changes. Failure to comply may be grounds for cancellation of this contract.

STATE OF WEST VIRGINIA Purchasing Division PURCHASING AFFIDAVIT

CONSTRUCTION CONTRACTS: Under W. Va. Code § 5-22-1(i), the contracting public entity shall not award a construction contract to any bidder that is known to be in default on any monetary obligation owed to the state or a political subdivision of the state, including, but not limited to, obligations related to payroll taxes, property taxes, sales and use taxes, fire service fees, or other fines or fees.

ALL CONTRACTS: Under W. Va. Code §5A-3-10a, no contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and: (1) the debt owed is an amount greater than one thousand dollars in the aggregate; or (2) the debtor is in employer default.

EXCEPTION: The prohibition listed above does not apply where a vendor has contested any tax administered pursuant to chapter eleven of the W. Va. Code, workers' compensation premium, permit fee or environmental fee or assessment and the matter has not become final or where the vendor has entered into a payment plan or agreement and the vendor is not in default of any of the provisions of such plan or agreement.

DEFINITIONS:

"Debt" means any assessment, premium, penalty, fine, tax or other amount of money owed to the state or any of its political subdivisions because of a judgment, fine, permit violation, license assessment, defaulted workers' compensation premium, penalty or other assessment presently delinquent or due and required to be paid to the state or any of its political subdivisions, including any interest or additional penalties accrued thereon.

"Employer default" means having an outstanding balance or liability to the old fund or to the uninsured employers' fund or being in policy default, as defined in W. Va. Code § 23-2c-2, failure to maintain mandatory workers' compensation coverage, or failure to fully meet its obligations as a workers' compensation self-insured employer. An employer is not in employer default if it has entered into a repayment agreement with the Insurance Commissioner and remains in compliance with the obligations under the

"Related party" means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceed five percent of the total contract amount.

AFFIRMATION: By signing this form, the vendor's authorized signer affirms and acknowledges under penalty of law for false swearing (W. Va. Code §61-5-3) that: (1) for construction contracts, the vendor is not in default on any monetary obligation owed to the state or a political subdivision of the state, and (2) for all other contracts, that neither vendor nor any related party owe a debt as defined above and that neither vendor nor any related party are in employer default as defined above, unless the debt or employer default is permitted under the exception above.

WITNESS THE FOLLOWING SIGNATURE:

ν	endor's Name:	<u>GeoStal</u>	oilization	Internatio	nal, LLC
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Authorized Signature	e:	Date: 3/22/2022
State of	rado	
County of <u>Ad</u>	ams , to-wit:	
Taken, subscribed, a	and sworn to before me this 22 day	of March , 2022
My Commission expl	ires 07.07.	, 20 <u>24</u>
AFFIX SEAL HERE	BEATRIS J SANDOVAL Notary Public State of Colorado Notary ID # 20084023438 My Commission Expires 07-07-2024	NOTARY PUBLIC Beats & Jundhard Purchasing Affidavit (Revised 01/19/2018)

Slide Repair Using Soil Nail Method Attachment A ("ATT A") Pricing Pages

Vendor should complete ATT A by providing a Unit Price per each item. Vendor should complete ATT A in its entirety as failure to do so may result in disqualification of Vendor's bid. Quantities listed on this Pricing Page are approximations and and will be used for evaluation purposes only. It is understood and agreed that the contract shall cover the quantities actually ordered throughout the life of the contract.

Vendor Name:		Geostabilization International				
Item Number	Estimated Quantity	Unit of Measure	Description		Extended Amount	
1	25	Each	Soil Nails Propelled by Compressed Gas -up to 20 feet in length	425.00	10,625.00	
2	100	Each	Permanently Cased Soil Nails up to 20 feet in length	485.00	48,500.00	
3	100	Each	Permanently Cased Soil Nails up to 30 feet in length	525.00	52,500.00	
4	100	Each	Permanently Cased Soil Nails up to 40 feet in length	585.00	58,500.00	
5	50	Each	Permanently Cased Soil Nails up to 50 feet in length	640.00	32,000.00	
6	50	Each	Permanently Cased Soil Nails up to 60 feet in length	690.00	34,500.00	
7	50	Each	Permanently Cased Soil Nails up to 70 feet in length	735.00	36,750.00	
8	50	Each	Permanently Cased Soil Nails up to 80 feet in length	775.00	38,750.00	
9	100	Each	Self Drilling Soil Nails up to 20 feet in length	750.00	75,000.00	
10	100	Each	Self Drilling Soil Nails up to 30 feet in length	1,000.00	100,000.00	
11	100	Each	Self Drilling Soil Nails up to 40 feet in length	1,200.00	120,000.00	
12	50	Each	Self Drilling Soil Nails up to 50 feet in length	1,440.00	72,000.00	
13	50	Each	Self Drilling Soil Nails up to 60 feet in length	1,560.00	78,000.00	
14	50	Each	Self Drilling Soil Nails up to 70 feet in length	1,660.00	83,000.00	
15	50	Each	Self Drilling Soil Nails up to 80 feet in length	1,740.00	87,000.00	
16	100	Square Foot	Furnish and install Shotcrete	45.00	4,500.00	
17	50	Linear Foot	Extra Shoulder Build-up of Shotcrete	225.00	11,250.00	
18	500	Each	Concrete Masonry Units	6.25	3,125.00	
19	500	Square Foot	Geosynthetic Fabric	2.00	1,000.00	
20	250	Square Foot	Wire Mesh Surface Treatment High Tensile Diamond Mesh	30.00	7,500.00	
21	150	Square Foot	Wire Mesh Surface Treatment High Capacity Double-Twist Hexagonal Mesh	16.50	2,475.00	
22	100	Each	Galvanized Steel Plates	98.00	9,800.00	
23	10	Linear Foot	4 inch Strip Drain	20.00	200.00	
24	10	Linear Foot	Horizontal Drains - Slotted Pipe	48.00	480.00	
25	10	Linear Foot	Horizontal Drains - Perforated Pipe	48.00	480.00	
26	15	Lump Sum	Mobilization/Demobilization - Standard	3,500.00	52,500.00	
27	10	Lump Sum	Mobilization/Demobilization - Emergency	3,500.00	35,000.00	
28	10	Day	Pilot Truck and Driver	975.00	9,750.00	
29	10	Unit	Traffic Control Devices	2.00	20.00	
30	10	Hour	Flagger	95.00	950.00	
31	10	Day	Arrow Board	420.00	4,200.00	
32	1	Hour	Excavation Crew	1,480.00	1,480.00	
			TOTAL AMOUNT BID		1,071,835.00	

Pricing shall be considered Statewide. Award will be based on lowest overall cost.

Slide Repair Using Soil Nail Method Attachment B ("ATT B") Personnel Experience Form - Project Manager

	Vendor Name:	GeoStabilization International
Project M	anager Name:	Amanda Blade
Years	of Experience:	11
		Launched Soil Nails Projects
Project #1	Name:	OK SH 82 Slide Repair Sites 1 & 2, 3
Floject #1	Dates:	1/11/2021-2/6/2021
Project #2	Name:	US 377 / OK-99
Project #2	Dates:	6/16/2020-6/18/2020
Project #3	Name:	TDOT CNT154- Site 12 @ LM 7.75 Fentress and Overton Counties
FIOJECT#5	Dates:	6/5/2019-8/4/2019
		Permanently Cased Soil Nails Projects
Project #1	Name:	20-ARDOT - SR 71 Three (3) Slide Areas
FIOJECT#1	Dates:	7/13/2020-9/19/2020
Project #2	Name:	ARDOT SR 16 @ LM 13.31 and LM 13.46 - Landslide Repair
Floject #2	Dates:	12/4/2019-12/27/2020
Project #2	Name:	R-38625-A SR 262 at 10+90
Project #3	Dates:	7/28/2020-9/30/2020
		Self Drilling Soil Nails Projects
Droiget #1	Name:	OK SH-20 Site 1 (East) and OK SH-20 Site 2 (West) Slide Repair
Project #1	Dates:	3/29/2021-5/6/2021
Project #2	Name:	US 377 / OK-99
Project #2	Dates:	6/16/2020-6/18/2020
Project #3	Name:	TDOT - CNT265 - SR 91 Eight (8) Slide Areas (Site 3A)
F10Ject #5	Dates:	4/3/2020-4/15/2020

Slide Repair Using Soil Nail Method Attachment B ("ATT B") Personnel Experience Form - Project Manager

Ţ	Vendor Name:	GeoStabilization International
Project M	anager Name:	Chris Monahan
Years	of Experience:	6
		Launched Soil Nails Projects
Project #1	Name:	CR 28/2 MP 2.00 Old Furnace Rd.
Floject #1	Dates:	11/14/2019-11/19/2019
Droject #2	Name:	CR 1 MP 3.65 River Road
Project #2	Dates:	11/4/2019-11/8/2019
Project #3	Name:	CR 1 MP 2.49 River Road
Project #5	Dates:	10/21/2019-11/4/2019
		Permanently Cased Soil Nails Projects
Project #1	Name:	CR 7 Kelly's Creek Rd. Slide 1
Floject #1	Dates:	7/5/2021-7/10/2021
Project #2	Name:	CR 61/29 Boonesborough Road Site 2D
F10ject #2	Dates:	8/17/2020-9/5/2020
Project #3	Name:	WV 69 MP 1.14
Floject #5	Dates:	11/6/2020-11/11/2020
		Self Drilling Soil Nails Projects
Project #1	Name:	Nellis Road CR 1
F10ject #1	Dates:	9/3/2020-9/18/2020
Project #2	Name:	Lens Creek Road WV 94
Project #2	Dates:	1/13/2020-6/4/2020
Project #2	Name:	Short Creek Site 1
Project #3	Dates:	1/20/2020-3/3/2020

Slide Repair Using Soil Nail Method Attachment B ("ATT B") Personnel Experience Form - Project Manager

1	Vendor Name:	GeoStabilization International
Project Manager Name:		Joe Waycaster
Years	of Experience:	27
		Launched Soil Nails Projects
Project #1	Name:	KY 221, MP 10.0
FIOJECT#1	Dates:	7/27/2020-8/17/2020
Droject #2	Name:	TDOT CNT154- Site 12 @ LM 7.75 Fentress and Overton Counties
Project #2	Dates:	6/5/2019-8/4/2019
Droject #2	Name:	TDOT CNT229 - SR 2 (US 41) Between LM 25.2 and 26.4
Project #3	Dates:	7/13/2019-8/18/2020
		Permanently Cased Soil Nails Projects
Project #1	Name:	CR 13 Unionvalle Kenwood Rd
Floject #1	Dates:	7/16/2021-8/23/2021
Droject #2	Name:	COS 541, MP 34.3
Project #2	Dates:	6/17/2020-6/26/2020
Droject #2	Name:	KY 1657, MP 1.94
Project #3	Dates:	1/11/2021-1/15/2021
		Self Drilling Soil Nails Projects
Drojost #1	Name:	WV 85 MP 24.62 Bigson Road
Project #1	Dates:	5/28/2021-6/4/2021
Project #2	Name:	CR 79/3 MP 17.44 Cabin Creek Road
Project #2	Dates:	5/3/2021-5/7/2021
Project #2	Name:	WV 10 MP 2.05
Project #3	Dates:	4/26/2021-5/7/2021

Slide Repair Using Soil Nail Method Attachment B ("ATT B") Personnel Experience Form - Supervisor Engineer

Vendor Name:		GeoStabilization International LLC
Supervisor Engir	eer's Name	Albert Ruckman - WV 018353
		Launched Soil Nail Projects
Project #1	Name:	OK SH 82 Slide Repair Sites 1 & 2, 3
Floject #1	Dates:	01-04-21-02-06-21
Droigot #2	Name:	WV 7 MP 15.99 Full Length Temp. Shoring
Project #2	Dates:	5-14-20-7-1-20
Ducient #2	Name:	WV - CR 28/2 MP 2.00 Old Furnace Rd.
Project #3	Dates:	10-7-19 - 11-19-19
	-	Permanently Cased Soil Nails Projects
Project #1	Name:	CR 210/25 MP 13.38 Hanging Rock
Floject #1	Dates:	11/29/21-01-15-22
Project #2	Name:	CR 8 MP 1.91 Low Gap Road
Floject #2	Dates:	11-19-19 - 6-24-20
Project #3	Name:	WV CR 5 Manilla Creek Road Slide
Floject #5	Dates:	12-5-19 - 12-20-19
		Self Drilling Soil Nails Projects
Project #1	Name:	CR 119-7 MP 0.73 Julius Hall Road
Floject #1	Dates:	8-26-21 - 01-23-22
Project #2	Name:	CR 51 MP 1.90 Castleman's Run Road
110jeet #2	Dates:	06-09-20 - 06-18-20
Project #2	Name:	Boonesborough Road Site 3
Project #3	Dates:	11-14-19 - 2-11-20

Slide Repair Using Soil Nail Method Attachment B ("ATT B") Personnel Experience Form - Supervisor Engineer

Vendor Name:		GeoStabilization International LLC
Supervisor Engineer's Name		Roch Player - WV 024890
		Launched Soil Nail Projects
Project #1	Name:	CR 8 - Ditch Stabilization for Carlton County, MN
110jeet #1	Dates:	09-23-20-10-07-20
Project #2	Name:	CR 1 MP 2.49 River Road
110jeet #2	Dates:	7-12-19-4-6-20
Project #3	Name:	US-11 Cut Slope
Floject #5	Dates:	4-14-21 - 7-03-21
		Permanently Cased Soil Nails Projects
Project #1	Name:	CR 13 Unionvalle Kenwood Rd
110jeet #1	Dates:	7-12-21 - 8-23-21
Project #2 Name:		US 220 MP 22.43
110jeet #2	Dates:	2-21-20 - 5-8-20
Project #3	Name:	CR 5 MP 3.36 Locust Hill Road
Floject #5	Dates:	9-21-20 - 10-28-20
		Self Drilling Soil Nails Projects
Project #1	Name:	KY 194, MP 20.13
Floject #1	Dates:	11-29-21 - 12-9-21
Project #2	Name:	21 NC Ski Mountain Road
110jeet #2	Dates:	10-25-21 - 12-15-21
Project #2	Name:	TDOT SR 61 @ LM 3.5 - Union County Emergency Slide
Project #3	Dates:	2-27-19 - 4-11-19

Slide Repair Using Soil Nail Method Attachment B ("ATT B") Personnel Experience Form - Supervisor Engineer

Vendor Name:		GeoStabilization International LLC
Supervisor Engineer's Name:		Nathan Beard - WV 019372
		Launched Soil Nail Projects
Project #1	Name:	21-OR HWY 101 MP 11
Floject #1	Dates:	02-2-21-02-23-21
Project #2	Name:	WV US 220 SB MP 7.00 Moorefield
Floject #2	Dates:	02-15-19-03-25-19
Project #2	Name:	CR 1 MP 3.65 River Road
Project #3	Dates:	11/4/2019-11/8/2019
		Permanently Cased Soil Nails Projects
Project #1	Name:	21 - KY 36, MP 17.361
Floject #1	Dates:	8-9-21 - 10-12-21
Project #2	Name:	21 - KY 467, MP 9.97
Project #2	Dates:	7-7-21- 9-17-21
Droigat #2	Name:	19 - WV CO 29 MP 4.08 Jake's Run Rd.
Project #3	Dates:	2-19-20 - 6-8-20
		Self Drilling Soil Nails Projects
Project #1	Name:	US-460 WB RW-8A
Project #1	Dates:	1-10-22 - 02-23-22
Project #2	Name:	CR 1 MP 15.34 Union Ridge
Project #2	Dates:	12-7-21 - 02-12-22
Droigat #2	Name:	21-MD Pearre Road
Project #3	Dates:	12-1-21 - 12-21-21

Slide Repair Using Soil Nail Method Attachment B ("ATT B") Personnel Experience Form - Equipment Operator

Vendor Name:		GeoStabilization International
Equipment	Operator Name:	Josh Kelly
		Launched Soil Nails Projects
Project #1	Name:	US 220 MP 5.88
FIOJECT#1	Dates:	8/10/2020-8/17/2020
Droiget #2	Name:	20 - Everett Rd - Sites 1 & 2
Project #2	Dates:	7/19/2021-7/28/2021
Ducient #2	Name:	HAM-75-3.28
Project #3	Dates:	11/18/2020-11/30/2020
	P	ermanently Cased Soil Nails Projects
Designet #1	Name:	CR 61/29 Boonesborough Road Site 2D
Project #1	Dates:	8/17/2020-9/5/2020
Ducient #2	Name:	CR 84 MP 3.37 Anawalt Ridge Road
Project #2	Dates:	6/22/2020-7/1/2020
Ducient #2	Name:	CR 25 MP 10.45 Blue Sulphur Springs Road
Project #3	Dates:	4/15/2020-4/24/2020
		Self Drilling Soil Nails Projects
Designet #1	Name:	Havaco Slide on WV 103
Project #1	Dates:	1/28/2020-3/11/2020
Drainet #2	Name:	CR 11 MP 1.79 Schmucker Road
Project #2	Dates:	2/11/2020-2/17/2020
Droiget #2	Name:	CR 9/11 Conservation Rd. Emergency Repair
Project #3	Dates:	2/18/2020-2/28/2020

Slide Repair Using Soil Nail Method Attachment B ("ATT B") Personnel Experience Form - Equipment Operator

	Vendor Name:	GeoStabilization International
Equipment (Operator Name:	Roger Teesdale
		Launched Soil Nails Projects
Project #1	Name:	CR 28/2 MP 2.00 Old Furnace Rd.
Floject #1	Dates:	11/14/2019-11/19/2019
Project #2	Name:	CR 1 MP 3.65 River Road
Floject #2	Dates:	11/4/2019-11/8/2019
Project #3	Name:	WV 7 MP 15.99 Temp Shoring
110ject #5	Dates:	5/18/2020-5/19/2020
	Pe	ermanently Cased Soil Nails Projects
Project #1	Name:	CO 7/13 MP 1.00 Rudulf Road
Fioject #1	Dates:	12/2/2019-12/4/2019
Project #2	Name:	CO 7/13 MP 0.40 Pentress Road
110ject #2	Dates:	4/22/2019-5/4/2019
Project #3	Name:	CO 7/13 MP 0.48 Pentress Rd.
110ject #5	Dates:	11/14/2019-11/19/2019
		Self Drilling Soil Nails Projects
Project #1	Name:	CR 17 MP 0.46 Woodrow Mtn. Slide A
FIOJECT#1	Dates:	5/12/2020-6/20/2020
Project #2	Name:	CR 17 MP 0.82 Woodrow Mtn. Slide C
Project #2	Dates:	5/14/2020-6/20/2020
Project #2	Name:	WV 42 MP 11.50 Lunice Creek Slide 1
Project #3	Dates:	6/3/2020-6/8/2020

Slide Repair Using Soil Nail Method Attachment B ("ATT B") Personnel Experience Form - Equipment Operator

Vendor Name:		GeoStabilization International
Foreman's Name:		Jessee Ricker
		Launched Soil Nail Projects
Ducient #1	Name:	TDOT CNT154 - Site 10 @ LM 6.50 - Fentress and Overton Counties
Project #1	Dates:	6/25/2019-9/23/2019
Ductors #0	Name:	TDOT CNT154 - Site 11 @ LM 6.68 - Fentress and Overton Counties
Project #2	Dates:	6/21/2019-9/4/2019
D 1	Name:	TDOT CNT154- Site 12 @ LM 7.75 Fentress and Overton Counties
Project #3	Dates:	6/5/2019-8/4/2019
	Pe	ermanently Cased Soil Nails Projects
Ducient #1	Name:	20 - KY 26, MP 0.546
Project #1	Dates:	10/14/2020-10/27/2020
Ducient #2	Name:	3800 E. Lower Dry Fork Rd.
Project #2	Dates:	6/24/2020-7/13/2020
Duciest #2	Name:	Pyle South Amherst Road
Project #3	Dates:	11/2/2019-11/6/2019
	40	Self Drilling Soil Nails Projects
Due:	Name:	20 - CUY-271X-0581NW
Project #1	Dates:	11/3/2020-11/3/2020
Duciest #2	Name:	20-TDOT SR 116 @ LM 6.8 - Anderson County
Project #2	Dates:	3/18/2020-5/1/2020
Due is at #2	Name:	JAC-35-17.24
Project #3	Dates:	6/29/2020-7/8/2020

Slide Repair Using Soil Nail Method Attachment B ("ATT B") Personnel Experience Form - Foreman & Nozzleman

Vendor Name:		GeoStabilization International		
Foreman's Name:		Joshua Knight		
	Launched Soil Nail Projects			
Project #1	Name:	TDOT CNT154 - Site 10 @ LM 6.50 - Fentress and Overton Counties		
Floject #1	Dates:	6/25/2019-9/23/2019		
Project #2	Name:	TDOT CNT229 - SR 2 (US 41) Between LM 25.2 and 26.4		
Floject #2	Dates:	7/13/2019-8/18/2020		
Droject #2	Name:	5800 E. Brushy Fork Rd		
Project #3	Dates:	3/18/2019-4/19/2019		
		Permanently Cased Soil Nails Projects		
Project #1	Name:	21 - I-75, MP 50.9		
Project #1	Dates:	4/19/2021-5/19/2021		
Project #2	Name:	I-69, RP 109+77		
Floject #2	Dates:	4/8/2020-7/15/2020		
Project #3	Name:	21 - CLE-50-2.61		
Floject #5	Dates:	4/5/2021-4/12/2021		
		Self Drilling Soil Nails Projects		
Project #1	Name:	KY 11, MP 14.55		
Floject #1	Dates:	6/3/2020-7/17/2020		
Project #2	Name:	TDOT CNT926 - SR 27 @ LM 26.60 - Marion County		
FIUJECT #2	Dates:	2/26/2020-4/17/2020		
Project #2	Name:	TDOT CNT 154 SR 85 Site 2		
Project #3	Dates:	2/3/2020-2/25/2020		

Nozzleman's Name:	Matt Turner			
ACI Certification #:	01352944			
Years of Experience: 9				
Total Square Feet of Sho	stcrete Applied in the past 3 Years: 10,462.00			
Dates of Installation:	12/19/2019-3/24/2020			
Dates of Installation:	8/25/2020-6/10/2021			
Dates of Installation:	6/5/2020-8/19/2020			
Dates of Installation:	5/27/2020-624/2020			

Slide Repair Using Soil Nail Method Attachment B ("ATT B") Personnel Experience Form - Foreman & Nozzleman

Ven	dor Name:	GeoStabilization International	
Name:		Phaivane Romyen	
		Launched Soil Nails Projects	
Project #1	Name:	CR 28/2 MP 2.00 Old Furnace Rd.	
110jeet #1	Dates:	11/14/2019-11/19/2019	
Project #2	Name:	WV 93 MP 1.90 Laurel Dale Rd	
110jeet #2	Dates:	11/11/2019-/11/13/2019	
Project #3	Name:	CR 1 MP 2.49 River Road	
110jeet #3	Dates:	10/21/2019-11/4/2019	
		Permanently Cased Soil Nails Projects	
Project #1	Name:	CO 60 MP 5.32 Little Indian Fork Road	
110jeet #1	Dates:	6/24/2020-7/10/2020	
Project #2	Name:	US 33 MP 18.99 Light House Curve	
110jeet #2	Dates:	9/13/2019-9/20/2019	
Project #3	Name:	CO 17 MP 4.11	
110jeet #3	Dates:	4/8/2019-4/19/2019	
		Self Drilling Soil Nails Projects	
Project #1	Name:	WV 83 MP 6.20 Bradshaw Road	
110jeet #1	Dates:	4/19/2021-4/23/2021	
Project #2	Name:	WV 161 MP 18.06 Elkhorn Road	
110jett #2	Dates:	4/13/2021-4/16/2021	
Project #3	Name:	19 - WV CO 29 MP 4.01 Jake's Run Rd.	
110jett #5	Dates:	5/13/2020-6/2/2020	

Nozzleman's Name:	Kyle Frazier
ACI Certification #:	01630524
Years of Experience:	5
Total Square Feet of Sho	tcrete Applied in the past 3 Years:13,360
Dates of Installation:	3/26/2021-4/22/2021
Dates of Installation:	1/5/2020-3/3/2020
Dates of Installation:	3/13/2019-4/11/2019
Dates of Installation:	10/12/2018-7/30/2019

Slide Repair Using Soil Nail Method Attachment B ("ATT B") Personnel Experience Form - Foreman & Nozzleman

Vendor Name:		GeoStabilization International		
Foreman's Name:		Ronald Robinson		
	Launched Soil Nail Projects			
Droject #1	Name:	TDOT CNT154 - Site 11 @ LM 6.68 - Fentress and Overton Counties		
Project #1	Dates:	6/21/2019-9/4/2019		
Deciset #2	Name:	TDOT CNT229 - SR 2 (US 41) Between LM 25.2 and 26.4		
Project #2	Dates:	7/13/2019-8/18/2020		
Decidet #2	Name:	TDOT CNT154 - Site 10 @ LM 6.50 - Fentress and Overton Counties		
Project #3	Dates:	6/25/2019-9/23/2019		
		Permanently Cased Soil Nails Projects		
Project #1	Name:	VA Route 653 Mabe Stanleytown Road		
Floject#1	Dates:	5/18/2020-5/27/2020		
Project #2	Name:	LG&E KU Paris Driveway		
Floject #2	Dates:	10/12/2020-11/5/2020		
Drojost #2	Name:	20 - KY 26, MP 0.546		
Project #3	Dates:	10/14/2020-10/27/2020		
		Self Drilling Soil Nails Projects		
Project #1	Name:	VA 460 near Celanese Facility		
Floject #1	Dates:	4/27/2020-5/28/2020		
Project #2	Name:	18-VA Route 653 Mabe Stanleytown Road		
	Dates:	5/18/2020-5/27/2020		
Project #2	Name:	Route 65 Veterans Memorial Highway		
Project #3	Dates:	6/22/2020-6/24/2020		

Nozzleman's Name:	Randolph Lowery				
ACI Certification #:	01631845				
Years of Experience:	3				
Total Square Feet of Sho	Total Square Feet of Shotcrete Applied in the past 3 Years: 8,964.00				
Dates of Installation:	4/5/2020-8/18/2020				
Dates of Installation:	5/27/2020-10/6/2020				
Dates of Installation:	3/2/2020-7/14/2020				
Dates of Installation:	10/15/2019-2/16/2020				

Slide Repair Using Soil Nail Method Attachment C ("ATT C") Source Plant Info Form

Vendor should complete ATT C by providing a WVDOH certified source plant for ATT A Contract Items, per Section 3.3.4.5 of the contract Specifications. Failure to submit ATT C may result in disquanlification of Vendor's bid. Please complete and submit additional pages as needed.

Vendor Name:				
	Plant Location			
9111	Physical Address, City, State, Zip Code			
	Central Supply		Is Plant currently	
	vn Industrial Park, 26501(PS Code: CSC1.02.601)		✓ YES	□ NO
	73 Saltwell, WV 26330 (CSC1.01.601)	Ce	rtified Plant Code:	
	Elkins, WV 26241 (CSC1.03.601)		PS Code next to al	l addresses
	Summersville Plant (BMC1.01.601)			
	s Run Road, Buckhannon, WV 26201 (ACX1.01.601)			
) Pennsboro, WV 26415 (CSC1.15.601)			
	in Road, Glenville, WV 26351 (CSC1.05.601)			
Chapel	l Road, Gassaway 26624 (CSC1.04.601)			
South Hill	Street, Mabscott WV 25871 (DHC1.02.601)			
Pr	inceton, WV 24740 (BMC1.03.601)	T		
	Parsons Plant (CSC1.16.601)			
	Plant Location			
911 1	Physical Address, City, State, Zip Code			
	RDR	T	Is Plant currently	certified:
411 Sycamo	ore St, Clarksburg, WV 26301 (RDR1.01.601)		V YES	NO
· · · · · · · · · · · · · · · · · · ·		Ce	rtified Plant Code:	1-1-
		+	PS Code next to al	l addresses
	Plant Location	-		
911 I	Physical Address, City, State, Zip Code			
	The Wells Group		Is Plant currently	certified:
150 Marcellu	is Way, Bridgeport, WV 26330 (CCC1.03.601)		YES	NO
402 Bucke	ye Street Parkersburg 26101 (CCC1.02.601)	Ce	rtified Plant Code:	
				1 addresses
	Plant Location			
911 H	Physical Address, City, State, Zip Code			
	Hanson Ready Mix		Is Plant currently	certified:
1601 W Baltin	nore St, McMechan, WV 26040 (ERM1.04.601)		YES	□ NO
962	Winfield Road, 25213 (ERM1.09.601)	Ce	rtified Plant Code:	- A.
Kyle Lane	e, Huntingtown, WV 25702 (ERM1.08.601)		PS Code next to al	1 addresses
1107 Bulli	t St, Charleston, WV 25301 (ERM1.07.601)	1		
New M	Iartinsville Plant, 26155 (ERM1.03.601)			
	Plant Location			
911 H	Physical Address, City, State, Zip Code			
			Is Plant currently	certified:
			YES	NO
		Ce	rtified Plant Code:	
	Plant Location			
911 I	Physical Address, City, State, Zip Code			
		T	Is Plant currently	certified:
			YES	NO
		Ce	rtified Plant Code:	
		1		



WEST VIRGINIA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS

Standard Specifications Order Form

ORDERING INSTRUCTIONS:

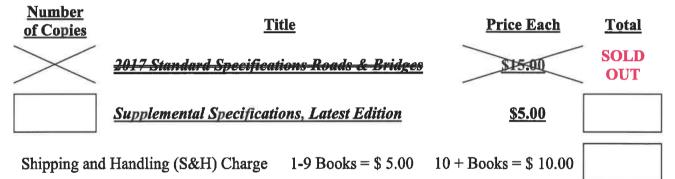
Copies of the <u>2017 Standard Specifications Roads & Bridges</u> and latest <u>Supplemental Specifications</u> may be purchased by completing this form, indicating the number of books desired, along with proper mailing and billing information.

Submit completed form by e-mail <u>DOHSpecifications@wv.gov</u>, or mail to:

Technical Support Division 1334 Smith Street Charleston, WV 25301

ORDER FORM:

Delivery Method (check one):	Pick-up □	Mail 🛛 (S&H fees apply – see below)
Payment Method (check one):	Invoice 🗆	Check \Box (payable to: WV Division of Highways)



TOTAL AMOUNT DUE

Notice: The 2017 Standard Specifications Roads and Bridges and Supplemental Specifications are available for download on the Specifications Webpage.

CUSTOMER INFORMATION:

Company Name:	GeoStabilization International LLC			
ATTENTION:	Lloyd Kuehn			
Street Address:	4475 E 74th Ave Suite 100 Commerce City, CO 80022			
City, State, Zip Code:	Commerce City, CO 80022			
Telephone: 855-579-05	536 Fax: 970-245-7737 Email: lloyd@gsi.us			

For Office Use Only (DO NOT WRITE IN THE SPACE BELOW)

Order Filled B	y:		Date:	
REC ORG	AUTH	ACT	OBJ	P/N
0061	AEXP002	126	021	N

West Virginia Ethics Commission



Disclosure of Interested Parties to Contracts

Pursuant to *W. Va. Code* § 6D-1-2, a state agency may not enter into a contract, or a series of related contracts, that has/have an actual or estimated value of \$1 million or more until the business entity submits to the contracting state agency a Disclosure of Interested Parties to the applicable contract. In addition, the business entity awarded a contract is obligated to submit a supplemental Disclosure of Interested Parties reflecting any new or differing interested parties to the contract within 30 days following the completion or termination of the applicable contract.

For purposes of complying with these requirements, the following definitions apply:

"Business entity" means any entity recognized by law through which business is conducted, including a sole proprietorship, partnership or corporation, but does not include publicly traded companies listed on a national or international stock exchange.

"Interested party" or "Interested parties" means:

- (1) A business entity performing work or service pursuant to, or in furtherance of, the applicable contract, including specifically sub-contractors;
- (2) the person(s) who have an ownership interest equal to or greater than 25% in the business entity performing work or service pursuant to, or in furtherance of, the applicable contract. (This subdivision does not apply to a publicly traded company); and
- (3) the person or business entity, if any, that served as a compensated broker or intermediary to actively facilitate the applicable contract or negotiated the terms of the applicable contract with the state agency. (This subdivision does not apply to persons or business entities performing legal services related to the negotiation or drafting of the applicable contract.)

"State agency" means a board, commission, office, department or other agency in the executive, judicial or legislative branch of state government, including publicly funded institutions of higher education: Provided, that for purposes of W. Va. Code § 6D-1-2, the West Virginia Investment Management Board shall not be deemed a state agency nor subject to the requirements of that provision.

The contracting business entity must complete this form and submit it to the contracting state agency prior to contract award and to complete another form within 30 days of contract completion or termination.

This form was created by the State of West Virginia Ethics Commission, 210 Brooks Street, Suite 300, Charleston, WV 25301-1804. Telephone: (304)558-0664; fax: (304)558-2169; e-mail: <u>ethics@wv.gov</u>; website: <u>www.ethics.wv.gov</u>.

West Virginia Ethics Commission Disclosure of Interested Parties to Contracts

(Required by W. Va. Code § 6D-1-2)

Name of Contracting Business Entity: GeoStabilization International LLC Address: 4475 E 74th Ave Suite 100 Commerce City, CO 80022

Name of Authorized Agent	Lloyd Kuehn	Address:	74th Ave Suite 100 Commerce City, CO 80022
Contract Number: ARFQ	0803 DOT2200000027	Contract Description:	6622C049- Slide Repair Using Soll Nail Method - Statewide
Governmental agency awa	rding contract: WVDOH		

□ Check here if this is a Supplemental Disclosure

List the Names of Interested Parties to the contract which are known or reasonably anticipated by the contracting business entity for each category below (attach additional pages if necessary):

1. Subcontractors or other entities performing work or service under the Contract

Check here if none, otherwise list entity/individual names below.

- Any person or entity who owns 25% or more of contracting entity (not applicable to publicly traded entities)
 Check here if none, otherwise list entity/individual names below.
- 3. Any person or entity that facilitated, or negotiated the terms of, the applicable contract (excluding legal services related to the negotiation or drafting of the applicable contract)

Check here if none, otherwise list entity/individual names below.

Signature:	Date Signed: 03-28-202	2
Notary Verification		
State of Colorado , c	County of Adams	
I, Lloyd Kuehn entity listed above, being duly sworn, acknowledge that t penalty of perjury.	, the authorized agent the Disclosure herein is being made	t of the contracting busines e under oath and under the
Taken, sworn to and subscribed before me this 28th	day of <u>March</u>	, 2022
To be completed by State Agency: Date Received by State Agency: Date submitted to Ethics Commission: Governmental agency submitting Disclosure:		SARAH MARVIN



State of West Virginia Agency Request for Quote Highways

Proc Folder:	1012594		Reason for Modification:
Doc Description:	Addendum 1: 6622C049	- Slide Repair Using Soil Nail Method	Addendum 1: To answer questions and modify specifications
Proc Type:	Agency Master Agreeme	ent	
Date Issued	Solicitation Closes	Solicitation No	Version
2022-03-22	2022-03-25 14:30	ARFQ 0803 DOT2200000027	2
BID RECEIVING L FINANCE & ADMIN DIVISION OF HIGH BLDG 5, RM A-260 1900 KANAWHA B CHARLESTON US	ISTRATION IWAYS		

Address: 4475 E 74th Avenue, Suite 100, Commerce City, CO 80022

Street: 4475 E 74th Avenue, Suite 100

City: Commerce City

State : Colorado	Country : USA	Zip : 80022
Principal Contact : Lloyd Kuehn		
Vendor Contact Phone: (855) 579-0536	Extension:	

FOR INFORMATION	CONTACT THE	BUYER
Kristine E James		
304-414-7104		
kristy.e.james@wv.gov	v	

Vendor Signature X

Inn

FEIN# 52-2379754

DATE 03-28-2022

All offers subject to all terms and conditions contained in this solicitation

ADDITIONAL INFORMATION

ADDENDUM 1 IS ISSUED

1. Modify specifications of product or service being sought

2. Responses to Vendor's question

SOLICITATION CLOSING REMAINS THE SAME 03/25/2022 AT 2:30PM

INVOICE TO		SHI	Р ТО		
VARIOUS AGEN LOCATIONS		LOC	IOUS AGENCY ATIONS		
AS INDICATED	BY ORDER	AS I	NDICATED BY ORDE	ER	
No City	WV	No C	Sity	wv	
US		US			
Line Comn	n Ln Desc	Qty	Unit Issue	Unit Price	Total Price
1 Highw	ay and road maintenance service				
Comm Code	Manufacturer	Spec	ification	Model #	
72141003					
Extended Desc	ription:				
Highway and roa	ad maintenance service				
SCHEDULE OF	EVENTS				

Line	<u>Event</u>	Event Date
1	TECHNICAL QUESTIONS DUE AT 10AM	2022-03-18

	Document Phase	Document Description	Page 3
DOT2200000027		Addendum 1: 6622C049- Slide Repair Using Soil Nail Method	

ADDITIONAL TERMS AND CONDITIONS

See attached document(s) for additional Terms and Conditions

SOLICITATION NUMBER: ARFQ DOT220000027 Addendum Number: 1

The purpose of this addendum is to modify the solicitation identified as ("Solicitation") to reflect the change(s) identified and described below.

Applicable Addendum Category:

- [] Modify bid opening date and time
- [/] Modify specifications of product or service being sought
- [Attachment of vendor questions and responses
- [] Attachment of pre-bid sign-in sheet
- [] Correction of error
- [] Other

Description of Modification to Solicitation:

ADDENDUM 2 IS ISSUED

- 1. Modify specifications of product or service being sought
- 2. Responses to Vendor's question

SOLICITATION CLOSING REMAINS THE SAME 03/25/2022 AT 2:30PM

Additional Documentation: Documentation related to this Addendum (if any) has been included herewith as Attachment A and is specifically incorporated herein by reference.

Terms and Conditions:

- 1. All provisions of the Solicitation and other addenda not modified herein shall remain in full force and effect.
- Vendor should acknowledge receipt of all addenda issued for this Solicitation by completing an Addendum Acknowledgment, a copy of which is included herewith. Failure to acknowledge addenda may result in bid disqualification. The addendum acknowledgement should be submitted with the bid to expedite document processing.

SOLICITATION NUMBER – ARFQ DOT220000027 SLIDE REPAIR USING SOIL NAIL METHOD

Addendum 1

To answer vendor posed questions.

<u>Question 1</u>: Relative to General Term and Condition 33, historically the processing fees associated with payments received from State of West Virginia's Purchasing Card have been 2.35%. Should the Vendor understand this percentage fee will apply to Purchasing Card payments received under this contract?

<u>Response</u>: Yes. If the P-Card is used to make payment for services rendered under this contract, a processing fee may be assessed. This fee may vary based on the current basis rate assigned by the Federal Reserve or the Vendors financial institution. Information regarding the State of West Virginia's Purchasing Card Program can be found on the West Virginia State Auditor's Office website at www.WVSAO.gov or by calling 304-558-2261. Through the WVSAO site, Vendors may also inquire about receiving payment through the State's Electronic Funds Transfer payment system.

<u>Question 2</u>: Regarding Specification 6.5.1, could WVDOH confirm the table referenced below from the 2022 Supplemental Specifications reflects the current liquidated damages applicable to this contract?

Original Contract Amount		Daily Charges
For More Than	To and Including	Per Calendar Day
\$0	\$500,000	\$300
\$500,000	\$2,000,000	\$600
\$2,000,000	\$10,000,000	\$1,500
\$10,000,000	\$25,000,000	\$3,000
\$25,000.000		\$4,000

<u>Response</u>: Yes. Per the 2022 Supplemental Specifications, Section 108.7, Table 108.7.1 reflects the current total amount of daily charges to be deducted in the event liquidated damages are applied.

<u>Question 3</u>: Specification 3.6 and 3.3.12.1 identifies that the "awarded Contractor must have at least three qualified crews ready for deployment to work in multiple locations simultaneously" and Specification 3.3.12.2 indicates that all the procedures from 3.3.12.1 apply. Will bidder(s) be required to demonstrate ownership and/or availability for deployment within 48 hours of three operational soil nail rigs capable of performing the work scope identified? If allowed to rent or lease specialty equipment that is not commonly available, how would WVDOH ensure that the awarded contractor can meet this requirement?

<u>Response</u>: Section 3.3.12.1 references a "Standard Project" in which the vendor must have three crews available for mobilization within 14 days. Section 3.3.12.2 references "Emergency work" in which the successful bidder must be able to mobilize 3 crews within 48 hrs. The WVDOH does not specify that the equipment necessary for the performance of this contract be purchased or rented if the bidder is able to meet the mobilization requirements. In the 3.6 personnel requirements, a crew shall consist of a minimum of a Project Manager, Supervising Engineer, Foremen, Nozzleman and Equipment Operator. However, the Project Manager and Supervising Engineer can be assigned to multiple crews. To fulfill the requirements to bid, a vendor would need to supply the names of 3 Foremen, 3 Equipment Operators, 3 nozzlemen and as little as 1 Supervising Engineer and Project Manager if they are being shared amongst more than one crew.

<u>Question 4</u>: Specification 3.4, could WVDOH specify whether the Vendor will be required to utilize an approved WVDOH dump site if there is not a location to place the material within the confines of the applicable project's right-of-way devoid of instability or environmental concerns?

<u>Response</u>: If site conditions permit, the vendor will be allowed to place any excavated material within the confines of the project site. In the event the project site is unsuitable for placing the excavated materials, an alternate location utilizing WVDOH right of way will be utilized. If neither condition exists, the vendor shall move the excavated material to a location of their choosing. The WVDOH District Engineer or their designee shall determine the feasibility of dumping on DOH property.

<u>Question 5</u>: Specification 3.6, could WVDOH confirm that the bidder must submit three of each of the forms for each personnel classification referenced on Attachment B (Project Manager, Supervisor Engineer, Equipment Operator, and Foreman-Nozzleman)?

<u>Response</u>: In the 3.6 personnel requirements, a crew shall consist of a minimum of a Project Manager, Supervising Engineer, Foremen, Nozzleman and Equipment Operator. However, the Project Manager and Supervising Engineer can be assigned to multiple crews. To fulfill the requirements to bid, a vendor would need to supply the names of 3 Foremen, 3 Equipment Operators, 3 nozzlemen and as little as 1 Supervising Engineer and Project Manager if they are being shared amongst multiple crews.

<u>Question 6</u>: Specification 3.6.1, could WVDOH confirm whether Supervisor Engineers need to be licensed in West Virginia and under full time employment of the Contractor (as noted in Specification 3.4.2)?

<u>Response</u>: 6. Yes. The supervising Engineer must be under full time employment of the contractor and licensed as a Professional Engineer in West Virginia.

<u>Question 7</u>: Specification 3.4, is the Vendor required to provide engineering models utilized to develop the engineering plans and details upon request of the WVDOH?

<u>Response</u>: Per the specifications, the vendor must provide the "necessary engineering plans and details/proposals required to successfully repair slides when requested, at the time of need by the WVDOH." Engineering models are not required to be submitted.

Question 8: The specifications for this job mention to bid the work for "Launched Soil Nails" where this is a proprietary and patented system also referred to as the "Soil Nail Launcher" by Geostabilization Internation, GSI.

<u>Response:</u> The term "Launched Soil Nails" refers to a method of soil nail placement as outlined in the Federal Highway Administration Soil Nail Wall Reference Manual which follows the guidelines of the American Association of State Highway and Transportation Officials LRFD Bridge Design Specifications. The specifications have the term "method" listed in the "Purpose and Scope" section of the contract specifications to denote that this is a method as opposed to a proprietary system. The term "method" has been added to sections 3.3.1, 3.3.2 and 3.3.3 for clarification. A copy of the FHWA manual is attached as well as a link to the website. The Launched soil nail method is referenced on beginning on page 423.

https://www.fhwa.dot.gov/engineering/geotech/pubs/nhi14007.pdf

Following pages are the new specifications.

SPECIFICATIONS

1. PURPOSE AND SCOPE: The West Virginia Division of Highways is soliciting bids to establish a Statewide open-end contract for labor, equipment, and materials to facilitate "on call" services, as needed, for Slide Repair using the methods of Launched Soil Nails, Permanently Cased Soil Nails, or Self Drilling Soil Nails.

Work shall consist of the Contractor designing plans to stabilize identified slides by internally reinforcing the soil mass with reinforcing elements (Soil Nails) using the installation methods as specified in this solicitation. The stabilization of the slide area shall be constructed from the top of the slide down. The WVDOH will identify locations and direct all work to be performed as specified herein. The Contractor, along with a WVDOH representative, shall review all locations to determine the method to be used as well as applicable design considerations.

WVDOH will provide all permits, guardrail, public notification, site clearing, environmental controls, and obtain access to adjacent property as needed.

- 2. **DEFINITIONS:** The terms listed below shall have the following meanings assigned to them throughout and for the purpose of this Solicitation. Additional definitions can be found in Section 2 of the General Terms and Conditions.
 - 2.1. "AASHTO" The American Association of State Highway and Transportation Officials is a standard body which publishes specifications, tests protocols, and guidelines that are used in highway design and construction throughout the United States. Reference: www.transportation.org
 - 2.2. "ACI" American Concrete Institute. Reference: <u>www.concrete.org</u>
 - 2.3. "ANSI" American National Standards Institute. Reference: <u>www.ansi.org</u>.
 - 2.4. "ASTM International" and "ASTM" Interchangeable terms used for the international standards organization that develops and publishes voluntary consensus technical standards for a wide range of materials, products, systems, and services, formerly known as the American Society for Testing and Materials. Reference: www.astm.org
 - 2.5. "ATTACHMENT A," "Pricing Pages," and "ATT A" Used throughout this Solicitation for the schedule of prices attached hereto as Attachment A ("ATT A") upon which Vendor should list its pricing for Contract Items.
 - 2.6. "ATTACHMENT B," "Personnel Experience Forms," and "ATT B" Used throughout this Solicitation for the forms attached hereto as Attachment B ("ATT B")

upon which Vendor should enter personnel experience information as identified in Section 3.6 of this Solicitation and referenced throughout.

- 2.7. "ATTACHMENT C," "Sourced Plant Info Form," and "ATT B" Used throughout this Solicitation for the form attached hereto as Attachment C ("ATT C") upon which Vendor should provide its source provider/plant information for Contract Item materials.
- **2.8.** "Contract Item" or "Contract Items" The list of items available for Vendor to provide pricing as identified in Section 3 of this Solicitation and referenced throughout.
- 2.9. "Contractor" or "Vendor" Interchangeably used throughout this Solicitation and in any cited Sections of the West Virginia Department of Transportation, Division of Highways Standard Specifications, Roads and Bridges, adopted latest Standard Specs edition, as amended, including any Supplementals and refers to any entity submitting a bid in response to the Solicitation, the entity that has been selected as the lowest responsible bidder, or the entity that has been awarded the Contract, as context requires.
- **2.10.** "Emergency Work" Work which is required to be done without delay owing to circumstances for which the WVDOH could not have reasonably expected and has been designated as such by a representative of the WVDOH.
- 2.11. "Liquidated Damages" Monetary compensation due from the Vendor in the event the Vendor's performance falls short of contractual stipulation or breaches the contract. Delays in the delivery of goods and/or services or quality failures or corrections by the Vendor may result in the Agency assessing charges for such deficiencies per these contract Specifications, the Standard Specs Section 108.7, as amended, and calculated from the table posted at the WVDOH Contract Administration's Specifications and Documents website, as amended:

https://transportation.wv.gov/highways/contractadmin/specifications/Pages/LiquidDat edDamages.aspx

- 2.12. "MP per MCS&T" Refers to a Materials Procedure per the Materials Control, Soils, and Testing Division of the West Virginia Division of Highways. Reference: https://transportation.wv.gov/highways/mcst/Pages/default.aspx
- 2.13. "OSHA" Occupational Safety and Health Administration. Reference: <u>www.osha.gov</u>.
- **2.14.** "Solicitation" The official notice of an opportunity to supply the State with goods and/or services that is published by the West Virginia Division of Highways.
- 2.15. "Standard Specs" The West Virginia Department of Transportation, Division of Highways Standard Specifications, Roads and Bridges, adopted latest edition, and as amended or modified by any subsequent Supplemental Specifications.

2.16. "WVDOH" and "Agency" - Interchangeable terms for the West Virginia Division of Highways.

3. GENERAL REQUIREMENTS:

3.1. Standard Specifications: The following sections of the Standard Specs, but not limited to, shall apply to the administration of this contract: Sections 101, 102, 103, 104, 105, 106, 107, 108, 109, and 110, as amended.

Materials, equipment, and performance of this contract shall confirm, but are not limited to, the requirements of Standard Specs Sections 636, as amended.

A hard copy of the current Standard Specs may be purchased at a cost of \$20.00 (\$15.00 for the 2017 book plus \$5.00 for the Supplemental Latest Edition) using the **Attachment D ("ATT D") Standard Specifications Order Form**. The completed form should be submitted by email to <u>DOTSpecifications@wv.gov</u> or mailed to:

West Virginia Division of Highways Technical Support Division 1334 Smith Street Charleston, West Virginia 25301

A free electronic copy of the Standard Specs may be obtained by sourcing: http://www.transportation.wv.gov/highways/contractadmin/specifications/2017StandSpec/Pages/default.aspx

- **3.2.** Documentation to be Included with the Bid: The Vendor should carefully read the entire solicitation invitation. The Vendor should include as part of their bid response:
 - Certification and Signature Page
 - Addendum Acknowledgement Form
 - Valid West Virginia Contractor's License, if applicable.
 - Contract Manager Page
 - Attachments included in solicitation package (ATT A, ATT B, etc.)
 - Purchasing Affidavit (properly notarized)
 - Ethics/Disclosure Form (properly notarized), when provided with the solicitation
 - Valid Certificate of Insurance; and,
 - Any other required forms or supporting information as described herein.

Omitting any required forms, attachments, or documentation as described throughout this contract could deem a bid non-responsive and result in the disqualification of the Vendor's bid response. **3.3.** Contract Items and Mandatory Requirements: Vendor shall provide Agency with the Contract Items for all methods listed below on an open end and continuing basis. Contract Items must meet or exceed the mandatory requirements as shown below.

At any time during the life of this contract, upon request by the WVDOH, the awarded Vendor shall provide an update of any information requested in Section 3.6

- 3.3.1. Contract Item 1: Launched Soil Nails Method Vendor shall furnish equipment, all incidentals, and launched galvanized soil nails (hollow steel tubes that have been hot dip galvanized). The launched soil nails shall have a wall thickness of 0.120 inches, nominal outside diameter of 1.5 inches. The strength of the tube shall be 36 ksi. When applicable, Vendor shall provide perforated tubes that can serve as both horizontal drains and tensile elements. Excess cutoffs from previously launched nails are not acceptable. Vendor shall bid one price for each 20-foot length of launched soil nail on Attachment A ("ATT A") Pricing Pages.
 - **3.3.1.1.** Launched soil nails shall be inserted with a single stroke of velocity more than 200 miles per hour. The inserted length and spacing will be determined based upon the WVDOH District Engineer or designee's approved engineering plans. More than 4 inches of exposed soil nails after launching is unacceptable unless first approved by the WVDOH District Engineer or designee. Exposed portion of installed nails must be cut for inclusion into shotcrete or flush to ground in the case of no shotcrete work when not required by the engineering plans. Disposal of the cut-off portions of the soil nails from the right-of-way is the responsibility of the Contractor at no additional cost to the WVDOH. If required, lagging and backfill will be provided by the WVDOH.
- 3.3.2. Contract Items 2 thru 8: Permanently Cased Soil Nails Method Vendor shall furnish permanently cased soil nails that are a three stage construction including installation of: 1) an outer tube (minimum 1.5 inch outside diameter, minimum 0.120 inch wall thickness hot-dipped galvanized 36 ksi steel tube that is mechanically deformed, threaded or specially galvanized through a drossing process to produce a plurality of surficial asperities); 2) neat cement grout that completely fills the outer tube; and 3) an inner bar consisting of epoxy coated, #6 (or greater) grade 60 or grade 75 rebar or thread bar, depending on the final design load. When applicable, Vendor shall provide perforated tubes that can be pressure grouted and bid one price for each 20-foot, 30-foot, 40-foot, 50foot, 60-foot, 70-foot, and 80-foot length of permanently cased soil nails on ATT A.
- **3.3.3.** Contract Items 9 thru 15: Self-Drilling Soil Nails Method Vendor shall furnish self-drilling soil nails that consist of a hollow bar with a sacrificial drill

bit. Multiple bars may be coupled to produce final length. Bar outer diameters shall be a minimum of 1.5 inches and maximum 3 inches depending on design load. Vendor shall bid one price for each 20-foot, 30-foot, 40-foot, 50-foot, 60-foot, 70-foot, and 80-foot length of self-drilling soil nails on ATT A.

- **3.3.4.** Contract Item 16: Shotcrete The shotcreting process shall consist of applying one or more layers of concrete conveyed through a hose pneumatically projected at a high velocity against a prepared surface with a nominal thickness of 6 inches with either welded wire fabric or triple twisted galvanized wire mesh approximately 2 inches from the outside surface. Vendor shall furnish shotcrete complying with the requirement of ACI 506.2, except as otherwise specified below. Vendor shall bid one price per square foot on ATT A.
 - **3.3.4.1.** Wet Mix Process: Shall comply with the requirements of ACI 506R and consist of thoroughly mixing all the ingredients except accelerating admixtures but including the mixing water, introducing the mixture into the delivery equipment, and delivering it by positive displacement, to the nozzle. The wet-mix shotcrete shall then be air jetted from the nozzle at high velocity onto the surface.
 - **3.3.4.2.** Dry Mix Process: Shall comply with the requirements of ACI 506R and consist of producing shotcrete by delivering the dry ingredients conveyed pneumatically with the mixing water introduced at the nozzle.
 - **3.3.4.3.** Materials and Application: Vendor shall deliver, store, and handle materials to prevent contamination, segregation, corrosion, or damage. Vendor shall store liquid admixtures to prevent evaporation and freezing.

Materials used to produce shotcrete must meet the following mandatory requirements:

Material	Requirement
	Shall comply with the requirements of Standard
Cement	Specs Section 701.1
Chemical	Fluid type, applied at nozzle, shall comply with
Admixtures	the requirements of AASHTO M194, ASTM
Accelerator	C494, and ASTM C1141 Type C or E.
Course	Shall comply with the requirements of Standard
Aggregate	Specs Section 703.1 or 703.2.
Fiber	Shall comply with the requirements of ASTM
Reinforcement	C1116.

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	Shall comply with the requirements of Standard
Fine Aggregate	Specs Section 702.1 (except for gradation).
	Shall comply with the requirements of Standard
	Specs Section 707.4.1. Replacement up to 20%
Fly Ash	by weight of cement.
Prepackaged	Shall comply with the requirements of ASTM
Shotcrete	C928.
	Shall be included with the Shotcrete and comply
	with the requirements of Standard Specs Sections
Rebar Mat	709.1 and 709.4.
	Shall comply with the requirements of AASHTO
	M194 and ASTM C494 Type B or D Mineral
Retarders	Admixtures.
	Shall comply with the requirements of Standard
	Specs Section 707.4.3. 85% minimum silicon
	dioxide solids content, not to exceed 8% by
Silica Fume	weight of cement.
Water – Clean	Shall comply with the requirements of Standard
and Potable	Specs Section 715.7.
Water-Reducer	Shall comply with the requirements of AASHTO
and	M194/ASTM C494 Type A, D, F, or G.
Superplastisizer	
Welded Wire	Shall comply with the requirements of AASHTO
Fabric	M55/ASTM A185 or A497.

3.3.4.4. Aggregate Material: Aggregate to be used for the shotcrete must meet the strength and durability requirements of AASHTO, as applicable, and the following gradation requirements.

Sieve Size	Percent Passing by Weight
1/2"	100
3/8"	90-100
No. 4	70-85
No. 8	50-70
No. 16	35-55
No. 30	20-35
No. 50	8-20
No. 100	2-10

3.3.4.4.1. The proportion of the shotcrete must be pumpable with the concrete pump furnished for the work, with a cementing materials content of at least 24.3 pounds per cubic foot and water/cement ratio not greater than 0.55. Admixtures not

approved by the WVDOH District Engineer or designee are not acceptable.

- **3.3.4.4.2.** Thoroughly mix admixtures into the shotcrete per the rate specified by the manufacturer. Use only accelerators compatible with the cement, non-corrosive steel and not promoting other detrimental effects such as cracking or excessive shrinkage. The maximum allowable chloride ion content of all ingredients is 0.10% when tested to AASHTO T260.
- **3.3.4.4.3.** Air entrainment is not required for temporary shotcrete construction facings but shall be used in all exposed permanent shotcrete. A minimum 8.5% +/- 2.5% air entrainment shall be in the concrete mixture before shooting for wet-mix shotcrete. Dry-mix shotcrete may be used, provided that the in-place air entrainment shall be checked at least once at the beginning of the operation and once after restarting the shotcrete process after any breaks each day and found that the in-place mixture has a minimum of 4% air entrainment.
- 3.3.4.4.4. Vendor shall provide shotcrete with a minimum design compressive strength of 2000 psi in three days and 4000 psi in 28 days when tested in accordance with ASTM C1140 and ASTM C42. Results from at least one (1) test panel for each mix design shall be submitted to the WVDOH District Engineer or designee prior to construction unless otherwise directed by the WVDOH District Engineer or designee.
- **3.3.4.4.5.** The batch aggregate and cement by weight or by volume must be in accordance with the requirements of ASTM C94 or AASHTO M241/ASTM C685. The mixing equipment must thoroughly blend the materials in sufficient quantity to maintain placing continuity. Ready Mix shotcrete must comply with AASHTO M157. The batch, delivery and placement of shotcrete must be within 90 minutes of mixing. The use of retarding admixtures may extend application time beyond 90 minutes if approved by the WVDOH District Engineer or designee.
- **3.3.4.5.** <u>Approved Source Plant:</u> After award and prior to each contracted project, the Vendor shall provide a sample and method of placement of shotcrete, meeting all requirements of Section 3.3.4, to the

WVDOH, Materials Controls, Soils and Testing Division for approval. Only after WVDOH approval shall the vendor proceed with shotcrete installation. WVDOH reserves the right to collect samples for testing at any time during the completion of a project.

For each plant it sources for ATT A Contract Items 1 through 25, the Vendor shall supply the Agency with the plant's name, certification status, and physical location on the Attachment C ("ATT C") Source Plant Info Form. Failure to submit ATT C may result in disqualification of Vendor's bid.

- **3.3.4.6.** Shotcrete Installation: The Contractor shall abide by the following shotcrete installation instructions. All installation shall be handled by the Contractor unless otherwise specified herewith:
 - **3.3.4.6.1.** Work shall only begin after receiving approval of the design mix and continue if the specified strengths are obtained. The Contractor is to provide all work required to obtain satisfactory strength tests at no additional cost to WVDOH.
 - **3.3.4.6.2.** The Contractor shall maintain the face of the excavation and other surfaces clean of loose materials, mud, rebound, overspray, or other foreign matter that could prevent or reduce shotcrete bond. Any surface materials that are loosened or damaged, to a sufficient depth should be removed. Any material that loosens during application shall be removed. The adjacent surfaces shall be protected from overspray during shooting. During the excavation and cleaning process, the ground shall not be loosened, cracked, or shattered. Water flow shall be diverted and standing water shall be removed so that shotcrete placement will not be affected.
 - **3.3.4.6.3.** The Contractor shall maintain a clean, dry, oil-free supply of compressed air sufficient for maintaining adequate nozzle velocity, at all times. The equipment shall be capable of delivering the premixed material accurately, uniformly, and continuously through the delivery hose. To prevent sagging or sloughing of freshly applied shotcrete, control must be taken with the application thickness, nozzle technique, air pressure and rate of shotcrete placement.

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- **3.3.4.6.4.** Shotcrete shall be applied from the lower part of the area upward to prevent accumulation of rebound. The placement of the nozzle shall be at a distance and approximately perpendicular to the working face so that rebound will be minimal and compaction will be maximized. Rebound shall not be worked back into the construction. Where shotcrete is used to complete the top ungrouted zone of the nail drill-hole near the face, the nozzle shall be positioned into the mouth of the drill-hole to completely fill the void.
- **3.3.4.6.5.** The shotcrete shall be applied from the lower part of the area upward to prevent accumulation of rebound. The placement of the nozzle shall be at a distance and approximately perpendicular to the working face so that rebound will be minimal and compaction will be maximized. Rebound shall not be worked back into the construction. Where shotcrete is used to complete the top ungrouted zone of the nail drill-hole near the face, the nozzle shall be positioned into the mouth of the drill-hole to completely fill the void.
- **3.3.4.6.6.** A clearly defined pattern of continuous horizontal or vertical ridges or depressions at the reinforcing elements after they are covered with shotcrete will be considered as indication of insufficient reinforcement cover or poor nozzle techniques. In this case, immediately suspend the application of shotcrete and implement corrective measures. Correct the shotcreting procedure by adjusting the nozzle distance and orientation, ensuring adequate cover over the reinforcement, and adjusting the water content of the shotcrete mix or other means.
- **3.3.4.6.7.** Any shotcrete surface defects shall be repaired after placement as soon as possible. Any shotcrete that exhibits segregation, honeycombing, lamination, void or sand pockets, or excessive shrinkage cracking shall be removed and replaced. In-place shotcrete not meeting the specified strength requirement will be subject to remediation. Possible remediation options include placement of additional shotcrete thickness or removal and replacement, at no additional cost to the WVDOH.
- **3.3.4.6.8.** A minimum reinforcement overlap shall be provided at reinforcement splice joints as per industry standards. The

surface of a joint shall be cleaned and wet before adjacent shotcrete is applied. Where shotcrete is used to complete the top ungrouted zone of the nail drill-hole near the face, to the maximum extent practical, clean and dampen the upper grout surface to receive shotcrete, like a construction joint.

- **3.3.4.6.9.** Shotcrete shall not be installed on frozen surfaces or ground. Cold weather protection shall be maintained if the temperature, after placement, is below 32° F until the inplace compressive strength of the shotcrete is greater than 725 psi. Cold weather protection may require blankets, heating under tents, or other means acceptable to the WVDOH. The shotcrete mix shall be deposited at a temperature of not less than 32°F or more than 100°F.
- **3.3.4.6.10.** During high wind or rain, unless suitable protective covers, enclosures or wind breaks are installed, shotcrete application shall be suspended. Any newly placed shotcrete that has been exposed to rain making the shotcrete unacceptable shall be removed and replaced. A polyethylene film or equivalent shall be used to protect the work from exposure to adverse weather. During hot weather or dry, windy conditions, the newly placed shotcrete shall be protected from drying by moisture curing until curing compound can be applied. Curing compound shall be applied with 24 hours of placement.
- **3.3.5.** Contract Item 17: Extra Shoulder Build-up of Shotcrete When required to meet the approved drawings and plans, the Contractor may be required to provide a 24-inch Extra Shoulder Build-up which is shotcrete formed outboard of the wall at the road level. Vendor shall bid one price per linear foot of extra shoulder build-up of shotcrete on ATT A.
- **3.3.6.** Contract Item 18: Concrete Masonry Units Split face Concrete Masonry Units are required to meet ASTM C-90 criteria to construct necessary Geosynthetically Confined Soil (GCS) walls. WVDOH forces, following methods and designs shown on plans, will perform installation. Vendor shall bid one price per concrete masonry unit on ATT A.
- **3.3.7.** Contract Item 19: Geosynthetic Fabric Geosynthetic fabric is a woven polypropylene sheet with a wide width tensile capacity of nominally 175 pounds per inch for GCS walls. WVDOH forces, following methods and designs shown on plans, will perform installation. Vendor shall bid one price per square foot of geosynthetic fabric on ATT A.

- **3.3.8.** Wire Mesh Surface Treatment WVDOH will approve the measurement of wire mesh surface treatment in square feet, properly installed and tensioned to the slope by welding or bolting steel plates with central holes over protruding soil nail tips. Vendor shall bid one price per square foot for the following on ATT A:
 - **3.3.8.1. Contract Item 20: High Tensile Diamond Mesh** Shall meet the following requirements:

Contract Item 20	Requirement		
Wire Diameter	0.120 inches		
	Zinc coated by the Zn/Al process		
Wire Coating	(minimum Zinc Coating 0.80 oz/sf)		
Tensile strength of wire	75 ksi		

3.3.8.2. Contract Item 21: High-Capacity Double Twist Hexagonal Mesh - Shall be manufactured in accordance with ASTM A975.97 and meet the following requirements:

Contract Item 21	Requirement		
Wire Diameter	0.120 inches		
	Hot dip galvanized, finish 5, class-3,		
	Zinc Coating. (ASTM A-641, tested		
Wire Coating	in accordance with ASTM A370-92)		
	Soft temper in accordance with		
Tensile strength of wire	ASTM A641-92		
Weight of Zinc Coating	Determined by ASTM A-90		
of Wire	(normally 0.85 oz/sf)		
	High grade or special high grade in		
Grade of Zinc Coating	accordance with ASTM 8-6, Table 1		
Uniformity of Coating	Determined by ASTM A-239		
	not less than 12% in accordance		
	with ASTM		
Elongation	A370-92		

3.3.9. Contract Item 22: Galvanized Steel Plates (including Bolts) - Shall meet the following requirements:

Contract Item 22	Requirement
Dimensions	8" x 8" x 3/8" or equivalent
	Minimum 36 ksi mild steel as required by ASTM A36
Material	or greater
Galvanization	Hot dip Zinc Galvanized

- 3.3.10. Contract Item 23: Strip Drains To eliminate water build-up behind the shotcrete wall, the vendor shall use at a minimum, 4-inch strip drains that are full width of the shotcrete (downslope) at a maximum of 6-foot centers. Drains shall meet the requirements of Standard Specs Section 714.19 and extend beyond the face of the shotcrete at the downhill face. Vendor shall source HDPE manufacturers from the WVDOH Plastics Products approved list. http://www.transportation.wv.gov/highways/mcst/Pages/Listings.aspx
- **3.3.11. Horizontal Drains:** Horizontal drains shall consist of 1.5-inch diameter (or larger) slotted schedule 80 (or thicker) PVC pipe, conforming to the requirements of ASTM Designation: D 1785. These pipes are inserted into drilled holes to reduce water pressures within slide masses.
 - **3.3.11.1. Contract Item 24: Slotted Pipe** Shall have two rows of slots. The rows shall be in the longitudinal direction of the pipe and the slots shall be cut in the circumferential direction of the pipe. The rows shall be centered on two of the third points (120 degrees apart) of the pipe circumference. Each row of slots shall conform to one of the configurations in the following table. Slots shall be spaced uniformly along the pipe. The minimum opening will be measured on the inner surface of the pipe.

Number of Slots (±3) Per Meter (3.0 feet)	Width of Slot Millimeters (inches)	Minimum Opening Per Meter (3 feet) Square Millimeters (in ²)	
72	1.27 (0.05)	2110 (3.27)	
75	0.51 (0.02)	975 (1.50)	
151	0.25 (0.01)	975 (1.50)	

3.3.11.2. Contract Item 25: Perforated Pipe - Shall have three rows of perforations with one row on each side of the pipe and the third row in the top. The perforations shall be 10 mm (0.40 in) in diameter spaced at 75 mm (3.0 in) centers with the top perforations staggered in relation with the holes on either side. Fittings for the PVC pipe shall be Schedule 80 Type II PVC solvent weld type fittings conforming to the requirements in ASTM Designation: D 2467. Machined male and female ends may be used in lieu of couplings. Un slotted or un-perforated PVC pipe, between 1 m (3.0 ft) to 9 m (29.5 ft) in length, shall be provided at the outlet of the drain.

3.3.12. Mobilization / Demobilization:

3.3.12.1. Contract Item 26: Standard Projects - The awarded Contractor must have at least three qualified crews readily available for deployment to work in multiple locations simultaneously. Unless otherwise agreed upon by the Contractor and the WVDOH District Engineer or designee, the Contractor shall have 14 working days to perform all work and operations necessary to load and unload equipment, move personnel, supplies and incidentals to and from the project site to accomplish all other miscellaneous associated work items or operations that must be performed, including cost that must be incurred, to mobilize and begin work on a standard project.

Soil nail installation rigs must be capable of either installing launched soil nails or drilling a hole up to 80 feet in length and six inches in diameter.

3.3.12.2. Contract Item 27: Emergency Work – Upon approval by the WVDOH District Engineer or designee, the Contractor shall have 48 hours or an agreed upon timeframe between the WVDOH and the Contractor to perform all work and operations necessary to mobilize and begin work on an emergency project, including all the same procedures as a standard project per Section 3.3.12.1. Emergency Work shall be invoiced by Vendor at 1.25 times the amount bid for Contract Item(s) on the Pricing Pages.

If the equipment can be transported under its own power to an adjacent site within a reasonable distance, as agreed upon by the WVDOH and the Contractor. Mobilization/demobilization will not be paid by the WVDOH for the second site.

- **3.3.13. Contract Items 28-31: Maintenance of Traffic** While undergoing improvement, the project site shall be kept open to traffic in such condition that both local and through traffic will be adequately and safely accommodated. Unless otherwise agreed upon by all parties and included in project proposal, the maintenance of traffic shall be provided by the Contractor.
- 3.4. Plans and Details/Proposal: The awarded Contractor will provide all necessary engineering plans and details/proposals required to successfully repair slides when requested, at the time of need by the WVDOH. Any necessary core drilling, rotary drilling, percussion drilling, auger drilling or driven casing required to produce plans are the responsibility of the Contractor. The awarded Contractor will provide all necessary engineering plans and details/proposal required to successfully repair slides when requested, at the time of need by the WVDOH. Any excavation required will be measured by crew hours (Contract Item 32). The disposal of excavated materials from

the right-of-way is the responsibility of the Contractor and will be paid at the contract unit price per hour. Any necessary core drilling, rotary drilling, percussion drilling, auger drilling or driven casing required to produce plans are the responsibility of the Contractor.

- **3.4.1.** The Contractor shall be responsible for maintaining record of the volume (measured by cubic yard) and location (by GPS coordinates) of material removed from a project site and provide the information upon request. In the event excavated materials are transported to a location other than the failure site, the Vendor shall record the GPS coordinates of the excavated site, the coordinates of the dumped location as well as the type and quantity of materials transported. The Vendor shall also be responsible for ensuring the materials are placed on DOH right-of-way while adhering to any environmental regulations or site-specific conditions.
- **3.4.2.** The engineering plans and details/proposal shall be stamped by a Registered Professional Engineer, licensed in the State of West Virginia, under the full-time employment of the Contractor, who is knowledgeable in the design and implementation of slope stabilization with soil nails and related work. Changes or deviations from the approved submittals must be resubmitted for approval. No adjustments in project time will be allowed due to incomplete submittals. The WVDOH reserves the right to agree to an adjustment in project time when in the best interest of the State of WV. The engineering plans and details/proposal shall include, at a minimum, the following information:
 - A description of the soil nail construction sequence and a schedule for the work.
 - The slip length per foot, the failure width per foot and the failure height (depth) per foot.
 - A description of the size and spacing of the nail to be placed.
 - All necessary details to successfully construct any temporary facing and drainage system.
 - The nail angle entry shall be within plus or minus 3 degrees from the approved plans. The nails shall not extend beyond the limits of the permanent easement or right of way. Subsidence or physical damage by such operations shall be cause for immediate cessation of operations and repairs at the Contractor's expense.
- **3.5.** Equipment Lay Down and Storage: The availability of storage and lay down areas for Vendor equipment, materials, etc., on WVDOH property shall be at the sole discretion of the WVDOH District Engineer or designee. Should placement or storage of Vendor equipment, materials, etc., be permitted, the WVDOH assumes no responsibility for damages, theft, injury, or vandalism to Vendor owned property while stationed or stored WVDOH property.

- **3.6.** Personnel and Equipment Requirements: The Contractor and his personnel shall meet the following requirements and must provide the information requested on the Attachment B Personnel Experience Forms ("ATT B"), which are provided as attachments to the solicitation and must be submitted with the bid. The awarded Contractor must have at least three qualified crews readily available for deployment to work in multiple locations simultaneously. A crew shall minimally consist of no less than one of each of those identified in Sections 3.6.1 through 3.6.4.
 - **3.6.1. Project Manager:** The Project Manager shall have successfully engineered and constructed no less than nine projects (three projects of each nail type bid) within the last three years. All soil nail work must be self-performed to meet this requirement. On the **ATT B -Project Manager** tab, the Contractor shall provide, at a minimum, the name of nine projects (three of each nail type being bid) and the dates of each project.

Supervisor Engineer: The employee shall have successfully stabilized an active landslide on a public roadway and designed no less than nine projects (three projects of each nail type being bid) within the last three years while maintaining traffic on the impacted roadway. <u>All soil nail work must be self-performed to meet this requirement</u>. On the **ATT B - Supervisor Engineer** tab, the Contractor shall provide, at a minimum, the name of one Supervisor Engineer, the name of nine projects of which he was the Supervisor Engineer (three of each nail type being bid) and the dates of each project.

Equipment Operator: Equipment Operators must have successfully operated rigs on no less than nine projects, three of each nail type being bid, within the last three years for which successfully stabilized an active landslide on an active, public roadway while maintaining traffic on the impacted roadway using the nail type bid: Launched Soil Nails, Permanently Cased Soil Nails and Self Drilling Soil Nails. All soil nail work must be self-performed to meet this requirement. On the **ATT B - Equipment Operator** tab, the Contractor shall provide, at a minimum, the name of one Equipment Operator, the name of nine projects of which he was the Equipment Operator, three of each nail type being bid and the dates of each project.

- **3.6.2.** Foreman: The Foreman must have successfully managed no less than three projects within the last three years with this Contractor, which successfully stabilized an active landslide using soil nails on a active, public roadway while maintaining traffic on the impacted roadway. On the ATT B Foreman-Nozzleman tab, the Contractor shall provide, at a minimum, one Foreman's name, the name of three projects of which the named individual was the Foreman, the nail type, and dates of each project.
- **3.6.3.** Nozzleman: Nozzlemen or any worker applying shotcrete must be certified as an ACI Shotcrete Nozzleman as outlined in ACI Certification Publication CP-

60. The Contractor is fully responsible for training, operations and results of work performed by the Nozzleman. On the **ATT B - Foreman-Nozzleman** tab the Contractor shall provide, at a minimum, one Nozzleman's name, the Nozzleman's ACI Certification Number and the number of square feet of shotcrete applied by the named individual in the last three years, including the dates of installation.

- **3.6.4.** In addition to the personnel listed above, all other laborers and workers employed by the Contractor should possess knowledge of installation of soil nails and general roadway maintenance.
- **3.7.** Safety Requirements: The Contractor shall be responsible for meeting all federal, state, and local safety code and accepted industry standard requirements.
 - **3.7.1.** The Contractor's personnel/crew shall obey all traffic and safety rules and regulations and shall not create any hazardous conditions with the operation of the equipment. All Contractor supplied equipment, tools and personal safety equipment shall meet or exceed the safety standards specified for such items by ANSI Z133.1-2017.
 - **3.7.2.** All staff/crew shall wear approved hard hat, protective clothing, ANSI approved safety vests and any other requirements to meet OSHA standards.
- **3.8.** Pandemic-Response Safety Protocols: In addition to the Vendor's established protocols and the WVDOH's established safety protocols outlined in the Standard Specs, as amended, the Vendor and the Vendor's personnel/workers shall adhere to all WVDOH's pandemic response protocols while present at a WVDOH jobsite. Vendors may obtain the WVDOH's pandemic-response by contacting the WVDOH District Engineer or their designee.
- **3.9.** Soil Nail Sampling and Testing: Acceptance of the Soil Nails will be by Contractor's certification to the WVDOH, stating that the material composition and installation conforms to these specifications, combined with visual inspection of the in-place Soil Nail and Shotcrete by the WVDOH District Engineer or designee. The Contractor shall test one soil nail per site. The WVDOH reserves the right to require additional testing by the Contractor. Any requested testing of Soil Nails will follow these procedures:
 - **3.9.1. Equipment:** A dial gauge capable of measuring to 25.4 um (0.001 in) shall be used to measure movement. A hydraulic jack and gauge calibrated as a unit shall be used to apply the test load. The pressure gauge shall be graduated in 690 kPA (100psi) increments or less and used to measure the applied load. The test loads shall be applied incrementally.
 - **3.9.2.** Pull-out testing: Install one nail as a non-service nail and load test to pull-out failure. Pull-out failure is defined as movement more than 1 mm (0.04 in)

between the 1-minute and 10-minute reading of 2 mm(0.08 in) per log cycle of time over a minimum load hold period of 60 minutes. The test nails shall be installed and tested as each level at a rate consistent with construction operations. The test length of nail shall be chosen to cause pull-out failure to steel yield, but it shall not be less than 2.4 m (8 ft) or 2.1 m (7 ft) where construction boundaries shown on the contract plans do not allow 2.4 m (8 ft) nails. A minimum ungrouted zone of 1 m (3 ft) in length to the face shall be provided.

- **3.9.2.1.** Each test soil nail using the drilling method shall be grouted in place as part of a regular production grouting process. After grouting, the nail shall not be loaded for a minimum of three days. Reaction frames should not bear on the shotcrete face within a 1 m (3 ft) radius of the center of the drilled hole.
- **3.9.2.2.** The pull-out test shall be made by incrementally loading the nail. The nail movement shall be measured and recorded to the nearest 25.4 um (0.001 in) with respect to the independent fixed reference point at each increment load. The test shall be monitored with a pressure gauge. The load hold period shall start as soon as the test load is applied. Movement shall be recorded at 0, 1, 2, 3, 4, 5, 6 and 10 minutes. If the load is extended, the nail movement shall be recorded at 15, 25, 30, 45 and 60 minutes. Each increment of load shall be no greater than 25% of the design load of the nail tested. The loading shall be terminated either at failure or earlier at the option of the Contractor, if at least twice the design unit bond stress is demonstrated

3.9.3. Acceptance Criteria:

- **3.9.3.1.** A nail deemed acceptable if the unit bond stress at a failure load or test termination is equal to or greater than twice the design unit bond stress. Unacceptable test results shall result in modifications to design or construction procedures. Any modifications of design or construction procedures shall be at the Contractor's expense and the verification testing procedure shall be repeated as required by the WVDOH. Graphs shall be plotted during the test of deflection against load.
- **3.9.3.2.** Acceptance of installed shotcrete will be by visual inspection by the WVDOH District Engineer or designee. Materials found not in compliance with the requirements of this contract may be rejected, removed, and replaced at the Contractor's expense

4. CONTRACT AWARD:

- **4.1. Contract Award:** The Contract is intended to provide Agencies with a purchase price on all Contract Items. The Contract shall be awarded to the Vendor that provides the Contract Items meeting the required specifications for the lowest overall total cost as shown on **ATT A**.
- 4.2. Contract Award Transition: Upon the award of this contract, the WVDOH Operations Division will announce the effective date of use of this contract to the Districts and the Vendors, whether it is by the effective date, the completed and encumbered date, or an established date by the WVDOH. Upon the announced effective date of use, any Delivery Order issued prior to the award of the contract shall remain in effect and should not be cancelled until that Delivery Order is filled; however, after ten (10) working days of the Districts and Vendors notice, any Delivery Order that has not been completely filled by the Vendors shall NOT be completed, and a cancellation notice will be sent to that Vendor from the issuing District for cancellation of the balance of that Delivery Order only. No Delivery Orders from prior contracts should be held open by the Districts or Vendors longer than ten (10) working days after the effective date of use is announced for the new contract.

This directive is issued to assist the Districts and the Vendors when fulfilling open Delivery Orders only. It is NOT issued to cause harm or to take contracts from one Vendor to give to another Vendor, but to establish a transition process from one contract into another contract.

- **4.3. Pricing Pages:** Vendor shall complete **Attachment A Pricing Pages ("ATT A")** by providing a Unit price per item. Failure to complete **ATT A** in its entirety may result in the Vendor's bid being disqualified.
 - **4.3.1. ATT A** contains a list of Contract Items and estimated purchase volumes. The estimated purchase volume for each item represents the approximate volume of anticipated purchases only. The approximate quantities on **ATT A** is for evaluation purposes only. Actual quantities will be provided to the awarded vendor on a Delivery Order at the time of need. No future use of the Contract or any individual item is guaranteed or implied.

4.3.2. Each unit price shall include labor, equipment, materials and incidental costs associated with the Contract Item being bid.

4.3.3. <u>Vendor should type or electronically enter the information into ATT A to</u> <u>prevent errors in the evaluation</u>. In most cases, the Vendor can request an electronic copy of the Pricing Pages spreadsheet for bid purposes by sending an email request to the following address: <u>Kristy.E.James@wv.gov</u>.

- **4.3.4.** Changing the Contract Item Descriptions, Units of Measure, or Estimated Quantities on the **ATT A** shall result in the disqualification of altered Contract Item bid. In circumstances when all Contract Items must be bid for evaluation and award purposes, the disqualification of any Contract Item will result in disqualification of the entire bid.
- **4.4. Price Adjustments:** In the event of a significant price increase of component material or rental equipment, if applicable, utilized to perform or under this Contract, that is not the fault of the Vendor, the contract pricing, may be equitably adjusted by change order as more fully described below.
 - **4.4.1.** A change in price is considered significant if the price of the component material or rental equipment increases by 20% or more from the original bid amount.
 - **4.4.2.** Any request for a price increase under this clause must be supported by: price quotes for the component material or rental equipment for which a change is being sought; invoices showing amounts actually paid for the component materials or rental equipment; and any other evidence that supports the increase request.
 - **4.4.3.** The quotes provided to support the price increase request must be the quotes that Vendor actually relied on when submitting its bid and both the quote and the amount ultimately paid must have resulted from an arm's length transaction with an unrelated party.
 - **4.4.4.** Vendor must also show that the significant price increase would have been incurred if the owner had purchased the material or rental equipment directly from the supplier.
 - **4.4.5.** Price adjustments will be granted or denied at the sole and absolute discretion of the State.
 - **4.4.6.** Price adjustments will only be considered annually at the contract expiration/renewal date. Vendor must submit price adjustment requests 60 days prior to the expiration/renewal date to be considered.
 - **4.4.7.** Vendor documentation for price adjustments shall be submitted to <u>DOHOperationsProcurement@wv.gov</u> for initial review.
 - **4.4.8.** Price adjustments shall be established by a written Change Order, which must be reviewed and approved by the Purchasing Division, and as to form by the Attorney General's Office, in order to be effective. Adjusted pricing will not take effect until the effective date of such Change Order and cannot be retroactive.

5. ORDERING AND PAYMENT:

- **5.1.** Ordering: Vendor shall accept orders through wvOASIS, regular mail, facsimile, email, or any other written forms of communication. Vendor shall maintain and keep current its phone numbers, fax number, e-mail address, locations, and ordering/billing/ payment addresses with WVDOH and in wvOASIS. Vendor may, but is not required to, accept on-line orders through a secure internet ordering portal/website. If Vendor has the ability to accept on-line orders, it should include in its response a brief description of how Agencies may utilize the on-line ordering system. Vendor shall ensure that its online ordering system is properly secured prior to processing Agency orders online.
- 5.2. Delivery Order: WVDOH will initiate the Delivery Order by identifying locations of need. The Delivery Order will be generated by a WVDOH Engineer or designee. The order should be completed on a WV-39 Blanket Release Order. The order should detail the need and location information of the work to be completed per contract item, as well as the tentative start and end dates, to be agreed upon as the official start and end dates. Emergencies shall be prominently noted on the Delivery Order. Once complete, the Delivery Orders shall be sent to Vendor via fax, email, or postal mail. <u>Any verbal communications to initiate or make modifications to a project from this contract are not acceptable as a Delivery Order.</u>
- **5.3.** Inspection and Approval: The WVDOH will approve payment at such time as the job site work has been completed, in accordance with the provisions of this agreement, and has been verified by the WVDOH Engineer or designee.
- 5.4. Payment: Upon completion of the work indicated on the Delivery Order, Vendor shall accept payment in accordance with the payment procedures of the State of West Virginia. The State of West Virginia currently utilizes a Purchasing Card program, administered under contract by a banking institution, as well as Electronic Funds Transfer as methods to process payment for goods and services. The Vendor shall accept the State of West Virginia's Purchasing Card and Electronic Funds Transfer for payment of orders under this Contract. Electronic Funds Transfer for payment is available through the WV State Auditor's Office. The Vendor may visit the WV State Auditor's website (wvsao.gov) for all necessary forms and instructions. Payment method may be dictated at WVDOH's discretion.
 - **5.4.1.** Inspection and Approval: The WVDOH will approve payment at such time as the job site work has been completed, in accordance with the provisions of this agreement, and has been verified by the WVDOH Engineer or designee.

6. PROJECT ACCEPTANCE, DELIVERY, AND RETURN:

- 6.1. Project Acceptance and Written Verification of Receipt: Upon receipt of a WVDOH Delivery Order, the Vendor shall advise the WVDOH in writing within five (5) calendar days of their acceptance or refusal of the Delivery Order. As verification of receipt, Vendor must provide written acknowledgement of any Delivery Orders and any Revisions/Modifications thereto sent by WVDOH. Failure to provide the WVDOH with written acknowledgement of any Delivery Orders/Revisions within five days of the Order being sent shall be considered refusal of the Delivery Order. In the event of refusal, the WVDOH at its own discretion shall cancel the Delivery Order and may seek to cancel the Delivery Order and obtain the goods or services from the next low bid Vendor or proceed with an Emergency Purchase from the open market.
- 6.2. Negotiation of Dates: The WVDOH shall have the option to negotiate with the Vendor, the project's tentative start and end dates. Project work shall be continuous to completion unless otherwise approved in writing by the WVDOH District Engineer or designee.
- 6.3. Delivery Time: Vendor shall deliver standard orders no later than fourteen (14) working days or an agreed upon acceptable date by the WVDOH and Vendor, after Vendor's receipt of a Delivery Order. There shall be a minimum aggregate order quantity of twenty-five (25) nails per job site, unless otherwise grouped with additional nearby sites as placed on the Delivery Order and agreed upon by the WVDOH and the Contractor. Vendor shall deliver emergency orders within 48 hours or an agreed upon acceptable date by the WVDOH and the Vendor, after a Delivery Order is received by the Vendor.

Starting times and scheduled hours may vary and will be at the discretion of the WVDOH District Engineer or designee. All work performed under this contract shall be performed Monday through Friday. Saturday work may be performed if approved in advance by the WVDOH District Engineer or designee. Work will not be performed on any state or federal holiday unless approved in advance by the WVDOH District Engineer or designee.

6.4. Adverse Weather Conditions: Unsuitable/adverse/inclement weather conditions may dictate the work schedule. It is preferred that operations be suspended immediately when an inclement weather event begins or if the WVDOH District Engineer or their designee determines that an inclement weather event is imminent. If working conditions are dangerous or unsuitable for the WVDOH, Vendor, or general public, work shall be suspended by the WVDOH Engineer/designee. If needed, revision to the project's start and end date may be negotiated by the Vendor and the WVDOH Engineer/designee. After a weather-related suspension of work, the WVDOH District Engineer or their designee shall determine and convey in writing, such Delivery Order changes and when work shall resume, followed by the Vendor's written acknowledgement, per Sections 6.2 of this Contract Solicitation.

6.5. Late Delivery: The Agency placing the order under this Contract must be notified in writing if orders will be delayed for any reason. Any delay in delivery that could cause harm to an Agency will be grounds for cancellation of the delayed order, and/or obtaining the items ordered from a third party. The Agency placing the Delivery Order under this Contract mut be notified in writing by the Vendor no later than five (5) business days prior to the scheduled start date from the Agency's order. Any failure to notify, acknowledge receipt of WVDOH's written Delivery Orders/Revisions resulting in delivery delay, or failure to start or complete the project per the WVDOH scheduled due dates may be determined by the WVDOH at its sole discretion as harmful to the Agency and as such, shall result in WVDOH's cancellation of the Delivery Order and application of Liquidated Damages.

Any Agency seeking to obtain items from a third party under this provision must first obtain approval of the WVDOH Finance & Administration Division, Budget & Procurement Division.

6.5.1. Liquidated Damages: If the Vendor's work completion or corrections of deficient work exceeds the Delivery Order completion due date/timeframe, the Vendor shall agree that no extension of contract time will be granted unless Liquidated Damages are applied by the WVDOH in the form of an off-set reduction to the total amount of the Vendor's final invoice. The WVDOH shall calculate Liquidated Damages per project beginning on day one (1) after the WVDOH's specified Delivery Order due date, in accordance with this Section, the Contract's Terms and Conditions, and the Standard Specs Section 108.7, as amended.

Original Contract Amount		Daily Charges	
For More Than	To and Including	Per Calendar Day	
50	\$500,000	\$300	
\$500,000	\$2,000,000	\$600	
\$2,000,000	\$10,000,000	\$1,500	
\$10,000,000	\$25,000,000	\$3,000	
\$25,000,000		\$4,000	

TABLE 108.7.1 School of Liquidated Demonstra

6.6. Delivery Payment/Risk of Loss: Standard order delivery shall be F.O.B. destination to the Agency's location. Vendor shall include the cost/discount of standard order delivery charges in its bid pricing and is not permitted to charge the Agency separately for such delivery. The Agency will pay delivery charges on all emergency orders provided that Vendor invoices those delivery costs as a separate charge with the original freight bill attached to the invoice.

Deliveries made by the Vendor shall be comprised only of contract items intended for delivery at that location and specified in the pricing pages, contract specifications, or WV-39 Blanket Release Order.

- 6.7. Return of Unacceptable Items: If the Agency deems the Contract Items to be unacceptable, the Contract Items shall be returned to Vendor at Vendor's expense and with no restocking charge. Vendor shall either make arrangements for the return within five (5) days of being notified that items are unacceptable or permit the Agency to arrange for the return and reimburse Agency for delivery expenses. If the original packaging cannot be utilized for the return, Vendor will supply the Agency with appropriate return packaging upon request. All returns of unacceptable items shall be F.O.B. the Agency's location. The returned product shall either be replaced, or the Agency shall receive a full credit or refund for the purchase price, at the Agency's discretion.
- **6.8.** Return Due to Agency Error: Items ordered in error by the Agency will be returned for credit within thirty (30) days of receipt, F.O.B. Vendor's location. Vendor shall not charge a restocking fee if returned products are in a resalable condition. Items shall be deemed to be in a resalable condition if they are unused and in the original packaging. Any restocking fee for items not in a resalable condition shall be the lower of the Vendor's customary restocking fee or 5% of the total invoiced value of the returned items.

7. VENDOR DEFAULT:

- 7.1. The following shall be considered a Vendor default under this Contract:
 - 7.1.1. Failure to provide Contract Items in accordance with the requirements contained herein.
 - 7.1.2. Failure to comply with other specifications and requirements contained herein.
 - **7.1.3.** Failure to comply with any laws, rules, and ordinances applicable to the Contract Services provided under this Contract.
 - 7.1.4. Failure to remedy deficient performance upon request.
- 7.2. The following remedies shall be available to Agency upon default:
 - 7.2.1. Immediate cancellation of the Contract.
 - 7.2.2. Immediate cancellation of one or more release orders issued under this Contract.
 - 7.2.3. Any other remedies available in law or equity.

8. MISCELLANEOUS:

- **8.1.** No Substitutions: Vendor shall supply only Contract Items submitted in response to the Solicitation unless a contract modification is approved in accordance with the provisions contained in this Contract.
- **8.2.** Vendor Supply: Vendor must carry sufficient inventory of the Contract Items being offered to fulfill its obligations under this Contract. By signing its bid, Vendor certifies that it can supply the Contract Items contained it its bid response.
- 8.3. **Reports:** Vendor shall provide quarterly reports and annual summaries to the Agency showing the Agency's items purchased, quantities of items purchased, and total dollar value of the items purchased. Vendor shall also provide reports, upon request, showing the items purchased during the term of this Contract, the quantity purchased for each of those items and the total value of purchases for each of those items. Failure to supply such reports may be grounds for cancellation of this Contract.
- 8.4. Contract Manager: During its performance of this Contract, Vendor must designate and maintain a primary contract manager responsible for overseeing Vendor's responsibilities under this Contract. The Contract manager must be available during normal business hours to address any customer service or other issues related to this Contract. Vendor should list its Contract manager and his or her contact information below.

Contract Manager:	John Soderberg
Telephone Numbers:	855-579-0536
Fax Number:	888-688-6454
Email Address:	john.soderberg@gsi.us

Vendor shall inform the Agency in writing of any changes to the information provided above within ten (10) calendar days of such changes. Failure to comply may be grounds for cancellation of this contract.

ADDENDUM ACKNOWLEDGEMENT FORM SOLICITATION NO.: DOT2200000027

Instructions: Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

Acknowledgment: I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

Addendum Numbers Received:

(Check the box next to each addendum received)

[x]	Addendum No. 1	[]	Addendum No. 6
[x]	Addendum No. 2	[]	Addendum No. 7
[x]	Addendum No. 3	[]	Addendum No. 8
[x]	Addendum No. 4	[]	Addendum No. 9
[]	Addendum No. 5	[]	Addendum No. 10

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

GeoStabilization International, LLC
Company
 Mm
Authorized Signature
3-30-2022
Date

NOTE: This addendum acknowledgement should be submitted with the bid to expedite document processing. Revised 6/8/2012



State of West Virginia Agency Request for Quote Highways

Proc Folder:	Proc Folder: 1012594			Reason for Modification:
Doc Description:	Addendum 2: 6622C049- S	ADDENDUM 2: MODIFYING BI		
Proc Type:	Agency Master Agreement			
Date issued	Solicitation Closes	Solicitation N	lo	Version
2022-03-24	2022-03-29 14:30	ARFQ 080	B DOT2200000027	3
BID RECEIVING L	OCATION			
FINANCE & ADMIN DIVISION OF HIGH BLDG 5, RM A-260 1900 KANAWHA B CHARLESTON US	IWAYS			
VENDOR				
Vendor Customer	Code: 000000196157			
Vendor Name : 0	GeoStabilization Internation	onal, LLC		
Address: 4475	E 74th Avenue, Suite 100,	Commerce Ci	ty, CO 80022	
Street: 4475 E 7	4th Avenue, Suite 100			
City : Commerce	e City			
State : Colorado		Country :	USA	Zip : 80022
Drinainal Contact	Lioyu kuenn			
Principal Contact	hone: (855) 579-0536		Extension:	

FOR INFORMATION CONTACT	THE BUYER
Kristine E James	
304-414-7104	
kristy.e.james@wv.gov	

Vendor Signature X

/mn/

FEIN# 52-2379754

DATE 03-28-2022

All offers subject to all terms and conditions contained in this solicitation

ADDITIONAL INFORMATION

ADDENDUM 2 IS ISSUED TO MODIFY THE BID OPENING DATE

BID OPENING IS MARCH 29, 2022

TIME IS THE SAME AT 2:30PM

INVOICE	ТО	SHIP TO		
VARIOU	S AGENCY DNS	VARIOUS AGENCY LOCATIONS		
AS INDIO	CATED BY ORDER	AS INDICATED BY	ORDER	
No City US	WV	No City US	WV	
Line	Comm Ln Desc	Qty Unit Issu	e Unit Price	Total Price
Line 1	Comm Ln Desc Highway and road maintenance service	Qty Unit Issu	e Unit Price	Total Price
Line 1 Comm C	Highway and road maintenance service	Qty Unit Issu Specification	e Unit Price Model #	Total Price
1	Highway and road maintenance service			Total Price
1 Comm C 7214100 Extended	Highway and road maintenance service			Total Price
1 Comm C 7214100 Extende Highway	Highway and road maintenance service Code Manufacturer 3 d Description:			Total Price
1 Comm C 7214100 Extende Highway	Highway and road maintenance service Code Manufacturer 3 d Description: and road maintenance service			Total Price

	Document Phase	Document Description	Page 3
DOT2200000027		Addendum 2: 6622C049- Slide Repair Using Soil Nail Method	

ADDITIONAL TERMS AND CONDITIONS

See attached document(s) for additional Terms and Conditions

SOLICITATION NUMBER: ARFQ DOT220000027 Addendum Number: 2

The purpose of this addendum is to modify the solicitation identified as ("Solicitation") to reflect the change(s) identified and described below.

Applicable Addendum Category:

- [</] Modify bid opening date and time
- [] Modify specifications of product or service being sought
- [] Attachment of vendor questions and responses
- [| Attachment of pre-bid sign-in sheet
- [] Correction of error
- [] Other

Description of Modification to Solicitation:

ADDENDUM 2 IS ISSUED TO MODIFY THE BID OPENING DATE

BID OPENING IS MARCH 29, 2022

TIME IS THE SAME AT 2:30PM

Additional Documentation: Documentation related to this Addendum (if any) has been included herewith as Attachment A and is specifically incorporated herein by reference.

Terms and Conditions:

- 1. All provisions of the Solicitation and other addenda not modified herein shall remain in full force and effect.
- 2. Vendor should acknowledge receipt of all addenda issued for this Solicitation by completing an Addendum Acknowledgment, a copy of which is included herewith. Failure to acknowledge addenda may result in bid disqualification. The addendum acknowledgement should be submitted with the bid to expedite document processing.

ATTACHMENT A

-

ADDENDUM ACKNOWLEDGEMENT FORM SOLICITATION NO.: DOT2200000027

Instructions: Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

Acknowledgment: I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

Addendum Numbers Received:

(Check the box next to each addendum received)

[x]	Addendum No. 1	[]	Addendum No. 6
[x]	Addendum No. 2	[]	Addendum No. 7
[x]	Addendum No. 3	[]	Addendum No. 8
[x]	Addendum No. 4	[]	Addendum No. 9
[]	Addendum No. 5	[]	Addendum No. 10

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

GeoStabilization International, LLC
Company
 Mm
Authorized Signature
3-30-2022
Date

NOTE: This addendum acknowledgement should be submitted with the bid to expedite document processing. Revised 6/8/2012



State of West Virginia Agency Request for Quote Highways

Proc Folder:	1012594	Reason for Modification:	
Doc Description	Addendum 3: 6622C049-	ADDENDUM 3 : MODIFY SPECIFICATIONS	
Ргос Туре:	Agency Master Agreemen	t	
Date Issued	Solicitation Closes	Solicitation No	Version
2022-03-25	2022-03-31 14:30	ARFQ 0803 DOT220000002	7 4
BID RECEIVING L	OCATION		
FINANCE & ADMI			
DIVISION OF HIG			
BLDG 5, RM A-26			
1900 KANAWHA E CHARLESTON	WV 25302		
US	VV 25502		
VENDOR			
Vendor Custome	r Code: 000000196157		
Vendor Name : (GeoStabilization Internati	onal, LLC	
Address : 4475	E 74th Avenue, Suite 100,	Commerce City, CO 80022	
Street: 4475 E	74th Avenue, Suite 100		
City : Commerc	e City		
State : Colorado)	Country : USA	Zip : 80022
Delectrol Control	: Lloyd Kuehn		
Principal Contact	-		

FOR INFORMATION CONTACT THE BUYER Kristine E James 304-414-7104 kristy.e.james@wv.gov

Vendor Signature X

FEIN# 52-2379754

DATE 03-28-2022

All offers subject to all terms and conditions contained in this solicitation

ADDITIONAL INFORMATION

ADDENDUM 3 IS ISSUED

1. Modify specifications of product or service being sought

SOLICITATION CLOSING HAS BEEN CHANGED TO 03/31/2022 AT 2:30PM

INVOIC	ETO		Sł	HIP TO			
VARIOUS AGENCY LOCATIONS		LC	VARIOUS AGENCY LOCATIONS				
AS INDI	CATED BY ORDER		AS	AS INDICATED BY ORDER			
No City		WV	No	o City	WV		
US			US	3			
Line	Comm Ln Desc		Qty	Unit Issue	Unit Price	Total Price	
1	Highway and road	d maintenance service					
Comm	Code	Manufacturer	Sp	ecification	Model #		
721410	03						
	ed Description:						
Highway	/ and road maintena	nce service					
SCHED	ULE OF EVENTS						

Line	<u>Event</u>	Event Date	
1	TECHNICAL QUESTIONS DUE AT 10AM	2022-03-18	

	Document Phase	Document Description	Page 3
DOT2200000027		Addendum 3: 6622C049- Slide Repair Using Soil Nail Method	

ADDITIONAL TERMS AND CONDITIONS

See attached document(s) for additional Terms and Conditions

SOLICITATION NUMBER: ARFQ DOT220000027 Addendum Number: 3

The purpose of this addendum is to modify the solicitation identified as ("Solicitation") to reflect the change(s) identified and described below.

Applicable Addendum Category:

- [✓] Modify bid opening date and time
- [/] Modify specifications of product or service being sought
- [] Attachment of vendor questions and responses
- [| Attachment of pre-bid sign-in sheet
- [| Correction of error
- [] Other

Description of Modification to Solicitation:

ADDENDUM 3 IS ISSUED

1. Modify specifications of product or service being sought

SOLICITATION CLOSING HAS BEEN CHANGED TO 03/31/2022 AT 2:30PM

Additional Documentation: Documentation related to this Addendum (if any) has been included herewith as Attachment A and is specifically incorporated herein by reference.

Terms and Conditions:

- 1. All provisions of the Solicitation and other addenda not modified herein shall remain in full force and effect.
- Vendor should acknowledge receipt of all addenda issued for this Solicitation by completing an Addendum Acknowledgment, a copy of which is included herewith. Failure to acknowledge addenda may result in bid disqualification. The addendum acknowledgement should be submitted with the bid to expedite document processing.

ATTACHMENT A

SPECIFICATIONS

1. PURPOSE AND SCOPE: The West Virginia Division of Highways is soliciting bids to establish a Statewide open-end, multi-award contract for labor, equipment, and materials to facilitate "on call" services, as needed, for Slide Repair using the methods of Launched Soil Nails, Permanently Cased Soil Nails, or Self Drilling Soil Nails.

Work shall consist of the Contractor designing plans to stabilize identified slides by internally reinforcing the soil mass with reinforcing elements (Soil Nails) using the installation methods as specified in this solicitation. The stabilization of the slide area shall be constructed from the top of the slide down. The WVDOH will identify locations and direct all work to be performed as specified herein. The Contractor, along with a WVDOH representative, shall review all locations to determine the method to be used as well as applicable design considerations.

WVDOH will provide all permits, guardrail, public notification, site clearing, environmental controls, and obtain access to adjacent property as needed.

- 2. DEFINITIONS: The terms listed below shall have the following meanings assigned to them throughout and for the purpose of this Solicitation. Additional definitions can be found in Section 2 of the General Terms and Conditions.
 - 2.1. "AASHTO" The American Association of State Highway and Transportation Officials is a standard body which publishes specifications, tests protocols, and guidelines that are used in highway design and construction throughout the United States. Reference: <u>www.transportation.org</u>
 - 2.2. "ACI" American Concrete Institute. Reference: <u>www.concrete.org</u>
 - 2.3. "ANSI" American National Standards Institute. Reference: <u>www.ansi.org</u>.
 - 2.4. "ASTM International" and "ASTM" Interchangeable terms used for the international standards organization that develops and publishes voluntary consensus technical standards for a wide range of materials, products, systems, and services, formerly known as the American Society for Testing and Materials. Reference: www.astm.org
 - 2.5. "ATTACHMENT A," "Pricing Pages," and "ATT A" Used throughout this Solicitation for the schedule of prices attached hereto as Attachment A ("ATT A") upon which Vendor should list its pricing for Contract Items.
 - 2.6. "ATTACHMENT B," "Personnel Experience Forms," and "ATT B" Used throughout this Solicitation for the forms attached hereto as Attachment B ("ATT B")

upon which Vendor should enter personnel experience information as identified in Section 3.6 of this Solicitation and referenced throughout.

- 2.7. "ATTACHMENT C," "Sourced Plant Info Form," and "ATT B" Used throughout this Solicitation for the form attached hereto as Attachment C ("ATT C") upon which Vendor should provide its source provider/plant information for Contract Item materials.
- **2.8.** "Contract Item" or "Contract Items" The list of items available for Vendor to provide pricing as identified in Section 3 of this Solicitation and referenced throughout.
- 2.9. "Contractor" or "Vendor" Interchangeably used throughout this Solicitation and in any cited Sections of the West Virginia Department of Transportation, Division of Highways Standard Specifications, Roads and Bridges, adopted latest Standard Specs edition, as amended, including any Supplementals and refers to any entity submitting a bid in response to the Solicitation, the entity that has been selected as the lowest responsible bidder, or the entity that has been awarded the Contract, as context requires.
- 2.10. "Emergency Work" Work which is required to be done without delay owing to circumstances for which the WVDOH could not have reasonably expected and has been designated as such by a representative of the WVDOH.
- 2.11. "Launched Soil Nail" otherwise known as ballistic soil nailing, is the process of insertion of a soil nail by compressed gas.
- 2.12. "Liquidated Damages" Monetary compensation due from the Vendor in the event the Vendor's performance falls short of contractual stipulation or breaches the contract. Delays in the delivery of goods and/or services or quality failures or corrections by the Vendor may result in the Agency assessing charges for such deficiencies per these contract Specifications, the Standard Specs Section 108.7, as amended, and calculated from the table posted at the WVDOH Contract Administration's Specifications and Documents website, as amended: <u>https://transportation.wv.gov/highways/contractadmin/specifications/Pages/LiquidDat</u> edDamages.aspx
- 2.13. "MP per MCS&T" Refers to a Materials Procedure per the Materials Control, Soils, and Testing Division of the West Virginia Division of Highways. Reference: https://transportation.wv.gov/highways/mcst/Pages/default.aspx
- 2.14. "OSHA" Occupational Safety and Health Administration. Reference: www.osha.gov.
- **2.15.** "Solicitation" The official notice of an opportunity to supply the State with goods and/or services that is published by the West Virginia Division of Highways.

- 2.16. "Standard Specs" The West Virginia Department of Transportation, Division of Highways Standard Specifications, Roads and Bridges, adopted latest edition, and as amended or modified by any subsequent Supplemental Specifications.
- **2.17. "WVDOH" and "Agency"** Interchangeable terms for the West Virginia Division of Highways.

3. GENERAL REQUIREMENTS:

3.1. Standard Specifications: The following sections of the Standard Specs, but not limited to, shall apply to the administration of this contract: Sections 101, 102, 103, 104, 105, 106, 107, 108, 109, and 110, as amended.

Materials, equipment, and performance of this contract shall confirm, but are not limited to, the requirements of Standard Specs Sections 636, as amended.

A hard copy of the current Standard Specs may be purchased at a cost of \$20.00 (\$15.00 for the 2017 book plus \$5.00 for the Supplemental Latest Edition) using the **Attachment D ("ATT D") Standard Specifications Order Form**. The completed form should be submitted by email to DOTSpecifications@wv.gov or mailed to:

West Virginia Division of Highways Technical Support Division 1334 Smith Street Charleston, West Virginia 25301

A free electronic copy of the Standard Specs may be obtained by sourcing: http://www.transportation.wv.gov/highways/contractadmin/specifications/2017StandSpec/Pages/default.aspx

- **3.2.** Documentation to be Included with the Bid: The Vendor should carefully read the entire solicitation invitation. The Vendor should include as part of their bid response:
 - Certification and Signature Page
 - Addendum Acknowledgement Form
 - Valid West Virginia Contractor's License, if applicable.
 - Contract Manager Page
 - Attachments included in solicitation package (ATT A, ATT B, etc.)
 - Purchasing Affidavit (properly notarized)
 - Ethics/Disclosure Form (properly notarized), when provided with the solicitation
 - Valid Certificate of Insurance; and,
 - Any other required forms or supporting information as described herein.

Omitting any required forms, attachments, or documentation as described throughout this contract could deem a bid non-responsive and result in the disqualification of the Vendor's bid response.

3.3. Contract Items and Mandatory Requirements: Vendor shall provide Agency with the Contract Items for all methods listed below on an open end and continuing basis. Contract Items must meet or exceed the mandatory requirements as shown below.

At any time during the life of this contract, upon request by the WVDOH, the awarded Vendor shall provide an update of any information requested in Section 3.6

- 3.3.1. Contract Item 1: Launched Soil Nails Method Vendor shall furnish equipment, all incidentals, and launched galvanized soil nails (hollow steel tubes that have been hot dip galvanized). The launched soil nails shall have a wall thickness of 0.120 inches, nominal outside diameter of 1.5 inches. The strength of the tube shall be 36 ksi. When applicable, Vendor shall provide perforated tubes that can serve as both horizontal drains and tensile elements. Excess cutoffs from previously launched nails are not acceptable. Vendor shall bid one price for each 20-foot length of launched soil nail on Attachment A ("ATT A") Pricing Pages.
 - **3.3.1.1.** Launched soil nails shall be inserted with a single stroke of velocity more than 200 miles per hour. The inserted length and spacing will be determined based upon the WVDOH District Engineer or designee's approved engineering plans. More than 4 inches of exposed soil nails after launching is unacceptable unless first approved by the WVDOH District Engineer or designee. Exposed portion of installed nails must be cut for inclusion into shotcrete or flush to ground in the case of no shotcrete work when not required by the engineering plans. Disposal of the cut-off portions of the soil nails from the right-of-way is the responsibility of the Contractor at no additional cost to the WVDOH. If required, lagging and backfill will be provided by the WVDOH.
- 3.3.2. Contract Items 2 thru 8: Permanently Cased Soil Nails Method Vendor shall furnish permanently cased soil nails that are a three stage construction including installation of: 1) an outer tube (minimum 1.5 inch outside diameter, minimum 0.120 inch wall thickness hot-dipped galvanized 36 ksi steel tube that is mechanically deformed, threaded or specially galvanized through a drossing process to produce a plurality of surficial asperities); 2) neat cement grout that completely fills the outer tube; and 3) an inner bar consisting of epoxy coated, #6 (or greater) grade 60 or grade 75 rebar or thread bar, depending on the final design load. When applicable, Vendor shall provide perforated tubes that can be pressure grouted and bid one price for each 20-foot, 30-foot, 40-foot, 50-foot, 60-foot, 70-foot, and 80-foot length of permanently cased soil nails on ATT A.

- **3.3.3.** Contract Items 9 thru 15: Self-Drilling Soil Nails Method Vendor shall furnish self-drilling soil nails that consist of a hollow bar with a sacrificial drill bit. Multiple bars may be coupled to produce final length. Bar outer diameters shall be a minimum of 1.5 inches and maximum 3 inches depending on design load. Vendor shall bid one price for each 20-foot, 30-foot, 40-foot, 50-foot, 60-foot, 70-foot, and 80-foot length of self-drilling soil nails on ATT A.
- **3.3.4.** Contract Item 16: Shotcrete The shotcreting process shall consist of applying one or more layers of concrete conveyed through a hose pneumatically projected at a high velocity against a prepared surface with a nominal thickness of 6 inches with either welded wire fabric or triple twisted galvanized wire mesh approximately 2 inches from the outside surface. Vendor shall furnish shotcrete complying with the requirement of ACI 506.2, except as otherwise specified below. Vendor shall bid one price per square foot on ATT A.
 - **3.3.4.1.** Wet Mix Process: Shall comply with the requirements of ACI 506R and consist of thoroughly mixing all the ingredients except accelerating admixtures but including the mixing water, introducing the mixture into the delivery equipment, and delivering it by positive displacement, to the nozzle. The wet-mix shotcrete shall then be air jetted from the nozzle at high velocity onto the surface.
 - **3.3.4.2.** Dry Mix Process: Shall comply with the requirements of ACI 506R and consist of producing shotcrete by delivering the dry ingredients conveyed pneumatically with the mixing water introduced at the nozzle.
 - **3.3.4.3.** Materials and Application: Vendor shall deliver, store, and handle materials to prevent contamination, segregation, corrosion, or damage. Vendor shall store liquid admixtures to prevent evaporation and freezing.

Materials used to produce shotcrete must meet the following mandatory requirements:

Material	Requirement		
	Shall comply with the requirements of Standard		
Cement	Specs Section 701.1		
Chemical	Fluid type, applied at nozzle, shall comply with		
Admixtures	the requirements of AASHTO M194, ASTM		
Accelerator	C494, and ASTM C1141 Type C or E.		
Course	Shall comply with the requirements of Standard		
Aggregate	Specs Section 703.1 or 703.2.		

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Fiber	Shall comply with the requirements of ASTM			
	Shall comply with the requirements of ASTM			
Reinforcement	C1116.			
	Shall comply with the requirements of Standard			
Fine Aggregate	Specs Section 702.1 (except for gradation).			
	Shall comply with the requirements of Standard			
	Specs Section 707.4.1. Replacement up to 20%			
Fly Ash	by weight of cement.			
Prepackaged	Shall comply with the requirements of ASTM			
Shotcrete	C928.			
	Shall be included with the Shotcrete and comply			
	with the requirements of Standard Specs Sections			
Rebar Mat	709.1 and 709.4.			
	Shall comply with the requirements of AASHTO			
Retarders	Admixtures.			
	Shall comply with the requirements of Standard			
Silica Fume	-			
Water – Clean				
and Potable				
Water-Reducer				
and				
Superplastisizer				
Welded Wire	Shall comply with the requirements of AASHTO			
Retarders Silica Fume Water – Clean and Potable Water-Reducer and Superplastisizer	709.1 and 709.4. Shall comply with the requirements of AASHT M194 and ASTM C494 Type B or D Mineral			

3.3.4.4. Aggregate Material: Aggregate to be used for the shotcrete must meet the strength and durability requirements of AASHTO, as applicable, and the following gradation requirements.

Sieve Size Percent Passing by Weight			
1/2"	100		
3/8"	90-100		
No. 4	70-85		
No. 8	50-70		
No. 16	35-55		
No. 30	20-35		
No. 50	8-20		
No. 100	2-10		

3.3.4.4.1. The proportion of the shotcrete must be pumpable with the concrete pump furnished for the work, with a cementing

materials content of at least 24.3 pounds per cubic foot and water/cement ratio not greater than 0.55. Admixtures not approved by the WVDOH District Engineer or designee are not acceptable.

- **3.3.4.4.2.** Thoroughly mix admixtures into the shotcrete per the rate specified by the manufacturer. Use only accelerators compatible with the cement, non-corrosive steel and not promoting other detrimental effects such as cracking or excessive shrinkage. The maximum allowable chloride ion content of all ingredients is 0.10% when tested to AASHTO T260.
- **3.3.4.4.3.** Air entrainment is not required for temporary shotcrete construction facings but shall be used in all exposed permanent shotcrete. A minimum 8.5% +/- 2.5% air entrainment shall be in the concrete mixture before shooting for wet-mix shotcrete. Dry-mix shotcrete may be used, provided that the in-place air entrainment shall be checked at least once at the beginning of the operation and once after restarting the shotcrete process after any breaks each day and found that the in-place mixture has a minimum of 4% air entrainment.
- **3.3.4.4.** Vendor shall provide shotcrete with a minimum design compressive strength of 2000 psi in three days and 4000 psi in 28 days when tested in accordance with ASTM C1140 and ASTM C42. Results from at least one (1) test panel for each mix design shall be submitted to the WVDOH District Engineer or designee prior to construction unless otherwise directed by the WVDOH District Engineer or designee.
- **3.3.4.4.5.** The batch aggregate and cement by weight or by volume must be in accordance with the requirements of ASTM C94 or AASHTO M241/ASTM C685. The mixing equipment must thoroughly blend the materials in sufficient quantity to maintain placing continuity. Ready Mix shotcrete must comply with AASHTO M157. The batch, delivery and placement of shotcrete must be within 90 minutes of mixing. The use of retarding admixtures may extend application time beyond 90 minutes if approved by the WVDOH District Engineer or designee.

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3.3.4.5. <u>Approved Source Plant:</u> After award and prior to each contracted project, the Vendor shall provide a sample and method of placement of shotcrete, meeting all requirements of Section 3.3.4, to the WVDOH, Materials Controls, Soils and Testing Division for approval. Only after WVDOH approval shall the vendor proceed with shotcrete installation. WVDOH reserves the right to collect samples for testing at any time during the completion of a project.

For each plant it sources for ATT A - Contract Items 1 through 25, the Vendor shall supply the Agency with the plant's name, certification status, and physical location on the Attachment C ("ATT C") Source Plant Info Form. Failure to submit ATT C may result in disqualification of Vendor's bid.

- **3.3.4.6.** Shotcrete Installation: The Contractor shall abide by the following shotcrete installation instructions. All installation shall be handled by the Contractor unless otherwise specified herewith:
 - **3.3.4.6.1.** Work shall only begin after receiving approval of the design mix and continue if the specified strengths are obtained. The Contractor is to provide all work required to obtain satisfactory strength tests at no additional cost to WVDOH.
 - **3.3.4.6.2.** The Contractor shall maintain the face of the excavation and other surfaces clean of loose materials, mud, rebound, overspray, or other foreign matter that could prevent or reduce shotcrete bond. Any surface materials that are loosened or damaged, to a sufficient depth should be removed. Any material that loosens during application shall be removed. The adjacent surfaces shall be protected from overspray during shooting. During the excavation and cleaning process, the ground shall not be loosened, cracked, or shattered. Water flow shall be diverted and standing water shall be removed so that shotcrete placement will not be affected.
 - **3.3.4.6.3.** The Contractor shall maintain a clean, dry, oil-free supply of compressed air sufficient for maintaining adequate nozzle velocity, at all times. The equipment shall be capable of delivering the premixed material accurately, uniformly, and continuously through the delivery hose. To prevent sagging or sloughing of freshly applied shotcrete, control must be taken with the application thickness,

nozzle technique, air pressure and rate of shotcrete placement.

- **3.3.4.6.4.** Shotcrete shall be applied from the lower part of the area upward to prevent accumulation of rebound. The placement of the nozzle shall be at a distance and approximately perpendicular to the working face so that rebound will be minimal, and compaction will be maximized. Rebound shall not be worked back into the construction. Where shotcrete is used to complete the top ungrouted zone of the nail drill-hole near the face, the nozzle shall be positioned into the mouth of the drill-hole to completely fill the void.
- **3.3.4.6.5.** The shotcrete shall be applied from the lower part of the area upward to prevent accumulation of rebound. The placement of the nozzle shall be at a distance and approximately perpendicular to the working face so that rebound will be minimal, and compaction will be maximized. Rebound shall not be worked back into the construction. Where shotcrete is used to complete the top ungrouted zone of the nail drill-hole near the face, the nozzle shall be positioned into the mouth of the drill-hole to completely fill the void.
- **3.3.4.6.6.** A clearly defined pattern of continuous horizontal or vertical ridges or depressions at the reinforcing elements after they are covered with shotcrete will be considered as indication of insufficient reinforcement cover or poor nozzle techniques. In this case, immediately suspend the application of shotcrete and implement corrective measures. Correct the shotcreting procedure by adjusting the nozzle distance and orientation, ensuring adequate cover over the reinforcement, and adjusting the water content of the shotcrete mix or other means.
- **3.3.4.6.7.** Any shotcrete surface defects shall be repaired after placement as soon as possible. Any shotcrete that exhibits segregation, honeycombing, lamination, void or sand pockets, or excessive shrinkage cracking shall be removed and replaced. In-place shotcrete not meeting the specified strength requirement will be subject to remediation. Possible remediation options include placement of additional shotcrete thickness or removal and replacement, at no additional cost to the WVDOH.

- **3.3.4.6.8.** A minimum reinforcement overlap shall be provided at reinforcement splice joints as per industry standards. The surface of a joint shall be cleaned and wet before adjacent shotcrete is applied. Where shotcrete is used to complete the top ungrouted zone of the nail drill-hole near the face, to the maximum extent practical, clean and dampen the upper grout surface to receive shotcrete, like a construction joint.
- **3.3.4.6.9.** Shotcrete shall not be installed on frozen surfaces or ground. Cold weather protection shall be maintained if the temperature, after placement, is below 32° F until the inplace compressive strength of the shotcrete is greater than 725 psi. Cold weather protection may require blankets, heating under tents, or other means acceptable to the WVDOH. The shotcrete mix shall be deposited at a temperature of not less than 32°F or more than 100°F.
- **3.3.4.6.10.** During high wind or rain, unless suitable protective covers, enclosures or wind breaks are installed, shotcrete application shall be suspended. Any newly placed shotcrete that has been exposed to rain making the shotcrete unacceptable shall be removed and replaced. A polyethylene film or equivalent shall be used to protect the work from exposure to adverse weather. During hot weather or dry, windy conditions, the newly placed shotcrete shall be protected from drying by moisture curing until curing compound can be applied. Curing compound shall be applied with 24 hours of placement.
- **3.3.5.** Contract Item 17: Extra Shoulder Build-up of Shotcrete When required to meet the approved drawings and plans, the Contractor may be required to provide a 24-inch Extra Shoulder Build-up which is shotcrete formed outboard of the wall at the road level. Vendor shall bid one price per linear foot of extra shoulder build-up of shotcrete on ATT A.
- **3.3.6.** Contract Item 18: Concrete Masonry Units Split face Concrete Masonry Units are required to meet ASTM C-90 criteria to construct necessary Geosynthetically Confined Soil (GCS) walls. WVDOH forces, following methods and designs shown on plans, will perform installation. Vendor shall bid one price per concrete masonry unit on ATT A.
- 3.3.7. Contract Item 19: Geosynthetic Fabric Geosynthetic fabric is a woven polypropylene sheet with a wide width tensile capacity of nominally 175

pounds per inch for GCS walls. WVDOH forces, following methods and designs shown on plans, will perform installation. Vendor shall bid one price per square foot of geosynthetic fabric on ATT A.

- **3.3.8.** Wire Mesh Surface Treatment WVDOH will approve the measurement of wire mesh surface treatment in square feet, properly installed and tensioned to the slope by welding or bolting steel plates with central holes over protruding soil nail tips. Vendor shall bid one price per square foot for the following on ATT A:
 - **3.3.8.1. Contract Item 20: High Tensile Diamond Mesh** Shall meet the following requirements:

Contract Item 20	Requirement		
Wire Diameter	0.120 inches		
	Zinc coated by the Zn/Al process		
Wire Coating	(minimum Zinc Coating 0.80 oz/sf)		
Tensile strength of wire	75 ksi		

3.3.8.2. Contract Item 21: High-Capacity Double Twist Hexagonal Mesh - Shall be manufactured in accordance with ASTM A975.97 and meet the following requirements:

Contract Item 21	Requirement		
Wire Diameter	0.120 inches		
	Hot dip galvanized, finish 5, class-3,		
	Zinc Coating. (ASTM A-641, tested		
Wire Coating	in accordance with ASTM A370-92)		
	Soft temper in accordance with		
Tensile strength of wire	ASTM A641-92		
Weight of Zinc Coating	Determined by ASTM A-90		
of Wire	(normally 0.85 oz/sf)		
	High grade or special high grade in		
Grade of Zinc Coating	accordance with ASTM 8-6, Table 1		
Uniformity of Coating	Determined by ASTM A-239		
	not less than 12% in accordance		
	with ASTM		
Elongation	A370-92		

3.3.9. Contract Item 22: Galvanized Steel Plates (including Bolts) - Shall meet the following requirements:

Contract Item 22	Requirement	
Dimensions	Dimensions 8" x 8" x 3/8" or equivalent	

	Minimum 36 ksi mild steel as required by ASTM A36
Material	or greater
Galvanization	Hot dip Zinc Galvanized

- **3.3.10. Contract Item 23: Strip Drains** To eliminate water build-up behind the shotcrete wall, the vendor shall use at a minimum, 4-inch strip drains that are full width of the shotcrete (downslope) at a maximum of 6-foot centers. Drains shall meet the requirements of Standard Specs Section 714.19 and extend beyond the face of the shotcrete at the downhill face. Vendor shall source HDPE manufacturers from the WVDOH Plastics Products approved list. http://www.transportation.wv.gov/highways/mcst/Pages/Listings.aspx
- **3.3.11. Horizontal Drains:** Horizontal drains shall consist of 1.5-inch diameter (or larger) slotted schedule 80 (or thicker) PVC pipe, conforming to the requirements of ASTM Designation: D 1785. These pipes are inserted into drilled holes to reduce water pressures within slide masses.
 - **3.3.11.1. Contract Item 24: Slotted Pipe** Shall have two rows of slots. The rows shall be in the longitudinal direction of the pipe and the slots shall be cut in the circumferential direction of the pipe. The rows shall be centered on two of the third points (120 degrees apart) of the pipe circumference. Each row of slots shall conform to one of the configurations in the following table. Slots shall be spaced uniformly along the pipe. The minimum opening will be measured on the inner surface of the pipe.

Number of Slots (±3) Per Meter (3.0 feet)	Width of Slot Millimeters (inches)	Minimum Opening Per Meter (3 feet) Square Millimeters (in ²)
72	1.27 (0.05)	2110 (3.27)
75	0.51 (0.02)	975 (1.50)
151	0.25 (0.01)	975 (1.50)

3.3.11.2. Contract Item 25: Perforated Pipe - Shall have three rows of perforations with one row on each side of the pipe and the third row in the top. The perforations shall be 10 mm (0.40 in) in diameter spaced at 75 mm (3.0 in) centers with the top perforations staggered in relation with the holes on either side. Fittings for the PVC pipe shall be Schedule 80 Type II PVC solvent weld type fittings conforming to the requirements in ASTM Designation: D 2467. Machined male and female ends may be used in lieu of couplings. Un slotted or un-perforated PVC pipe, between 1 m (3.0 ft) to 9 m (29.5 ft) in length, shall be provided at the outlet of the drain.

3.3.12. Mobilization / Demobilization:

3.3.12.1. Contract Item 26: Standard Projects - Contractor must have at least three qualified crews readily available for deployment to work in multiple locations simultaneously. Unless otherwise agreed upon by the Contractor and the WVDOH District Engineer or designee, the Contractor shall have 14 working days to perform all work and operations necessary to load and unload equipment, move personnel, supplies and incidentals to and from the project site to accomplish all other miscellaneous associated work items or operations that must be performed, including cost that must be incurred, to mobilize and begin work on a standard project.

Soil nail installation rigs must be capable of either installing launched soil nails or drilling a hole up to 80 feet in length and six inches in diameter.

3.3.12.2. Contract Item 27: Emergency Work – Upon approval by the WVDOH District Engineer or designee, the Contractor shall have 48 hours or an agreed upon timeframe between the WVDOH and the Contractor to perform all work and operations necessary to mobilize and begin work on an emergency project, including all the same procedures as a standard project per Section 3.3.12.1. Emergency Work shall be invoiced by Vendor at 1.25 times the amount bid for Contract Item(s) on the Pricing Pages.

If the equipment can be transported under its own power to an adjacent site within a reasonable distance, as agreed upon by the WVDOH and the Contractor. Mobilization/demobilization will not be paid by the WVDOH for the second site.

- **3.3.13. Contract Items 28-31: Maintenance of Traffic** While undergoing improvement, the project site shall be kept open to traffic in such condition that both local and through traffic will be adequately and safely accommodated. Unless otherwise agreed upon by all parties and included in project proposal, the maintenance of traffic shall be provided by the Contractor.
- **3.4.** Plans and Details/Proposal: Contractor will provide all necessary engineering plans and details/proposals required to successfully repair slides when requested, at the time of need by the WVDOH. Any necessary core drilling, rotary drilling, percussion drilling, auger drilling or driven casing required to produce plans are the responsibility of the Contractor. The awarded Contractor will provide all necessary engineering plans

and details/proposal required to successfully repair slides when requested, at the time of need by the WVDOH. Any excavation required will be measured by crew hours (Contract Item 32). The disposal of excavated materials from the right-of-way is the responsibility of the Contractor and will be paid at the contract unit price per hour. Any necessary core drilling, rotary drilling, percussion drilling, auger drilling or driven casing required to produce plans are the responsibility of the Contractor.

- **3.4.1.** The Contractor shall be responsible for maintaining record of the volume (measured by cubic yard) and location (by GPS coordinates) of material removed from a project site and provide the information upon request. In the event excavated materials are transported to a location other than the failure site, the Vendor shall record the GPS coordinates of the excavated site, the coordinates of the dumped location as well as the type and quantity of materials transported. The Vendor shall also be responsible for ensuring the materials are placed on DOH right-of-way while adhering to any environmental regulations or site-specific conditions.
- **3.4.2.** The engineering plans and details/proposal shall be stamped by a Registered Professional Engineer, licensed in the State of West Virginia, under the full-time employment of the Contractor, who is knowledgeable in the design and implementation of slope stabilization with soil nails and related work. Changes or deviations from the approved submittals must be resubmitted for approval. No adjustments in project time will be allowed due to incomplete submittals. The WVDOH reserves the right to agree to an adjustment in project time when in the best interest of the State of WV. The engineering plans and details/proposal shall include, at a minimum, the following information:
 - A description of the soil nail construction sequence and a schedule for the work.
 - The slip length per foot, the failure width per foot and the failure height (depth) per foot.
 - A description of the size and spacing of the nail to be placed.
 - All necessary details to successfully construct any temporary facing and drainage system.
 - The nail angle entry shall be within plus or minus 3 degrees from the approved plans. The nails shall not extend beyond the limits of the permanent easement or right of way. Subsidence or physical damage by such operations shall be cause for immediate cessation of operations and repairs at the Contractor's expense.
- **3.5.** Equipment Lay Down and Storage: The availability of storage and lay down areas for Vendor equipment, materials, etc., on WVDOH property shall be at the sole discretion of the WVDOH District Engineer or designee. Should placement or storage of Vendor equipment, materials, etc., be permitted, the WVDOH assumes no

responsibility for damages, theft, injury, or vandalism to Vendor owned property while stationed or stored WVDOH property.

- 3.6. Personnel and Equipment Requirements: A Contractor and it's personnel shall meet the following requirements and must provide the information requested on the Attachment B Personnel Experience Forms ("ATT B"), which are provided as attachments to the solicitation and must be submitted with the bid. The awarded Contractor must have at least three qualified crews readily available for deployment to work in multiple locations simultaneously. A crew shall minimally consist of no less than one of each of those identified in Sections 3.6.1 through 3.6.4.
 - **3.6.1. Project Manager:** The Project Manager shall have successfully engineered and constructed no less than three projects within the past three years for each nail type bid. All soil nail work must be self-performed to meet this requirement. On the **ATT B -Project Manager** tab, the Contractor shall provide the name and dates for each project.

Supervisor Engineer: The Supervisor Engineer shall have successfully stabilized an active landslide on a public roadway and designed no less than three projects within the last 3 years while maintaining traffic on the impacted roadway for each nail type being bid. All soil nail work must be self-performed to meet this requirement. On the **ATT B** - **Supervisor Engineer** tab, the Contractor shall provide the name and dates for each project.

Equipment Operator: Equipment Operators must have successfully operated rigs and stabilized an active landslide on an active public roadway while maintaining traffic for no less than three of each nail type being bid.. All soil nail work must be self-performed to meet this requirement. On the **ATT B** - **Equipment Operator** tab, the Contractor shall provide the name and dates for each project.

- **3.6.2.** Foreman: The Foreman must have successfully managed no less than three projects within the last three years with this Contractor, which successfully stabilized an active landslide using soil nails on a active, public roadway while maintaining traffic on the impacted roadway. On the ATT B Foreman-Nozzleman tab, the Contractor shall provide, at a minimum, one Foreman's name, the name of three projects of which the employee was the Foreman, the nail type, and dates of each project.
- **3.6.3.** Nozzleman: Nozzlemen or any worker applying shotcrete must be certified as an ACI Shotcrete Nozzleman as outlined in ACI Certification Publication CP-60. The Contractor is fully responsible for training, operations and results of work performed by the Nozzleman. On the ATT B - Foreman-Nozzleman tab the Contractor shall provide, at a minimum, one Nozzleman's name, the Nozzleman's ACI Certification Number and the number of square feet of

shotcrete applied by the named individual in the last three years, including the dates of installation.

- **3.6.4.** In addition to the personnel listed above, all other laborers and workers employed by the Contractor should possess knowledge of installation of soil nails and general roadway maintenance.
- **3.7.** Safety Requirements: The Contractor shall be responsible for meeting all federal, state, and local safety code and accepted industry standard requirements.
 - **3.7.1.** The Contractor's personnel/crew shall obey all traffic and safety rules and regulations and shall not create any hazardous conditions with the operation of the equipment. All Contractor supplied equipment, tools and personal safety equipment shall meet or exceed the safety standards specified for such items by ANSI Z133.1-2017.
 - **3.7.2.** All staff/crew shall wear approved hard hat, protective clothing, ANSI approved safety vests and any other requirements to meet OSHA standards.
- **3.8.** Pandemic-Response Safety Protocols: In addition to the Vendor's established protocols and the WVDOH's established safety protocols outlined in the Standard Specs, as amended, the Vendor and the Vendor's personnel/workers shall adhere to all WVDOH's pandemic response protocols while present at a WVDOH jobsite. Vendors may obtain the WVDOH's pandemic-response by contacting the WVDOH District Engineer or their designee.
- **3.9.** Soil Nail Sampling and Testing: Acceptance of the Soil Nails will be by Contractor's certification to the WVDOH, stating that the material composition and installation conforms to these specifications, combined with visual inspection of the in-place Soil Nail and Shotcrete by the WVDOH District Engineer or designee. The Contractor shall test one soil nail per site. The WVDOH reserves the right to require additional testing by the Contractor. Any requested testing of Soil Nails will follow these procedures:
 - **3.9.1. Equipment:** A dial gauge capable of measuring to 25.4 um (0.001 in) shall be used to measure movement. A hydraulic jack and gauge calibrated as a unit shall be used to apply the test load. The pressure gauge shall be graduated in 690 kPA (100psi) increments or less and used to measure the applied load. The test loads shall be applied incrementally.
 - **3.9.2.** Pull-out testing: Install one nail as a non-service nail and load test to pull-out failure. Pull-out failure is defined as movement more than 1 mm (0.04 in) between the 1-minute and 10-minute reading of 2 mm (0.08 in) per log cycle of time over a minimum load hold period of 60 minutes. The test nails shall be installed and tested as each level at a rate consistent with construction operations. The test length of nail shall be chosen to cause pull-out failure to

steel yield, but it shall not be less than 2.4 m (8 ft) or 2.1 m (7 ft) where construction boundaries shown on the contract plans do not allow 2.4 m (8 ft) nails. A minimum ungrouted zone of 1 m (3 ft) in length to the face shall be provided.

- **3.9.2.1.** Each test soil nail using the drilling method shall be grouted in place as part of a regular production grouting process. After grouting, the nail shall not be loaded for a minimum of three days. Reaction frames should not bear on the shotcrete face within a 1 m (3 ft) radius of the center of the drilled hole.
- **3.9.2.2.** The pull-out test shall be made by incrementally loading the nail. The nail movement shall be measured and recorded to the nearest 25.4 um (0.001 in) with respect to the independent fixed reference point at each increment load. The test shall be monitored with a pressure gauge. The load hold period shall start as soon as the test load is applied. Movement shall be recorded at 0, 1, 2, 3, 4, 5, 6 and 10 minutes. If the load is extended, the nail movement shall be recorded at 15, 25, 30, 45 and 60 minutes. Each increment of load shall be no greater than 25% of the design load of the nail tested. The loading shall be terminated either at failure or earlier at the option of the Contractor, if at least twice the design unit bond stress is demonstrated

3.9.3. Acceptance Criteria:

- **3.9.3.1.** A nail deemed acceptable if the unit bond stress at a failure load or test termination is equal to or greater than twice the design unit bond stress. Unacceptable test results shall result in modifications to design or construction procedures. Any modifications of design or construction procedures shall be at the Contractor's expense and the verification testing procedure shall be repeated as required by the WVDOH. Graphs shall be plotted during the test of deflection against load.
- **3.9.3.2.** Acceptance of installed shotcrete will be by visual inspection by the WVDOH District Engineer or designee. Materials found not in compliance with the requirements of this contract may be rejected, removed, and replaced at the Contractor's expense

4. CONTRACT AWARD:

4.1. Contract Award: The Contract is intended to provide Agencies with a purchase price on all Contract Items. The Contract shall be awarded to the Vendor that provides the

Contract Items meeting the required specifications for the lowest overall total cost as shown on ATT A.

4.2. Contract Award Transition: Upon the award of this contract, the WVDOH Operations Division will announce the effective date of use of this contract to the Districts and the Vendors, whether it is by the effective date, the completed and encumbered date, or an established date by the WVDOH. Upon the announced effective date of use, any Delivery Order issued prior to the award of the contract shall remain in effect and should not be cancelled until that Delivery Order is filled; however, after ten (10) working days of the Districts and Vendors notice, any Delivery Order that has not been completely filled by the Vendors shall NOT be completed, and a cancellation notice will be sent to that Vendor from the issuing District for cancellation of the balance of that Delivery Order only. No Delivery Orders from prior contracts should be held open by the Districts or Vendors longer than ten (10) working days after the effective date of use is announced for the new contract.

This directive is issued to assist the Districts and the Vendors when fulfilling open Delivery Orders only. It is NOT issued to cause harm or to take contracts from one Vendor to give to another Vendor, but to establish a transition process from one contract into another contract.

- **4.3. Pricing Pages:** Vendor shall complete **Attachment A Pricing Pages ("ATT A")** by providing a Unit price per item. Failure to complete **ATT A** in its entirety may result in the Vendor's bid being disqualified.
 - **4.3.1. ATT A** contains a list of Contract Items and estimated purchase volumes. The estimated purchase volume for each item represents the approximate volume of anticipated purchases only. The approximate quantities on **ATT A** is for evaluation purposes only. Actual quantities will be provided to the awarded vendor on a Delivery Order at the time of need. No future use of the Contract or any individual item is guaranteed or implied.

4.3.2. Each unit price shall include labor, equipment, materials and incidental costs associated with the Contract Item being bid.

- **4.3.3.** Vendor should type or electronically enter the information into ATT A to prevent errors in the evaluation. In most cases, the Vendor can request an electronic copy of the Pricing Pages spreadsheet for bid purposes by sending an email request to the following address: <u>Kristy.E.James@wv.gov</u>.
- **4.3.4.** Changing the Contract Item Descriptions, Units of Measure, or Estimated Quantities on the **ATT A** shall result in the disqualification of altered Contract Item bid. In circumstances when all Contract Items must be bid for evaluation and award purposes, the disqualification of any Contract Item will result in disqualification of the entire bid.

- **4.4. Price Adjustments:** In the event of a significant price increase of component material or rental equipment, if applicable, utilized to perform or under this Contract, that is not the fault of the Vendor, the contract pricing, may be equitably adjusted by change order as more fully described below.
 - **4.4.1.** A change in price is considered significant if the price of the component material or rental equipment increases by 20% or more from the original bid amount.
 - **4.4.2.** Any request for a price increase under this clause must be supported by: price quotes for the component material or rental equipment for which a change is being sought; invoices showing amounts actually paid for the component materials or rental equipment; and any other evidence that supports the increase request.
 - **4.4.3.** The quotes provided to support the price increase request must be the quotes that Vendor actually relied on when submitting its bid and both the quote and the amount ultimately paid must have resulted from an arm's length transaction with an unrelated party.
 - **4.4.4.** Vendor must also show that the significant price increase would have been incurred if the owner had purchased the material or rental equipment directly from the supplier.
 - **4.4.5.** Price adjustments will be granted or denied at the sole and absolute discretion of the State.
 - **4.4.6.** Price adjustments will only be considered annually at the contract expiration/renewal date. Vendor must submit price adjustment requests 60 days prior to the expiration/renewal date to be considered.
 - **4.4.7.** Vendor documentation for price adjustments shall be submitted to <u>DOHOperationsProcurement@wv.gov</u> for initial review.
 - **4.4.8.** Price adjustments shall be established by a written Change Order, which must be reviewed and approved by the Purchasing Division, and as to form by the Attorney General's Office, in order to be effective. Adjusted pricing will not take effect until the effective date of such Change Order and cannot be retroactive.

5. ORDERING AND PAYMENT:

- 5.1. Ordering: Vendor shall accept orders through wvOASIS, regular mail, facsimile, email, or any other written forms of communication. Vendor shall maintain and keep current its phone numbers, fax number, e-mail address, locations, and ordering/billing/ payment addresses with WVDOH and in wvOASIS. Vendor may, but is not required to, accept on-line orders through a secure internet ordering portal/website. If Vendor has the ability to accept on-line orders, it should include in its response a brief description of how Agencies may utilize the on-line ordering system. Vendor shall ensure that its online ordering system is properly secured prior to processing Agency orders online.
- 5.2. Delivery Order: The WVDOH will initiate a Delivery Order to the Vendor with the lowest bid for the slide repair method of need at a specific location. The Delivery Order will be generated by a WVDOH Engineer or designee and should be completed on a WV-39 Blanket Release Order. The order should detail the need and location information of the work to be completed per Contract Item, as well as the tentative start and end dates, to be agreed upon as the official start and end dates. Emergencies shall be prominently noted on the Delivery Order. Once complete, the Delivery Orders shall be sent to Vendor via fax, email, or postal mail. <u>Any verbal communications to initiate or make modifications to a project from this contract are not acceptable as a Delivery Order.</u>
- **5.3.** Inspection and Approval: The WVDOH will approve payment at such time as the job site work has been completed, in accordance with the provisions of this agreement, and has been verified by the WVDOH Engineer or designee.
- 5.4. Payment: Upon completion of the work indicated on the Delivery Order, Vendor shall accept payment in accordance with the payment procedures of the State of West Virginia. The State of West Virginia currently utilizes a Purchasing Card program, administered under contract by a banking institution, as well as Electronic Funds Transfer as methods to process payment for goods and services. The Vendor shall accept the State of West Virginia's Purchasing Card and Electronic Funds Transfer for payment of orders under this Contract. Electronic Funds Transfer for payment is available through the WV State Auditor's Office. The Vendor may visit the WV State Auditor's website (wvsao.gov) for all necessary forms and instructions. Payment method may be dictated at WVDOH's discretion.
 - **5.4.1.** Inspection and Approval: The WVDOH will approve payment at such time as the job site work has been completed, in accordance with the provisions of this agreement, and has been verified by the WVDOH Engineer or designee.

6. PROJECT ACCEPTANCE, DELIVERY, AND RETURN:

6.1. Project Acceptance and Written Verification of Receipt: Upon receipt of a WVDOH Delivery Order, the Vendor shall advise the WVDOH in writing within five

(5) calendar days of their acceptance or refusal of the Delivery Order. As verification of receipt, Vendor must provide written acknowledgement of any Delivery Orders and any Revisions/Modifications thereto sent by WVDOH. Failure to provide the WVDOH with written acknowledgement of any Delivery Orders/Revisions within five days of the Order being sent shall be considered refusal of the Delivery Order. In the event of refusal, the WVDOH at its own discretion shall cancel the Delivery Order and may seek to cancel the Delivery Order and obtain the goods or services from the next low bid Vendor or proceed with an Emergency Purchase from the open market.

- 6.2. Negotiation of Dates: The WVDOH shall have the option to negotiate with the Vendor, the project's tentative start and end dates. Project work shall be continuous to completion unless otherwise approved in writing by the WVDOH District Engineer or designee.
- 6.3. Delivery Time: Vendor shall deliver standard orders no later than fourteen (14) working days or an agreed upon acceptable date by the WVDOH and Vendor, after Vendor's receipt of a Delivery Order. There shall be a minimum aggregate order quantity of twenty-five (25) nails per job site, unless otherwise grouped with additional nearby sites as placed on the Delivery Order and agreed upon by the WVDOH and the Contractor. Vendor shall deliver emergency orders within 48 hours or an agreed upon acceptable date by the WVDOH and the Vendor, after a Delivery Order is received by the Vendor.

Starting times and scheduled hours may vary and will be at the discretion of the WVDOH District Engineer or designee. All work performed under this contract shall be performed Monday through Friday. Saturday work may be performed if approved in advance by the WVDOH District Engineer or designee. Work will not be performed on any state or federal holiday unless approved in advance by the WVDOH District Engineer or designee.

- 6.4. Adverse Weather Conditions: Unsuitable/adverse/inclement weather conditions may dictate the work schedule. It is preferred that operations be suspended immediately when an inclement weather event begins or if the WVDOH District Engineer or their designee determines that an inclement weather event is imminent. If working conditions are dangerous or unsuitable for the WVDOH, Vendor, or general public, work shall be suspended by the WVDOH Engineer/designee. If needed, revision to the project's start and end date may be negotiated by the Vendor and the WVDOH Engineer/designee. After a weather-related suspension of work, the WVDOH District Engineer or their designee shall determine and convey in writing, such Delivery Order changes and when work shall resume, followed by the Vendor's written acknowledgement, per Sections 6.2 of this Contract Solicitation.
- 6.5. Late Delivery: The Agency placing the order under this Contract must be notified in writing if orders will be delayed for any reason. Any delay in delivery that could cause harm to an Agency will be grounds for cancellation of the delayed order, and/or

obtaining the items ordered from a third party. The Agency placing the Delivery Order under this Contract mut be notified in writing by the Vendor no later than five (5) business days prior to the scheduled start date from the Agency's order. Any failure to notify, acknowledge receipt of WVDOH's written Delivery Orders/Revisions resulting in delivery delay, or failure to start or complete the project per the WVDOH scheduled due dates may be determined by the WVDOH at its sole discretion as harmful to the Agency and as such, shall result in WVDOH's cancellation of the Delivery Order and application of Liquidated Damages.

Any Agency seeking to obtain items from a third party under this provision must first obtain approval of the WVDOH Finance & Administration Division, Budget & Procurement Division.

6.5.1. Liquidated Damages: If the Vendor's work completion or corrections of deficient work exceeds the Delivery Order completion due date/timeframe, the Vendor shall agree that no extension of contract time will be granted unless Liquidated Damages are applied by the WVDOH in the form of an off-set reduction to the total amount of the Vendor's final invoice. The WVDOH shall calculate Liquidated Damages per project beginning on day one (1) after the WVDOH's specified Delivery Order due date, in accordance with this Section, the Contract's Terms and Conditions, and the Standard Specs Section 108.7, as amended.

Original Contract Amount		Daily Charges
For More Than	To and Including	Per Calendar Day
\$0	\$500,000	\$300
\$500,000	\$2,000,000	\$600
\$2,000,000	\$10,000,000	\$1,500
\$10,000,000	\$25,000,000	\$3,000
\$25,000,000		\$4,000

TABLE 108.7.1

6.6. Delivery Payment/Risk of Loss: Standard order delivery shall be F.O.B. destination to the Agency's location. Vendor shall include the cost/discount of standard order delivery charges in its bid pricing and is not permitted to charge the Agency separately for such delivery. The Agency will pay delivery charges on all emergency orders provided that Vendor invoices those delivery costs as a separate charge with the original freight bill attached to the invoice.

Deliveries made by the Vendor shall be comprised only of contract items intended for delivery at that location and specified in the pricing pages, contract specifications, or WV-39 Blanket Release Order.

6.7. Return of Unacceptable Items: If the Agency deems the Contract Items to be unacceptable, the Contract Items shall be returned to Vendor at Vendor's expense and

with no restocking charge. Vendor shall either make arrangements for the return within five (5) days of being notified that items are unacceptable or permit the Agency to arrange for the return and reimburse Agency for delivery expenses. If the original packaging cannot be utilized for the return, Vendor will supply the Agency with appropriate return packaging upon request. All returns of unacceptable items shall be F.O.B. the Agency's location. The returned product shall either be replaced, or the Agency shall receive a full credit or refund for the purchase price, at the Agency's discretion.

6.8. Return Due to Agency Error: Items ordered in error by the Agency will be returned for credit within thirty (30) days of receipt, F.O.B. Vendor's location. Vendor shall not charge a restocking fee if returned products are in a resalable condition. Items shall be deemed to be in a resalable condition if they are unused and in the original packaging. Any restocking fee for items not in a resalable condition shall be the lower of the Vendor's customary restocking fee or 5% of the total invoiced value of the returned items.

7. VENDOR DEFAULT:

- 7.1. The following shall be considered a Vendor default under this Contract:
 - 7.1.1. Failure to provide Contract Items in accordance with the requirements contained herein.
 - 7.1.2. Failure to comply with other specifications and requirements contained herein.
 - **7.1.3.** Failure to comply with any laws, rules, and ordinances applicable to the Contract Services provided under this Contract.
 - 7.1.4. Failure to remedy deficient performance upon request.
- 7.2. The following remedies shall be available to Agency upon default:
 - 7.2.1. Immediate cancellation of the Contract.
 - 7.2.2. Immediate cancellation of one or more release orders issued under this Contract.
 - 7.2.3. Any other remedies available in law or equity.

8. MISCELLANEOUS:

- **8.1.** No Substitutions: Vendor shall supply only Contract Items submitted in response to the Solicitation unless a contract modification is approved in accordance with the provisions contained in this Contract.
- **8.2.** Vendor Supply: Vendor must carry sufficient inventory of the Contract Items being offered to fulfill its obligations under this Contract. By signing its bid, Vendor certifies that it can supply the Contract Items contained it its bid response.
- **8.3. Reports:** Vendor shall provide quarterly reports and annual summaries to the Agency showing the Agency's items purchased, quantities of items purchased, and total dollar value of the items purchased. Vendor shall also provide reports, upon request, showing the items purchased during the term of this Contract, the quantity purchased for each of those items and the total value of purchases for each of those items. Failure to supply such reports may be grounds for cancellation of this Contract.
- 8.4. Contract Manager: During its performance of this Contract, Vendor must designate and maintain a primary contract manager responsible for overseeing Vendor's responsibilities under this Contract. The Contract Manager must be available during normal business hours to address any customer service or other issues related to this Contract. Vendor should list its Contract manager and his or her contact information below.

Contract Manager:	John Soderberg			
Telephone Numbers:	855-579-0536			
Fax Number:	888-688-6454			
Email Address:	john.soderberg@gsi.us			

Vendor shall inform the Agency in writing of any changes to the information provided above within ten (10) calendar days of such changes. Failure to comply may be grounds for cancellation of this contract.

ADDENDUM ACKNOWLEDGEMENT FORM SOLICITATION NO.: DOT2200000027

Instructions: Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

Acknowledgment: I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

Addendum Numbers Received:

(Check the box next to each addendum received)

[x]	Addendum No. 1	[]	Addendum No. 6
[x]	Addendum No. 2	[]	Addendum No. 7
[x]	Addendum No. 3	[]	Addendum No. 8
[x]	Addendum No. 4	[]	Addendum No. 9
[]	Addendum No. 5	[]	Addendum No. 10

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

GeoStabilization International, LLC
Company
 Mm
Authorized Signature
3-30-2022
Date

NOTE: This addendum acknowledgement should be submitted with the bid to expedite document processing. Revised 6/8/2012



State of West Virginia Agency Request for Quote Highways

Proc Folder:	Folder: 1012594				Reason for Modification:	
Doc Description:	Addendum 4: 6622C049- Slide Repair Using Soil Nail Method				ADDENDUM 4	
Proc Type:	Agency Master Agreeme					
Date Issued	Solicitation Closes	Solicitation N			Version	
2022-03-29	2022-03-31 14:30 ARFQ 0803 DOT2200000027			5		
BID RECEIVING LO	DCATION					
FINANCE & ADMIN						
DIVISION OF HIGH						
BLDG 5, RM A-260						
1900 KANAWHA B		-				
CHARLESTON	WV 25302					
US					·	
VENDOR						
Vendor Customer	Code: 000000196157					
Vendor Name : G	eoStabilization Internat	ional, LLC				
Address : 4475 E	74th Avenue, Suite 100), Commerce Cit	γ, CO 80022			
Street: 4475 E 7	4th Avenue, Suite 100					
City : Commerce	e City					
State : Colorado		Country :	USA	Zip :	80022	
Principal Contact	: Lloyd Kuehn					
Vendor Contact Pl	none: (855) 579-0536		Extension:			
FOR INFORMATIO Kristine E James	N CONTACT THE BUYE	२				
304-414-7104						
kristy.e.james@wv.						

Vendor Signature X

1m

FEIN# 52-2379754

DATE 03-30-2022

All offers subject to all terms and conditions contained in this solicitation

ADDITIONAL INFORMATION

ADDENDUM 4 IS ISSUED

1. Modify specifications of product or service being sought

2. Add Revised Pricing pages

SOLICITATION CLOSING STAYS THE SAME 03/31/2022 AT 2:30PM

INVOICE TO		SHI	° TO		
VARIOUS AGENCY LOCATIONS			IOUS AGENCY ATIONS		
AS INDICA	TED BY ORDER	AS I	NDICATED BY ORDE	ĒR	
No City	WV	No C	lity	WV	
US		US			
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1 F	lighway and road maintenance service				
Comm Coo	le Manufacturer	Spec	ification	Model #	
72141003					
Extended [Description:				
-lighway an	d road maintenance service				
SCHEDULI	E OF EVENTS				

Line	Event	Event Date
1	TECHNICAL QUESTIONS DUE AT 10AM	2022-03-18

	Document Phase	Document Description	Page 3
DOT2200000027		Addendum 4: 6622C049- Slide Repair Using Soil Nail Method	

ADDITIONAL TERMS AND CONDITIONS

See attached document(s) for additional Terms and Conditions

SOLICITATION NUMBER: ARFQ DOT220000027 Addendum Number: 4

The purpose of this addendum is to modify the solicitation identified as ("Solicitation") to reflect the change(s) identified and described below.

Applicable Addendum Category:

- $[\checkmark]$ Modify bid opening date and time
- $[\checkmark]$ Modify specifications of product or service being sought
- [] Attachment of vendor questions and responses
- [] Attachment of pre-bid sign-in sheet
- [] Correction of error
- [] Other

Description of Modification to Solicitation:

ADDENDUM 4 IS ISSUED

- 1. Modify specifications of product or service being sought
- 2. Add Revised Pricing pages

SOLICITATION CLOSING STAYS THE SAME 03/31/2022 AT 2:30PM

Additional Documentation: Documentation related to this Addendum (if any) has been included herewith as Attachment A and is specifically incorporated herein by reference.

Terms and Conditions:

- 1. All provisions of the Solicitation and other addenda not modified herein shall remain in full force and effect.
- Vendor should acknowledge receipt of all addenda issued for this Solicitation by completing an Addendum Acknowledgment, a copy of which is included herewith. Failure to acknowledge addenda may result in bid disqualification. The addendum acknowledgement should be submitted with the bid to expedite document processing.

ATTACHMENT A

SPECIFICATIONS

1. PURPOSE AND SCOPE: The West Virginia Division of Highways is soliciting bids to establish a Statewide open-end, multi-award contract for labor, equipment, and materials to facilitate "on call" services, as needed, for Slide Repair using the methods of Soil Nails propelled by compressed gas, Permanently Cased Soil Nails, or Self Drilling Soil Nails.

Work shall consist of the Contractor designing plans to stabilize identified slides by internally reinforcing the soil mass with reinforcing elements (Soil Nails) using the installation methods as specified in this solicitation. The stabilization of the slide area shall be constructed from the top of the slide down. The WVDOH will identify locations and direct all work to be performed as specified herein. The Contractor, along with a WVDOH representative, shall review all locations to determine the method to be used as well as applicable design considerations.

WVDOH will provide all permits, guardrail, public notification, site clearing, environmental controls, and obtain access to adjacent property as needed.

- 2. **DEFINITIONS:** The terms listed below shall have the following meanings assigned to them throughout and for the purpose of this Solicitation. Additional definitions can be found in Section 2 of the General Terms and Conditions.
 - 2.1. "AASHTO" The American Association of State Highway and Transportation Officials is a standard body which publishes specifications, tests protocols, and guidelines that are used in highway design and construction throughout the United States. Reference: www.transportation.org
 - 2.2. "ACI" American Concrete Institute. Reference: <u>www.concrete.org</u>
 - 2.3. "ANSI" American National Standards Institute. Reference: www.ansi.org.
 - 2.4. "ASTM International" and "ASTM" Interchangeable terms used for the international standards organization that develops and publishes voluntary consensus technical standards for a wide range of materials, products, systems, and services, formerly known as the American Society for Testing and Materials. Reference: www.astm.org
 - 2.5. "ATTACHMENT A," "Pricing Pages," and "ATT A" Used throughout this Solicitation for the schedule of prices attached hereto as Attachment A ("ATT A") upon which Vendor should list its pricing for Contract Items.
 - 2.6. "ATTACHMENT B," "Personnel Experience Forms," and "ATT B" Used throughout this Solicitation for the forms attached hereto as Attachment B ("ATT B")

upon which Vendor should enter personnel experience information as identified in Section 3.6 of this Solicitation and referenced throughout.

- 2.7. "ATTACHMENT C," "Sourced Plant Info Form," and "ATT B" Used throughout this Solicitation for the form attached hereto as Attachment C ("ATT C") upon which Vendor should provide its source provider/plant information for Contract Item materials.
- **2.8.** "Contract Item" or "Contract Items" The list of items available for Vendor to provide pricing as identified in Section 3 of this Solicitation and referenced throughout.
- 2.9. "Contractor" or "Vendor" Interchangeably used throughout this Solicitation and in any cited Sections of the West Virginia Department of Transportation, Division of Highways Standard Specifications, Roads and Bridges, adopted latest Standard Specs edition, as amended, including any Supplementals and refers to any entity submitting a bid in response to the Solicitation, the entity that has been selected as the lowest responsible bidder, or the entity that has been awarded the Contract, as context requires.
- 2.10. "Emergency Work" Work which is required to be done without delay owing to circumstances for which the WVDOH could not have reasonably expected and has been designated as such by a representative of the WVDOH.
- 2.11. "Liquidated Damages" Monetary compensation due from the Vendor in the event the Vendor's performance falls short of contractual stipulation or breaches the contract. Delays in the delivery of goods and/or services or quality failures or corrections by the Vendor may result in the Agency assessing charges for such deficiencies per these contract Specifications, the Standard Specs Section 108.7, as amended, and calculated from the table posted at the WVDOH Contract Administration's Specifications and Documents website, as amended:

https://transportation.wv.gov/highways/contractadmin/specifications/Pages/LiquidDat edDamages.aspx

- 2.12. "MP per MCS&T" Refers to a Materials Procedure per the Materials Control, Soils, and Testing Division of the West Virginia Division of Highways. Reference: https://transportation.wv.gov/highways/mcst/Pages/default.aspx
- **2.13. "OSHA" -** Occupational Safety and Health Administration. Reference: <u>www.osha.gov</u>.
- **2.14.** "Solicitation" The official notice of an opportunity to supply the State with goods and/or services that is published by the West Virginia Division of Highways.
- 2.15. "Standard Specs" The West Virginia Department of Transportation, Division of Highways Standard Specifications, Roads and Bridges, adopted latest edition, and as amended or modified by any subsequent Supplemental Specifications.

2.16. "WVDOH" and "Agency" - Interchangeable terms for the West Virginia Division of Highways.

3. GENERAL REQUIREMENTS:

3.1. Standard Specifications: The following sections of the Standard Specs, but not limited to, shall apply to the administration of this contract: Sections 101, 102, 103, 104, 105, 106, 107, 108, 109, and 110, as amended.

Materials, equipment, and performance of this contract shall confirm, but are not limited to, the requirements of Standard Specs Sections 636, as amended.

A hard copy of the current Standard Specs may be purchased at a cost of \$20.00 (\$15.00 for the 2017 book plus \$5.00 for the Supplemental Latest Edition) using the **Attachment D ("ATT D") Standard Specifications Order Form**. The completed form should be submitted by email to <u>DOTSpecifications@wv.gov</u> or mailed to:

West Virginia Division of Highways Technical Support Division 1334 Smith Street Charleston, West Virginia 25301

A free electronic copy of the Standard Specs may be obtained by sourcing: http://www.transportation.wv.gov/highways/contractadmin/specifications/2017StandSpec/Pages/default.aspx

- **3.2.** Documentation to be Included with the Bid: The Vendor should carefully read the entire solicitation invitation. The Vendor should include as part of their bid response:
 - Certification and Signature Page
 - Addendum Acknowledgement Form
 - Valid West Virginia Contractor's License, if applicable.
 - Contract Manager Page
 - Attachments included in solicitation package (ATT A, ATT B, etc.)
 - Purchasing Affidavit (properly notarized)
 - Ethics/Disclosure Form (properly notarized), when provided with the solicitation
 - Valid Certificate of Insurance; and,
 - Any other required forms or supporting information as described herein.

Omitting any required forms, attachments, or documentation as described throughout this contract could deem a bid non-responsive and result in the disqualification of the Vendor's bid response. **3.3.** Contract Items and Mandatory Requirements: Vendor shall provide Agency with the Contract Items for all methods listed below on an open end and continuing basis. Contract Items must meet or exceed the mandatory requirements as shown below.

At any time during the life of this contract, upon request by the WVDOH, the awarded Vendor shall provide an update of any information requested in Section 3.6

- **3.3.1.** Contract Item 1: Soil Nails Propelled by Compressed Gas Vendor shall furnish equipment, all incidentals, and galvanized soil nails (hollow steel tubes that have been hot dip galvanized). The soil nails shall have a wall thickness of 0.120 inches, nominal outside diameter of 1.5 inches. The strength of the tube shall be 36 ksi. When applicable, Vendor shall provide perforated tubes that can serve as both horizontal drains and tensile elements. Excess cutoffs from previously inserted nails are not acceptable. Vendor shall bid one price for each 20-foot length of soil nail on Attachment A ("ATT A") Pricing Pages.
 - **3.3.1.1.** Soil nails shall be inserted with a single stroke of velocity of no less than 200 miles per hour. The inserted length and spacing will be determined based upon the WVDOH District Engineer or designee's approved engineering plans. More than 4 inches of exposed soil nails after insertion is unacceptable unless first approved by the WVDOH District Engineer or designee. Exposed portion of installed nails must be cut for inclusion into shotcrete or flush to ground in the case of no shotcrete work when not required by the engineering plans. Disposal of the cut-off portions of the soil nails from the right-of-way is the responsibility of the Contractor at no additional cost to the WVDOH. If required, lagging and backfill will be provided by the WVDOH.
- 3.3.2. Contract Items 2 thru 8: Permanently Cased Soil Nails Method Vendor shall furnish permanently cased soil nails that are a three stage construction including installation of: 1) an outer tube (minimum 1.5 inch outside diameter, minimum 0.120 inch wall thickness hot-dipped galvanized 36 ksi steel tube that is mechanically deformed, threaded or specially galvanized through a drossing process to produce a plurality of surficial asperities); 2) neat cement grout that completely fills the outer tube; and 3) an inner bar consisting of epoxy coated, #6 (or greater) grade 60 or grade 75 rebar or thread bar, depending on the final design load. When applicable, Vendor shall provide perforated tubes that can be pressure grouted and bid one price for each 20-foot, 30-foot, 40-foot, 50foot, 60-foot, 70-foot, and 80-foot length of permanently cased soil nails on ATT A.
- **3.3.3.** Contract Items 9 thru 15: Self-Drilling Soil Nails Method Vendor shall furnish self-drilling soil nails that consist of a hollow bar with a sacrificial drill bit. Multiple bars may be coupled to produce final length. Bar outer diameters shall be a minimum of 1.5 inches and maximum 3 inches depending on design

load. Vendor shall bid one price for each 20-foot, 30-foot, 40-foot, 50-foot, 60-foot, 70-foot, and 80-foot length of self-drilling soil nails on **ATT A**.

- **3.3.4.** Contract Item 16: Shotcrete The shotcreting process shall consist of applying one or more layers of concrete conveyed through a hose pneumatically projected at a high velocity against a prepared surface with a nominal thickness of 6 inches with either welded wire fabric or triple twisted galvanized wire mesh approximately 2 inches from the outside surface. Vendor shall furnish shotcrete complying with the requirement of ACI 506.2, except as otherwise specified below. Vendor shall bid one price per square foot on ATT A.
 - **3.3.4.1.** Wet Mix Process: Shall comply with the requirements of ACI 506R and consist of thoroughly mixing all the ingredients except accelerating admixtures but including the mixing water, introducing the mixture into the delivery equipment, and delivering it by positive displacement, to the nozzle. The wet-mix shotcrete shall then be air jetted from the nozzle at high velocity onto the surface.
 - **3.3.4.2.** Dry Mix Process: Shall comply with the requirements of ACI 506R and consist of producing shotcrete by delivering the dry ingredients conveyed pneumatically with the mixing water introduced at the nozzle.
 - **3.3.4.3.** Materials and Application: Vendor shall deliver, store, and handle materials to prevent contamination, segregation, corrosion, or damage. Vendor shall store liquid admixtures to prevent evaporation and freezing.

Materials used to produce shotcrete must meet the following mandatory requirements:

Material	Requirement
	Shall comply with the requirements of Standard
Cement	Specs Section 701.1
Chemical	Fluid type, applied at nozzle, shall comply with
Admixtures	the requirements of AASHTO M194, ASTM
Accelerator	C494, and ASTM C1141 Type C or E.
Course	Shall comply with the requirements of Standard
Aggregate	Specs Section 703.1 or 703.2.
Fiber	Shall comply with the requirements of ASTM
Reinforcement	C1116.
	Shall comply with the requirements of Standard
Fine Aggregate	Specs Section 702.1 (except for gradation).

REQUEST FOR QUOTATION Slide Repair Using Soil Nail Method

	Shall comply with the requirements of Standard
	Specs Section 707.4.1. Replacement up to 20%
Fly Ash	by weight of cement.
Prepackaged	Shall comply with the requirements of ASTM
Shotcrete	C928.
	Shall be included with the Shotcrete and comply
	with the requirements of Standard Specs Sections
Rebar Mat	709.1 and 709.4.
	Shall comply with the requirements of AASHTO
	M194 and ASTM C494 Type B or D Mineral
Retarders	Admixtures.
	Shall comply with the requirements of Standard
	Specs Section 707.4.3. 85% minimum silicon
	dioxide solids content, not to exceed 8% by
Silica Fume	weight of cement.
Water – Clean	Shall comply with the requirements of Standard
and Potable	Specs Section 715.7.
Water-Reducer	Shall comply with the requirements of AASHTO
and	M194/ASTM C494 Type A, D, F, or G.
Superplastisizer	
Welded Wire	Shall comply with the requirements of AASHTO
Fabric	M55/ASTM A185 or A497.

3.3.4.4. Aggregate Material: Aggregate to be used for the shotcrete must meet the strength and durability requirements of AASHTO, as applicable, and the following gradation requirements.

Sieve Size	Percent Passing by Weight
1/2"	100
3/8"	90-100
No. 4	70-85
No. 8	50-70
No. 16	35-55
No. 30	20-35
No. 50	8-20
No. 100	2-10

3.3.4.4.1. The proportion of the shotcrete must be pumpable with the concrete pump furnished for the work, with a cementing materials content of at least 24.3 pounds per cubic foot and water/cement ratio not greater than 0.55. Admixtures not approved by the WVDOH District Engineer or designee are not acceptable.

- **3.3.4.4.2.** Thoroughly mix admixtures into the shotcrete per the rate specified by the manufacturer. Use only accelerators compatible with the cement, non-corrosive steel and not promoting other detrimental effects such as cracking or excessive shrinkage. The maximum allowable chloride ion content of all ingredients is 0.10% when tested to AASHTO T260.
- 3.3.4.4.3. Air entrainment is not required for temporary shotcrete construction facings but shall be used in all exposed permanent shotcrete. A minimum 8.5% +/- 2.5% air entrainment shall be in the concrete mixture before shooting for wet-mix shotcrete. Dry-mix shotcrete may be used, provided that the in-place air entrainment shall be checked at least once at the beginning of the operation and once after restarting the shotcrete process after any breaks each day and found that the in-place mixture has a minimum of 4% air entrainment.
- **3.3.4.4.4.** Vendor shall provide shotcrete with a minimum design compressive strength of 2000 psi in three days and 4000 psi in 28 days when tested in accordance with ASTM C1140 and ASTM C42. Results from at least one (1) test panel for each mix design shall be submitted to the WVDOH District Engineer or designee prior to construction unless otherwise directed by the WVDOH District Engineer or designee.
- **3.3.4.4.5.** The batch aggregate and cement by weight or by volume must be in accordance with the requirements of ASTM C94 or AASHTO M241/ASTM C685. The mixing equipment must thoroughly blend the materials in sufficient quantity to maintain placing continuity. Ready Mix shotcrete must comply with AASHTO M157. The batch, delivery and placement of shotcrete must be within 90 minutes of mixing. The use of retarding admixtures may extend application time beyond 90 minutes if approved by the WVDOH District Engineer or designee.
- **3.3.4.5.** <u>Approved Source Plant:</u> After award and prior to each contracted project, the Vendor shall provide a sample and method of placement of shotcrete, meeting all requirements of Section 3.3.4, to the WVDOH, Materials Controls, Soils and Testing Division for approval. Only after WVDOH approval shall the vendor proceed with

shotcrete installation. WVDOH reserves the right to collect samples for testing at any time during the completion of a project.

For each plant it sources for ATT A - Contract Items 1 through 25, the Vendor shall supply the Agency with the plant's name, certification status, and physical location on the Attachment C ("ATT C") Source Plant Info Form. Failure to submit ATT C may result in disqualification of Vendor's bid.

- **3.3.4.6.** Shotcrete Installation: The Contractor shall abide by the following shotcrete installation instructions. All installation shall be handled by the Contractor unless otherwise specified herewith:
 - **3.3.4.6.1.** Work shall only begin after receiving approval of the design mix and continue if the specified strengths are obtained. The Contractor is to provide all work required to obtain satisfactory strength tests at no additional cost to WVDOH.
 - **3.3.4.6.2.** The Contractor shall maintain the face of the excavation and other surfaces clean of loose materials, mud, rebound, overspray, or other foreign matter that could prevent or reduce shotcrete bond. Any surface materials that are loosened or damaged, to a sufficient depth should be removed. Any material that loosens during application shall be removed. The adjacent surfaces shall be protected from overspray during shooting. During the excavation and cleaning process, the ground shall not be loosened, cracked, or shattered. Water flow shall be diverted and standing water shall be removed so that shotcrete placement will not be affected.
 - **3.3.4.6.3.** The Contractor shall maintain a clean, dry, oil-free supply of compressed air sufficient for maintaining adequate nozzle velocity, at all times. The equipment shall be capable of delivering the premixed material accurately, uniformly, and continuously through the delivery hose. To prevent sagging or sloughing of freshly applied shotcrete, control must be taken with the application thickness, nozzle technique, air pressure and rate of shotcrete placement.
 - **3.3.4.6.4.** Shotcrete shall be applied from the lower part of the area upward to prevent accumulation of rebound. The placement of the nozzle shall be at a distance and

approximately perpendicular to the working face so that rebound will be minimal and compaction will be maximized. Rebound shall not be worked back into the construction. Where shotcrete is used to complete the top ungrouted zone of the nail drill-hole near the face, the nozzle shall be positioned into the mouth of the drill-hole to completely fill the void.

- **3.3.4.6.5.** The shotcrete shall be applied from the lower part of the area upward to prevent accumulation of rebound. The placement of the nozzle shall be at a distance and approximately perpendicular to the working face so that rebound will be minimal and compaction will be maximized. Rebound shall not be worked back into the construction. Where shotcrete is used to complete the top ungrouted zone of the nail drill-hole near the face, the nozzle shall be positioned into the mouth of the drill-hole to completely fill the void.
- **3.3.4.6.6.** A clearly defined pattern of continuous horizontal or vertical ridges or depressions at the reinforcing elements after they are covered with shotcrete will be considered as indication of insufficient reinforcement cover or poor nozzle techniques. In this case, immediately suspend the application of shotcrete and implement corrective measures. Correct the shotcreting procedure by adjusting the nozzle distance and orientation, ensuring adequate cover over the reinforcement, and adjusting the water content of the shotcrete mix or other means.
- **3.3.4.6.7.** Any shotcrete surface defects shall be repaired after placement as soon as possible. Any shotcrete that exhibits segregation, honeycombing, lamination, void or sand pockets, or excessive shrinkage cracking shall be removed and replaced. In-place shotcrete not meeting the specified strength requirement will be subject to remediation. Possible remediation options include placement of additional shotcrete thickness or removal and replacement, at no additional cost to the WVDOH.
- **3.3.4.6.8.** A minimum reinforcement overlap shall be provided at reinforcement splice joints as per industry standards. The surface of a joint shall be cleaned and wet before adjacent shotcrete is applied. Where shotcrete is used to complete the top ungrouted zone of the nail drill-hole near the face,

to the maximum extent practical, clean and dampen the upper grout surface to receive shotcrete, like a construction joint.

- **3.3.4.6.9.** Shotcrete shall not be installed on frozen surfaces or ground. Cold weather protection shall be maintained if the temperature, after placement, is below 32° F until the inplace compressive strength of the shotcrete is greater than 725 psi. Cold weather protection may require blankets, heating under tents, or other means acceptable to the WVDOH. The shotcrete mix shall be deposited at a temperature of not less than 32°F or more than 100°F.
- **3.3.4.6.10.** During high wind or rain, unless suitable protective covers, enclosures or wind breaks are installed, shotcrete application shall be suspended. Any newly placed shotcrete that has been exposed to rain making the shotcrete unacceptable shall be removed and replaced. A polyethylene film or equivalent shall be used to protect the work from exposure to adverse weather. During hot weather or dry, windy conditions, the newly placed shotcrete shall be protected from drying by moisture curing until curing compound can be applied. Curing compound shall be applied with 24 hours of placement.
- **3.3.5.** Contract Item 17: Extra Shoulder Build-up of Shotcrete When required to meet the approved drawings and plans, the Contractor may be required to provide a 24-inch Extra Shoulder Build-up which is shotcrete formed outboard of the wall at the road level. Vendor shall bid one price per linear foot of extra shoulder build-up of shotcrete on ATT A.
- **3.3.6.** Contract Item 18: Concrete Masonry Units Split face Concrete Masonry Units are required to meet ASTM C-90 criteria to construct necessary Geosynthetically Confined Soil (GCS) walls. WVDOH forces, following methods and designs shown on plans, will perform installation. Vendor shall bid one price per concrete masonry unit on ATT A.
- **3.3.7.** Contract Item 19: Geosynthetic Fabric Geosynthetic fabric is a woven polypropylene sheet with a wide width tensile capacity of nominally 175 pounds per inch for GCS walls. WVDOH forces, following methods and designs shown on plans, will perform installation. Vendor shall bid one price per square foot of geosynthetic fabric on ATT A.
- **3.3.8.** Wire Mesh Surface Treatment WVDOH will approve the measurement of wire mesh surface treatment in square feet, properly installed and tensioned to

the slope by welding or bolting steel plates with central holes over protruding soil nail tips. Vendor shall bid one price per square foot for the following on ATT A:

3.3.8.1. Contract Item 20: High Tensile Diamond Mesh - Shall meet the following requirements:

Contract Item 20	Requirement
Wire Diameter	0.120 inches
	Zinc coated by the Zn/Al process
Wire Coating	(minimum Zinc Coating 0.80 oz/sf)
Tensile strength of wire	75 ksi

3.3.8.2. Contract Item 21: High-Capacity Double Twist Hexagonal Mesh - Shall be manufactured in accordance with ASTM A975.97 and meet the following requirements:

Contract Item 21	Requirement
Wire Diameter	0.120 inches
	Hot dip galvanized, finish 5, class-3,
	Zinc Coating. (ASTM A-641, tested
Wire Coating	in accordance with ASTM A370-92)
	Soft temper in accordance with
Tensile strength of wire	ASTM A641-92
Weight of Zinc Coating	Determined by ASTM A-90
of Wire	(normally 0.85 oz/sf)
	High grade or special high grade in
Grade of Zinc Coating	accordance with ASTM 8-6, Table 1
Uniformity of Coating	Determined by ASTM A-239
	not less than 12% in accordance
	with ASTM
Elongation	A370-92

3.3.9. Contract Item 22: Galvanized Steel Plates (including Bolts) - Shall meet the following requirements:

Contract Item 22	Requirement
Dimensions	8" x 8" x 3/8" or equivalent
	Minimum 36 ksi mild steel as required by ASTM A36
Material	or greater
Galvanization	Hot dip Zinc Galvanized

3.3.10. Contract Item 23: Strip Drains - To eliminate water build-up behind the shotcrete wall, the vendor shall use at a minimum, 4-inch strip drains that are

full width of the shotcrete (downslope) at a maximum of 6-foot centers. Drains shall meet the requirements of Standard Specs Section 714.19 and extend beyond the face of the shotcrete at the downhill face. Vendor shall source HDPE manufacturers from the WVDOH Plastics Products approved list. http://www.transportation.wv.gov/highways/mcst/Pages/Listings.aspx

- **3.3.11. Horizontal Drains:** Horizontal drains shall consist of 1.5-inch diameter (or larger) slotted schedule 80 (or thicker) PVC pipe, conforming to the requirements of ASTM Designation: D 1785. These pipes are inserted into drilled holes to reduce water pressures within slide masses.
 - **3.3.11.1. Contract Item 24: Slotted Pipe** Shall have two rows of slots. The rows shall be in the longitudinal direction of the pipe and the slots shall be cut in the circumferential direction of the pipe. The rows shall be centered on two of the third points (120 degrees apart) of the pipe circumference. Each row of slots shall conform to one of the configurations in the following table. Slots shall be spaced uniformly along the pipe. The minimum opening will be measured on the inner surface of the pipe.

Number of Slots (±3) Per Meter (3.0 feet)	Width of Slot Millimeters (inches)	Minimum Opening Per Meter (3 feet) Square Millimeters (in ²)		
72	1.27 (0.05)	2110 (3.27)		
75	0.51 (0.02)	975 (1.50)		
151	0.25 (0.01)	975 (1.50)		

3.3.11.2. Contract Item 25: Perforated Pipe - Shall have three rows of perforations with one row on each side of the pipe and the third row in the top. The perforations shall be 10 mm (0.40 in) in diameter spaced at 75 mm (3.0 in) centers with the top perforations staggered in relation with the holes on either side. Fittings for the PVC pipe shall be Schedule 80 Type II PVC solvent weld type fittings conforming to the requirements in ASTM Designation: D 2467. Machined male and female ends may be used in lieu of couplings. Un slotted or un-perforated PVC pipe, between 1 m (3.0 ft) to 9 m (29.5 ft) in length, shall be provided at the outlet of the drain.

3.3.12. Mobilization / Demobilization:

3.3.12.1. Contract Item 26: Standard Projects - Contractor must have at least three qualified crews readily available for deployment to work in multiple locations simultaneously. Unless otherwise agreed upon by the Contractor and the WVDOH District Engineer or designee, the Contractor shall have 14 working days to perform all work and operations necessary to load and unload equipment, move personnel, supplies and incidentals to and from the project site to accomplish all other miscellaneous associated work items or operations that must be performed, including cost that must be incurred, to mobilize and begin work on a standard project.

Soil nail installation rigs must be capable of either installing soil nails propelled by compressed gas or drilling a hole up to 80 feet in length and six inches in diameter.

3.3.12.2. Contract Item 27: Emergency Work – Upon approval by the WVDOH District Engineer or designee, the Contractor shall have 48 hours or an agreed upon timeframe between the WVDOH and the Contractor to perform all work and operations necessary to mobilize and begin work on an emergency project, including all the same procedures as a standard project per Section 3.3.12.1. Emergency Work shall be invoiced by Vendor at 1.25 times the amount bid for Contract Item(s) on the Pricing Pages.

If the equipment can be transported under its own power to an adjacent site within a reasonable distance, as agreed upon by the WVDOH and the Contractor. Mobilization/demobilization will not be paid by the WVDOH for the second site.

- **3.3.13. Contract Items 28-31: Maintenance of Traffic** While undergoing improvement, the project site shall be kept open to traffic in such condition that both local and through traffic will be adequately and safely accommodated. Unless otherwise agreed upon by all parties and included in project proposal, the maintenance of traffic shall be provided by the Contractor.
- 3.4. Plans and Details/Proposal: Contractor will provide all necessary engineering plans and details/proposals required to successfully repair slides when requested, at the time of need by the WVDOH. Any necessary core drilling, rotary drilling, percussion drilling, auger drilling or driven casing required to produce plans are the responsibility of the Contractor. The awarded Contractor will provide all necessary engineering plans and details/proposal required to successfully repair slides when requested, at the time of need by the WVDOH. Any excavation required will be measured by crew hours (Contract Item 32). The disposal of excavated materials from the right-of-way is the responsibility of the Contractor and will be paid at the contract unit price per hour.

Any necessary core drilling, rotary drilling, percussion drilling, auger drilling or driven casing required to produce plans are the responsibility of the Contractor.

- **3.4.1.** The Contractor shall be responsible for maintaining record of the volume (measured by cubic yard) and location (by GPS coordinates) of material removed from a project site and provide the information upon request. In the event excavated materials are transported to a location other than the failure site, the Vendor shall record the GPS coordinates of the excavated site, the coordinates of the dumped location as well as the type and quantity of materials transported. The Vendor shall also be responsible for ensuring the materials are placed on DOH right-of-way while adhering to any environmental regulations or site-specific conditions.
- **3.4.2.** The engineering plans and details/proposal shall be stamped by a Registered Professional Engineer, licensed in the State of West Virginia, under the full-time employment of the Contractor, who is knowledgeable in the design and implementation of slope stabilization with soil nails and related work. Changes or deviations from the approved submittals must be resubmitted for approval. No adjustments in project time will be allowed due to incomplete submittals. The WVDOH reserves the right to agree to an adjustment in project time when in the best interest of the State of WV. The engineering plans and details/proposal shall include, at a minimum, the following information:
 - A description of the soil nail construction sequence and a schedule for the work.
 - The slip length per foot, the failure width per foot and the failure height (depth) per foot.
 - A description of the size and spacing of the nail to be placed.
 - All necessary details to successfully construct any temporary facing and drainage system.
 - The nail angle entry shall be within plus or minus 3 degrees from the approved plans. The nails shall not extend beyond the limits of the permanent easement or right of way. Subsidence or physical damage by such operations shall be cause for immediate cessation of operations and repairs at the Contractor's expense.
- **3.5.** Equipment Lay Down and Storage: The availability of storage and lay down areas for Vendor equipment, materials, etc., on WVDOH property shall be at the sole discretion of the WVDOH District Engineer or designee. Should placement or storage of Vendor equipment, materials, etc., be permitted, the WVDOH assumes no responsibility for damages, theft, injury, or vandalism to Vendor owned property while stationed or stored WVDOH property.
- 3.6. Personnel and Equipment Requirements: A Contractor and it's personnel shall meet the following requirements and must provide the information requested on the

Attachment B Personnel Experience Forms ("ATT B"), which are provided as attachments to the solicitation and must be submitted with the bid. The awarded Contractor must have at least three qualified crews readily available for deployment to work in multiple locations simultaneously. A crew shall minimally consist of no less than one of each of those identified in Sections 3.6.1 through 3.6.4.

3.6.1. Project Manager: The Project Manager shall have successfully engineered and constructed no less than three projects within the past three years for each nail type bid. All soil nail work must be self-performed to meet this requirement. On the **ATT B -Project Manager** tab, the Contractor shall provide the name and dates for each project.

Supervisor Engineer: The Supervisor Engineer shall have successfully stabilized an active landslide on a public roadway and designed no less than three projects within the last 3 years while maintaining traffic on the impacted roadway for each nail type being bid. All soil nail work must be self-performed to meet this requirement. On the **ATT B** - **Supervisor Engineer** tab, the Contractor shall provide the name and dates for each project.

Equipment Operator: Equipment Operators must have successfully operated rigs and stabilized an active landslide on an active public roadway while maintaining traffic for no less than three of each nail type being bid.. All soil nail work must be self-performed to meet this requirement. On the ATT B - Equipment Operator tab, the Contractor shall provide the name and dates for each project.

- **3.6.2.** Foreman: The Foreman must have successfully managed no less than three projects within the last three years with this Contractor, which successfully stabilized an active landslide using soil nails on a active, public roadway while maintaining traffic on the impacted roadway. On the ATT B Foreman-Nozzleman tab, the Contractor shall provide, at a minimum, one Foreman's name, the name of three projects of which the employee was the Foreman, the nail type, and dates of each project.
- **3.6.3.** Nozzleman: Nozzlemen or any worker applying shotcrete must be certified as an ACI Shotcrete Nozzleman as outlined in ACI Certification Publication CP-60. The Contractor is fully responsible for training, operations and results of work performed by the Nozzleman. On the ATT B - Foreman-Nozzleman tab the Contractor shall provide, at a minimum, one Nozzleman's name, the Nozzleman's ACI Certification Number and the number of square feet of shotcrete applied by the named individual in the last three years, including the dates of installation.

- **3.6.4.** In addition to the personnel listed above, all other laborers and workers employed by the Contractor should possess knowledge of installation of soil nails and general roadway maintenance.
- **3.7.** Safety Requirements: The Contractor shall be responsible for meeting all federal, state, and local safety code and accepted industry standard requirements.
 - **3.7.1.** The Contractor's personnel/crew shall obey all traffic and safety rules and regulations and shall not create any hazardous conditions with the operation of the equipment. All Contractor supplied equipment, tools and personal safety equipment shall meet or exceed the safety standards specified for such items by ANSI Z133.1-2017.
 - **3.7.2.** All staff/crew shall wear approved hard hat, protective clothing, ANSI approved safety vests and any other requirements to meet OSHA standards.
- **3.8.** Pandemic-Response Safety Protocols: In addition to the Vendor's established protocols and the WVDOH's established safety protocols outlined in the Standard Specs, as amended, the Vendor and the Vendor's personnel/workers shall adhere to all WVDOH's pandemic response protocols while present at a WVDOH jobsite. Vendors may obtain the WVDOH's pandemic-response by contacting the WVDOH District Engineer or their designee.
- **3.9.** Soil Nail Sampling and Testing: Acceptance of the Soil Nails will be by Contractor's certification to the WVDOH, stating that the material composition and installation conforms to these specifications, combined with visual inspection of the in-place Soil Nail and Shotcrete by the WVDOH District Engineer or designee. The Contractor shall test one soil nail per site. The WVDOH reserves the right to require additional testing by the Contractor. Any requested testing of Soil Nails will follow these procedures:
 - **3.9.1. Equipment:** A dial gauge capable of measuring to 25.4 um (0.001 in) shall be used to measure movement. A hydraulic jack and gauge calibrated as a unit shall be used to apply the test load. The pressure gauge shall be graduated in 690 kPA (100psi) increments or less and used to measure the applied load. The test loads shall be applied incrementally.
 - **3.9.2.** Pull-out testing: Install one nail as a non-service nail and load test to pull-out failure. Pull-out failure is defined as movement more than 1 mm (0.04 in) between the 1-minute and 10-minute reading of 2 mm (0.08 in) per log cycle of time over a minimum load hold period of 60 minutes. The test nails shall be installed and tested as each level at a rate consistent with construction operations. The test length of nail shall be chosen to cause pull-out failure to steel yield, but it shall not be less than 2.4 m (8 ft) or 2.1 m (7 ft) where construction boundaries shown on the contract plans do not allow 2.4 m (8 ft)

nails. A minimum ungrouted zone of 1 m (3 ft) in length to the face shall be provided.

- **3.9.2.1.** Each test soil nail using the drilling method shall be grouted in place as part of a regular production grouting process. After grouting, the nail shall not be loaded for a minimum of three days. Reaction frames should not bear on the shotcrete face within a 1 m (3 ft) radius of the center of the drilled hole.
- **3.9.2.2.** The pull-out test shall be made by incrementally loading the nail. The nail movement shall be measured and recorded to the nearest 25.4 um (0.001 in) with respect to the independent fixed reference point at each increment load. The test shall be monitored with a pressure gauge. The load hold period shall start as soon as the test load is applied. Movement shall be recorded at 0, 1, 2, 3, 4, 5, 6 and 10 minutes. If the load is extended, the nail movement shall be recorded at 15, 25, 30, 45 and 60 minutes. Each increment of load shall be no greater than 25% of the design load of the nail tested. The loading shall be terminated either at failure or earlier at the option of the Contractor, if at least twice the design unit bond stress is demonstrated

3.9.3. Acceptance Criteria:

- **3.9.3.1.** A nail deemed acceptable if the unit bond stress at a failure load or test termination is equal to or greater than twice the design unit bond stress. Unacceptable test results shall result in modifications to design or construction procedures. Any modifications of design or construction procedures shall be at the Contractor's expense and the verification testing procedure shall be repeated as required by the WVDOH. Graphs shall be plotted during the test of deflection against load.
- **3.9.3.2.** Acceptance of installed shotcrete will be by visual inspection by the WVDOH District Engineer or designee. Materials found not in compliance with the requirements of this contract may be rejected, removed, and replaced at the Contractor's expense

4. CONTRACT AWARD:

4.1. Contract Award: The Contract is intended to provide Agencies with a purchase price on all Contract Items. The Contract shall be awarded to the Vendor that provides the Contract Items meeting the required specifications for the lowest overall total cost as shown on **ATT A**.

4.2. Contract Award Transition: Upon the award of this contract, the WVDOH Operations Division will announce the effective date of use of this contract to the Districts and the Vendors, whether it is by the effective date, the completed and encumbered date, or an established date by the WVDOH. Upon the announced effective date of use, any Delivery Order issued prior to the award of the contract shall remain in effect and should not be cancelled until that Delivery Order is filled; however, after ten (10) working days of the Districts and Vendors notice, any Delivery Order that has not been completely filled by the Vendors shall NOT be completed, and a cancellation notice will be sent to that Vendor from the issuing District for cancellation of the balance of that Delivery Order only. No Delivery Orders from prior contracts should be held open by the Districts or Vendors longer than ten (10) working days after the effective date of use is announced for the new contract.

This directive is issued to assist the Districts and the Vendors when fulfilling open Delivery Orders only. It is NOT issued to cause harm or to take contracts from one Vendor to give to another Vendor, but to establish a transition process from one contract into another contract.

- **4.3. Pricing Pages:** Vendor shall complete **Attachment A Pricing Pages ("ATT A")** by providing a Unit price per item. Failure to complete **ATT A** in its entirety may result in the Vendor's bid being disqualified.
 - **4.3.1. ATT A** contains a list of Contract Items and estimated purchase volumes. The estimated purchase volume for each item represents the approximate volume of anticipated purchases only. The approximate quantities on **ATT A** is for evaluation purposes only. Actual quantities will be provided to the awarded vendor on a Delivery Order at the time of need. No future use of the Contract or any individual item is guaranteed or implied.

4.3.2. Each unit price shall include labor, equipment, materials and incidental costs associated with the Contract Item being bid.

- **4.3.3.** <u>Vendor should type or electronically enter the information into ATT A to</u> <u>prevent errors in the evaluation</u>. In most cases, the Vendor can request an electronic copy of the Pricing Pages spreadsheet for bid purposes by sending an email request to the following address: <u>Kristy.E.James@wv.gov</u>.
- **4.3.4.** Changing the Contract Item Descriptions, Units of Measure, or Estimated Quantities on the **ATT A** shall result in the disqualification of altered Contract Item bid. In circumstances when all Contract Items must be bid for evaluation and award purposes, the disqualification of any Contract Item will result in disqualification of the entire bid.

- **4.4. Price Adjustments:** In the event of a significant price increase of component material or rental equipment, if applicable, utilized to perform or under this Contract, that is not the fault of the Vendor, the contract pricing, may be equitably adjusted by change order as more fully described below.
 - **4.4.1.** A change in price is considered significant if the price of the component material or rental equipment increases by 20% or more from the original bid amount.
 - **4.4.2.** Any request for a price increase under this clause must be supported by: price quotes for the component material or rental equipment for which a change is being sought; invoices showing amounts actually paid for the component materials or rental equipment; and any other evidence that supports the increase request.
 - **4.4.3.** The quotes provided to support the price increase request must be the quotes that Vendor actually relied on when submitting its bid and both the quote and the amount ultimately paid must have resulted from an arm's length transaction with an unrelated party.
 - **4.4.4.** Vendor must also show that the significant price increase would have been incurred if the owner had purchased the material or rental equipment directly from the supplier.
 - **4.4.5.** Price adjustments will be granted or denied at the sole and absolute discretion of the State.
 - **4.4.6.** Price adjustments will only be considered annually at the contract expiration/renewal date. Vendor must submit price adjustment requests 60 days prior to the expiration/renewal date to be considered.
 - **4.4.7.** Vendor documentation for price adjustments shall be submitted to <u>DOHOperationsProcurement@wv.gov</u> for initial review.
 - **4.4.8.** Price adjustments shall be established by a written Change Order, which must be reviewed and approved by the Purchasing Division, and as to form by the Attorney General's Office, in order to be effective. Adjusted pricing will not take effect until the effective date of such Change Order and cannot be retroactive.

5. ORDERING AND PAYMENT:

- 5.1. Ordering: Vendor shall accept orders through wvOASIS, regular mail, facsimile, email, or any other written forms of communication. Vendor shall maintain and keep current its phone numbers, fax number, e-mail address, locations, and ordering/billing/ payment addresses with WVDOH and in wvOASIS. Vendor may, but is not required to, accept on-line orders through a secure internet ordering portal/website. If Vendor has the ability to accept on-line orders, it should include in its response a brief description of how Agencies may utilize the on-line ordering system. Vendor shall ensure that its online ordering system is properly secured prior to processing Agency orders online.
- 5.2. Delivery Order: The WVDOH will initiate a Delivery Order to the Vendor with the lowest bid for the slide repair method of need at a specific location. The Delivery Order will be generated by a WVDOH Engineer or designeeand should be completed on a WV-39 Blanket Release Order. The order should detail the need and location information of the work to be completed per Contract Item, as well as the tentative start and end dates, to be agreed upon as the official start and end dates. Emergencies shall be prominently noted on the Delivery Order. Once complete, the Delivery Orders shall be sent to Vendor via fax, email, or postal mail. <u>Any verbal communications to initiate or make modifications to a project from this contract are not acceptable as a Delivery Order.</u>
- **5.3.** Inspection and Approval: The WVDOH will approve payment at such time as the job site work has been completed, in accordance with the provisions of this agreement, and has been verified by the WVDOH Engineer or designee.
- 5.4. Payment: Upon completion of the work indicated on the Delivery Order, Vendor shall accept payment in accordance with the payment procedures of the State of West Virginia. The State of West Virginia currently utilizes a Purchasing Card program, administered under contract by a banking institution, as well as Electronic Funds Transfer as methods to process payment for goods and services. The Vendor shall accept the State of West Virginia's Purchasing Card and Electronic Funds Transfer for payment of orders under this Contract. Electronic Funds Transfer for payment is available through the WV State Auditor's Office. The Vendor may visit the WV State Auditor's website (wvsao.gov) for all necessary forms and instructions. Payment method may be dictated at WVDOH's discretion.
 - **5.4.1. Inspection and Approval**: The WVDOH will approve payment at such time as the job site work has been completed, in accordance with the provisions of this agreement, and has been verified by the WVDOH Engineer or designee.

6. PROJECT ACCEPTANCE, DELIVERY, AND RETURN:

6.1. Project Acceptance and Written Verification of Receipt: Upon receipt of a WVDOH Delivery Order, the Vendor shall advise the WVDOH in writing within five

(5) calendar days of their acceptance or refusal of the Delivery Order. As verification of receipt, Vendor must provide written acknowledgement of any Delivery Orders and any Revisions/Modifications thereto sent by WVDOH. Failure to provide the WVDOH with written acknowledgement of any Delivery Orders/Revisions within five days of the Order being sent shall be considered refusal of the Delivery Order. In the event of refusal, the WVDOH at its own discretion shall cancel the Delivery Order and may seek to cancel the Delivery Order and obtain the goods or services from the next low bid Vendor or proceed with an Emergency Purchase from the open market.

- 6.2. Negotiation of Dates: The WVDOH shall have the option to negotiate with the Vendor, the project's tentative start and end dates. Project work shall be continuous to completion unless otherwise approved in writing by the WVDOH District Engineer or designee.
- 6.3. Delivery Time: Vendor shall deliver standard orders no later than fourteen (14) working days or an agreed upon acceptable date by the WVDOH and Vendor, after Vendor's receipt of a Delivery Order. There shall be a minimum aggregate order quantity of twenty-five (25) nails per job site, unless otherwise grouped with additional nearby sites as placed on the Delivery Order and agreed upon by the WVDOH and the Contractor. Vendor shall deliver emergency orders within 48 hours or an agreed upon acceptable date by the WVDOH and the Vendor, after a Delivery Order is received by the Vendor.

Starting times and scheduled hours may vary and will be at the discretion of the WVDOH District Engineer or designee. All work performed under this contract shall be performed Monday through Friday. Saturday work may be performed if approved in advance by the WVDOH District Engineer or designee. Work will not be performed on any state or federal holiday unless approved in advance by the WVDOH District Engineer or designee.

- 6.4. Adverse Weather Conditions: Unsuitable/adverse/inclement weather conditions may dictate the work schedule. It is preferred that operations be suspended immediately when an inclement weather event begins or if the WVDOH District Engineer or their designee determines that an inclement weather event is imminent. If working conditions are dangerous or unsuitable for the WVDOH, Vendor, or general public, work shall be suspended by the WVDOH Engineer/designee. If needed, revision to the project's start and end date may be negotiated by the Vendor and the WVDOH Engineer/designee. After a weather-related suspension of work, the WVDOH District Engineer or their designee shall determine and convey in writing, such Delivery Order changes and when work shall resume, followed by the Vendor's written acknowledgement, per Sections 6.2 of this Contract Solicitation.
- **6.5.** Late Delivery: The Agency placing the order under this Contract must be notified in writing if orders will be delayed for any reason. Any delay in delivery that could cause harm to an Agency will be grounds for cancellation of the delayed order, and/or

obtaining the items ordered from a third party. The Agency placing the Delivery Order under this Contract mut be notified in writing by the Vendor no later than five (5) business days prior to the scheduled start date from the Agency's order. Any failure to notify, acknowledge receipt of WVDOH's written Delivery Orders/Revisions resulting in delivery delay, or failure to start or complete the project per the WVDOH scheduled due dates may be determined by the WVDOH at its sole discretion as harmful to the Agency and as such, shall result in WVDOH's cancellation of the Delivery Order and application of Liquidated Damages.

Any Agency seeking to obtain items from a third party under this provision must first obtain approval of the WVDOH Finance & Administration Division, Budget & Procurement Division.

6.5.1. Liquidated Damages: If the Vendor's work completion or corrections of deficient work exceeds the Delivery Order completion due date/timeframe, the Vendor shall agree that no extension of contract time will be granted unless Liquidated Damages are applied by the WVDOH in the form of an off-set reduction to the total amount of the Vendor's final invoice. The WVDOH shall calculate Liquidated Damages per project beginning on day one (1) after the WVDOH's specified Delivery Order due date, in accordance with this Section, the Contract's Terms and Conditions, and the Standard Specs Section 108.7, as amended.

	chedule of Liquidated Damag	的
Original Cou	unist Amount	Daily Charges
For More Than	To and Iseluding	Per Calendar Day
\$Ú	5500,0HN	\$300
\$500,000	\$2,000,000	5600
\$2,000,000	\$ 143,00043,0000	\$1,500
\$10.000,000	\$25,000,000	\$3,000
\$25,000,000		\$4.000

TABLE 108.7.1

6.6. Delivery Payment/Risk of Loss: Standard order delivery shall be F.O.B. destination to the Agency's location. Vendor shall include the cost/discount of standard order delivery charges in its bid pricing and is not permitted to charge the Agency separately for such delivery. The Agency will pay delivery charges on all emergency orders provided that Vendor invoices those delivery costs as a separate charge with the original freight bill attached to the invoice.

Deliveries made by the Vendor shall be comprised only of contract items intended for delivery at that location and specified in the pricing pages, contract specifications, or WV-39 Blanket Release Order.

6.7. Return of Unacceptable Items: If the Agency deems the Contract Items to be unacceptable, the Contract Items shall be returned to Vendor at Vendor's expense and with no restocking charge. Vendor shall either make arrangements for the return within

five (5) days of being notified that items are unacceptable or permit the Agency to arrange for the return and reimburse Agency for delivery expenses. If the original packaging cannot be utilized for the return, Vendor will supply the Agency with appropriate return packaging upon request. All returns of unacceptable items shall be F.O.B. the Agency's location. The returned product shall either be replaced, or the Agency shall receive a full credit or refund for the purchase price, at the Agency's discretion.

6.8. Return Due to Agency Error: Items ordered in error by the Agency will be returned for credit within thirty (30) days of receipt, F.O.B. Vendor's location. Vendor shall not charge a restocking fee if returned products are in a resalable condition. Items shall be deemed to be in a resalable condition if they are unused and in the original packaging. Any restocking fee for items not in a resalable condition shall be the lower of the Vendor's customary restocking fee or 5% of the total invoiced value of the returned items.

7. VENDOR DEFAULT:

- 7.1. The following shall be considered a Vendor default under this Contract:
 - 7.1.1. Failure to provide Contract Items in accordance with the requirements contained herein.
 - 7.1.2. Failure to comply with other specifications and requirements contained herein.
 - **7.1.3.** Failure to comply with any laws, rules, and ordinances applicable to the Contract Services provided under this Contract.
 - 7.1.4. Failure to remedy deficient performance upon request.
- 7.2. The following remedies shall be available to Agency upon default:
 - 7.2.1. Immediate cancellation of the Contract.
 - 7.2.2. Immediate cancellation of one or more release orders issued under this Contract.
 - 7.2.3. Any other remedies available in law or equity.

8. MISCELLANEOUS:

- **8.1.** No Substitutions: Vendor shall supply only Contract Items submitted in response to the Solicitation unless a contract modification is approved in accordance with the provisions contained in this Contract.
- **8.2.** Vendor Supply: Vendor must carry sufficient inventory of the Contract Items being offered to fulfill its obligations under this Contract. By signing its bid, Vendor certifies that it can supply the Contract Items contained it its bid response.
- **8.3. Reports:** Vendor shall provide quarterly reports and annual summaries to the Agency showing the Agency's items purchased, quantities of items purchased, and total dollar value of the items purchased. Vendor shall also provide reports, upon request, showing the items purchased during the term of this Contract, the quantity purchased for each of those items and the total value of purchases for each of those items. Failure to supply such reports may be grounds for cancellation of this Contract.
- 8.4. Contract Manager: During its performance of this Contract, Vendor must designate and maintain a primary contract manager responsible for overseeing Vendor's responsibilities under this Contract. The Contract Manager must be available during normal business hours to address any customer service or other issues related to this Contract. Vendor should list its Contract manager and his or her contact information below.

Contract Manager:	John Soderberg
Telephone Numbers:	855-579-0536
Fax Number:	888-688-6454
Email Address:jo	ohn.soderberg@gsi.us

Vendor shall inform the Agency in writing of any changes to the information provided above within ten (10) calendar days of such changes. Failure to comply may be grounds for cancellation of this contract.

ADDENDUM ACKNOWLEDGEMENT FORM SOLICITATION NO.: DOT2200000027

Instructions: Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

Acknowledgment: I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

Addendum Numbers Received:

(Check the box next to each addendum received)

[x]	Addendum No. 1	[]	Addendum No. 6
[x]	Addendum No. 2	[]	Addendum No. 7
[x]	Addendum No. 3	[]	Addendum No. 8
[x]	Addendum No. 4	[]	Addendum No. 9
[]	Addendum No. 5	[]	Addendum No. 10

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

GeoStabilization International, LLC
Company
 Mm
Authorized Signature
3-30-2022
Date

NOTE: This addendum acknowledgement should be submitted with the bid to expedite document processing. Revised 6/8/2012

ACORD [®] C	ERTIF	ICATE OF LIA	BILITY INS	URANC	ж [MM/DD/YYYY) 1/2022	
THIS CERTIFICATE IS ISSUED AS A CERTIFICATE DOES NOT AFFIRMAT BELOW. THIS CERTIFICATE OF IN REPRESENTATIVE OR PRODUCER, A IMPORTANT: If the certificate holder	TIVELY O SURANCE ND THE O is an AD	R NEGATIVELY AMEND, E DOES NOT CONSTITU CERTIFICATE HOLDER. DITIONAL INSURED, the	EXTEND OR ALT TE A CONTRACT		VERAGE AFFORDED THE ISSUING INSUREF NAL INSURED provision	BY THE R(S), AU [*]	POLICIES THORIZED	
If SUBROGATION IS WAIVED, subject this certificate does not confer rights	t to the te to the cer	erms and conditions of the tipicate holder in lieu of s	ne policy, certain p uch endorsement()	olicies may	require an endorsemen	it. A sta	tement on	
PRODUCER			CONTACT NAME: Lauren So	7				
Alliant Insurance Services, Inc. 6312 S Fiddlers Green Circle, Suite 5	50E		PHONE (A/C, No, Ext): 720-50	3-9054	FAX (A/C, No)			
Greenwood Village, CO 80111			ADDRESS: lauren.se	chneider@alli	ant.com			
					RDING COVERAGE		NAIC #	
INSURED		GEOSINT-01	INSURER A : Allied W				19489	
Geostabilization International, LLC			INSURER B : Executiv				35181 20281	
4475 E. 74th Avenue, 1st Floor Commerce City, CO 80022				ISURER C : Federal Insurance Company ISURER D : Indian Harbor Insurance Compan				
			INSURER E : Starr Specialty Insurance Comp				16109	
			INSURER F :					
COVERAGES CEI THIS IS TO CERTIFY THAT THE POLICIES		E NUMBER: 2133203207			REVISION NUMBER:			
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INSR LTR TYPE OF INSURANCE	ADDL SUB	2	POLICY EFF (MM/DD/YYYY)			TS		
B X COMMERCIAL GENERAL LIABILITY		54310162	5/1/2021	5/1/2022	EACH OCCURRENCE	\$ 2,000,0	000	
					PREMISES (Ea occurrence)	\$ 100,00	0	
					MED EXP (Any one person) PERSONAL & ADV INJURY	\$ 5,000 \$ 2,000,0	000	
GEN'L AGGREGATE LIMIT APPLIES PER:					GENERAL AGGREGATE	\$4,000,0		
POLICY X PRO-					PRODUCTS - COMP/OP AGG	\$4,000,0		
OTHER:					Deductible	\$ 25,000		
		54310161	5/1/2021	5/1/2022	COMBINED SINGLE LIMIT (Ea accident)	\$2,000,0	000	
X ANY AUTO OWNED SCHEDULED					BODILY INJURY (Per person) BODILY INJURY (Per accident)		\$	
X HIRED AUTOS ONLY X AUTOS AUTOS ONLY X AUTOS ONLY					PROPERTY DAMAGE	э \$	\$	
AUTOS ONLY AUTOS ONLY					(Per accident) Comp & Coll Ded	\$ 5,000		
A UMBRELLA LIAB X OCCUR		03101170	5/1/2021	5/1/2022	EACH OCCURRENCE	\$ 10,000	,000	
X EXCESS LIAB CLAIMS-MADE					AGGREGATE	\$ 10,000	,000	
C WORKERS COMPENSATION		54040404	E/4/0004	54 10000	Prods/Comp Ops	\$ 10,000	,000	
AND EMPLOYERS' LIABILITY		54310164	5/1/2021	5/1/2022	X PER OTH- STATUTE ER	A 4 000 C	000	
ANYPROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH)	N/A				E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE	\$ 1,000,0		
If yes, describe under DESCRIPTION OF OPERATIONS below					E.L. DISEASE - POLICY LIMIT			
E L/R Equip & Installation Fit D Professional Pollution		ITN100065086221 CEO744667104	5/1/2021 5/1/2021	5/1/2022 5/1/2022	Leased/Rented \$1M Each Claim/Aggregate Each Claim/Aggregate	Inst Fit \$10M/\$ \$10M/\$	10M	
DESCRIPTION OF OPERATIONS / LOCATIONS / VEHIC RE: Sealed Bid: 6622C049- Slide Repair U			le, may be attached if mor	e apace is requir	ed)			
CERTIFICATE HOLDER			CANCELLATION					
WV Department of Transp 1900 Kanawha Boulevard Charleston WV 25305		om 260		N DATE THI ITH THE POLIC	ESCRIBED POLICIES BE C EREOF, NOTICE WILL I Y PROVISIONS.			
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			© 19	900-2015 AC	ORD CORPORATION.	All right	s reserved.	

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ADDITIONAL INSURED – OWNERS, LESSEES OR CONTRACTORS – SCHEDULED PERSON OR ORGANIZATION

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

SCHEDULE

Any person or organization whom you have agreed to include as an additional insured under a written contract, agreement or permit, provided such contract, agreement or permit was executed or agreed upon prior to the date of loss.	Name Of Additional Insured Person(s) Or Organization(s)	Location(s) Of Covered Operations
	agreed to include as an additional insured under a written contract, agreement or permit, provided such contract, agreement or permit was executed or agreed upon	for such additional insured pursuant to any such written contract, agreement

- A. Section II Who is An Insured is amended to include as an additional insured the person(s) or organization(s) shown in the Schedule, but only with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" caused, in whole or in part, by:
 - 1. Your acts or omissions; or
 - 2. The acts or omissions of those acting on your behalf;

in the performance of your ongoing operations for the additional insured(s) at the location(s) designated above.

However:

- 1. The insurance afforded to such additional insured only applies to the extent permitted by law; and
- 2. If coverage provided to the additional insured is required by a contract or agreement, the insurance afforded to such additional insured will not be broader than that which you are required by the contract or agreement to provide for such additional insured.

B. With respect to the insurance afforded to these additional insureds, the following additional exclusions apply:

This insurance does not apply to "bodily injury" or "property damage" occurring after:

- 1. All work, including materials, parts or equipment furnished in connection with such work, on the project (other than service, maintenance or repairs) to be performed by or on behalf of the additional insured(s) at the location of the covered operations has been completed; or
- 2. That portion of "your work" out of which the injury or damage arises has been put to its intended use by any person or organization other than another contractor or subcontractor engaged in performing operations for a principal as a part of the same project.

C. With respect to the insurance afforded to these additional insureds, the following is added to Section III – Limits Of Insurance:

If coverage provided to the additional insured is required by a contract or agreement, the most we will pay on behalf of the additional insured is the amount of insurance:

1. Required by the contract or agreement; or

2. Available under the applicable limits of insurance;

whichever is less.

This endorsement shall not increase the applicable limits of insurance.

ADDITIONAL INSURED – OWNERS, LESSEES OR CONTRACTORS – COMPLETED OPERATIONS

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART PRODUCTS/COMPLETED OPERATIONS LIABILITY COVERAGE PART

SCHEDULE

Name Of Additional Insured Person(s) Or Organization(s)	Location And Description Of Completed Operations
Any person or organization whom you have agreed to include as an additional insured under a written contract, agreement or permit, provided such contract, agreement	such written contract, agreement or
or permit was executed or agreed upon prior to the date of loss.	
Information required to complete this Schedule, if not sh	own above, will be shown in the Declarations.

A. Section II – Who Is An Insured is amended to include as an additional insured the person(s) or organization(s) shown in the Schedule, but only with respect to liability for "bodily injury" or "property damage" caused, in whole or in part, by "your work" at the location designated and described in the Schedule of this endorsement performed for that additional insured and included in the "products-completed operations hazard".

However:

- 1. The insurance afforded to such additional insured only applies to the extent permitted by law; and
- 2. If coverage provided to the additional insured is required by a contract or agreement, the insurance afforded to such additional insured will not be broader than that which you are required by the contract or agreement to provide for such additional insured.

B. With respect to the insurance afforded to these additional insureds, the following is added to Section III – Limits Of Insurance:

If coverage provided to the additional insured is required by a contract or agreement, the most we will pay on behalf of the additional insured is the amount of insurance:

- 1. Required by the contract or agreement; or
- 2. Available under the applicable Limits of Insurance shown in the Declarations;

whichever is less.

This endorsement shall not increase the applicable Limits of Insurance shown in the Declarations.

PRIMARY INSURANCE FOR SCHEDULED ADDITIONAL INSURED

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

SCHEDULE

Additional Insured:

Location Of Covered Operations:

ALL LOCATIONS

WHERE REQUIRED BY WRITTEN CONTRACT

(If no entry appears above, information required to complete this endorsement will be shown in the Declarations as applicable to this endorsement.)

With respect only to the Additional Insured and at the Location Of Covered Operations shown in the Schedule, the following is added to SECTION IV – COMMERCIAL GENERAL LIABILITY CONDITIONS, Paragraph 4.Other Insuranceand supersedes any provision to thecontrary:

Primary And Noncontributory Insurance

This insurance is primary to and will not seekcontribution from any other insurance available to the Additional Insured with respect to the Location Of Covered Operations shown in the Schedule under thispolicyprovided that:

- (1) The Additional Insured is a named insuredunder such other insurance; and
- (2) You have agreed in writing in a contract oragreement that this insurance would beprimary and would not seek contributionfrom any other insurance available to theAdditional Insured.

- **b.** Those statements are based upon representations you made to us; and
- c. We have issued this policy in reliance upon your representations.

7. Separation Of Insureds

Except with respect to the Limits of Insurance, and any rights or duties specifically assigned in this Coverage Part to the first Named Insured, this insurance applies:

- a. As if each Named Insured were the only Named Insured; and
- **b.** Separately to each insured against whom claim is made or "suit" is brought.

8. Transfer Or Walver Of Rights Of Recovery Against Others To Us

We will waive the right of recovery we would otherwise have had against another person or organization, for loss to which this insurance applies, provided the insured has waived their rights of recovery against such person or organization in a contract or agreement that is executed before such loss.

To the extent that the insured's rights to recover all or part of any payment made under this Coverage Part have not been waived, those rights are transferred to us. The insured must do nothing after loss to impair them. At our request, the insured will bring "suit" or transfer those rights to us and help us enforce them.

This condition does not apply to Coverage C.

9. When We Do Not Renew

If we decide not to renew this Coverage Part, we will mail or deliver to the first Named Insured shown in the Declarations written notice of the nonrenewal not less than 30 days before the expiration date.

If notice is mailed, proof of mailing will be sufficient proof of notice.

SECTION V – DEFINITIONS

 "Advertisement" means an electronic, oral, written or other notice, about goods, products or services, designed for the specific purpose of attracting the general public or a specific market segment to use such goods, products or services.

"Advertisement" does not include any e-mail address, Internet domain name or other electronic address or metalanguage.

2. "Advertising injury" means injury, other than "bodily injury", "property damage" or "personal injury", sustained by a person or organization and caused by an offense of infringing, in that particular part of your "advertisement" about your goods, products or services, upon their:

- a. Copyrighted "advertisement"; or
- b. Registered collective mark, registered service mark or other registered trademarked name, slogan, symbol or title.
- 3. "Asbestos" means asbestos in any form, including its presence or use in any alloy, by-product, compound or other material or waste. Waste includes materials to be recycled, reconditioned or reclaimed.
- 4. "Auto" means:
 - a. A land motor vehicle, trailer or semitrailer designed for travel on public roads, including any attached machinery or equipment; or
 - **b.** Any other land vehicle that is subject to a compulsory or financial responsibility law or other motor vehicle insurance law where it is licensed or principally garaged.

However, "auto" does not include "mobile equipment".

5."Bodily injury" means physical:

- a. Injury;
- b. Sickness; or
- c. Disease;

sustained by a person, including resulting death, humiliation, mental anguish, mental injury or shock at any time. All such loss shall be deemed to occur at the time of the physical injury, sickness or disease that caused it.

- 6. "Coverage territory" means:
 - a. The United States of America (including its territories and possessions), Puerto Rico and Canada;
 - b. International waters or airspace, but only if the injury or damage occurs in the course of travel or transportation between any places included in Paragraph a. above; or
 - **c.** All other parts of the world if the injury or damage arises out of:
 - (1) Goods or products made or sold by you in the territory described in Paragraph a. above;
 - (2) The activities of a person whose home is in the territory described in Paragraph a. above, but is away for a short time on your business; or
 - (3) "Advertising injury" or "personal injury" offenses that take place through the Internet or similar electronic means of communication

Form 10-02-1800 (Rev. 09-17)

DESIGNATED INSURED FOR COVERED AUTOS LIABILITY COVERAGE

This endorsement modifies insurance provided under the following:

AUTO DEALERS COVERAGE FORM BUSINESS AUTO COVERAGE FORM MOTOR CARRIER COVERAGE FORM

With respect to coverage provided by this endorsement, the provisions of the Coverage Form apply unless modified by this endorsement.

This endorsement identifies person(s) or organization(s) who are "insureds" for Covered Autos Liability Coverage under the Who Is An Insured provision of the Coverage Form. This endorsement does not alter coverage provided in the Coverage Form.

This endorsement changes the policy effective on the inception date of the policy unless another date is indicated below.

Named Insured: GeoStabilization International LLC

Endorsement Effective Date: 05/1/2021

SCHEDULE

Name Of Person(s) Or Organization(s): Where required by executed contract.

Information required to complete this Schedule, if not shown above, will be shown in the Declarations.

Each person or organization shown in the Schedule is an "insured" for Covered Autos Liability Coverage, but only to the extent that person or organization qualifies as an "insured" under the Who Is An Insured provision contained in Paragraph **A.1.** of Section II – Covered Autos Liability Coverage in the Business Auto and Motor Carrier Coverage Forms and Paragraph **D.2.** of Section I – Covered Autos Coverages of the Auto Dealers Coverage Form.

WAIVER OF TRANSFER OF RIGHTS OF RECOVERY AGAINST OTHERS TO US (WAIVER OF SUBROGATION)

This endorsement modifies insurance provided under the following:

AUTO DEALERS COVERAGE FORM BUSINESS AUTO COVERAGE FORM MOTOR CARRIER COVERAGE FORM

With respect to coverage provided by this endorsement, the provisions of the Coverage Form apply unless modified by the endorsement.

This endorsement changes the policy effective on the inception date of the policy unless another date is indicated below.

Named Insured: GeoStabilization International LLC

Endorsement Effective Date: 05/1/2021

SCHEDULE

Name(s) Of Person(s) Or Organization(s):

Where required by executed contract.

Information required to complete this Schedule, if not shown above, will be shown in the Declarations.

The **Transfer Of Rights Of Recovery Against Others To Us** condition does not apply to the person(s) or organization(s) shown in the Schedule, but only to the extent that subrogation is waived prior to the "accident" or the "loss" under a contract with that person or organization.

WAIVER OF OUR RIGHT TO RECOVER FROM OTHERS ENDORSEMENT

We have the right to recover our payments from anyone liable for an injury covered by this policy. We will not enforce our right against the person or organization named in the Schedule. (This agreement applies only to the extent that you perform work under a written contract that requires you to obtain this agreement from us.)

This agreement shall not operate directly or indirectly to benefit anyone not named in the Schedule.

Schedule

Where required by executed contract.

This endorsement changes the policy to which it is attached and is effective on the date issued unless otherwise stated.

(The information below is required only when this endorsement is issued subsequent to preparation of the policy.)

Endorsement Effective 05/1/2021 Insured GeoStabilization International LLC

Policy No. 54310164

Countersigned by Kathleen Van Houten

Endorsement No. Premium

Insurance Company Chubb National Insurance Company

WC 00 03 13 (Ed. 4-84)

PRIMARY AND NON-CONTRIBUTORY LIABILITY INSURANCE

This endorsement modifies insurance provided under the following:

BUSINESS AUTO COVERAGE FORM

With respect to coverage provided by this endorsement, the provisions of the Coverage Form apply unless modified by the endorsement.

This endorsement changes the policy effective on the inception date of the policy unless another date is indicated below.

Named Insured: SOIL NAIL HOLDINGS, LLC

Endorsement Effective Date: 05/01/2021

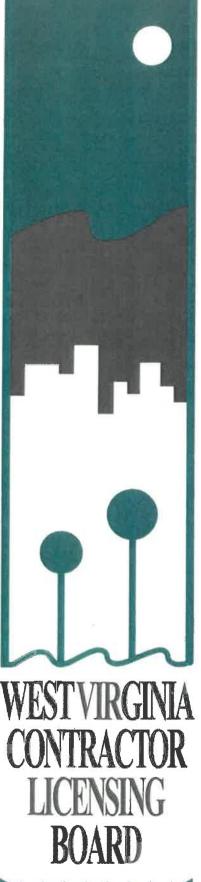
SCHEDULE

Name(s) Of Person(s) Or Organization(s):

Information required to complete this Schedule, if not shown above, will be shown in the Declarations.

The following is added to Item 5. – "Other Insurance" of Item B. – "General Conditions" under Section IV – "Business Auto Conditions":

e. Regardless of the provisions of Paragraph 5.a. through d. above, for any liability arising out of the ownership, maintenance, use, rental, lease, loan, hire or borrowing by an "insured" of a covered "auto" for which an "insured" is contractually obligated to provide primary insurance coverage to a client, this Coverage Form will be primary and non-contributory with respect to the Persons or Organizations in the schedule, regardless of the availability or existence of other collectible insurance under any other Coverage Form or policy that applies on a primary basis.



CONTRACTOR LICENSE

Authorized by the

West Virginia Contractor Licensing Board

Number:

WV036662

Classification:

GENERAL ENGINEERING SOIL STABILIZATION

> GEOSTABILIZATION INTERNATIONAL LLC DBA GEOSTABILIZATION INTERNATIONAL LLC 4475 E 74TH AVE STE 100 COMMERCE CITY, CO 80022

Date Issued

Authorized Company Signature

Expiration Date

MAY 14, 2021

MAY 14, 2022

Chair, West Virginia Contractor Licensing Board

This license, or a copy thereof, must be posted in a conspicuous place at every construction site where work is being performed. This license number must appear in all advertisements, on all bid submissions and on all fully executed and binding contracts. This license cannot be assigned or transferred by licensee. Issued under provisions of West Virginia Code, Chapter 21, Article 11.

WEST VIRGINIA DIVISION OF LABOR

1900 Kanawha Boulevard East - State Capitol Complex - Building 3, Room 200 - Charleston, WV 25305



NOTICE OF LEGISLATION CHANGES

Below is a list of bills and a short synopsis of the changes made by the 2021 Legislature that will affect certification and licensing programs within the Division of Labor:

HB2006 - Effective June 15, 2021

- 1. The Contractor Licensing Board will start operating under WV Code §30-42;
- 2. The cost of the undertaking, before a license is required, will change from \$2,500 to \$5,000 for residential work and \$25,000 for commercial work (Undertaking means entire project material & labor);
- 3. Landscaping will not require a contractor license; and
- 4. Painting *will not* require a contractor license.

HB2008 – Effective June 16, 2021

Crane Operator Certification Act (§21-3D)

- 1. The WV Crane Operator Certification Requirement is being repealed and *will no longer* be accepted to meet the OSHA standard;
- 2. On or after June 16, 2021, we will no longer accept or process applications and payments;
- 3. ALL WV Crane Operator Certifications issued in 2021 will expire January 1, 2022; and
- 4. Employers must ensure ALL crane operators are trained, certified/licensed, and evaluated according to **OSHA** Regulation 29 C.F.R. §1926.1427 Subpart CC.

For more information, visit www.osha.gov/cranes-derricks-construction or contact

Occupational Safety and Health Administration – United States Department of Labor 405 Capitol Street, Suite 407 Charleston, WV 25301 (304) 347-5937

Supervision of Plumbing Work Act (§21-14)

- 1. Master Plumber will no longer require 12,000 hours of experience;
- 2. Journeyman Plumber will no longer require 8,000 hours of experience; and
- 3. Plumber-In-Training fee will be reduced from \$50.00 to \$25.00.

Regulation of Heating, Ventilating, and Cooling Work Act (§21-16)

- 1. HVAC Technician experience will be reduced from 8,000 hours to 2,000 hours;
- 2. A Veteran may apply for licensure, without examination, once they meet certain requirements; and
- 3. HVAC Technician-In-Training fee *will be reduced* from \$50.00 to \$25.00.

Slide Repair Using Soil Nail Method Attachment A ("ATT A") Pricing Pages

Vendor should complete ATT A by providing a Unit Price per each item. Vendor should complete ATT A in its entirety as failure to do so may result in disqualification of Vendor's bid. Quantities listed on this Pricing Page are approximations and and will be used for evaluation purposes only. It is understood and agreed that the contract shall cover the quantities actually ordered throughout the life of the contract.

Ven	Vendor Name: Geostabilization International				
Item Number	Estimated Quantity	Unit of Measure	Description		Extended Amount
1	25	Each	Soil Nails Propelled by Compressed Gas -up to 20 feet in length	425.00	10,625.00
2	100	Each	Permanently Cased Soil Nails up to 20 feet in length	485.00	48,500.00
3	100	Each	Permanently Cased Soil Nails up to 30 feet in length	525.00	52,500.00
4	100	Each	Permanently Cased Soil Nails up to 40 feet in length	585.00	58,500.00
5	50	Each	Permanently Cased Soil Nails up to 50 feet in length	640.00	32,000.00
6	50	Each	Permanently Cased Soil Nails up to 60 feet in length	690.00	34,500.00
7	50	Each	Permanently Cased Soil Nails up to 70 feet in length	735.00	36,750.00
8	50	Each	Permanently Cased Soil Nails up to 80 feet in length	775.00	38,750.00
9	100	Each	Self Drilling Soil Nails up to 20 feet in length	750.00	75,000.00
10	100	Each	Self Drilling Soil Nails up to 30 feet in length	1,000.00	100,000.00
11	100	Each	Self Drilling Soil Nails up to 40 feet in length	1,200.00	120,000.00
12	50	Each	Self Drilling Soil Nails up to 50 feet in length	1,440.00	72,000.00
13	50	Each	Self Drilling Soil Nails up to 60 feet in length	1,560.00	78,000.00
14	50	Each	Self Drilling Soil Nails up to 70 feet in length	1,660.00	83,000.00
15	50	Each	Self Drilling Soil Nails up to 80 feet in length	1,740.00	87,000.00
16	100	Square Foot	Furnish and install Shotcrete	45.00	4,500.00
17	50	Linear Foot	Extra Shoulder Build-up of Shotcrete	225.00	11,250.00
18	500	Each	Concrete Masonry Units	6.25	3,125.00
19	500	Square Foot	Geosynthetic Fabric	2.00	1,000.00
20	250	Square Foot	Wire Mesh Surface Treatment High Tensile Diamond Mesh	30.00	7,500.00
21	150	Square Foot	Wire Mesh Surface Treatment High Capacity Double-Twist Hexagonal Mesh	16.50	2,475.00
22	100	Each	Galvanized Steel Plates	98.00	9,800.00
23	10	Linear Foot	4 inch Strip Drain	20.00	200.00
24	10	Linear Foot	Horizontal Drains - Slotted Pipe	48.00	480.00
25	10	Linear Foot	Horizontal Drains - Perforated Pipe	48.00	480.00
26	15	Lump Sum	Mobilization/Demobilization - Standard	3,500.00	52,500.00
27	10	Lump Sum	Mobilization/Demobilization - Emergency	3,500.00	35,000.00
28	10	Day	Pilot Truck and Driver	975.00	9,750.00
29	10	Unit	Traffic Control Devices	2.00	20.00
30	10	Hour	Flagger	95.00	950.00
31	10	Day	Arrow Board	420.00	4,200.00
32	1	Hour	Excavation Crew	1,480.00	1,480.00
			TOTAL AMOUNT BID		1,071,835.00

Pricing shall be considered Statewide. Award will be based on lowest overall cost.