



The following documentation is an electronically-submitted vendor response to an advertised solicitation from the *West Virginia Purchasing Bulletin* within the Vendor Self-Service portal at wvOASIS.gov. As part of the State of West Virginia's procurement process, and to maintain the transparency of the bid-opening process, this documentation submitted online is publicly posted by the West Virginia Purchasing Division at WVPurchasing.gov with any other vendor responses to this solicitation submitted to the Purchasing Division in hard copy format.

Header 3

List View

General Information | [Contact](#) | [Default Values](#) | [Discount](#) | [Document Information](#) | [Clarification Request](#)

Procurement Folder: 1887140

Procurement Type: Central Purchase Order

Vendor ID: VS0000043657

Legal Name: SPRUCE CREEK ENTERPRISES LLC

Alias/DBA: TIMOTHY L HOGUE

Total Bid: \$97,000.00

Response Date: 05/12/2026

Response Time: 17:07

Responded By User ID: sprucecreekllc

First Name: Timothy

Last Name: Hogue

Email: tim.hogue@sprucecreekllc.

Phone: 3046413896

SO Doc Code: CRFQ

SO Dept: 1400

SO Doc ID: AGR2600000040

Published Date: 5/7/26

Close Date: 5/13/26

Close Time: 13:30

Status: Closed

Solicitation Description: Ritchie County WV-Dam Obstruction & Streambank Stabilization

Total of Header Attachments: 3

Total of All Attachments: 3



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: 1887140
Solicitation Description: Ritchie County WV-Dam Obstruction & Streambank Stabilization
Proc Type: Central Purchase Order

Solicitation Closes	Solicitation Response	Version
2026-05-13 13:30	SR 1400 ESR05122600000007790	1

VENDOR
 VS0000043657
 SPRUCE CREEK ENTERPRISES LLC

Solicitation Number: CRFQ 1400 AGR2600000040

Total Bid: 97000

Response Date: 2026-05-12

Response Time: 17:07:49

Comments:

FOR INFORMATION CONTACT THE BUYER

Larry D McDonnell
 304-558-2063
 larry.d.mcdonnell@wv.gov

Vendor Signature X	FEIN#	DATE
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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	Disaster preparedness response services				97000.00

Comm Code	Manufacturer	Specification	Model #
93131802			

Commodity Line Comments:

Extended Description:

Please see the attached documentation for further details.

BID BOND
(Percentage)

Bond Number: 73808476

KNOW ALL PERSONS BY THESE PRESENTS, That we Spruce Creek Enterprises LLC of 23 Cambridge Drive, Clarksburg, WV 26301, hereinafter referred to as the Principal, and Western Surety Company, as Surety, are held and firmly bound unto Oasis of WV Dept of Administration Purchasing Div. of 2019 Washington Street East, Charleston, WV 25305, hereinafter referred to as the Obligee, in the sum of Bid 5.00% of the Amount (5 %) percent of the greatest amount bid, for the payment of which we bind ourselves, our legal representatives, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, Principal has submitted or is about to submit a proposal to Obligee on a contract for Ritchie County Stream Bank Stabilization

NOW, THEREFORE, if the said contract be awarded to Principal and Principal shall, within such time as may be specified, enter into the contract in writing and give such bond or bonds as may be specified in the bidding or contract documents with surety acceptable to Obligee; or if Principal shall fail to do so, pay to Obligee the damages which Obligee may suffer by reason of such failure not exceeding the penalty of this bond, then this obligation shall be void; otherwise to remain in full force and effect.

SIGNED, SEALED AND DATED this 13th day of May, 2026.

Spruce Creek Enterprises LLC
(Principal)

By [Signature] (Seal)

Western Surety Company
(Surety)

By Carlo Jo Dobbins (Seal)

Carlo Jo Dobbins
Attorney In Fact



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

State of West Virginia
Centralized Request for Quote
Construction

Proc Folder: 1887140	Reason for Modification:
Doc Description: Ritchie County WV-Dam Obstruction & Streambank Stabilization	Addendum No. 03
Proc Type: Central Purchase Order	

Date Issued	Solicitation Closes	Solicitation No	Version
2026-05-07	2026-05-13 13:30	CRFQ 1400 AGR2600000040	4

BID RECEIVING LOCATION

BID CLERK
 DEPARTMENT OF ADMINISTRATION
 PURCHASING DIVISION
 2019 WASHINGTON ST E
 CHARLESTON WV 25305
 US

VENDOR

Vendor Customer Code: VS0000043657
Vendor Name : Spruce Creek Enterprises LLC
Address : 23 Cambridge Dr
Street :
City : Clarksburg
State : WV **Country :** US **Zip :** 26301
Principal Contact : Timothy Hogue
Vendor Contact Phone: 304-641-3896 **Extension:**

FOR INFORMATION CONTACT THE BUYER

Larry D McDonnell
 304-558-2063
 larry.d.mcdonnell@wv.gov

Vendor Signature X *Timothy Hogue* **FEIN#** 82-5018890 **DATE** 05/12/26

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

ADDITIONAL INFORMATION

Addendum No. 03
To attach answers to vendor questions.

To attach revised Exhibit D - Drawings as of 5/06/2026.

Bid opening date and time still remains 05/13/2026 at 1:30PM EST.

No other changes.

INVOICE TO		SHIP TO	
WEST VIRGINIA CONSERVATION AGENCY 1900 KANAWHA BLVD E		WEST VIRGINIA CONSERVATION AGENCY WEST VIRGINIA CONSERVATION AGENCY 255 GUS R DOUGLASS LN	
CHARLESTON	WV	CHARLESTON	WV
US		US	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
1	Disaster preparedness response services				

Comm Code	Manufacturer	Specification	Model #
93131802			

Extended Description:
Please see the attached documentation for further details.

SCHEDULE OF EVENTS

<u>Line</u>	<u>Event</u>	<u>Event Date</u>
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SOLICITATION NUMBER: CRFQ AGR26*40

Addendum Number: 03

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:

To attach answers to vendor questions.

To attach revised Exhibit D – Drawings as of 5/06/2026.

Bid opening date and time still remains 05/13/2026 at 1:30PM EST.

No other changes.

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.

Answers to Vendor Questions:

CRFQ AGR26*40 – Richie County WV-Dam NFHR Obstruction & Streambank Stabilization

Question #1:

Would a 6x12” Type C Rip Rap substitute be acceptable in place of 6-18” type C Rip Rap due to product availability and location?

6X12” is not acceptable, must use 6-18” Type C RipRap.

Question #2:

Would a 4x8” Type D Rip Rap substitute be acceptable in place of a 4-12” type D rip rap due to product availability and location?

4X8” is not acceptable, must use 4-12” Type C RipRap.

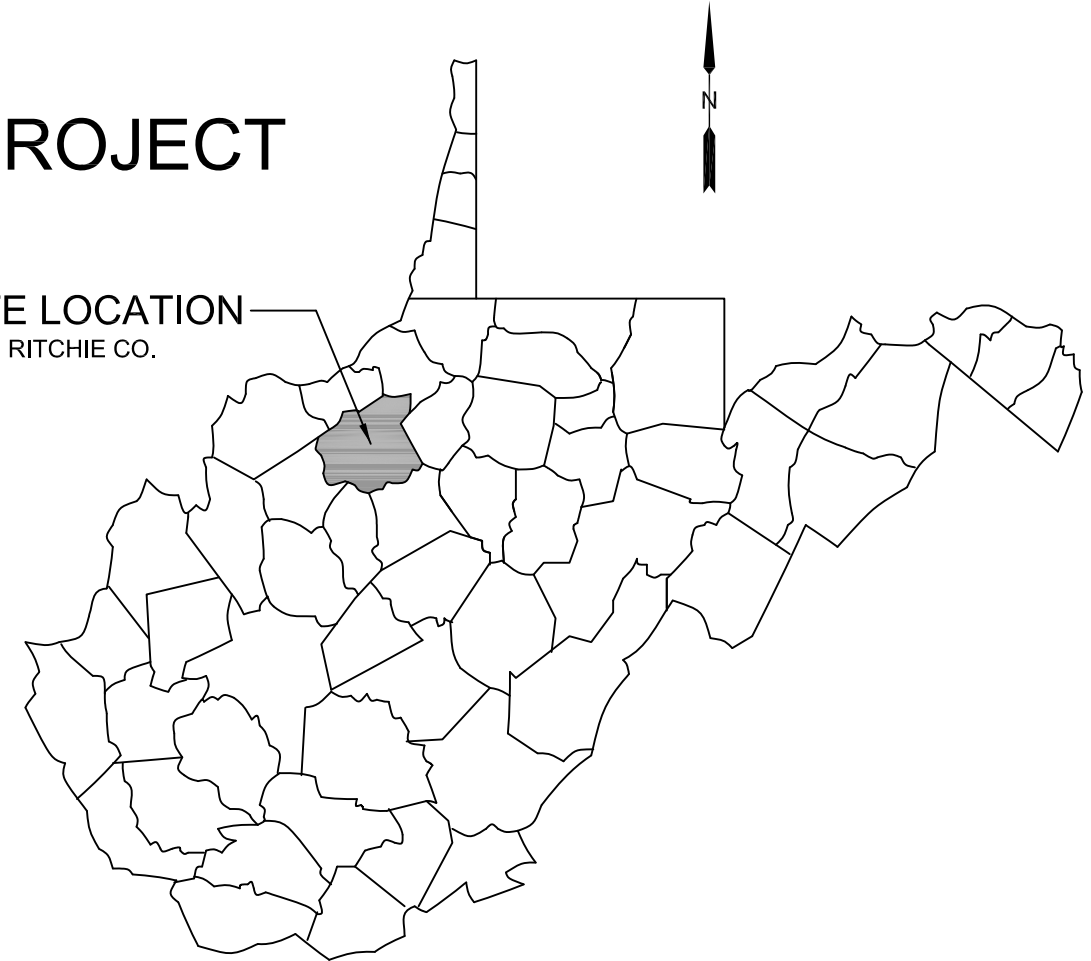
NORTH FORK HUGHES RIVER OUTLET CHANNEL - LEFT BANK STABILIZATION PROJECT

RITCHIE COUNTY, WEST VIRGINIA

APPALACHIAN REGIONAL COMMISSION
and the
NATURAL RESOURCES CONSERVATION SERVICE
U.S. DEPARTMENT OF AGRICULTURE
cooperating with
WEST VIRGINIA CONSERVATION AGENCY
LITTLE KANAWHA CONSERVATION DISTRICT
and
WEST VIRGINIA DIVISION OF NATURAL RESOURCES

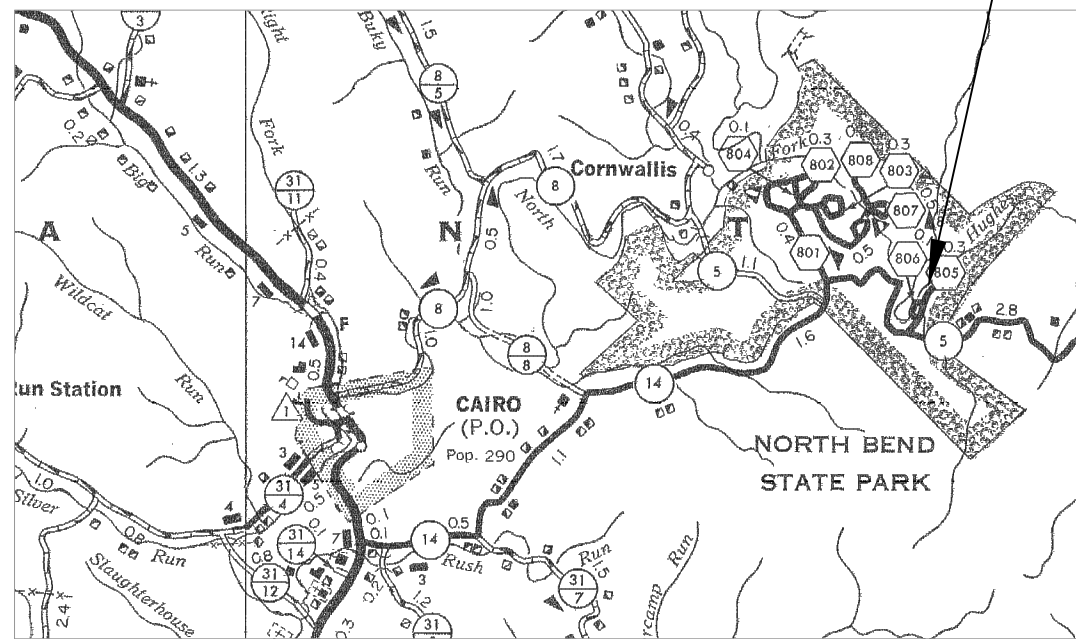
Class VIII Job Approval

SITE LOCATION
RITCHIE CO.



INDEX OF SHEETS	
1	Cover Sheet
2	Streambank Details and Plan View
3	Existing Road Rehabilitation Plan View
4	Existing Road Rehabilitation Details

SITE LOCATION



EXISTING ROAD REHABILITATION

ROCK RIPRAP STREAMBANK STABILIZATION



UTILITY NOTIFICATION

"The Natural Resources Conservation Service makes no representation as to the existence or non-existence of any utilities at the construction site. Shown on these construction drawings are those utilities which have been identified. It is the responsibility of the landowners or operators and contractors to assure themselves that no hazard exists or damage will occur to utilities."

Designed	D. Sweeney	Date	12/2024
Drawn	D. Sweeney		12/2024
Checked	A. Deichert		04/2025
Approved	A. Deichert		04/2025

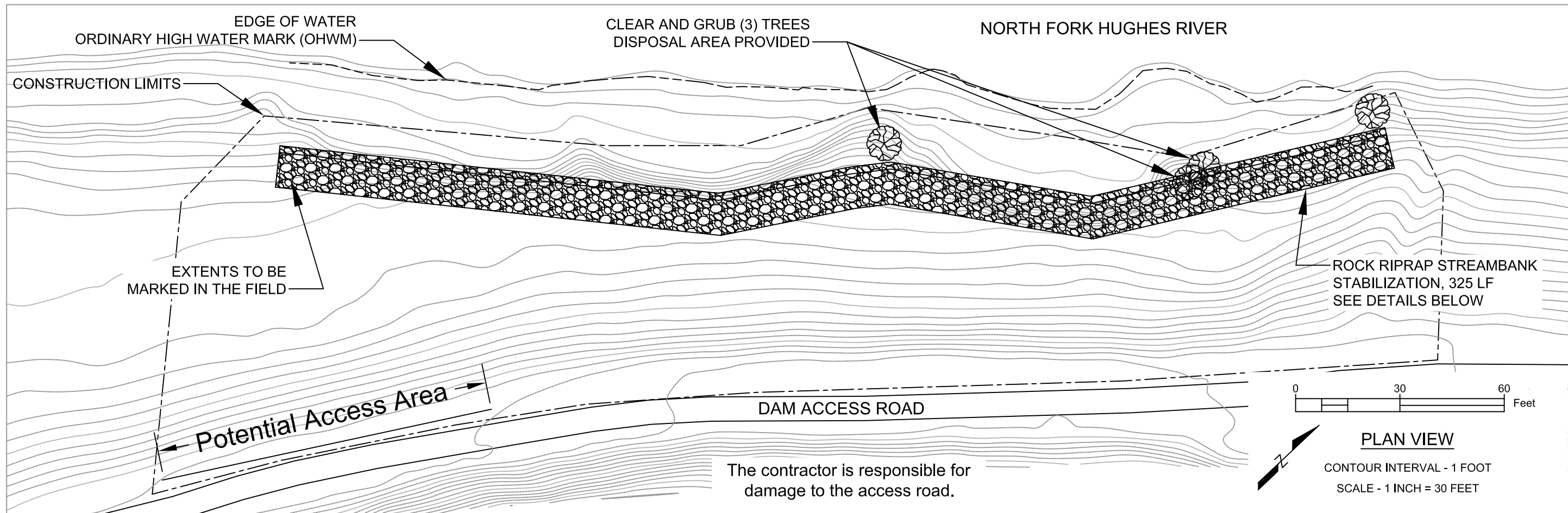
NORTH FORK HUGHES RIVER
OUTLET CHANNEL STREAMBANK STABILIZATION
COVER SHEET

Ritchie County, West Virginia



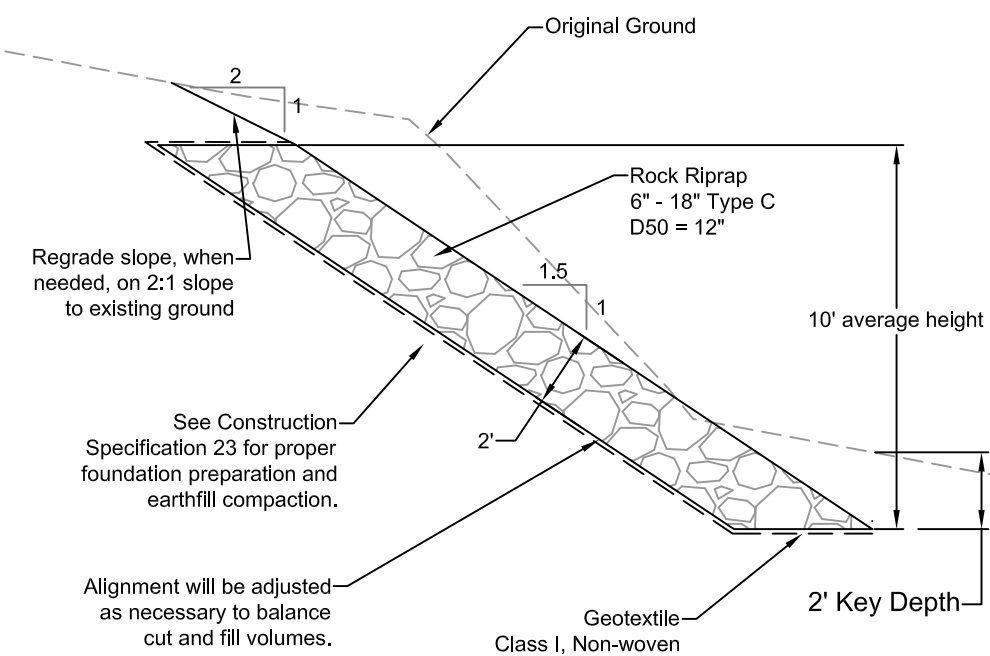
File No.
NFHR Left Bank
Stabilization2.dwg

Drawing No.
COVER



TYPICAL SECTION OF STREAMBANK STABILIZATION

Not to Scale

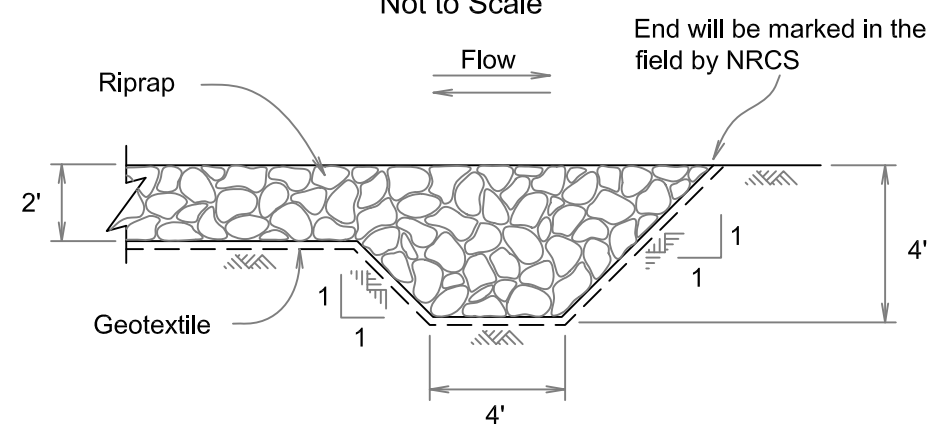


QUANTITIES	
Rock Riprap - Type C, 6"-18"	725 TN
Geotextile - Class I, Non-woven	6,850 SF

RIPRAP KEY @ UPSTREAM AND DOWNSTREAM END

Sectional View - top of bank looking down channel slope (Perpendicular to Slope)

Not to Scale



NOTE: Key shall extend from the toe of the slope to the top of bank.

Water Surface

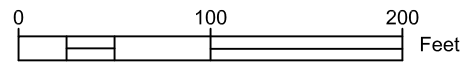
Date	Designed	Drawn	Checked	Approved
12/2024	D. Sweeney	D. Sweeney	A. Deichert	A. Deichert
12/2024				
04/2025				
04/2025				

NORTH FORK HUGHES RIVER
 OUTLET CHANNEL STREAMBANK STABILIZATION
 STREAMBANK DETAILS AND PLAN VIEW
 Ritchie County, West Virginia



File No.
 NFHR Left Bank
 Stabilization2.dwg

Drawing No.
 BANK DETAILS



PLAN VIEW

CONTOUR INTERVAL - 1 FOOT

SCALE - 1 INCH = 100 FEET



Construction Notes:

1. Any organic material will be removed from the road surface.
2. Grade adjacent areas when needed to direct surface flow to cross drains or create positive flow.
3. Three (3) Protected Cross Drains will be added at the approximate locations shown on this sheet, See Sheet 4 for details.
4. Re-establish ditch as detailed on Sheet 4 and shown on this sheet.
5. Resurface roadway with 4" of WVDOH Class 1 at 10' width, 2,200 lf.
6. The lined rock gutter and protected cross drains shall be completed prior to placing Class I on the road surface. Begin road resurfacing as shown to protect the completed surface.

LINED ROCK GUTTER - 190 LF
SEE SHEET 4 FOR DETAILS

PROTECTED CROSS DRAIN
TO BE LOCATED IN THE FIELD
SEE SHEET 4 FOR DETAILS

BEGIN RESURFACING

PROTECTED CROSS DRAIN
TO BE LOCATED IN THE FIELD
SEE SHEET 4 FOR DETAILS

END RESURFACING

ASW ACCESS ROAD ALIGNMENT
PREPARE AND RESURFACE - 10' WIDE,
2,200 LF, SEE DETAILS ON SHEET 4

PROTECTED CROSS DRAIN
TO BE LOCATED IN THE FIELD
SEE SHEET 4 FOR DETAILS

NORTH FORK HUGHES RIVER

DAM ACCESS ROAD

NEHR DAM

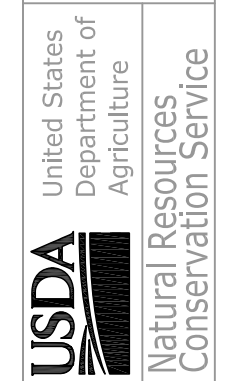
Construction Notes:

7. The streambank stabilization work shall be completed prior to road resurfacing.
8. Tree limbs may be trimmed to facilitate tailgating stone. Tree limbs may be wasted nearby permitting they do not block the road or create any other access issues.

Date	12/2024
Designed	D. Sweeney
Drawn	D. Sweeney
Checked	A. Deichert
Approved	A. Deichert

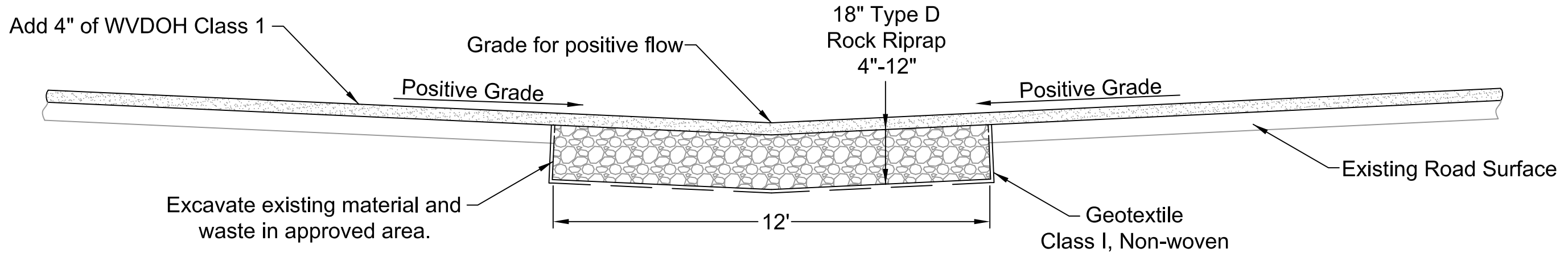
**NORTH FORK HUGHES RIVER
OUTLET CHANNEL STREAMBANK STABILIZATION
EXISTING ROAD REHABILITATION PLAN VIEW**

Ritchie County, West Virginia

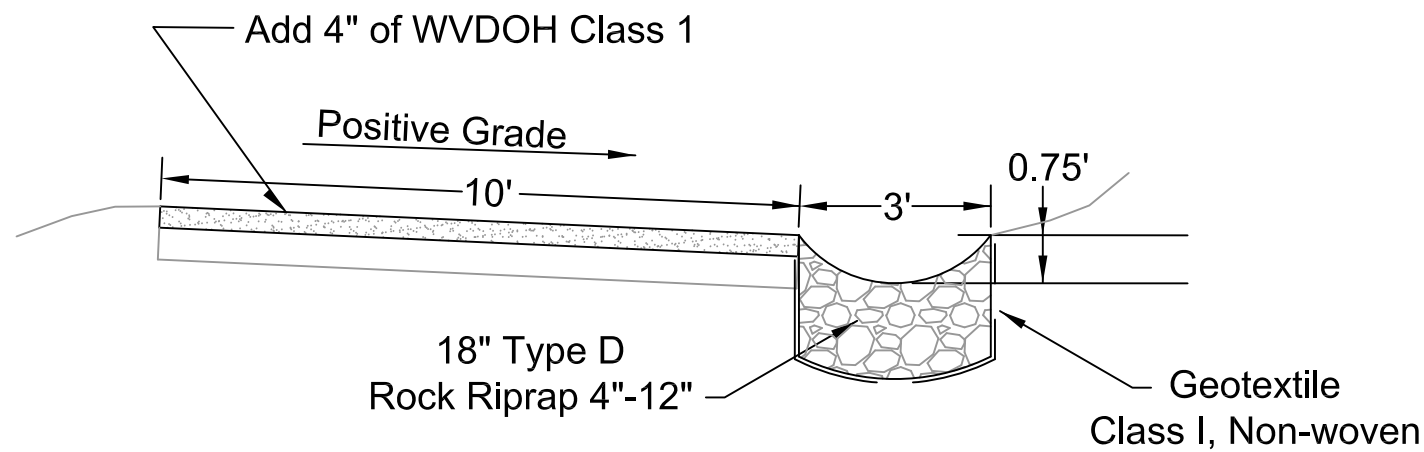


File No.
NFHR Left Bank
Stabilization2.dwg

Drawing No.
PLAN VIEW



PROTECTED CROSS DRAIN TYPICAL SECTION

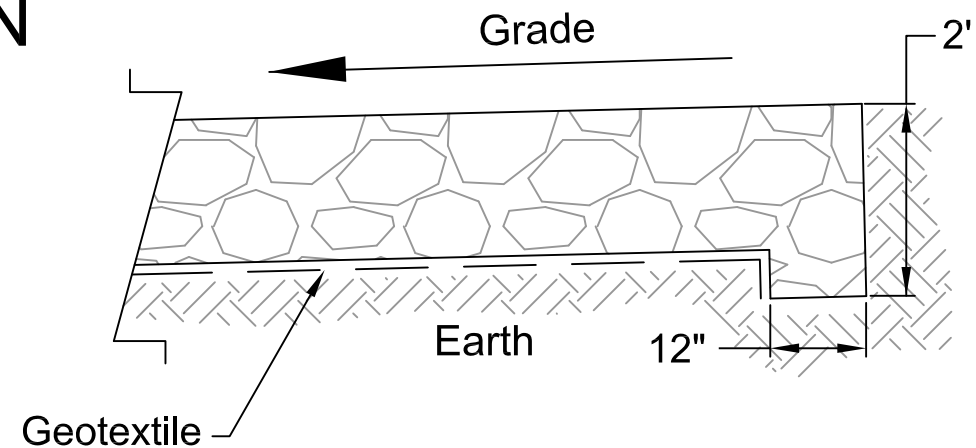


ROCK LINED GUTTER TYPICAL SECTION

Note: Organic material from the existing ditch will be removed and disposed of, along with any excavated material, in the designated waste area.



SCALE: 1 INCH = 3 FEET



GEOTEXTILE KEY DETAIL

Not to Scale

Installed at Upstream Ends of Gutter and Cross Drains

QUANTITIES	
Rock Riprap - Type D, 4"-12"	
Protected Cross Drain, 3 each	30 TN
Lined Waterway	50 TN
WVDOH Class I	450 TN
Geotextile - Class I, Non-woven	1,500 SF

Date	12/2024	Designed	D. Sweeney
Date	12/2024	Drawn	D. Sweeney
Date	04/2025	Checked	A. Deichert
Date	04/2025	Approved	A. Deichert

NORTH FORK HUGHES RIVER
OUTLET CHANNEL STREAMBANK STABILIZATION
EXISTING ROAD REHABILITATION DETAILS
Ritchie County, West Virginia



File No.
NFHR Left Bank
Stabilization2.dwg

Drawing No.
PLAN VIEW

ADDENDUM ACKNOWLEDGEMENT FORM
SOLICITATION NO.: CRFQ AGR26*40

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)

- | | |
|--|--|
| <input checked="" type="checkbox"/> Addendum No. 1 | <input type="checkbox"/> Addendum No. 6 |
| <input checked="" type="checkbox"/> Addendum No. 2 | <input type="checkbox"/> Addendum No. 7 |
| <input checked="" type="checkbox"/> Addendum No. 3 | <input type="checkbox"/> Addendum No. 8 |
| <input type="checkbox"/> Addendum No. 4 | <input type="checkbox"/> Addendum No. 9 |
| <input type="checkbox"/> Addendum No. 5 | <input type="checkbox"/> 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 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.

Spruce Creek Enterprises LLC

Company

Timothy Hogue

Authorized Signature

05/12/26

Date

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



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

State of West Virginia
 Centralized Request for Quote
 Construction

Proc Folder: 1887140
Doc Description: Ritchie County WV-Dam Obstruction & Streambank Stabilization
Proc Type: Central Purchase Order
Reason for Modification:

Date Issued	Solicitation Closes	Solicitation No	Version
2026-04-16	2026-05-13 13:30	CRFQ 1400 AGR2600000040	1

BID RECEIVING LOCATION

BID CLERK
 DEPARTMENT OF ADMINISTRATION
 PURCHASING DIVISION
 2019 WASHINGTON ST E
 CHARLESTON WV 25305
 US

VENDOR

Vendor Customer Code: VS0000043657
Vendor Name : Spruce Creek Enterprises LLC
Address : 23 Cambridge Dr
Street :
City : Clarksburg
State : WV **Country :** US **Zip :** 26301
Principal Contact : Timothy Hogue
Vendor Contact Phone: 304-641-3896 **Extension:**

FOR INFORMATION CONTACT THE BUYER

Larry D McDonnell
 304-558-2063
 larry.d.mcdonnell@wv.gov

Vendor Signature X *Timothy Hogue* **FEIN#** 82-5018890 **DATE** 05/12/26

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

ADDITIONAL INFORMATION

The State of West Virginia Purchasing Division, is soliciting bids for the agency, West Virginia Conservation Agency, to establish a contract to remove an obstruction from the principal spillway outlet and stilling basin at the dam's outlet and stabilize the failing streambank located at North Fork Hughes River in Ritchie County, WV, per the attached documentation.

MANDATORY PRE-BID MEETING: See attached documentation for further details

READ ALL TERMS AND CONDITIONS AND SPECIFICATIONS IN ITS ENTIREITY - SEE ATTACHED FILE NAMED: CRFQ AGR26*40 - SOLICITATION DOCUMENTATION

****Questions regarding the solicitation must be submitted in writing to Larry.D.McDonnell@wv.gov prior to the question period deadline listed in the attached documentation****

INVOICE TO		SHIP TO	
WEST VIRGINIA CONSERVATION AGENCY 1900 KANAWHA BLVD E		WEST VIRGINIA CONSERVATION AGENCY WEST VIRGINIA CONSERVATION AGENCY 255 GUS R DOUGLASS LN	
CHARLESTON	WV	CHARLESTON	WV
US		US	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
1	Disaster preparedness response services				97,000

Comm Code	Manufacturer	Specification	Model #
93131802			

Extended Description:
Please see the attached documentation for further details.

SCHEDULE OF EVENTS

<u>Line</u>	<u>Event</u>	<u>Event Date</u>
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INSTRUCTIONS TO VENDORS SUBMITTING BIDS

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. **PRE-BID MEETING:** The item identified below shall apply to this Solicitation.

A pre-bid meeting will not be held prior to bid opening

A **MANDATORY PRE-BID** meeting will be held at the following place and time:

North Bend State Park Lodge
196 N Bend State Park
Cairo, WV 26337
Date: April 29, 2026
Time: 10:00AM EST

All Vendors submitting a bid must attend the **mandatory** pre-bid meeting. Failure to attend the **mandatory** pre-bid meeting shall result in disqualification of the Vendor's bid. No one individual is permitted to represent more than one vendor at the pre-bid meeting. Any individual that does attempt to represent two or more vendors will be required to select one vendor to which the individual's attendance will be attributed. The vendors not selected will be deemed to have not attended the pre-bid meeting unless another individual attended on their behalf.

An attendance sheet provided at the pre-bid meeting shall serve as the official document verifying attendance. Any person attending the pre-bid meeting on behalf of a Vendor must list on the attendance sheet his or her name and the name of the Vendor he or she is representing. It is the Vendor's responsibility to locate the attendance sheet and provide the required information. Failure to complete the attendance sheet as required may result in disqualification of Vendor's bid.

Vendors who arrive after the starting time but prior to the end of the pre-bid will be permitted to sign in but are charged with knowing all matters discussed at the pre-bid.

Any discussions or answers to questions at the pre-bid meeting are preliminary in nature and are non-binding. Official and binding answers to questions will be published in a written addendum to the Solicitation prior to bid opening.

4. VENDOR QUESTION DEADLINE: Vendors may submit questions relating to this Solicitation to the Purchasing Division. Questions must be submitted in writing. All questions **must be submitted on or before the date listed below and to the address listed below to be considered.** A written response will be published in a Solicitation addendum if a response is possible and appropriate. Non-written discussions, conversations, or questions and answers regarding this Solicitation are preliminary in nature and are non-binding.

Submitted emails should have the solicitation number in the subject line. Question

Submission Deadline: May 6, 2026 by 2:00PM EST

Submit Questions to: Larry D. McDonnell
2019 Washington Street, East Charleston, WV 25305
Fax: (304) 558-3970
Email: larry.d.mcdonnell@wv.gov

5. VERBAL COMMUNICATION: Any verbal communication between the Vendor and any State personnel is not binding, including verbal communication at the mandatory pre-bid conference. Only information issued in writing and added to the Solicitation by an official written addendum by the Purchasing Division is binding.

6. BID SUBMISSION: All bids must be submitted on or before the date and time of the bid opening listed in section 7 below. Vendors can submit bids electronically through wvOASIS, in paper form delivered to the Purchasing Division at the address listed below either in person or by courier, or in facsimile form by faxing to the Purchasing Division at the number listed below. Notwithstanding the foregoing, the Purchasing Division may prohibit the submission of bids electronically through wvOASIS at its sole discretion. Such a prohibition will be contained and communicated in the wvOASIS system resulting in the Vendor's inability to submit bids through wvOASIS. The Purchasing Division will not accept bids or modification of bids via email.

Bids submitted in paper, facsimile, or via wvOASIS must contain a signature. Failure to submit a bid in any form without a signature will result in rejection of your bid.

A bid submitted in paper or facsimile form should contain the information listed below on the face of the submission envelope or fax cover sheet. Otherwise, the bid may be rejected by the Purchasing Division.

VENDOR NAME:

BUYER:

SOLICITATION NO.:

BID OPENING DATE:

BID OPENING TIME:

FAX NUMBER:

Any bid received by the Purchasing Division staff is considered to be in the possession of the Purchasing Division and will not be returned for any reason.

Bid Delivery Address and Fax Number:

Department of Administration, Purchasing Division 2019 Washington Street East

Charleston, WV 25305-0130

Fax: 304-558-3970

7. BID OPENING: Bids submitted in response to this Solicitation will be opened at the location identified below on the date and time listed below. Delivery of a bid after the bid opening date and time will result in bid disqualification. For purposes of this Solicitation, a bid is considered delivered when confirmation of delivery is provided by wvOASIS (in the case of electronic submission) or when the bid is time stamped by the official Purchasing Division time clock (in the case of hand delivery or via delivery by mail).

Bid Opening Date and Time: May 13, 2026 at 1:30PM EST

Bid Opening Location:

Department of Administration, Purchasing Division

2019 Washington Street East

Charleston, WV 25305-0130

8. ADDENDUM ACKNOWLEDGEMENT: Changes or revisions to this Solicitation will be made by an official written addendum issued by the Purchasing Division. Vendor should acknowledge receipt of all addenda issued with this Solicitation by completing an Addendum Acknowledgement Form. Failure to acknowledge addenda may result in bid disqualification. The addendum acknowledgement should be submitted with the bid to expedite document processing.

9. **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.

10. **ALTERNATE MODEL OR BRAND:** Unless the box below is checked, 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 State at its sole discretion. Any Vendor bidding an alternate model or brand **shall** 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.

This Solicitation is based upon a standardized commodity established under W. Va. Code § 5A-3-61. Vendors are expected to bid the standardized commodity identified. Failure to bid the standardized commodity will result in your firm's bid being rejected.

11. **COMMUNICATION LIMITATIONS:** In accordance with West Virginia Code of State Rules §148-1-6.6.2, 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 Purchasing Division, is strictly prohibited without prior Purchasing Division approval. Purchasing Division approval for such communication is implied for all agency delegated and exempt purchases.

12. **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, if applicable.

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

14. **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: www.state.wv.us/admin/purchase/vrc/Venpref.pdf.

15A. 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: www.state.wv.us/admin/purchase/vrc/Venpref.pdf.

15. SMALL, WOMEN-OWNED, OR MINORITY-OWNED BUSINESSES:

For any solicitations publicly advertised for bid, in accordance with West Virginia Code §5A-3-37 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.

16. WAIVER OF MINOR IRREGULARITIES: The Director reserves the right to waive minor irregularities in bids or specifications in accordance with West Virginia Code of State Rules § 148-1-4.7.

17. ELECTRONIC FILE ACCESS RESTRICTIONS: Vendor must ensure that its submission in wvOASIS can be accessed and viewed by the Purchasing Division staff immediately upon bid opening. The Purchasing Division 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 are therefore 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 Purchasing Division to print or electronically save documents provided that those documents are viewable by the Purchasing Division prior to obtaining the password or removing the access restriction.

18. NON-RESPONSIBLE: The Purchasing Division Director 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 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.”

19. ACCEPTANCE/REJECTION: The State may accept or reject any bid in whole, or in part in accordance with W. Va. Code of State Rules § 148-1-4.6. and § 148-1-6.3.”

20. **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 Director of the Purchasing Division 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 § 148-1-4.7. This authority does not apply to instances where state law mandates receipt with the bid.

21. **EMAIL NOTIFICATION OF AWARD:** The Purchasing Division 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 Purchasing Division with a valid email address in the bid response. Bidders may also monitor wvOASIS or the Purchasing Division's website to determine when a contract has been awarded.

22. **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.

GENERAL TERMS AND CONDITIONS:

1. CONTRACTUAL AGREEMENT: Issuance of an Award Document signed by the Purchasing Division Director, or his designee, and approved as to form by the Attorney General's office constitutes acceptance by the State of this Contract made by and between the State of West Virginia and the Vendor. Vendor's signature on its bid, or on the Contract if the Contract is not the result of a bid solicitation, 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" or "Agencies" means the agency, board, commission, or other entity of the State of West Virginia that is identified on the first page of the Solicitation or any other public entity seeking to procure goods or services under this Contract.

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 State and the Vendor to provide the goods or services requested in the Solicitation.

2.4. "Director" means the Director of the West Virginia Department of Administration, Purchasing Division.

2.5. "Purchasing Division" means the West Virginia Department of Administration, Purchasing Division.

2.6. "Award Document" means the document signed by the Agency and the Purchasing Division, and approved as to form by the Attorney General, that identifies the Vendor as the contract holder.

2.7. "Solicitation" means the official notice of an opportunity to supply the State with goods or services that is published by the Purchasing Division.

2.8. "State" means the State of West Virginia and/or any of its agencies, commissions, boards, etc. as context requires.

2.9. "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:

Term Contract

Initial Contract Term: The Initial Contract Term will be for a period of _____. The Initial Contract Term becomes effective on the effective start date listed on the first page of this Contract, identified as the State of West Virginia contract cover page containing the signatures of the Purchasing Division, Attorney General, and Encumbrance clerk (or another page identified as _____), and the Initial Contract Term ends on the effective end date also shown on the first page of this Contract.

Renewal Term: This Contract may be renewed upon the mutual written consent of the Agency, and the Vendor, with approval of the Purchasing Division and the Attorney General's office (Attorney General approval is as to form only). Any request for renewal should be delivered to the Agency and then submitted to the Purchasing Division 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. Unless otherwise specified below, renewal of this Contract is limited to _____ successive one (1) year periods or multiple renewal periods of less than one year, provided that the multiple renewal periods do not exceed the total number of months available in all renewal years combined. Automatic renewal of this Contract is prohibited. Renewals must be approved by the Vendor, Agency, Purchasing Division and Attorney General's office (Attorney General approval is as to form only)

Alternate Renewal Term – This contract may be renewed for _____ successive _____ year periods or shorter periods provided that they do not exceed the total number of months contained in all available renewals. Automatic renewal of this Contract is prohibited. Renewals must be approved by the Vendor, Agency, Purchasing Division and Attorney General's office (Attorney General approval is as to form only)

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 within one year of the expiration of this Contract shall be effective for 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 _____ 21 calendar _____ days.

Fixed Period Contract with Renewals: This Contract becomes effective upon Vendor's receipt of the notice to proceed and part of the Contract more fully described in the attached specifications must be completed within _____ days. Upon completion of the work covered by the preceding sentence, the vendor agrees that:

the contract will continue for _____ years;

the contract may be renewed for _____ successive _____ year periods or shorter periods provided that they do not exceed the total number of months contained in all available renewals. Automatic renewal of this Contract is prohibited. Renewals must be approved by the Vendor, Agency, Purchasing Division and Attorney General's Office (Attorney General approval is as to form only).

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

Construction/Project Oversight: This Contract becomes effective on the effective start date listed on the first page of this Contract, identified as the State of West Virginia contract cover page containing the signatures of the Purchasing Division, Attorney General, and Encumbrance clerk (or another page identified as _____), and continues until the project for which the vendor is providing oversight is complete.

Other: Contract Term specified in _____

4. AUTHORITY TO PROCEED: Vendor is authorized to begin performance of this contract on the date of encumbrance listed on the front page of the Award Document unless either the box for "Fixed Period Contract" or "Fixed Period Contract with Renewals" has been checked in Section 3 above. If either "Fixed Period Contract" or "Fixed Period Contract with Renewals" has been checked, Vendor must not begin work until it receives a separate notice to proceed from the State. The notice to proceed will then be incorporated into the Contract via change order to memorialize the official date that work commenced.

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/Award Document 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.

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, Agency, Purchasing Division, and Attorney General's office.

Construction: This Contract is for construction activity more fully defined in the specifications.

6. EMERGENCY PURCHASES: The Purchasing Division Director may authorize the Agency to 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. 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, approved by the Purchasing Division Director, shall not constitute a breach of this Contract and shall not entitle the Vendor to any form of compensation or damages. This provision does not excuse the State from fulfilling its obligations under a One-Time Purchase contract.

7. REQUIRED DOCUMENTS: All of the items checked in this section must be provided to the Purchasing Division by the Vendor as specified:

LICENSE(S) / CERTIFICATIONS / PERMITS: In addition to anything required under the Section of the General Terms and Conditions entitled Licensing, the apparent successful Vendor shall furnish proof of the following licenses, certifications, and/or permits upon request and in a form acceptable to the State. The request may be prior to or after contract award at the State's sole discretion.

West Virginia Contractor's License: B - General Building, West Virginia Contractor's License: C - General Engineering, or West Virginia Contractor's License: 002 - Excavation

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

8. INSURANCE: The apparent successful Vendor shall furnish proof of the insurance identified by a checkmark below prior to Contract award. The insurance coverages identified below must be maintained throughout the life of this contract. Thirty (30) days prior to the expiration of the insurance policies, Vendor shall provide the Agency with proof that the insurance mandated herein has been continued. Vendor must also provide Agency with immediate notice of any changes in its insurance policies, including but not limited to, policy cancelation, policy reduction, or change in insurers. The apparent successful Vendor shall also furnish proof of any additional insurance requirements contained in the specifications prior to Contract award regardless of whether that insurance requirement is listed in this section.

Vendor must maintain:

Commercial General Liability Insurance in at least an amount of: \$1,000,000.00 per occurrence.

Automobile Liability Insurance in at least an amount of: \$1,000,000.00 per occurrence.

Professional/Malpractice/Errors and Omission Insurance in at least an amount of: _____ per occurrence. Notwithstanding the forgoing, Vendor's are not required to list the State as an additional insured for this type of policy.

Commercial Crime and Third Party Fidelity Insurance in an amount of: _____ per occurrence.

Cyber Liability Insurance in an amount of: _____ per occurrence.

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

Pollution Insurance in an amount of: _____ per occurrence.

Aircraft Liability in an amount of: _____ per occurrence.

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

10. VENUE: All legal actions for damages brought by Vendor against the State shall be brought in the West Virginia Claims Commission. Other causes of action must be brought in the West Virginia court authorized by statute to exercise jurisdiction over it.

11. LIQUIDATED DAMAGES: 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. Vendor shall pay liquidated damages in the amount specified below or as described in the specifications:

_____ for _____.

Liquidated Damages Contained in the Specifications.

Liquidated Damages Are Not Included in this Contract.

12. ACCEPTANCE: Vendor's signature on its bid, or on the certification and signature page, constitutes an offer to the State 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.

13. PRICING: The pricing set forth herein is firm for the life of the Contract, unless specified elsewhere within this Solicitation/Contract by the State. A Vendor's inclusion of price adjustment provisions in its bid, without an express authorization from the State in the Solicitation to do so, may result in bid disqualification. Notwithstanding the foregoing, Vendor must extend any publicly advertised sale price to the State and invoice at the lower of the contract price or the publicly advertised sale price.

14. PAYMENT IN ARREARS: Payments for goods/services will be made in arrears only upon receipt of a proper invoice, detailing the goods/services provided or receipt of the goods/services, whichever is later. Notwithstanding the foregoing, payments for software maintenance, licenses, or subscriptions may be paid annually in advance.

15. PAYMENT METHODS: Vendor must accept payment by electronic funds transfer and P-Card. (The State of West Virginia's Purchasing Card program, administered under contract by a banking institution, processes payment for goods and services through state designated credit cards.)

16. 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.

17. ADDITIONAL FEES: Vendor is not permitted to charge additional fees or assess additional charges that were not either expressly provided for in the solicitation published by the State of West Virginia, included in the Contract, or included in the unit price or lump sum bid amount that Vendor is required by the solicitation to provide. Including such fees or charges as notes to the solicitation may result in rejection of vendor's bid. Requesting such fees or charges be paid after the contract has been awarded may result in cancellation of the contract.

18. 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. If that occurs, the State may notify the Vendor that an alternative source of funding has been obtained and thereby avoid the automatic termination. Non-appropriation or non-funding shall not be considered an event of default.

19. CANCELLATION: The Purchasing Division Director 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 Purchasing Division Director may also cancel any purchase or Contract upon 30 days written notice to the Vendor in accordance with West Virginia Code of State Rules § 148-1-5.2.b.

20. TIME: Time is of the essence regarding all matters of time and performance in this Contract.

21. 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.

22. COMPLIANCE WITH LAWS: 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.

SUBCONTRACTOR COMPLIANCE: Vendor shall notify all subcontractors providing commodities or services related to this Contract that as subcontractors, they too are required to comply with all applicable laws, regulations, and ordinances. Notification under this provision must occur prior to the performance of any work under the contract by the subcontractor.

23. 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.

24. 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, with approval of the Purchasing Division and the Attorney General's office (Attorney General approval is as to form only). Any change to existing contracts that adds work or changes contract cost, and were not included in the original contract, must be approved by the Purchasing Division and the Attorney General's Office (as to form) prior to the implementation of the change or commencement of work affected by the change.

25. 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.

26. 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 or Purchasing Division 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.

27. 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, the Purchasing Division, the Attorney General's office (as to form only), and any other government agency or office that may be required to approve such assignments.

28. 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.

29. 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.

30. PRIVACY, SECURITY, AND CONFIDENTIALITY: The Vendor agrees that it will not disclose to anyone, directly or indirectly, any such 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 www.state.wv.us/admin/purchase/privacy.

31. 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.

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

Submission of any bid, proposal, or other document to the Purchasing Division constitutes your explicit consent to the subsequent public disclosure of the bid, proposal, or document. The Purchasing Division will disclose any document labeled "confidential," "proprietary," "trade secret," "private," or labeled with any other claim against public disclosure of the documents, to include any "trade secrets" as defined by West Virginia Code § 47-22-1 et seq. All submissions are subject to public disclosure without notice.

32. LICENSING: In accordance with West Virginia Code of State Rules § 148-1-6.1.e, 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. Obligations related to political subdivisions may include, but are not limited to, business licensing, business and occupation taxes, inspection compliance, permitting, etc. Upon request, the Vendor must provide all necessary releases to obtain information to enable the Purchasing Division Director or the Agency to verify that the Vendor is licensed and in good standing with the above entities.

SUBCONTRACTOR COMPLIANCE: Vendor shall notify all subcontractors providing commodities or services related to this Contract that as subcontractors, they too are required to be licensed, in good standing, and up-to-date on all state and local obligations as described in this section. Obligations related to political subdivisions may include, but are not limited to, business licensing, business and occupation taxes, inspection compliance, permitting, etc. Notification under this provision must occur prior to the performance of any work under the contract by the subcontractor.

33. ANTITRUST: In submitting a bid to, signing a contract with, or accepting a Award Document from any agency of the State of West Virginia, 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.

34. VENDOR NON-CONFLICT: Neither Vendor nor its representatives are permitted to have any interest, nor shall they 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.

35. 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.

36. INDEMNIFICATION: The Vendor agrees to indemnify, defend, and hold harmless the State and the Agency, their officers, and employees from and against: (1) Any claims or losses for services rendered by any subcontractor, person, or firm performing or supplying services, materials, or supplies in connection with the performance of the Contract; (2) Any claims or losses resulting to any person or entity injured or damaged by the Vendor, its officers, employees, or subcontractors by the publication, translation, reproduction, delivery, performance, use, or disposition of any data used under the Contract in a manner not authorized by the Contract, or by Federal or State statutes or regulations; and (3) Any failure of the Vendor, its officers, employees, or subcontractors to observe State and Federal laws including, but not limited to, labor and wage and hour laws.

37. NO DEBT CERTIFICATION: In accordance with West Virginia Code §§ 5A-3-10a and 5-22-1(i), the State is prohibited from awarding a contract to any bidder that owes a debt to the State or a political subdivision of the State. By submitting a bid, or entering into a contract with the State, Vendor is affirming 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, neither the Vendor nor any related party owe a debt as defined above, and neither the Vendor nor any related party are in employer default as defined in the statute cited above unless the debt or employer default is permitted under the statute.

38. 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.

39. REPORTS: Vendor shall provide the Agency and/or the Purchasing Division with the following reports identified by a checked box below:

Such reports as the Agency and/or the Purchasing Division 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 Purchasing Division via email at purchasing.division@wv.gov.

40. BACKGROUND CHECK: In accordance with W. Va. Code § 15-2D-3, 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.

41. 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 heath, basic oxygen, electric furnace, Bessemer or other steel making process.
- c. The Purchasing Division Director may, in writing, authorize the use of foreign steel products if:
 1. 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
 2. 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.

42. 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.

43. INTERESTED PARTY SUPPLEMENTAL DISCLOSURE: W. Va. Code § 6D-1-2 requires that for contracts with an actual or estimated value of at least \$1 million, the Vendor must submit to the Agency a disclosure of interested parties prior to beginning work under this Contract. Additionally, the Vendor must submit a supplemental disclosure of interested parties reflecting any new or differing interested parties to the contract, which were not included in the original pre-work interested party disclosure, within 30 days following the completion or termination of the contract. 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.

44. PROHIBITION AGAINST USED OR REFURBISHED: Unless expressly permitted in the solicitation published by the State, Vendor must provide new, unused commodities, and is prohibited from supplying used or refurbished commodities, in fulfilling its responsibilities under this Contract.

45. VOID CONTRACT CLAUSES: This Contract is subject to the provisions of West Virginia Code § 5A-3-62, which automatically voids certain contract clauses that violate State law.

46. ISRAEL BOYCOTT: Bidder understands and agrees that, pursuant to W. Va. Code § 5A-3-63, it is prohibited from engaging in a boycott of Israel during the term of this contract.

ADDITIONAL TERMS AND CONDITIONS (Construction Contracts Only)

1. CONTRACTOR'S LICENSE: Until June 15, 2021, West Virginia Code § 21-11-2, and after that date, § 30-42-2, requires that all persons desiring to perform contracting work in this state be licensed. The West Virginia Contractors Licensing Board is empowered to issue the contractor's license. Applications for a contractor's license may be made by contacting the West Virginia Contractor Licensing Board.

The apparent successful Vendor must furnish a copy of its contractor's license prior to the issuance of a contract award document.

2. BONDS: The following bonds must be submitted:

- BID BOND:** Pursuant to the requirements contained in W. Va. Code § 5-22-1(c), All Vendors submitting a bid on a construction project shall furnish a valid 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 OR VENDOR'S BID WILL BE DISQUALIFIED.**
- PERFORMANCE BOND:** The apparent successful Vendor shall provide a performance bond in the amount of 100% of the contract. The performance bond must be received by the Purchasing Division prior to Contract award. (Attorney General requires use of the State approved bond forms found at: www.state.wv.us/admin/purchase/forms2.html)
- 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 Purchasing Division prior to Contract award. (Attorney General requires use of the State approved bond forms found at: www.state.wv.us/admin/purchase/forms2.html)
- MAINTENANCE BOND:** The apparent successful Vendor shall provide a two (2) year maintenance bond covering the roofing system if the work impacts an existing roof. The amount of the bond must be equal to the price associated with the percentage of the project impacting the roof. The maintenance bond must be issued and delivered to the Purchasing Division prior to Contract award. (Attorney General requires use of the State approved bond forms found at: www.state.wv.us/admin/purchase/forms2.html)

At a minimum, all construction projects require a bid bond, performance bond, and labor/material payment bond. Failure on the part of the state of West Virginia to checkmark the required bonds above does not relieve the vendor from the legal requirement of providing these bonds.

In lieu of the Bid 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 the bid bond must be of the same amount required of the Bid Bond and delivered with the bid.

3. DRUG-FREE WORKPLACE AFFIDAVIT: W. Va. Code § 21-1D-5 provides that any solicitation for a public improvement contract requires each Vendor that submits a bid for the work to submit an affidavit that the Vendor has a written plan for a drug-free workplace policy. If the affidavit is not submitted with the bid submission, the Purchasing Division shall promptly request by telephone and electronic mail that the low bidder and second low bidder provide the affidavit within one business day of the request. Failure to submit the affidavit within one business day of receiving the request shall result in disqualification of the bid. To comply with this law, Vendor should complete the enclosed drug-free workplace affidavit and submit the same with its bid. Failure to submit the signed and notarized drugfree workplace affidavit or a similar affidavit that fully complies with the requirements of the applicable code, within one business day of being requested to do so shall result in disqualification of Vendor's bid. Pursuant to W. Va. Code 21-1D-2(b) and (k), this provision does not apply to public improvement contracts the value of which is \$100,000 or less or temporary or emergency repairs.

3.1. DRUG-FREE WORKPLACE POLICY: Pursuant to W. Va. Code § 21-1D-4, Vendor and its subcontractors must implement and maintain a written drug-free workplace policy that complies with said article. The awarding public authority shall cancel this contract if: (1) Vendor fails to implement and maintain a written drug-free workplace policy described in the preceding paragraph, (2) Vendor fails to provide information regarding implementation of its drug-free workplace policy at the request of the public authority; or (3) Vendor provides to the public authority false information regarding the contractor's drug-free workplace policy.

Pursuant to W. Va. Code 21-1D-2(b) and (k), this provision does not apply to public improvement contracts the value of which is \$100,000 or less or temporary or emergency repairs.

4. DRUG FREE WORKPLACE REPORT: Pursuant to W. Va. Code § 21-1D-7b, no less than once per year, or upon completion of the project, every contractor shall provide a certified report to the public authority which let the contract. For contracts over \$25,000, the public authority shall be the West Virginia Purchasing Division. For contracts of \$25,000 or less, the public authority shall be the agency issuing the contract. The report shall include:

- (1) Information to show that the education and training service to the requirements of West Virginia Code § 21-1D-5 was provided;
- (2) The name of the laboratory certified by the United States Department of Health and Human Services or its successor that performs the drug tests;
- (3) The average number of employees in connection with the construction on the public improvement;
- (4) Drug test results for the following categories including the number of positive tests and the number of negative tests: (A) Pre-employment and new hires; (B) Reasonable suspicion; (C) Post-accident; and (D) Random.

Vendor should utilize the attached Certified Drug Free Workplace Report Coversheet when submitting the report required hereunder. Pursuant to W. Va. Code 21-1D-2(b) and (k), this provision does not apply to public improvement contracts the value of which is \$100,000 or less or temporary or emergency repairs.

5. AIA DOCUMENTS: All construction contracts that will be completed in conjunction with architectural services procured under Chapter 5G of the West Virginia Code will be governed by the attached AIA documents, as amended by the Supplementary Conditions for the State of West Virginia, in addition to the terms and conditions contained herein.

6. PROHIBITION AGAINST GENERAL CONDITIONS: Notwithstanding anything contained in the AIA Documents or the Supplementary Conditions, the State of West Virginia will not pay for general conditions, or winter conditions, or any other condition representing a delay in the contracts. The Vendor is expected to mitigate delay costs to the greatest extent possible and any costs associated with Delays must be specifically and concretely identified. The state will not consider an average daily rate multiplied by the number of days extended to be an acceptable charge.

7. GREEN BUILDINGS MINIMUM ENERGY STANDARDS: In accordance with § 22-29-4, all new building construction projects of public agencies that have not entered the schematic design phase prior to July 1, 2012, or any building construction project receiving state grant funds and appropriations, including public schools, that have not entered the schematic design phase prior to July 1, 2012, shall be designed and constructed complying with the ICC International Energy Conservation Code, adopted by the State Fire Commission, and the ANSI/ASHRAE/IESNA Standard 90.1-2007: Provided, That if any construction project has a commitment of federal funds to pay for a portion of such project, this provision shall only apply to the extent such standards are consistent with the federal standards.

8. LOCAL LABOR MARKET HIRING REQUIREMENT: Pursuant to West Virginia Code §21-1C-1 et seq., Employers shall hire at least seventy-five percent of employees for public improvement construction projects from the local labor market, to be rounded off, with at least two employees from outside the local labor market permissible for each employer per project.

Any employer unable to employ the minimum number of employees from the local labor market shall inform the nearest office of Workforce West Virginia of the number of qualified employees needed and provide a job description of the positions to be filled.

If, within three business days following the placing of a job order, Workforce West Virginia is unable to refer any qualified job applicants to the employer or refers less qualified job applicants than the number requested, then Workforce West Virginia shall issue a waiver to the employer stating the unavailability of applicant and shall permit the employer to fill any positions covered by the waiver from outside the local labor market. The waiver shall be in writing and shall be issued within the prescribed three days. A waiver certificate shall be sent to both the employer for its permanent project records and to the public authority.

Any employer who violates this requirement is subject to a civil penalty of \$250 per each employee less than the required threshold of seventy-five percent per day of violation after receipt of a notice of violation.

Any employer that continues to violate any provision of this article more than fourteen calendar days after receipt of a notice of violation is subject to a civil penalty of \$500 per each employee less than the required threshold of seventy-five percent per day of violation.

The following terms used in this section have the meaning shown below.

(1) The term “construction project” means any construction, reconstruction, improvement, enlargement, painting, decorating or repair of any public improvement let to contract in an amount equal to or greater than \$500,000. The term “construction project” does not include temporary or emergency repairs;

(2) The term “employee” means any person hired or permitted to perform hourly work for wages by a person, firm or corporation in the construction industry; The term “employee” does not include:(i) Bona fide employees of a public authority or individuals engaged in making temporary or emergency repairs;(ii) Bona fide independent contractors; or(iii) Salaried supervisory personnel necessary to assure efficient execution of the employee's work;

(3) The term “employer” means any person, firm or corporation employing one or more employees on any public improvement and includes all contractors and subcontractors;

(4) The term “local labor market” means every county in West Virginia and any county outside of West Virginia if any portion of that county is within fifty miles of the border of West Virginia;

(5) The term “public improvement” includes the construction of all buildings, roads, highways, bridges, streets, alleys, sewers, ditches, sewage disposal plants, waterworks, airports and all other structures that may be let to contract by a public authority, excluding improvements funded, in whole or in part, by federal funds.

9. DAVIS-BACON AND RELATED ACT WAGE RATES:

The work performed under this contract is federally funded in whole, or in part. Pursuant to _____, Vendors are required to pay applicable Davis-Bacon wage rates.

The work performed under this contract is not subject to Davis-Bacon wage rates.

10. SUBCONTRACTOR LIST SUBMISSION: In accordance with W. Va. Code § 5-22-1, the apparent low bidder on a contract valued at more than \$250,000.00 for the construction, alteration, decoration, painting or improvement of a new or existing building or structure shall submit a list of all subcontractors who will perform more than \$25,000.00 of work on the project including labor and materials. (This section does not apply to any other construction projects, such as highway, mine reclamation, water or sewer projects.) The subcontractor list shall be provided to the Purchasing Division within one business day of the opening of bids for review.

If the apparent low bidder fails to submit the subcontractor list, the Purchasing Division shall promptly request by telephone and electronic mail that the low bidder and second low bidder provide the subcontractor list within one business day of the request. Failure to submit the subcontractor list within one business day of receiving the request shall result in disqualification of the bid.

If no subcontractors who will perform more than \$25,000.00 of work are to be used to complete the project, the apparent low bidder must make this clear on the subcontractor list, in the bid itself, or in response to the Purchasing Division's request for the subcontractor list.

a. Required Information. The subcontractor list must contain the following information:

i. Bidder's name

ii. Name of each subcontractor performing more than \$25,000 of work on the project.

iii. The license number of each subcontractor, as required by W. Va. Code § 21-11-1 et. seq.

iv. If applicable, a notation that no subcontractor will be used to perform more than \$25,000.00 of work. (This item iv. is not required if the vendor makes this clear in the bid itself or in documentation following the request for the subcontractor list.)

b. Subcontractor List Submission Form: The subcontractor list may be submitted in any form, including the attached form, as long as the required information noted above is included. If any information is missing from the bidder's subcontractor list submission, it may be obtained from other documents such as bids, emails, letters, etc. that accompany the subcontractor list submission.

c. Substitution of Subcontractor. Written approval must be obtained from the State Spending Unit before any subcontractor substitution is permitted. Substitutions are not permitted unless:

i. The subcontractor listed in the original bid has filed for bankruptcy;

ii. The subcontractor in the original bid has been debarred or suspended; or

iii. The contractor certifies in writing that the subcontractor listed in the original bid fails, is unable, or refuses to perform his subcontract.

DESIGNATED CONTACT: Vendor appoints the individual identified in this Section as the Contract Administrator and the initial point of contact for matters relating to this Contract.

(Printed Name and Title) Timothy Hogue, Owner
(Address) 23 Cambridge Dr Clarksburg WV 26301
(Phone Number) / (Fax Number) 304-641-3896
(email address) tim.hogue@sprucecreekllc.com

CERTIFICATION AND SIGNATURE: By signing below, or submitting documentation through wvOASIS, I certify that: I have reviewed this Solicitation/Contract 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/Contract 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 this bid or offer was made without prior understanding, agreement, or connection with any entity submitting a bid or offer for the same material, supplies, equipment or services; that this bid or offer is in all respects fair and without collusion or fraud; 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; 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.

By signing below, I further certify that I understand this Contract is subject to the provisions of West Virginia Code § 5A-3-62, which automatically voids certain contract clauses that violate State law; and that pursuant to W. Va. Code 5A-3-63, the entity entering into this contract is prohibited from engaging in a boycott against Israel.

Spruce Creek Enterprises LLC

(Company) _____
Timothy Hogue
(Signature of Authorized Representative) _____ Timothy Hogue Owner 05/12/26
(Printed Name and Title of Authorized Representative) (Date)
304-641-3896
(Phone Number) (Fax Number)
tim.hogue@sprucecreekllc.com
(Email Address)

REQUEST FOR QUOTATION
Ritchie County WV - Dam Obstruction & Streambank Stabilization
CRFQ AGR26*40

GENERAL CONSTRUCTION SPECIFICATIONS (No AIA Documents)

- 1. PURPOSE AND SCOPE:** The West Virginia Purchasing Division is soliciting bids on behalf of WV Conservation Agency to establish a contract for the following:

The purpose of this agreement is to remove an obstruction from the principal spillway outlet and stilling basin at the dam's outlet and stabilize the failing streambank. These improvements are needed to increase the integrity of the North Fork Hughes River watershed project. Beneficiaries include residents in the watershed, recreational users of North Fork Hughes River, and visitors to North Bend State Park in Ritchie County, West Virginia.

The Vendor shall furnish all materials, labor, and equipment necessary to complete all Construction Services. The Vendor shall furnish any incidental work, materials, labor, and equipment that are necessary to complete the Construction Services, even if such incidental work is not explicitly included in the Project Plans. (Exhibit C section 95)

- 2. DEFINITIONS:** The terms listed below shall have the meanings assigned to them below. Additional definitions can be found in section 2 of the General Terms and Conditions and in the Project Plans as defined below.

2.1. "Construction Services" means removal of spillway obstruction, proper disposal of blockage materials, streambank work, and seeding and mulching of all disturbed areas of work site(s) in Ritchie County, WV as more fully described in the Project Plans.

2.2 "Pricing Page" means the pages contained in wvOASIS, attached hereto as **Exhibit A**. Exhibit A is included in this documentation upon which Vendor should list its proposed price for the Construction Services.

2.3 "Solicitation" means the official notice of an opportunity to supply the State with Construction Services that is published by the Purchasing Division.

2.4 "Project Plans" means documents developed by an architect, an engineer, the Agency, or another design professional, which are attached hereto as **Exhibit B**, that provide detailed instructions on how the Construction Services are to be performed. In the event that Project Plans contain drawings or other documents too large to attach in **Exhibit B**, Vendors can obtain copies in accordance with Section 9 of these Specifications.

- 3. ORDER OF PRECEDENCE:** This General Construction Specifications document will have priority over, and supersede, anything contained in the Project Plans.

- 4. QUALIFICATIONS:** Vendor, or Vendor's staff if requirements are inherently limited to individuals rather than corporate entities, shall have the following minimum qualifications:

4.1. Experience: Vendor, or Vendor's supervisory staff assigned to this project, must have successfully completed at least one projects that involved work similar to that described in

REQUEST FOR QUOTATION
Ritchie County WV - Dam Obstruction & Streambank Stabilization
CRFQ AGR26*40

these specifications or the Project Plans. Compliance with this experience requirement will be determined prior to contract award by the State through references provided by the Vendor upon request, through knowledge or documentation of the Vendor's past projects, through confirmation of experience requirements from the architect assisting the State in this project, or some other method that the State determines to be acceptable. Vendor must provide any documentation requested by the State to assist in confirmation of compliance with this provision. References, documentation, or other information to confirm compliance with this experience requirement may be requested after bid opening and prior to contract award.

5. **CONTRACT AWARD:** The Contract is intended to provide Agency with a purchase price for the Construction Services. The Contract will be awarded to the lowest qualified responsible bidder meeting the required specifications. If the Pricing Pages contain alternates/add-ons, the Contract will be awarded based on the grand total of the base bid and any alternates/add-ons selected.
6. **SELECTION OF ALTERNATES:** Pursuant to W. Va. Code § 5-22-1(f), any solicitation of bids shall include no more than five alternates. Alternates, if accepted, shall be accepted in the order in which they are listed on the bid form. Any unaccepted alternate contained within a bid shall expire 90 days after the date of the opening of bids for review. Determination of the lowest qualified responsible bidder shall be based on the sum of the base bid and any alternates accepted.
7. **PERFORMANCE:** Vendor shall perform the Construction Services in accordance with this document and the Project Plans included on **Exhibit B** of this solicitation.
8. **SUBSTITUTIONS:** Any substitution requests must be submitted in accordance with the official question and answer period described in the INSTRUCTIONS TO VENDORS SUBMITTING BIDS, Paragraph 4. Vendor Question Deadline. Vendors submitting substitution requests should submit product brochures and product specifications during the official question and answer period.
9. **PROJECT PLANS:** The checked box will apply to Project Plans for this solicitation.



No Additional Project Plan Documents: There are no additional Project Plans other than those attached hereto as Exhibit B or any subsequent addenda modifying **Exhibit B**.

If you have any issues downloading the attachments, contact Larry McDonnell at Larry.D.McDonnell@wv.gov

10. CONDITIONS OF THE WORK

- 10.1. **Permits:** The Vendor shall procure all necessary permits and licenses to comply with all applicable Federal, State, or Local laws, regulations and ordinances of any regulating body.

REQUEST FOR QUOTATION
Ritchie County WV - Dam Obstruction & Streambank Stabilization
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10.2. Existing Conditions: If discrepancies are discovered between the existing conditions and those noted in the specifications, Vendor must immediately notify the Agency's representative. Vendor must also immediately notify the Agency if suspected hazardous materials are encountered.

10.3. Standard Work Hours: The standard hours of work for this Contract will be 7:00 am to 5:30 pm minimum, excluding holidays recognized by the State of West Virginia. Any work outside of the standard hours of work must be approved in advance at the Agency's sole discretion. Authorization of work outside of the standard hours of work will not entitle Vendor to additional compensation.

10.4. Project Closeout: Project Closeout shall include the following:

10.4.1. Final Cleanup: Vendor shall perform the final cleanup activities listed below, along with any other final cleanup activities normally associated with the work performed under this Contract, prior to final inspection:

10.4.1.1. Removal and disposal of all debris listed in **Exhibit B** of this solicitation.

10.4.2. Final Inspection: Vendor shall participate in a final inspection with the Agency's project manager. The purpose of the final inspection will be to identify deficiencies that need to be remedied prior to Agency's final acceptance of the work. Vendor shall at all times be obligated to perform in accordance with the Contract and must take all actions necessary to ensure that work complies with requirements of Contract prior to final acceptance. Final acceptance does not waive or release Vendor from its obligation to ensure that work complies with the Contract requirements. Vendor shall submit any warranty documents to the Agency project manager at final inspection.

11. FACILITIES ACCESS: Performance of Contract Services may require access cards and/or keys to gain entrance to Agency's facilities. In the event that access cards and/or keys are required:

11.1. Vendor must identify principal service personnel which will be issued access cards and/or keys to perform service.

11.2. Vendor will be responsible for controlling cards and keys and will pay replacement fee, if the cards or keys become lost or stolen.

11.3. Vendor shall notify Agency immediately of any lost, stolen, or missing card or key.

11.4. Anyone performing under this Contract will be subject to Agency's security protocol and procedures.

REQUEST FOR QUOTATION
Ritchie County WV - Dam Obstruction & Streambank Stabilization
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11.5. Vendor shall inform all staff of Agency's security protocol and procedures.

12. MISCELLANEOUS:

12.1. 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:	Tim Hogue
Telephone Number:	304-641-3896
Fax Number:	
Email Address:	tim.hogue@sprucecreekllc.com



State of West Virginia

PURCHASING DIVISION

Construction Bid Submission Review Form

This list has been provided for informational purposes only and is not to be construed as a complete list of request for quotation or bidding requirements for any individual construction project. This list does not and cannot include every item, mistake or oversight that could cause a contractor's bid to be disqualified. Rather, this list is intended to draw attention to some of the most common problems that the Purchasing Division encounters in the bidding process for construction projects. All potential bidders must read the request for quotation, all additional documents, and all instructions relating thereto ("Bid Documents") in their entirety to identify the actual request for quotation and bidding requirements. Failure to read the Bid Documents in their entirety and comply with the stated requirements contained therein may result in bid disqualification.

Errors That Shall Be Reason for Immediate Bid Disqualification

1. Failure to attend a mandatory pre-bid meeting
2. Failure to sign the bid
3. Failure to supply a valid bid bond or other surety approved by the state of West Virginia
4. Failure to meet any mandatory requirement of the solicitation
5. Failure to submit bid prior to the bid opening date and time
6. Federal debarment
7. State of West Virginia debarment or suspension

Errors that May Be Reason for Bid Disqualification Before Contract Award

1. Failure to acknowledge receipt of Addenda (only if stipulated as mandatory)
2. Debt to the state or political subdivision (must be cured prior to award)
3. Workers' Compensation or Unemployment Compensation delinquency (must be cured prior to award)
4. Not registered as a vendor with the state of West Virginia (must be cured prior to award)
5. Failure to obtain required bonds and/or insurance
6. Failure to provide the sub-contractor listing within one business day of bid opening or one business day of the request to do so by the Purchasing Division
7. Failure to supply West Virginia contractor's license number with bid or within one day of Purchasing Division request to do so
8. Failure to supply a signed drug-free workplace affidavit with bid or within one day of Purchasing Division request to do so
9. Failure to use the provided solicitation form (only if stipulated as mandatory)



**State of West Virginia
DRUG FREE WORKPLACE CONFORMANCE AFFIDAVIT
West Virginia Code §21-1D-5**

I, _____, after being first duly sworn, depose and state as follows:

1. I am an employee of _____; and,
(Company Name)
2. I do hereby attest that _____
(Company Name)

maintains a written plan for a drug-free workplace policy and that such plan and policy are in compliance with **West Virginia Code** §21-1D.

The above statements are sworn to under the penalty of perjury.

Printed Name: _____

Signature: _____

Title: _____

Company Name: _____

Date: _____

STATE OF WEST VIRGINIA,

COUNTY OF _____, TO-WIT:

Taken, subscribed and sworn to before me this _____ day of _____, _____.

By Commission expires _____

(Seal)

(Notary Public)

State of West Virginia
Purchasing Division

CERTIFIED DRUG-FREE WORKPLACE REPORT COVERSHEET

In accordance with **West Virginia Code** § 21-1D-7b, no less than once per year, or upon completion of the project, every contractor shall provide a certified report to the public authority which let the contract. That report must include each of the items identified below in the Required Report Content section.

Instructions: Vendor should complete this coversheet, attach it to the required report, and submit it to the appropriate location as follows: For contracts more than \$25,000, the report should be mailed to the West Virginia Purchasing Division at 2019 Washington Street East, Charleston, WV 25305. For contracts of \$25,000 or less, the vendor should mail the report to the public authority issuing the contract.

Contract Identification:

Contract Number: _____

Contract Purpose: _____

Agency Requesting Work: _____

Required Report Content: The attached report must include each of the items listed below. The vendor should check each box as an indication that the required information has been included in the attached report.

- Information indicating the education and training service to the requirements of **West Virginia Code** § 21-1D-5 was provided;
- Name of the laboratory certified by the United States Department of Health and Human Services or its successor that performs the drug tests;
- Average number of employees in connection with the construction on the public improvement;
- Drug test results for the following categories including the number of positive tests and the number of negative tests: (A) Pre-employment and new hires; (B) Reasonable suspicion; (C) Post-accident; and (D) Random.

Vendor Contact Information:

Vendor Name: _____

Vendor Telephone: _____

Vendor Address: _____

Vendor Fax: _____

Vendor E-Mail: _____

BID BOND PREPARATION INSTRUCTIONS

AGENCY (A) _____
RFQ/RFP# (B) _____

- (A) WV State Agency (Stated on Page 1 "Spending Unit")
(B) Request for Quotation Number (upper right corner of page #1)
(C) Your Business Entity Name (or Individual Name if Sole Proprietor)
(D) City, Location of your Company
(E) State, Location of your Company
(F) Surety Corporate Name
(G) City, Location of Surety
(H) State, Location of Surety
(I) State of Surety Incorporation
(J) City of Surety's Principal Office
(K) Minimum amount of acceptable bid bond is 5% of total bid. You may state "5% of bid" or a specific amount on this line in words.
(L) Amount of bond in numbers
(M) Brief Description of scope of work
(N) Day of the month
(O) Month
(P) Year
(Q) Name of Business Entity (or Individual Name if Sole Proprietor)
(R) Seal of Principal
(S) Signature of President, Vice President, or Authorized Agent
(T) Title of Person Signing for Principal
(U) Seal of Surety
(V) Name of Surety
(W) Signature of Attorney in Fact of the Surety

Bid Bond
KNOW ALL MEN BY THESE PRESENTS, That we, the undersigned,
(C) of (D), (E),
as Principal, and (F) of (G),
(H), a corporation organized and existing under the laws
of the State of (I) with its principal office in the City of
(J), as Surety, are held and firmly bound unto The State
of West Virginia, as Obligee, in the penal sum of (K)
(\$ (L)) for the payment of which, well and truly to be made,
we jointly and severally bind ourselves, our heirs, administrators, executors,
successors and assigns.

The Condition of the above obligation is such that whereas the Principal has submitted to the Purchasing Section of the Department of Administration a certain bid or proposal, attached hereto and made a part hereof to enter into a contract in writing for
(M)

NOW THEREFORE

(a) If said bid shall be rejected, or
(b) If said bid shall be accepted and the Principal shall enter into a contract in accordance with the bid or proposal attached hereto and shall furnish any other bonds and insurance required by the bid or proposal, and shall in all other respects perform the agreement created by the acceptance of said bid then this obligation shall be null and void, otherwise this obligation shall remain in full force and effect. It is expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall, in no event, exceed the penal amount of this obligation as herein stated

The Surety for value received, hereby stipulates and agrees that the obligations of said Surety and its bond shall be in no way impaired or affected by any extension of time within which the Obligee may accept such bid: and said Surety does hereby waive notice of any such extension.

NOTE 1: Dated Power of Attorney with Surety Seal must accompany this bid bond.

WITNESS, the following signatures and seals of Principal and Surety, executed and sealed by a proper officer of Principal and Surety, or by Principal individually if Principal is an individual, the (N) day of (O), 20 (P).

Principal Seal (R) (Q) (Name of Principal)
By (S) (Must be President, Vice President, or Duly Authorized Agent)
(T) Title
Surety Seal (U) (V) (Name of Surety)
(W) Attorney-in-Fact

IMPORTANT - Surety executing bonds must be licensed in West Virginia to transact surety insurance, must affix its seal, and must attach a power of attorney with its seal affixed.

BID BOND

KNOW ALL MEN BY THESE PRESENTS, That we, the undersigned, _____
_____ of _____, _____, as Principal, and _____
_____ of _____, _____, a corporation organized and existing under the laws of the State of _____
_____ with its principal office in the City of _____, as Surety, are held and firmly bound unto the State
of West Virginia, as Obligee, in the penal sum of _____ (\$ _____) for the payment of which,
well and truly to be made, we jointly and severally bind ourselves, our heirs, administrators, executors, successors and assigns.

The Condition of the above obligation is such that whereas the Principal has submitted to the Purchasing Section of the
Department of Administration a certain bid or proposal, attached hereto and made a part hereof, to enter into a contract in writing for

NOW THEREFORE,

- (a) If said bid shall be rejected, or
- (b) If said bid shall be accepted and the Principal shall enter into a contract in accordance with the bid or proposal
attached hereto and shall furnish any other bonds and insurance required by the bid or proposal, and shall in all other respects perform
the agreement created by the acceptance of said bid, then this obligation shall be null and void, otherwise this obligation shall remain in
full force and effect. It is expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall, in no
event, exceed the penal amount of this obligation as herein stated.

The Surety, for the value received, hereby stipulates and agrees that the obligations of said Surety and its bond shall be in no
way impaired or affected by any extension of the time within which the Obligee may accept such bid, and said Surety does hereby
waive notice of any such extension.

WITNESS, the following signatures and seals of Principal and Surety, executed and sealed by a proper officer of Principal and
Surety, or by Principal individually if Principal is an individual, this _____ day of _____, 20_____.

Principal Seal

(Name of Principal)

By _____
(Must be President, Vice President, or
Duly Authorized Agent)

(Title)

Surety Seal

(Name of Surety)

Attorney-in-Fact

**IMPORTANT – Surety executing bonds must be licensed in West Virginia to transact surety insurance, must affix its seal, and
must attach a power of attorney with its seal affixed.**

REQUEST FOR QUOTATION
Ritchie County WV - Dam Obstruction & Streambank Stabilization
CRFQ AGR26*40

EXHIBIT A – Pricing Page

See next page.

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REQUEST FOR QUOTATION
Ritchie County, WV – North Fork of Hughes River Project

EXHIBIT A – Pricing Page

Blockage and Debris Removal Ritchie County, WV

All labor, materials, equipment, and supplies necessary for:

Blockage and Debris Removal Ritchie County, WV

Name of Bidder: Spruce Creek Enterprises LLC

Bidders Address: 23 Cambridge Dr

Street

Clarksburg

WV

26301

City

State

Zip

Telephone: 304-641-3896

Fax Number: _____

Email: tim.hogue@sprucecreekllc.com

Contractor's License No: WV-054922

(include copy with bid response documents)

The Bidder, being familiar with and understanding the Bidding Documents and having examined the site and being familiar with all local conditions affecting the project hereby proposes to furnish all labor, material, equipment, supplies and transportation and to perform all Work in accordance with the Bidding Documents within the time set forth for the sum of:

Base Bid: \$ 97,000

(Also enter this amount into Commodity Line 1)

ninety seven thousand dollars

(Show amount in both words)

Timothy Hogue
Signature

05/12/26

Date

Printed Name Tim Hogue

Title Owner

Failure to use this bid form may result in bid disqualification.

Ritchie County WV-Dam Obstruction & Streambank Stabilization

EXHIBIT A - PRICING PAGE

CRFQ AGR26*40

Item	Description	Construction Specification - Exhibit C	Quantity	Unit	Unit Price	Total
1.	Seeding and Mulching	6	1	LS	10,000	\$ 10,000 -
2.	Mobilization and Demobilization	8	1	LS	38,218	\$ 38,218 -
3.	Rock Riprap - Type D, 4"- 12"	61	80	TN	45.95	\$ 3,676 -
4.	Rock Riprap - Type C, 6"- 18"	61	725	TN	43.52	\$ 31,552 -
5.	WVDOH Aggregate Base Course, Class 1	401	450	TN	30.12	\$ 13,554 -
		<u>TOTAL OVERALL COST:</u>				\$ 97,000 -

Unit Definitions: LS = Lump Sum, LF = Linear Foot, CF = Cubic Feet, SF = Square Feet, CY = Cubic Yards, EA = Each, MO = Month, TN = Ton(s), AC = Acre(s), HR = Hours

REQUEST FOR QUOTATION
Ritchie County WV - Dam Obstruction & Streambank Stabilization
CRFQ AGR26*40

EXHIBIT B – PROJECT PLANS

SCOPE OF WORK: Specified details found in Exhibit C- Streambank Stabilization.

1. The work consists of installing measures or performing work to control erosion and minimize the production of sediment and other pollutants to water and air from construction activities.
2. The work consists of preparing the area for treatment; furnishing and placing seeds, sprigs, mulch, fertilizer, inoculant, lime, and other soil amendments; and anchoring mulch in designated areas as specified. (Exhibit C – Section 6)
3. The work consists of the mobilization and demobilization of the contractor's forces and equipment necessary for performing the work required under the contract. It does not include mobilization and demobilization for specific items of work for which payment is provided elsewhere in the contract. Mobilization will not be considered as work in fulfilling the contract requirements for commencement of work.
4. The work consists of establishing traffic control and maintaining safe, convenient use of public roads and right of way.
5. The work consists of the removal of surface water and ground water as necessary to perform the construction required by the contract in accordance with the specifications (Exhibit B). It must include: (1) constructing, installing, building, and maintaining all necessary temporary water containment facilities, channels, and diversions; (2) furnishing, installing, and operating all necessary pumps, piping, and other facilities and equipment; and (3) removing all such temporary works and equipment after their intended function is no longer required.
6. The work consists of the excavation required by the drawings and specifications, as well as the disposal of the excavated materials.
7.
 - a) The work consists of the construction of earth embankments, other earthfills, and earth backfills required by the drawings and specifications.(Exhibit C and D)
 - b) Earthfill is composed of natural earth materials that can be placed and compacted by construction equipment operated conventionally.
 - c) Earth backfill is composed of natural earth material placed and compacted in confined spaces or adjacent to structures (including pipes) by hand tamping, manually directed power tampers or vibrating plates, or their equivalent.

REQUEST FOR QUOTATION
Ritchie County WV - Dam Obstruction & Streambank Stabilization
CRFQ AGR26*40

8. The work consists of the construction of rock riprap revetments and blankets, including filter or bedding where specified.
9. The work consists of developing, implementing, and maintaining a quality control system to ensure that the specified quality is achieved for all materials and work performed.
10. This work consists of furnishing all material, equipment, and labor necessary for the installation of geotextiles. (Exhibit C section 95)
11. The work shall consist of furnishing and placing aggregate as shown on the drawings. (Exhibit D)
12. The specification for quality of rock (Exhibit C Section 95) to be used in the construction of rock riprap.
13. The specification for quality of geotextile, including geotextile for temporary silt fence.

EXHIBIT C - North Fork Hughes River

NORTH FORK HUGHES RIVER
RITCHIE COUNTY, WEST VIRGINIA

STREAMBANK STABILIZATION

LIST OF SPECIFICATIONS

CONSTRUCTION SPECIFICATIONS

NO.	TITLE
5	Pollution Control
6	Seeding, Sprigging and Mulching
8	Mobilization and Demobilization
9	Traffic Control
11	Removal of Water
21	Excavation
23	Earthfill
61	Rock Riprap
94	Contractor Quality Control
95	Geotextile
401	WVDOH Class I Aggregate

MATERIAL SPECIFICATIONS

NO.	TITLE
523	Rock for Riprap
592	Geotextile

Construction Specification 5 — Pollution Control

Title 210 – Engineering

Part 642 – Specifications for Construction Contracts

Subpart B – National Construction Specifications

June 2024

A. Scope

1. The work consists of installing measures or performing work to control erosion and minimize the production of sediment and other pollutants to water and air from construction activities.
2. The following BioPreferred® product categories are applicable to this specification:
 - a. Mulch and compost materials
 - b. Erosion control materials
 - c. Fertilizers
 - d. Dust suppressants
 - e. Agricultural spray adjuvants

B. Material

1. Silt fence conform to the requirement of Materials Specification 592, Geotextile. All other material furnished meet the requirements of the material specifications listed in Section G of this specification.
2. Erosion and Sediment Control Measures and Works. The measures and works includes, but are not limited to, the following:
 - a. Staging of Earthwork Activities. Scheduling the excavation and moving of soil materials to minimize the size of areas disturbed and unprotected from erosion for the shortest reasonable time.
 - b. Seeding. Seeding to protect disturbed areas occur as soon as reasonably possible following completion of that earthwork activity.
 - c. Mulching. Mulching to provide temporary protection of the soil surface from erosion.
 - d. Diversions. Diversions to divert water from work areas and to collect water from work areas for treatment and safe disposition. These are temporary and must be removed and the area restored to its near-original condition when the diversions are no longer required or when permanent measures are installed.
 - e. Stream Crossings. Culverts or bridges where equipment must cross streams. These are temporary must and be removed and the area restored to its near-original condition when the crossings are no longer required or when permanent measures are installed.
 - f. Sediment Basins. Sediment basins for collecting, settling, and eliminating sediment from eroding areas that impact properties and streams below the

construction sites. These basins are temporary and must be removed and the area restored to its original condition when they are no longer required or when permanent measures are installed.

- g. Sediment Filters. Straw bale filters or geotextile sediment fences for trapping sediment from areas with limited runoff. Sediment filters must be properly anchored to prevent erosion under or around them. Silt fences must be installed and maintained in accordance with ASTM D6462. These filters are temporary and must be removed and the area restored to its original condition when they are no longer required or when permanent measures are installed.
- h. Waterways. Waterways for the safe disposal of runoff from fields, diversions, and other structures or measures. These works are temporary and must be removed and the area restored to its original condition when they are no longer required or when permanent measures are installed.
- i. Other. Additional protection measures as specified in Section G of this specification or required by the federal, state, or local government.

C. Chemical Pollution

1. The contractor must provide watertight tanks or barrels or construct a sump sealed with plastic sheets to collect and temporarily contain chemical pollutants, such as drained lubricating or transmission fluids, grease, soaps, concrete mixer wash water, or asphalt, produced as a by-product from the construction activities. Dispose of pollutants in accordance with appropriate state and federal regulations. At the completion of the construction work, remove tanks, barrels, and sumps and restore the area to its original condition as specified in Section H of this specification. Sump removal must be conducted without causing pollution.
2. Sanitary facilities, such as chemical toilets, and septic tanks must not be located next to live streams, wells, or springs. They must be located at a distance sufficient to prevent contamination of any water source. At the completion of construction activities, facilities must be disposed of without causing pollution as specified in Section H of this specification.

D. Air Pollution

1. The burning of brush or slash and the disposal of other materials must adhere to state and local regulations.
2. Fire prevention measures must be taken to prevent the start or spreading of wildfires that may result from project activities. Firebreaks or guards must be constructed and maintained at locations shown on the drawings.
3. All public access or haul roads used by the contractor during construction of the project must be sprinkled or otherwise treated to fully suppress dust. All dust control methods must ensure safe construction operations at all times. If chemical dust suppressants are applied, the material must be a commercially available product specifically designed for dust suppression, and the application must follow the manufacturer's requirements and recommendations. A copy of the product data sheet and manufacturer's recommended application procedures must be provided to the engineer 5 working days before the first application.

E. Maintenance, Removal, and Restoration

1. All pollution-control measures and temporary works must be adequately maintained in a functional condition for the duration of the construction period. Remove all temporary measures and restore the site to near-original condition.

F. Measurement and Payment

1. Method 1. For items of work for which specific unit prices are established in the contract, each item is measured to the nearest unit applicable. Payment for each item is made at the contract unit price for that item. For water or chemical suppressant items used for dust control for which items of work are established in Section H of this specification, measurement for payment will not include water or chemical suppressants that are used inappropriately or excessively. Such payment will constitute full compensation for the completion of the work.
2. Method 2. For items of work for which lump-sum prices are established in the contract, payment is made as the work proceeds and is supported by invoices presented by the contractor that reflect actual costs. If the total of all progress payments is less than the lump-sum contract price for this item, the balance remaining for this item will be included in the final contract payment. Payment of the lump-sum contract price will constitute full compensation for completion of the work.
3. Method 3. For items of work for which lump-sum prices are established in the contract, payment will be prorated and provided in equal amounts on each monthly progress payment estimate. The number of months used for prorating must be the number estimated to complete the work as outlined in the contractor's approved construction schedule. The final month's prorate amount will be provided with the final contract payment. Payment as described will constitute full compensation for completion of the work.
4. All Methods. The following provisions apply to all methods of measurement and payment. Compensation for any item of work described in the contract but not listed in the bid schedule is included in the payment for the item of work to which it is made subsidiary. Such items, and the items to which they are made subsidiary, are identified in Section H of this specification.

G. Items of work and construction details

Items of work to be performed in conformance with this specification and the construction details are:

a. Subsidiary Item, Pollution Control

- (1) The Contractor shall exercise precaution throughout the duration of the Contract to prevent the pollution of rivers and streams. Chemicals, fuels, lubricants, raw sewage, and other harmful wastes shall not be discharged into or alongside any river, stream, or natural or man-made waterway leading thereto. Materials identified as chemical pollutants in Section C of this specification shall be removed from the site and disposed of in compliance with applicable state and federal regulations. Any chemical pollutant spills shall be reported to the State Center for Pollution, Toxic Chemical and Oil Spills hotline at 1-(800)-642-3074.
- (2) The Contractor shall schedule clearing and grubbing operations in a manner which will minimize the amount of erodible surface soil exposed at any time. Areas shall not be cleared and grubbed until immediately prior to actual need or use of the area.
- (3) Pollution control measures shall be installed in a timely manner to protect against erosion from areas to be exposed by excavation and fill operations.
- (4) Equipment shall not be operated in live streams except as may be required to construct stream bank stabilization measures and temporary structures located in live streams. Frequent fording of live streams with construction equipment will not be permitted.

Temporary bridges, culverts, or other structures shall be installed wherever an appreciable number of stream crossings are necessary.

- (5) Protective cover shall be applied to disturbed areas as soon as work has been completed in the area, and/or whenever work in the disturbed area will be delayed or stopped more than five (5) continuous days. Areas to be provided with protective cover will be staked and/or flagged in the field by the Contracting Officer's Representative. Protective cover shall be applied to disturbed areas by mulching with straw. Materials and workmanship for providing protective cover shall be in accordance with Construction Specification 6, Seeding, Sprigging and Mulching.

Straw mulch shall be applied uniformly to disturbed areas at the rate of 2 tons per acre.

- (6) In Section F, Measurement and Payment, shall not apply. No separate payment shall be made for Pollution Control. Compensation for this item is subsidiary to and included in the payment for **Bid Item 4, Rock Riprap - Type C, 6"-18", Construction Specification 61.**

Construction Specification 6 — Seeding, Sprigging, and Mulching

Title 210 - Engineering

Part 642 – Specifications for Construction Contracts

Subpart B – National Construction Specifications

June 2024

A. Scope

1. The work consists of preparing the area for treatment; furnishing and placing seed, sprigs, mulch, fertilizer, inoculant, lime, and other soil amendments; and anchoring mulch in designated areas as specified.
2. The following BioPreferred® product categories are applicable to this specification:
 - a. Mulch and compost materials
 - b. Erosion control materials
 - c. Fertilizers
 - d. Agricultural spray adjuvants

B. Material

1. Seed.
 - a. All seed must conform to the current rules and regulations of the state where it is being used and must be from the latest crop available. It must meet or exceed the standard for purity and germination listed in Section G.
 - b. Seed must be labeled in accordance with the state laws and the U.S. Department of Agriculture rules and regulations under the Federal Seed Act in effect on the date of invitations for bids. Bag tag figures are evidence of purity and germination. No seed will be accepted with a test date of more than 9 months before the delivery date to the site.
 - c. Seed that has become wet, moldy, or otherwise damaged in transit or storage will not be accepted. The percent of noxious weed seed allowable must be as defined in the current state laws relating to agricultural seeds. Each type of seed must be delivered in separate sealed containers and fully tagged unless an exception is granted in writing by the contracting officer.
2. Fertilizer. Unless otherwise specified, the fertilizer must be a commercial-grade fertilizer. It must meet the standard for grade and quality specified by state law. Where fertilizer is furnished from bulk storage, the contractor must furnish a supplier's certification of analysis and weight. When required by the contract, a representative sample of the fertilizer must be furnished to the contracting officer for chemical analysis.

3. Inoculants. The inoculant for treating legume seeds must be a pure culture of nitrogen-fixing bacteria prepared specifically for the species and must not be used later than the date indicated on the container or as otherwise specified. A mixing medium, as recommended by the manufacturer, must be used to bond the inoculant to the seed. Two times the amount of the inoculant recommended by the manufacturer must be used (unless seed is applied using a hydraulic seeder; then four times the amount must be used). Seed must be sown within 24 hours of treatment and must not remain in the hydraulic seeder longer than 4 hours.
4. Lime and Other Soil Amendments. Lime must consist of standard ground agriculture limestone or approved equivalent. Standard ground agriculture limestone is defined as ground limestone meeting current requirements of the state's Department of Agriculture. Other soil amendments must meet quality criteria and application requirements specified in Section G.
5. Mulch Tackifiers. Asphalt emulsion tackifiers must conform to the requirements of ASTM D977, Specification for Emulsified Asphalt. The emulsified asphalt may be rapid setting, medium setting, or slow setting. Non-asphaltic tackifiers required because of environmental considerations must be as specified in Section G.
6. Straw Mulch Material. Straw mulch must consist of wheat, barley, oat or rye straw, hay, grass cut from native grasses, or other plants as specified in Section G. The mulch material must be air-dried reasonably light in color and must not be musty, moldy, caked, or otherwise of low quality. The use of mulch that contains noxious weeds is not permitted. The contractor must provide a method satisfactory to the contracting officer for determining weight of mulch furnished.
7. Other Mulch Materials. Mulching materials, such as wood cellulose fiber mulch, mulch tackifiers, synthetic fiber mulch, netting, and mesh may be required for specialized locations and conditions. These materials, when specified, must be accompanied by the manufacturer's recommendations for methods of application.

C. Seeding Mixtures, Sod, Sprigs, and Dates of Planting

1. The application rate per acre for seed mixtures, sprigs, or sod and the date of seeding or planting must be as shown on the plans or as specified in Section G.

D. Seedbed Preparation and Treatment

1. Dress areas to be treated to a smooth, firm surface. On sites where equipment can operate on slopes safely, adequately loosen and smooth the seedbed (4 to 6 inches deep). Depending on soil and moisture conditions, disking, cultipacking, or both, may be necessary to properly prepare a seedbed. Where equipment cannot operate safely, prepare the seedbed by methods like scarifying, providing a roughened soil surface by hand so that broadcast seed will remain in place.
2. If seeding is to be accomplished immediately following construction operations, seedbed preparation may not be required except on a compacted, polished, or freshly cut soil surface.

3. Rocks larger than 6 inches in diameter, trash, weeds, and other debris that will interfere with seeding or maintenance operations must be removed or disposed of as specified in Section G.
4. Discontinue seedbed preparation when soil moisture conditions are not suitable for the preparation of a satisfactory seedbed as determined by the responsible engineer.

E. Seeding, Sprigging, Fertilizing, Mulching, and Stabilizing

1. Perform all seeding or sprigging operations in such a manner that the seed or sprigs are applied in the specified quantities uniformly in the designated areas. The method and rate of seed application must be as specified in Section G. Unless otherwise specified, seeding or sprigging must be accomplished within 2 days after final grading is completed and approved.
2. Apply fertilizer, lime, and other soil amendments as specified in Section G. When specified, the fertilizer and soil amendments must be thoroughly incorporated into the soil immediately following surface application.
3. The rate, amount, and kind of mulching or mesh must be as specified in Section G. Apply mulches uniformly to the designated areas. They must be applied to areas seeded not later than 2 working days after seeding has been performed. Stabilize straw mulch material within 24 hours of application using a mulch crimper or equivalent anchoring tool or by a suitable tackifier. When the mulch crimper or equivalent anchoring tool is used, it must have straight blades and be the type manufactured expressly for and capable of firmly punching the mulch into the soil. Where the equipment can be safely operated, it must be operated on the contour. Use hand methods where equipment cannot safely operate to perform the work required.
4. Apply the tackifier uniformly over the mulch material at the specified rate or inject it into the mulch material as it is being applied. Stabilizing materials like mesh or netting must be applied smoothly but loosely on the designated areas. The edges of these materials must be buried or securely anchored using spikes or staples as specified in Section G.
5. The contractor must maintain the mesh or netting areas until all work under the contract has been completed and accepted. Maintenance must consist of the repair of areas damaged by water erosion, wind, fire, or other causes. Such areas must be repaired to reestablish the intended condition and to the design lines and grades required by the contract. The areas must be re-fertilized, reseeded, and re-mulched before the new application of the mesh or netting.

F. Measurement and Payment

1. Method 1. For items of work for which specific unit prices are established in the contract, each area treated is measured as specified in Section G and area is calculated to the nearest 0.1 acre. Payment for treatment is made at the contract unit price for the designated treatment, which will constitute full compensation for completion of the work.

- a. When specified as an item of work, mesh or netting is measured to the nearest square yard of surface area covered and accepted. Payment is made at the contract unit price and will constitute full compensation for completion of the work.
2. Method 2. For items of work for which specific lump-sum prices are established in the contract, the quantity of work will not be measured for payment. Payment for this item is made at the contract lump-sum price for the item and will constitute full compensation for the completion of the work.
3. Method 3. For items of work for which lump-sum prices are established in the contract, payment is made as the work proceeds. Progress payments will be determined as specified in Section G. Payment of the lump-sum contract price will constitute full compensation for completion of the work.
4. All Methods. The following provisions apply to all methods of measurement and payment. Compensation for any item of work described in the contract but not listed in the bid schedule is included in the payment for the item of work to which it is made subsidiary. Such items and the items to which they are made subsidiary are identified in Section G.

G. Items of work and construction details

Items of work to be performed in conformance with this specification and the construction details are:

a. Bid Item 1, Seeding and Mulching

- (1) This item shall consist of seeding and mulching to permanent cover all disturbed areas due to work associated with the construction activities.
- (2) No permanent seeding shall be done between October 1 and December 1 unless otherwise approved by the Contracting Officer.
- (3) The approved lines and grades for permanent seeding at the time of permanent seeding shall be maintained during and after the seeding and mulching operation. Any area that has been damaged or had part or all of the seeding material removed by any means shall be repaired before acceptance will be made. The area to be repaired shall be filled and/or graded as needed to bring it back to neat lines, fertilized, seedbed prepared, and then seeded and mulched at the specified rates.
- (4) Lime shall be applied at an application rate of 2 tons per acre.
- (5) The following minimum amounts of fertilizer shall be applied per acre prior to seeding:
 - a. Nitrogen (N) 40 lbs.
Phosphoric Acid (P₂O₅) 80 lbs.
Potash (K₂O) 80 lbs.
 - b. The required application can be achieved by applying fertilizer having an analysis of 10-20-20 at the rate of 400 pounds per acre or 9 pounds per 1000 square feet.
- (6) Seedbed Preparation:
 - a. Lime and fertilizer shall be applied prior to final seedbed preparation.
 - b. Seeding shall be accomplished immediately after achieving final grade. Seedbed preparation shall only be required on compacted, polished, or freshly cut soil surface. Where special seedbed preparation is required, the hardened soil shall be loosened to a depth of 1 ½ inches; either by equipment or manual methods.
- (7) Seed:
 - a. Each seed species shall comply with the West Virginia Department of Agriculture’s standards for purity and germination. Unless otherwise directed by the Contracting Officer’s Representative, the seed mixtures and application rates are:

<u>Seed</u>	<u>Rate, lb/ac.</u>
Bluegrass	8
Kentucky 31 Tall Fescue	10
Annual Ryegrass	15
Red Fescue	5
Perennial Ryegrass	5

- b. When seeding is performed between April 15 – August 1 or December 1 – March 1, the specified rates of seed per acre shall be increased by 50 percent.
- (8) Mulch material shall be wheat, oat or rye straw only. Mulch shall be applied uniformly over all seeded areas at the specified rate per acre. Application shall be within 24 hours after seeding. A mechanical blower may be used to apply the mulch. Application rates and material requirements shall be in accordance with the following table:

**Time Period vs. Mulching Requirements for
Revegetation of Construction Sites**

<u>Time Period</u>	<u>Suitability</u>	<u>Mulch Material</u>	<u>Rate/Acre</u>
March 1-April 15 or August 1-October 1	Best seeding periods	Small grain straw ¹	2 tons
April 15-August 1	High Risk Period	Small grain straw ¹	2 ½ tons
October 1-Dec. 1	Do not seed	Small grain straw ¹	2 tons
Dec. 1-March 1	Good seeding period.	Small grain straw ¹	2 ½ tons

¹ Small grain straw shall consist of wheat, oat, or rye straw.

- (9) In Section F, Measurement and Payment, Method 2 shall apply.

Construction Specification 8 — Mobilization and Demobilization

Title 210 – Engineering

Part 642 – Specifications for Construction Contracts

Subpart B – National Construction Specifications

June 2024

A. Scope

1. The work consists of the mobilization and demobilization of the contractor's forces and equipment necessary for performing the work required under the contract. It does not include mobilization and demobilization for specific items of work for which payment is provided elsewhere in the contract. Mobilization will not be considered as work in fulfilling the contract requirements for commencement of work.

B. Equipment and Material

1. Mobilization includes all activities and associated costs for transportation of contractor's personnel, equipment, and operating supplies to the site; establishment of offices, buildings, and other necessary general facilities for the contractor's operations at the site; premiums paid for performance and payment bonds including coinsurance and reinsurance agreements as applicable; and other items specified in Section D of this specification.
2. Demobilization includes all activities and costs for transportation of personnel, equipment, and supplies not required or included in the contract from the site, including the disassembly, removal, and site cleanup of offices, buildings, and other facilities assembled on the site specifically for this contract.
3. This work includes mobilization and demobilization required by the contract at the time of award. If additional mobilization and demobilization activities and costs are required during the performance of the contract as a result of changed, deleted, or added items of work for which the contractor is entitled to an adjustment in contract price, compensation for such costs will be included in the price adjustment for the item or items of work changed or added.

C. Payment

1. Payment will be made as the work proceeds after presentation of paid invoices or documentation of direct costs by the contractor showing specific mobilization and demobilization costs and supporting evidence of the charges of suppliers, subcontractors, and others. When the total of such payments is less than the lump-sum contract price, the balance remaining will be included in the final contract payment. Payment of the lump sum contract price for mobilization and demobilization will constitute full compensation for completion of the work.

2. Payment will not be made under this item for the purchase costs of materials having a residual value, the purchase costs of materials to be incorporated in the project, or the purchase costs of operating supplies.

D. Items of work and construction details

Items of work to be performed in conformance with this specification and the construction details are:

a. Bid Item 2, Mobilization and Demobilization

- (1) This item shall consist of mobilization and demobilization of all work forces, materials, and equipment necessary to complete the work.
- (2) The contractor will be required to provide a portable toilet at the site.
- (3) The Contractor shall contact MISS Utility before work at the site begins. The Contractor shall provide the MISS Utility confirmation number for the site to the Contracting Officer's Representative before commencement of the work.
- (4) Prior to construction the Contractor shall verify that all utilities have been disconnected at the described site.
- (5) The Contractor may use a portable sign for public notice and for posting documents as required by the permits and this contract. Signage may be prepared to accommodate frequent revisions for use at multiple sites.
- (6) In Section C, Payment shall apply upon approval of completed work by the Contracting Officer's Representative.

Construction Specification 9 — Traffic Control

Title 210 – Engineering

Part 642 – Specifications

Subpart B – National Construction Specifications

June 2024

A. Scope

1. The work consists of establishing traffic control and maintaining safe, convenient use of public roads and right of way.

B. Traffic and Access

1. The contractor's operations must cause no unnecessary inconvenience to the public. Maintain the public right of way at all times unless interruption is authorized by proper local authority. Contractor's authorized closing or detour plans must be provided to the engineer for approval.
2. Provide and maintain safe and adequate access to all public protection devices and to all critical utility-control locations. Facility access must be continuous and unobstructed unless otherwise approved.

C. Storage of Equipment and Material in Public Streets

1. Construction materials and equipment must not be stored or parked on public streets, roads, or highways. During any material or equipment loading or unloading activities that may temporarily interfere with traffic, an acceptable detour must be provided for the duration of the activity. Any associated expense for this activity is the responsibility of the contractor.
2. Excavated material, including suitable material that is intended for adjacent trench backfill or other earth backfill as specified in Section E of this specification, must not be stored on public streets, roads, or highways that remain in service for the public. Any waiver of this requirement must be obtained from the proper local authority and approved by the engineer. All excess and unsuitable material must be removed from the site as soon as possible. Remove any spillage from roadways before they are used by the public.

D. Street Closures, Detours, and Barricades

1. The contractor must comply with the requirements of all applicable, responsible units of government for closure of any street, road, or highway. The contractor must provide the required barriers, guards, lights, signs, temporary bridges, and flaggers and inform the public of any detours and construction hazards by the most suitable means available, such as local newspapers or radio stations. The contractor is also responsible for compliance with additional public safety requirements that may arise during construction. The contractor must furnish,

install, and, upon completion of the work, promptly remove all signs, warning devices, and other materials used in the performance of this work.

2. Unless otherwise specified, the contractor must notify, in writing, the fire chief, police chief, county sheriff, state patrol, schools that operate school buses, or any other government official as appropriate no less than 7 days before closing, partly closing, or reopening any street, road, or highway.
3. Unless otherwise specified, the contractor must furnish to the engineer a written plan showing the proposed method of signing, barricading for traffic control, and safety for street detours and closures.
4. All temporary detours will be maintained to ensure use of public rights of way is provided in a safe manner. This may include dust control, grading, and graveling as required in Section G of this specification.

E. General and Specific References

1. All signs, signals, barricades, use of flaggers, and other traffic control and public safety devices must conform to the general requirements set forth in the Manual of Uniform Traffic Control Devices (MUTCD) and the latest edition of Standard Highway Signs and Standard Alphabets for Highway Signs and OSHA Construction Industry Standards (29 CFR Part 1926), Subpart G, Signs, Signals, and Barricades, unless otherwise specified in Section G of this specification.

F. Measurement and Payment

1. For items of work for which specific lump-sum prices are established in the contract, payment for the work is made at the contract lump-sum price. Progress payments will be made based upon the percentage of estimated total time that traffic control will be required unless otherwise specified in Section G of this specification. Payment will constitute full compensation for all flaggers, labor, materials, equipment, and other items necessary and incidental to completion of the work.
2. Compensation for any item of work described in the contract but not listed in the bid schedule will be included in the payment for the item of work to which it is made subsidiary. Such items and items to which they are made subsidiary are identified in Section G of this specification.

G. Items of work and construction details

Items of work to be performed in conformance with this specification and the construction details are:

a. Subsidiary Item, Traffic Control

- (1) Temporary blockages of the road are permitted with proper flagging provisions. A minimum of one lane of traffic shall be maintained at all times, with two lane traffic restored after work hours.
- (2) Roadways will need to be kept clean of dirt, debris, and any other obstructions to allow for the safe passage of vehicles.
- (3) In Section F, Measurement and Payment, shall not apply. No separate payment shall be made for Traffic Control. Compensation for this item is subsidiary to and included in the payment for **Bid Item 4, Rock Riprap - Type C, 6"-18", Construction Specification 61, and Bid Item 5, WVDOH Class I, Construction Specification 401.**

Construction Specification 11 — Removal of Water

Tile 210 – Engineering

Part 642 – Specifications for Construction Contracts

Subpart B – National Construction Specifications

June 2024

A. Scope

1. The work consists of the removal of surface water and ground water as necessary to perform the construction required by the contract in accordance with the specifications. It must include: (1) constructing, installing, building, and maintaining all necessary temporary water containment facilities, channels, and diversions; (2) furnishing, installing, and operating all necessary pumps, piping, and other facilities and equipment; and (3) removing all such temporary works and equipment after their intended function is no longer required.

B. Diverting Surface Water

1. The contractor must install, maintain, and operate all cofferdams, channels, flumes, sumps, and all other temporary diversion and protective works needed to divert streamflow and other surface water through or around the construction site. Control of surface water must be continuous during the period that damage to construction work could occur. Unless otherwise specified or approved, the diversion outlet must be into the same drainageway that the water would have reached before being diverted.
2. The contractor must furnish the contracting officer, in writing, a proposed plan for diverting surface water before beginning any construction activities for which a diversion is required, unless waived in Section H of this specification. Acceptance of this plan or the waiving of the plan requirement will not relieve the contractor of the responsibilities related to this activity during the process of completing the work as specified.

C. Dewatering the Construction Site

1. Foundations, cutoff trenches, and all other parts of the construction site must be dewatered and kept free of standing water and muddy conditions as necessary for the proper execution of the work. The contractor must furnish, install, operate, and maintain all drains, sumps, pumps, casings, well points, and all other equipment required to properly dewater the site as specified. Dewatering systems that cause a loss of soil fines from the foundation areas will not be permitted.
2. The contractor must furnish the contracting officer, in writing, a proposed plan for dewatering before commencing with any construction activity for which dewatering may be required unless waived in Section H of this specification.

Acceptance of this plan or the waiving of the plan requirement will not relieve the contractor of the responsibilities for completing the specified work.

D. Dewatering Borrow Areas

1. The contractor must maintain all borrow areas free of surface water or otherwise provide for timely and effective removal of surface and subsurface water that accumulates within the borrow area unless waived in Section H of this specification. Process borrow material as necessary to achieve proper and uniform moisture content at the time of placement.
2. If pumping to dewater borrow areas is included as a bid item of work in the bid schedule, equip each pump discharge pipe with a water meter. The meter must be such that the measured quantity of water is accurate within 3 percent of the true quantity. The contractor must provide necessary support to perform accuracy tests of the water meter when requested by the contracting officer.

E. Erosion and Pollution Control

1. Removal of water from the construction site, including the borrow areas, must be accomplished so that erosion and the transporting of sediment and other pollutants are minimized. Dewatering activities must be accomplished in a manner that the water table water quality is not altered. Pollution control activities must not conflict with the requirements of Construction Specification 5, Pollution Control, if it is a part of this contract.

F. Removal of Temporary Works

1. When temporary works are no longer needed, the contractor must remove and return the area to a condition similar to that which existed before construction. Areas where temporary works were located must be graded for sightly appearance and proper functioning and access to the installed works of improvement and may not obstruct natural surface waterflows. The contractor must exercise extreme care during the removal stages to minimize the loss of soil sediment and debris that was trapped during construction.
2. Pipes, casings, and any other material used to dewater the site must be removed from temporary wells. Fill the wells to ground level with clean gravel or other suitable material approved by the contracting officer. The contractor must exercise extreme care to prevent pollution of the ground water by these actions.

G. Measurement and Payment

1. Method 1.
 - a. Items of work listed in the bid schedule for removal of water, diverting surface water, and dewatering construction sites and borrow areas are paid for at the contract lump-sum prices. Such payment will constitute full compensation for all labor, equipment, tools, and all other items necessary and incidental to the completion of the work.
2. Method 2.

- a. Items of work listed in the bid schedule for removal of water, diverting surface water, dewatering construction sites, and dewatering borrow areas are paid for at the contract lump-sum prices. Such payment will constitute full compensation for furnishing, installing, operating, and maintaining the necessary trenches, drains, sumps, pumps, piping, and for all labor, equipment, tools, and all other items necessary and incidental to the completion of the work. The exception is that additional payment for pumping to dewater borrow areas and the removal of water will be made as described in the following paragraph.
 - b. If pumping to dewater borrow areas is a contract bid item, payment is made at the contract unit price, which must be the price per 1,000 gallons shown in the bid schedule. Such payment will constitute full compensation for pumping only. Compensation for equipment, preparation, and other costs associated with pumping is included in the lump-sum payment for removal of water or the lump-sum payment for dewatering the borrow areas. Payment is made only for pumping that is necessary to dewater borrow areas that cannot be effectively drained by gravity or that must have the water table lowered to be usable as a suitable borrow source. Pumping for other purposes will not be included for payment under this item.
3. All Methods. The following provisions apply to all methods of measurement and payment. Compensation for any item of work described in the contract but not listed in the bid schedule is included in the payment for the contract line item to which it is made subsidiary. Such items and the items to which they are made subsidiary are identified in Section H of this specification.

H. Items of work and construction details

Items of work to be performed in conformance with this specification and the construction details are:

a. Subsidiary Item, Removal of Water

- (1) This item shall include all costs that are required for providing all materials, equipment, labor, and services necessary to divert surface waters and dewater the work areas as required to perform the work during the contract. Construction site dewatering methods may include providing positive drainage allowing surface or subsurface water to vacate the work area or by temporary or continuous pumping as needed to dewater the work area.
- (2) Submittal of written plans for diverting surface waters and dewatering the site are not required.
- (3) In Section G, Measurement and Payment, shall not apply. No separate payment shall be made for Removal of Water. Compensation for this item is subsidiary to and included in the payment for **Bid Item 4, Rock Riprap - Type C, 6"-18", Construction Specification 61.**

Construction Specification 21 — Excavation

Title 210 – Engineering

Part 642 – Specifications for Construction Contracts

Subpart B – National Construction Specifications

June 2024

A. Scope

1. The work consists of the excavation required by the drawings and specifications, as well as the disposal of the excavated materials.

B. Classification

1. Excavation is classified as common excavation, rock excavation, or unclassified excavation in accordance with the following definitions.
2. Common excavation is defined as the excavation of all materials that (1) can be excavated, transported, and unloaded using heavy ripping equipment and wheel tractor-scrappers with pusher tractors or (2) can be excavated and dumped into place or loaded onto hauling equipment by excavators having a rated capacity of 1 cubic yard or larger and equipped with attachments (shovel, bucket, backhoe, dragline, or clam shell) appropriate to the material type, character, and nature of the materials.
3. Rock excavation is defined as the excavation of all hard, compacted, or cemented materials that require blasting or the use of ripping and excavating equipment larger than defined for common excavation. The excavation and removal of isolated boulders or rock fragments larger than 1 cubic yard encountered in materials otherwise conforming to the definition of common excavation must be classified as rock excavation. The presence of isolated boulders or rock fragments larger than 1 cubic yard is not in itself sufficient cause to change the classification of the surrounding material.
 - a. For the purpose of these classifications, the following definitions apply:
 - (1) Heavy ripping equipment is a rear-mounted, heavy-duty, single-tooth, ripping attachment mounted on a track-type tractor having a power rating of at least 250-flywheel horsepower, unless otherwise specified in Section J.
 - (2) A wheel tractor-scraper is a self-loading (not elevating) and unloading scraper having a struck-bowl capacity of at least 12 cubic yards.
 - (3) A pusher tractor is a track-type tractor having a power rating of at least 250-flywheel horsepower equipped with appropriate attachments.

4. Unclassified excavation is defined as the excavation of all materials encountered, including rock materials, regardless of their nature or the manner in which they are removed.

C. Blasting

1. The transportation, handling, storage, and use of dynamite and other explosives must be directed and supervised by someone of proven experience and ability who is authorized and qualified to conduct blasting operations.
2. Blasting must be done in a manner that prevents damage to the work or unnecessary fracturing of the underlying rock materials. It must conform to any special requirements in Section J of this specification. When specified in Section J, the contractor must furnish the engineer, in writing, a blasting plan before blasting operations begin.

D. Use of Excavated Material

1. Method 1. To the extent they are needed, all suitable material from the specified excavations must be used in the construction of required permanent earthfill or rockfill. The suitability of material for specific purposes is determined by the engineer. The contractor must not waste or otherwise dispose of suitable excavated material.
2. Method 2. Suitable material from the specified excavations may be used in the construction of required earthfill or rockfill. The suitability of material for specific purposes is determined by the engineer.

E. Disposal of Waste Materials

1. Method 1. All surplus or unsuitable excavated materials are designated as waste and must be disposed of at the locations shown on the drawings.
2. Method 2. All surplus or unsuitable excavated materials are designated as waste and disposed of by the contractor at chosen sites away from the site of the work. The disposal must be in an environmentally acceptable manner that does not violate local rules and regulations.

F. Excavation Limits

3. Excavations must comply with the Occupational Safety and Health Administration Construction Industry Standards Subpart P, Excavations, Trenching, and Shoring (29 CFR pt. 1926). All excavations must be completed and maintained in a safe and stable condition throughout the total construction phase. Structure and trench excavations must be completed to the specified elevations and to the length and width required to safely install, adjust, and remove any forms, bracing, or supports necessary for the installation of the work. Excavations outside the lines and limits shown on the drawings or specified herein are required to meet safety requirements and must be the responsibility of the contractor in constructing and maintaining a safe, stable excavation.

G. Borrow Excavation

1. When the quantities of suitable material obtained from specified excavations are insufficient to construct the specified earthfills and earth backfills, obtain additional material from the designated borrow areas. The extent and depth of borrow pits within the limits of the designated borrow areas are as specified in Section J or as approved by the engineer.
2. Borrow pits must be excavated and finally dressed to blend with the existing topography. They are sloped to prevent ponding and to provide drainage.

H. Over Excavation

1. Correct excavation in rock beyond the specified lines and grades by filling the resulting voids with Portland Cement concrete. Materials and mix proportions must be approved by the engineer. Concrete that will be exposed to the atmosphere when construction is completed must meet the requirements of concrete selected for use under Construction Specification 31, Concrete for Major Structures, or 32, Structure Concrete, as appropriate.
2. Concrete that will be permanently covered must contain not less than five bags of cement per cubic yard. The concrete must be placed and cured as specified by the engineer.
3. Correct excavation in earth beyond the specified lines and grades by filling the resulting voids with approved compacted earthfill. The exception to this is that if the earth will become the subgrade for riprap, rockfill, sand or gravel bedding, or drainfill, the voids may be filled with material conforming to the specifications for the riprap, rockfill, bedding, or drainfill. Before correcting an over excavation condition, the contractor must review the planned corrective action with the engineer and obtain approval of the corrective measures.

I. Measurement and Payment

1. Unit Price Methods. For items of work for which specific unit prices are established in the contract, the volume of each type and class of excavation within the specified pay limits is measured and computed to the nearest cubic yard by the method of average cross-sectional end areas or by methods outlined in Section J of this specification. Regardless of quantities excavated, the measurement for payment is made to the specified pay limits except when excavation outside the specified lines and grades directed by the engineer to remove unsuitable material is included. Excavation required because unsuitable conditions result from the contractor's improper construction operations, as determined by the engineer, is not included for measurement and payment.
2. Method 1. The pay limits are as designated on the drawings.
3. Method 2. The pay limits are defined as follows:
 - a. The upper limit is the original ground surface as it existed before the start of construction operations, unless excavation is performed within areas designated for previous excavation or earthfill; then the upper limit is the modified ground surface resulting from the specified previous excavation or earthfill.

- b. The lower and lateral limits are the neat lines and grades shown on the drawings.
4. Method 3. The pay limits are defined as follows:
- a. The upper limit is the original ground surface as it existed before the start of construction operations, unless excavation is performed within areas designated for previous excavation or earthfill; then the upper limit is the modified ground surface resulting from the specified previous excavation or earthfill.
 - b. The lower and lateral limits is the true surface of the completed excavation as directed by the engineer.
5. Method 4. The pay limits are defined as follows:
- a. The upper limit is the original ground surface as it existed before the start of construction operations, unless excavation is performed within areas designated for previous excavation or earthfill; then the upper limit is the modified ground surface resulting from the specified previous excavation or earthfill.
 - b. The lower limit is at the bottom surface of the proposed structure.
 - c. The lateral limits are 18 inches outside of the outside surface of the proposed structure or are the vertical planes 18 inches outside of and parallel to the footings, whichever gives the larger pay quantity, except as provided in paragraph d below.
 - d. For trapezoidal channel linings or similar structures that are to be supported by the sides of the excavation without intervening forms, the lateral limits are at the underside of the proposed lining or structure.
 - e. For the purposes of the definitions in paragraphs b, c, and d above, any specified bedding or drainfill directly beneath or beside the structure will be considered to be a part of the structure.
6. All Methods. The following provisions apply to all methods of measurement and payment.
- a. Payment for each type and class of excavation is made at the contract unit price for that type and class of excavation. Such payment will constitute full compensation for all labor, materials, equipment, and other items necessary and incidental to the performance of the work with the exception that extra payment for backfilling over excavation will be made in accordance with the following provisions.
 - b. Payment for backfilling over excavation, as specified in Section H of this specification, is made only if the excavation outside specified lines and grades is directed by the engineer to remove unsuitable material and the unsuitable condition is not a result of the contractor's improper construction operations as determined by the engineer.
 - c. Compensation for any item of work described in the contract but not listed in the bid schedule is included in the payment for the item of work to which it is made subsidiary. Such items and the items to which they are made subsidiary are identified in Section J of this specification.

J. Items of work and construction details

Items of work to be performed in conformance with this specification and the construction details are:

a. Excavation, General Requirements

- 1) This item shall consist of all excavation necessary to perform the work, as shown on the drawings and staked in the field.
- 2) All excavation shall be unclassified.
- 3) The contractor shall use care to stockpile any topsoil material to be used in the reclamation of the site.
- 4) No blasting shall be permitted.
- 5) The excavated material shall be used in accordance with Construction Specification 23, Earthfill. Any excess material shall be disposed of at an approved offsite location within the park.

b. Subsidiary Item, Excavation

- 1) This item shall consist of providing any and all materials, equipment, and labor necessary to excavate material necessary to complete the work.
- 2) In Section I, Measurement and Payment, shall not apply. No separate payment shall be made for Excavation. Compensation for this item is subsidiary to and included in the payment for **Bid Item 3, Rock Riprap - Type D, 4"-12", Construction Specification 61 and Bid Item 4, Rock Riprap - Type C, 6"-18", Construction Specification 61.**

Construction Specification 23 — Earthfill

Title 210 – Engineering

Part 642 – Specifications for Construction Contracts

Subpart B – National Construction Specifications

June 2024

A. Scope

1. The work consists of the construction of earth embankments, other earthfills, and earth backfills required by the drawings and specifications.
2. Earthfill is composed of natural earth materials that can be placed and compacted by construction equipment operated conventionally.
3. Earth backfill is composed of natural earth material placed and compacted in confined spaces or adjacent to structures (including pipes) by hand tamping, manually directed power tampers or vibrating plates, or their equivalent.

B. Material

1. All fill material must be obtained from required excavations and designated borrow areas. The selection, blending, routing, and disposition of material in the various fills must be subject to approval by the engineer.
2. Fill materials must contain no frozen soil, sod, brush, roots, or other perishable material. Rock particles larger than the maximum size specified for each type of fill must be removed prior to compaction of the fill.
3. The types of material used in the various fills must be as listed and described in the specifications and drawings.

C. Foundation preparation

1. Foundations for earthfill must be stripped to remove vegetation and other unsuitable material or must be excavated as specified.
2. Except as otherwise specified, earth foundation surfaces must be graded to remove surface irregularities and must be scarified parallel to the axis of the fill or otherwise acceptably scored and loosened to a minimum depth of 2 inches. The moisture content of the loosened material must be controlled as specified for the earthfill and the surface material of the foundation must be compacted and bonded with the first layer of earthfill as specified for subsequent layers of earthfill.
3. Earth abutment surfaces must be free of loose, uncompacted earth in excess of 2 inches in depth normal to the slope and must be at such a moisture content that the earthfill can be compacted against them to produce a good bond between the fill and the abutments.
4. Rock foundation and abutment surfaces must be cleared of all loose material by hand or other effective means and must be free of standing water when fill is

- placed upon them. Occasional rock outcrops in earth foundations for earthfill, except in dams and other structures designed to restrain the movement of water, must not require special treatment if they do not interfere with compaction of the foundation and initial layers of the fill or the bond between the foundation and the fill.
5. Foundation and abutment surfaces must be no steeper than one horizontal to one vertical unless otherwise specified. Test pits or other cavities must be filled with compacted earthfill conforming to the specifications for the earthfill to be placed upon the foundation.

D. Placement

1. Earthfill must not be placed until the required excavation and foundation preparation have been completed and the foundation has been inspected and approved by the engineer. Earthfill must not be placed upon a frozen surface nor have snow, ice, or frozen material incorporated in the earthfill matrix.
2. Earthfill must be placed in approximately horizontal layers. The thickness of each layer before compaction must not exceed the maximum thickness specified in section J or shown on the drawings. Materials placed by dumping in piles or windrows must be spread uniformly without exceeding the specified thickness before being compacted.
3. Hand-compacted earth backfill must be placed in layers whose thickness before compaction does not exceed the maximum thickness specified for layers of earth backfill compacted by manually directed power tampers.
4. Place earth backfill in a manner that prevents damage to the structures and allows the structures to assume the loads from the earth backfill gradually and uniformly. The height of the earth backfill adjacent to a structure must be increased at approximately the same rate on all sides of the structure.
5. Meet the following additional requirements for earthfill and earth backfill in dams, levees, and other structures designed to restrain the movement of water.
 - a. The distribution of materials throughout each zone must be essentially uniform and the earthfill free from lenses, pockets, streaks, or layers of material differing substantially in texture, moisture content, or gradation from the surrounding material. Zone earthfills must be constructed concurrently unless otherwise specified.
 - b. Scarified the surface of each layer parallel to the axis of the fill to at minimum a depth of 2 inches before the next layer is placed.
 - c. The top surface of embankments must be maintained approximately level during construction with two exceptions: a crown or cross-slope of about 2 percent must be maintained to ensure effective drainage, or as otherwise specified for drainfill or sectional zones.
 - d. Construct dam embankments in continuous layers from abutment to abutment except where openings to facilitate construction or to allow the passage of streamflow during construction are specifically authorized in the contract.

- e. Embankments built at different levels as described under paragraphs c or d above must be constructed so that the slope of the bonding surfaces between embankments in place and embankments to be placed is not steeper than 3 feet horizontal to 1 foot vertical. The bonding surface of the embankment in place must be stripped of all material not meeting the requirements of this specification and must be scarified, moistened, and recompacted when the new earthfill is placed against it. This ensures a good bond with the new earthfill and obtains the specified moisture content and density at the contact of the in-place and new earthfills.

E. Control of moisture content

1. During placement and compaction of earthfill and earth backfill, the moisture content of the material being placed must be maintained within the specified range.
2. The application of water to the earthfill material must be accomplished at the borrow areas insofar as practicable. Water may be applied by sprinkling the material after placement on the earthfill, if necessary. Obtain a uniform moisture distribution by disking.
3. Material that is too wet when deposited on the earthfill must either be removed or dried to the specified moisture content prior to compaction.
4. If the top surface of the preceding layer of compacted earthfill or a foundation or abutment surface in the contact zone with the earthfill becomes too dry to permit suitable bond, it must either be removed or scarified and moistened by sprinkling to an acceptable moisture content before placement of the next layer of earthfill.

F. Compaction

1. Earthfill. Earthfill must be compacted according to the following requirements for the class of compaction specified:
 - a. Class A compaction. Compact each layer of earthfill as necessary to provide the density of the earthfill matrix not less than the minimum density specified in Section J or identified on the drawings. The earthfill matrix is defined as the portion of the earthfill material finer than the maximum particle size allowed in the reference compaction test method specified (ASTM D698 or ASTM D1557).
 - b. Class B compaction. Compact each layer of earthfill to a mass density not less than the minimum density specified.
 - c. Class C compaction. Compact each layer of earthfill by the specified number of passes of the type and weight of roller or other equipment specified or by an equivalent approved method. Each pass must consist of at least one passage of the roller wheel or drum over the entire surface of the layer.
2. Earth backfill. Compact earth backfill adjacent to structures to a density equivalent to that of the surrounding in-place earth material or adjacent required earthfill or earth backfill. Compaction must be accomplished by hand tamping or manually directed power tampers, plate vibrators, walk-behind, miniature, or self-

propelled rollers. Unless otherwise specified, heavy equipment, including backhoe-mounted power tampers or vibrating compactors, and manually directed vibrating rollers must not be operated within 3 feet of any structure. Towed or self-propelled vibrating rollers must not be operated within 5 feet of any structure. Compaction by means of drop weights operating from a crane or hoist is not permitted.

3. Heavy Equipment. The passage of heavy equipment will not be allowed:
 - a. Over cast-in-place conduits within 14 days after placement of the concrete
 - b. Over cradled or bedded precast conduits within 7 days after placement of the concrete cradle or bedding
 - c. Over any type of conduit until the backfill has been placed above the top surface of the structure to a height equal to one-half the clear span width of the structure or pipe or 3 feet, whichever is greater, except as may be specified in Section J.
4. Compacting adjacent to structures. Compacting of earth backfill adjacent to structures must not be started until the concrete has attained the strength specified in Section J for this purpose. The strength is determined by compression testing of test cylinders cast by the contractor's quality control personnel for this purpose and cured at the worksite in the manner specified in ASTM C31 for determining when a structure may be put into service.
5. Placement Interval Against Concrete. When the required strength of the concrete is not specified as described above, compaction of earth backfill adjacent to structures must not be started until the following time intervals shown in figure 23-1 have elapsed after placement of the concrete.

Figure 23-1 Time interval before placing backfill

Structure	Time interval (days)
Vertical or near-vertical walls with earth loading on one side only	14
Walls backfilled on both sides simultaneously	7
Conduits and spillway risers, cast-in-place (with inside forms in place)	7
Conduits and spillway risers, cast-in-place (inside forms removed)	14
Conduits, pre-cast, cradled	2
Conduits, pre-cast, bedded	1
Cantilever outlet bents (backfilled both sides simultaneously)	3

G. Reworking or removal and replacement of defective earthfill

1. Earthfill placed at densities lower than the specified minimum density or at moisture contents outside the specified acceptable range of moisture content, or otherwise not conforming to the requirements of the specifications must be reworked to meet the requirements or removed and replaced by acceptable earthfill. The replacement earthfill and the foundation, abutment, and earthfill surfaces upon which it is placed must conform to all requirements of this

specification for foundation preparation, approval, placement, moisture control, and compaction.

H. Testing

1. During the course of the work, the contractor must perform quality control tests, as applicable, to identify earthfill and earth backfill materials; determine the reference maximum density and optimum moisture content; and document that the moisture content of material at the time of compaction and the density of earthfill and earth backfill in place conform to the requirements of this specification.
2. Determining Reference Maximum Density and Optimum Moisture Content. For Class A compaction, the reference maximum density and optimum moisture content must be determined in accordance with the compaction test and method specified on the drawings or in section J.
3. Documenting Specification Conformance. In-place densities of earthfill and earth backfill requiring Class A compaction must be measured in accordance with ASTM D1556, D2167, D2937, D6938, or D8167. Moisture contents of earthfill and earth backfill at the time of compaction must be measured in accordance with ASTM D2216, D4643, or D6938. Values of moisture content determined by ASTM D2216 are considered the true value of the soil moisture. Values of moisture content determined by ASTM D4643 or D6938 must be verified by comparison to values obtained by ASTM D2216. Values of in-place density and moisture content determined by these tests must be compared to the minimum density and moisture content range specified on the drawings or in Section J.
4. Correction for Oversize Particles. If the materials to be used for earthfill or earth backfill contain more than 5 percent by dry weight of oversize rock particles (particles larger than those allowed in the specified compaction test and method), corrections for oversize particles must be made using the appropriate procedures explained in ASTM D4718.

I. Measurement and payment

1. Unit Price Methods. For items of work for which specific unit prices are established in the contract, the volume of each type and compaction class of earthfill and earth backfill within the specified zone boundaries and pay limits is measured and computed to the nearest cubic yard by the method of average cross-sectional end areas. Unless otherwise specified in Section J, no deduction in volume is made for embedded items such as, but not limited to, conduits, inlet structures, outlet structures, embankment drains, sand diaphragm and outlet, and their appurtenances.
2. Pay Limits. The pay limits must be as defined below, with the further provision that earthfill required to fill voids resulting from over excavation of the foundation, outside the specified lines and grades, will be included in the measurement for payment only under the following conditions:

- a. Where such over excavation to remove unsuitable material is directed by the engineer
 - b. Where the unsuitable condition is not a result of the contractor's improper construction operations as determined by the engineer.
3. Beyond Specified Lines and Grades. Earthfill beyond the specified lines and grades to backfill excavation required for compliance with OSHA requirements will be considered subsidiary to the earthfill bid items.
 4. Method 1. The pay limits must be as designated on the drawings.
 5. Method 2. The pay limits must be the measured surface of the foundation when approved for placement of the earthfill and the specified neat lines of the earthfill surface.
 6. Method 3. The pay limits must be the measured surface of the foundation when approved for placement of the earthfill and the measured surface of the completed earthfill.
 7. Method 4. The pay limits must be the specified pay limits for excavation and the specified neat lines of the earthfill surface.
 8. Method 5. The pay limits must be the specified pay limits for excavation and the measured surface of the completed earthfill.
 9. Method 6. Payment for each type and compaction class of earthfill and earth backfill is made at the contract unit price for that type and compaction class of earthfill. Such payment will constitute full compensation for all labor, material, equipment, and other items necessary and incidental to the performance of the work.
 10. Method 7. Payment for each type and compaction class of earthfill and earth backfill is made at the contract unit price for that type and compaction class of earthfill. Such payment will constitute full compensation for all labor, material, equipment, and other items necessary and incidental to the performance of the work except furnishing, transporting, and applying water to the foundation and earthfill material. Water applied to the foundation and earthfill material is measured and payment made as specified in Construction Specification 10.
 11. All methods. The following provisions apply to all methods of measurement and payment. Compensation for any item of work described in the contract but not listed in the bid schedule is included in the payment for the item of work to which it is made subsidiary. Such items and the items to which they are made subsidiary are identified in Section J of this specification.

J. Items of work and construction details

Items of work to be performed in conformance with this specification and the construction details are:

a. Earthfill, General Requirements

- 1) No foundation preparation is required beyond removing debris from within the designated fill area.
- 2) No testing of placed earthfill is required.
- 3) Excavated material that will be used for Earthfill shall be approved by the Contracting Officer's Representative prior to placement to the lines and grades specified on the drawings and staked in the field. Any excess material shall be disposed of at an approved offsite location within the park.
- 4) Except for the top 6 inches and around utilities, the maximum rock particles size shall be 6 inches and the maximum lift thickness shall be 12 inches. The top 6 inches shall be fine grain soil material suitable for establishing a seedbed. The maximum rock particle size in the top 6 inches and around utilities shall be 2 inches. The top 6 inches may be placed in one 6-inch lift. The maximum lift thickness around utilities shall be 4 inches.
- 5) The moisture content of the earthfill shall be such that a dense compact fill can be obtained. The moisture content shall be sufficient to permit molding a firm ball when firmly squeezed by hand. The earthfill shall not be so wet that water runs out of the ball when squeezed nor so dry that the ball easily crumbles when slightly deformed.
- 6) Compaction shall be Class C as defined in Section F above. Compaction shall be obtained by traversing the entire surface of each lift four (4) times with the track of a crawler type tractor weighing not less than 15 tons. Fill placed around any utilities shall be hand compacted. Scarify the previous lift layer prior to placement of more fill material.
- 7) The contractor shall exercise caution when placing and compacting fill around utilities. Utility lines will be bedded in 2 feet of fine grain fill. No rocks larger than 2 inches in diameter shall be in contact with a utility line.

b. Subsidiary Item, Earthfill

- 1) This item shall consist of providing any and all materials, equipment, and labor necessary to provide Earthfill to the lines and grades specified on the drawings.
- 2) In Section I, Measurement and Payment, shall not apply. No separate payment shall be made for Earthfill. Compensation for this item is subsidiary to and included in the payment for **Bid Item 4, Rock Riprap - Type C, 6"-18", Construction Specification 61.**

Construction Specification 61 — Rock Riprap

Title 210 – Engineering

Part 642 – Specifications for Construction Contracts

Subpart B – National Construction Specifications

June 2024

A. Scope

1. The work consists of the construction of rock riprap revetments and blankets, including filter or bedding where specified.

B. Material

1. Rock riprap must conform to the requirements of Material Specification 523, Rock for Riprap, or, if so specified, must be obtained from designated sources. It must be free from dirt, clay, sand, rock fines, and other material not meeting the required gradation limits.
2. At least 30 days before rock is delivered from other than designated sources, the contractor must designate in writing the source from which rock material will be obtained and provide information satisfactory to the contracting officer that the material meets contract requirements. The contractor must provide the responsible engineer free access to the source for the purpose of obtaining samples for testing. The size and grading of the rock must be as specified in section H.
3. Rock from approved sources must be excavated, selected, and processed to meet the specified quality and grading requirements at the time the rock is installed.
4. Based on a specific gravity of 2.65 (typical of limestone and dolomite) and assuming the individual rock is shaped midway between a sphere and a cube, typical size/weight relationships are given in figure 61-1:

Figure 61-1 Typical riprap size/weight relationship

Sieve Size of Rock	Approx. Weight of Rock	Weight of Test Pile
16 inches	300 pounds	6,000 pounds
11 inches	100 pounds	2,000 pounds
6 inches	15 pounds	300 pounds

5. When specified in section H or when it is necessary to verify the gradation of the rock riprap, a particle size analysis must be performed in accordance with ASTM D5519, Test Method A or B. The analysis must be performed at the worksite on a test pile of representative rock. The mass of the test pile must be at least 20 times the mass of the largest rock in the pile. The results of the test are compared to the gradation required for the project. Test pile results that do not meet the construction specifications must be cause for the rock to be rejected. The test pile that meets contract requirements must be left on the jobsite as a sample for visual comparison. The test pile must be used as part of the last rock riprap to be placed.

6. Filter or bedding aggregates, when required, must conform to Material Specification 521, Aggregates for Drainfill and Filters, unless otherwise specified. Geotextiles must conform to Material Specification 592, Geotextile.

C. Subgrade preparation

1. The subgrade surface on which the rock riprap, filter, bedding, or geotextile is to be placed must be cut or filled and graded to the lines and grades shown on the drawings. When fill to subgrade lines is required, it must consist of approved material and conform to the requirements of the specified class of earthfill.
2. Rock riprap, filter, bedding, or geotextile must not be placed until the foundation preparation is completed and the subgrade surface has been inspected and approved.

D. Equipment-placed rock riprap

1. The rock riprap must be placed by equipment on the surface and to the depth specified. It must be installed to the full course thickness in one operation and in such a manner as to avoid serious displacement of the underlying material. The rock for riprap must be delivered and placed in a manner that ensures the riprap in place is reasonably homogeneous with the larger rocks uniformly distributed and firmly in contact one to another with the smaller rocks and spalls filling the voids between the larger rocks. Some hand placing may be required to provide a neat and uniform surface.
2. Rock riprap must be placed in a manner to prevent damage to structures. Hand placing is required as necessary to prevent damage to any new and existing structures.

E. Hand-placed rock riprap

1. The rock riprap must be placed by hand on the surface and to the depth specified. It must be securely bedded with the larger rocks firmly in contact one to another without bridging. Spaces between the larger rocks must be filled with smaller rocks and spalls. Smaller rocks must not be grouped as a substitute for larger rock. Flat slab rock must be laid on its vertical edge except where it is laid like paving stone and the thickness of the rock equals the specified depth of the riprap course.

F. Filter or bedding

1. When the contract specifies filter, bedding, or geotextile beneath the rock riprap, the designated material must be placed on the prepared subgrade surface as specified. Compaction of filter or bedding aggregate is not required, but the surface of such material must be finished reasonably smooth and free of mounds, dips, or windrows.

G. Measurement and payment

1. Method 1.
 - a. For items of work for which specific unit prices are established in the contract, the quantity of each type of rock riprap placed within the specified limits is

computed to the nearest ton by actual weight. The volume of each type of filter or bedding aggregate is measured within the specified limits and computed to the nearest cubic yard by the method of average cross-sectional end areas. For each load of rock riprap placed as specified, the contractor must furnish to the responsible engineer a statement-of-delivery ticket showing the weight to the nearest 0.1 ton.

- b. Payment is made at the contract unit price for each type of rock riprap, filter, or bedding. Such payment is considered full compensation for completion of the work.
2. Method 2.
 - a. For items of work for which specific unit prices are established in the contract, the quantity of each type of rock riprap placed within the specified limits is computed to the nearest 0.1 ton by actual weight. The quantity of each type of filter or bedding aggregate delivered and placed within the specified limits is computed to the nearest 0.1 ton. For each load of rock riprap placed as specified, the contractor must furnish to the engineer a statement-of-delivery ticket showing the weight to the nearest 0.1 ton. For each load of filter or bedding aggregate, the contractor must furnish to the responsible engineer a statement-of-delivery ticket showing the weight to the nearest 0.1 ton.
 - b. Payment is made at the contract unit price for each type of rock riprap, filter, or bedding. Such payment is considered full compensation for completion of the work.
 3. Method 3.
 - a. For items of work for which specific unit prices are established by the contract, the volume of each type of rock riprap and filter or bedding aggregate is measured within the specified limits and computed to the nearest cubic yard by the method of average cross-sectional end areas.
 - b. Payment is made at the contract unit price for each type of rock riprap, filter, or bedding. Such payment is considered full compensation for completion of the work.
 4. Method 4.
 - a. For items of work for which specific unit prices are established by the contract, the volume of each type of rock riprap, including filter and bedding aggregate, is measured within the specified limits and computed to the nearest cubic yard by the method of average cross-sectional end areas.
 - b. Payment is made at the contract unit price for each type of rock riprap, including filter and bedding. Such payment is considered full compensation for completion of the work.
 5. Method 5.
 - a. For items of work for which specific unit prices are established by the contract, the quantity of each type of rock riprap placed within the specified limits is computed to the nearest ton by actual weight. For each load of rock for riprap placed as specified, the contractor must furnish to the responsible

engineer a statement-of-delivery ticket showing the weight to the nearest 0.1 ton.

- b. Payment is made at the contract unit price for each type of rock riprap, and includes compensation for any aggregate or geotextile installed as specified for filter or bedding. Such payment is considered full compensation for completion of the work.
6. Method 6.
- a. For items of work for which specific unit prices are established by the contract, the volume of each type of rock riprap is measured within the specified limits and computed to the nearest cubic yard by the method of average cross-sectional end areas.
 - b. Payment is made at the contract unit price for each type of rock riprap and includes compensation for any aggregate or geotextile installed as specified for filter or bedding. Such payment is considered full compensation for completion of the work.
7. All methods.
- a. The following provision applies to all methods of measurement and payment. Compensation for any item of work described in the contract but not listed in the bid schedule is included in the payment for the item of work to which it is made subsidiary. Such items and the items to which they are made subsidiary are identified in section H.
 - b. No separate payment is made for testing the gradation of the test pile. Compensation for testing is included in the appropriate bid item for riprap.

H. Items of work and construction details

Items of work to be performed in conformance with this specification and details are:

1. Bid Item 3, Rock Riprap – Type D, 4”-12”.

- a. This item shall consist of furnishing and installing rock riprap for the construction of a lined waterway as shown on the drawings and staked in the field. This item shall also include all excavation necessary to install the lined waterway to neat lines and grade.
- b. In Section B, Material, rock shall meet the requirements of Rock Type I, Material Specification 523, or be obtained from sources with current approval from the WV DOT. The contractor shall provide a gradation test as specified with the material certification prior to the delivery of rock riprap to the site.
- c. The statement in Section B that begins with “At least 30 days before rock is delivered...” is to be changed to read “At least 7 days prior to delivery...”.
- d. Rock riprap shall be equipment placed.
- e. The rock riprap shall be well-graded between the nominal size of 4 and 12 inches. Well graded shall mean that a broad range of rock particle sizes are represented and that substantial amounts of each rock particle sizes are included. Not more than 15 percent of the rock particles by weight shall be smaller than 4 inches. No more than 50 percent of the rock particles by weight shall be smaller than 6 inches. One hundred percent of the rock particles shall be smaller than 12 inches.
- f. Method 5 of Section G, Measurement and Payment, shall apply.
- g. Items of work subsidiary to this bid item are:
 - a. Excavation, Construction Specification 21
 - b. Contractor Quality Control, Construction Specification 94
 - c. Geotextile, Construction Specification 95

1. Bid Item 4, Rock Riprap – Type C, 6”-18”.

- f. This item shall consist of furnishing and installing rock riprap for the protection of the stream bank slope as shown on the drawings and staked in the field. This item shall also include all excavation necessary to install the rock riprap protection and foundation preparation to neat lines and grade.
- g. In Section B, Material, rock shall meet the requirements of Rock Type I, Material Specification 523, or be obtained from sources with current approval from the WV DOT. The contractor shall provide a gradation test as specified with the material certification prior to the delivery of rock riprap to the site.

- h. The statement in Section B that begins with “At least 30 days before rock is delivered...” is to be changed to read “At least 7 days prior to delivery...”.
- i. Rock riprap shall be equipment placed.
- j. The rock riprap shall be well-graded between the nominal size of 6 and 18 inches. Well graded shall mean that a broad range of rock particle sizes are represented and that substantial amounts of each rock particle sizes are included. Not more than 15 percent of the rock particles by weight shall be smaller than 6 inches. No more than 50 percent of the rock particles by weight shall be smaller than 12 inches. One hundred percent of the rock particles shall be smaller than 18 inches.
- f. Rock riprap shall be shaped to blend with existing ground at all ends of the work. The riprap shall be tied into existing natural features where possible, as determined by the Contracting Officer's Representative. Riprap shall be keyed into the bank at the upstream and downstream end of the riprap blanket. The keys shall have a depth and a width equal to twice the thickness of the riprap blanket. The key sideslopes shall be 1:1. The keys shall extend up the slope from the toe of the riprap blanket to the top of the riprap blanket. See drawings for riprap key detail.
- g. Method 5 of Section G, Measurement and Payment, shall apply.
- h. Items of work subsidiary to this bid item are:
 - a. Pollution Control, Construction Specification 5
 - b. Traffic Control, Construction Specification 9
 - c. Removal of Water, Construction Specification 11
 - d. Excavation, Construction Specification 21
 - e. Earthfill, Construction Specification 23
 - f. Contractor Quality Control, Construction Specification 94
 - g. Geotextile, Construction Specification 95

Construction Specification 94 — Contractor Quality Control

Title 210 – Engineering

Part 642 – Specifications for Construction Contracts

Subpart B – National Construction Specifications

June 2024

A. Scope

1. The work consists of developing, implementing, and maintaining a quality control system to ensure that the specified quality is achieved for all materials and work performed.

B. Equipment and Materials

1. Equipment and material used for quality control must be of the quality and condition required to meet the test specifications cited in the contract. Testing equipment must be properly adjusted and calibrated at the start of operations with the calibration maintained at the frequency specified. Records of equipment calibration tests must be available to the engineer at all times. Equipment must be operated and maintained by qualified operators as prescribed in the manufacturer's operating instructions, the references specified, and as specified in Section J of this specification. All equipment and materials used in performing quality control testing must be as prescribed by the test standards referenced in the contract or in Section J.
2. Handle and operate all equipment and materials in a safe and proper manner and comply with all applicable regulations pertaining to their use, operation, handling, storage, and transportation.

C. Quality Control System

1. Method 1. The contractor must develop, implement, and maintain a system of quality control to provide the specified material testing and verification of material quality before use. The system activities must include procedures to verify adequacy of completed work, initiate corrective action to be taken, and document the final results. The identification of the quality control personnel and their duties and authorities must be submitted to the contracting officer in writing within 15 calendar days after notice of award.
2. Method 2. The contractor must develop, implement, and maintain a system adequate to achieve the specified quality of all work performed, material incorporated, and equipment furnished before use. The system established must be documented in a written plan developed by the contractor and approved by the contracting officer. Include in the system activities the material testing and inspection needed to verify the adequacy of completed work and procedures to be followed when corrective action is required. Daily records to substantiate the

conduct of the system must be maintained by the contractor. The quality control plan must cover all aspects of quality control and must address, at a minimum, all specified testing and inspection requirements. Provide the plan consistent with the planned performance in the contractor's approved construction schedule. Identify in the plan the contractor's onsite quality control manager and provide an organizational listing of all quality control personnel and their specific duties. The written plan must be submitted to the contracting officer within 15 calendar days after notice of award. The contractor must not proceed with any construction activity that requires inspection until the written plan is approved by the contracting officer.

3. All Methods. The quality control system must include, but not be limited to, a rigorous examination of construction material, processes, and operation, including testing of material and examination of manufacturer's certifications as required, to verify that work meets contract requirements and is performed competently.

D. Quality Control Personnel

1. Method 1. Quality control activities must be accomplished by competent personnel. A competent person is one who is experienced and capable of identifying, evaluating, and documenting that materials and processes being used will result in work that complies with the contract. This person also has authority to take prompt action to remove, replace, or correct such work or products not in compliance. Off-site testing laboratories must be certified or inspected by a nationally recognized entity. The contractor must submit to the contracting officer for approval laboratory certification or inspection information. The contractor must submit to the contracting officer for approval the names, qualifications, authorities, certifications, and availability of the competent personnel who will perform the quality control activities.
2. Method 2. Quality control activities must be accomplished by competent personnel who are separate and apart from line supervision and report directly to management. A competent person is experienced and capable of identifying, evaluating, and documenting that material and processes being used will result in work that complies with the contract. This person has authorization to take prompt action to remove, replace, or correct such work or products not in compliance. Off-site testing laboratories must be certified or inspected by a nationally recognized entity. The contractor must submit to the contracting officer for approval laboratory certification or inspection information. The contractor must submit to the contracting officer for approval the names, qualifications, authorities, certifications, and availability of the competent personnel who will perform the quality control activities.

E. Post-award Conference

1. The contractor must meet with the contracting officer before any work begins and discuss the contractor's quality control system. The contracting officer and the contractor must develop a mutual understanding regarding the quality control system including procedures for correcting quality control issues.

F. Records

1. The contractor's quality control records must document both acceptable and deficient features of the work and corrective actions taken. All records must be on forms approved by the contracting officer, be legible, and be dated and signed by the competent person creating the record.
2. Unless otherwise specified in Section J of this specification, records must include:
 - a. Documentation of shop drawings including date submitted to and date approved by the contracting officer, results of examinations, need for changes or modifications (if any), manufacturer's recommendations and certifications (if any), and signature of the authorized examiner.
 - b. Documentation of material delivered including quantity, storage location, and results of quality control examinations and tests.
 - c. Type, number, date, time, and name of individual performing quality control activities.
 - d. The material or item inspected and tested, the location and extent of such material or item, and a description of conditions observed and test results obtained during the quality control activity.
 - e. The determination that the material or item met the contract provisions and documentation that the engineer was notified.
 - f. For deficient work, the nature of the defects, specifications not met, corrective action taken, and results of quality control activities on the corrected material or item.

G. Reporting Results

1. The results of contractor's quality control inspections and tests must be communicated to the engineer immediately upon completion of the inspection or test. Unless otherwise specified in Section J, the original plus one copy of all records, inspections, tests performed, and material testing reports must be submitted to the engineer within 1 working day of completion. The original plus one copy of documentation of material delivered must be submitted to the engineer before the material is used.

H. Access

1. The contracting officer and the engineer must be given free access to all testing equipment, facilities, sites, and related records for the duration of the contract.

I. Payment

1. Method 1.
 - a. For items of work for which lump sum prices are established in the contract, payment is made as the work proceeds after presentation by the contractor of invoices showing related costs and evidence of charges by suppliers, subcontractors, and others for furnishing supplies and work performed. If the total of such payments is less than the lump sum contract price for this item, the remaining balance is included in the final contract payment. Payment of

the lump sum contract price constitutes full compensation for completion of the work.

- b. Payment is not made under this item for the purchase cost of material and equipment having a residual value.
2. Method 2.
 - a. For items of work for which lump sum prices are established in the contract, payment is prorated and paid in equal amounts on each monthly estimate. The number of months used for prorating must be the number estimated to complete the work. The final month's prorate amount is made with the final payment. Payment as described above constitutes full compensation for completion of the work.
 - b. Payment is not made under this item for the purchase cost of material and equipment having a residual value.
 3. All Methods. Compensation for any item of work described in the contract but not listed in the bid schedule is included in the payment for the item of work to which it is made subsidiary. Such items and the items to which they are made subsidiary are identified in section J.

J. Items of work and construction details

Items of work to be performed in conformance with this specification and construction details are:

a. Subsidiary Item, Contractor Quality Control

- (1) This item shall consist of all work and activities necessary to ensure work meets the specified lines, grades, and quality for the work included in this contract.
- (2) In Section C, Quality Control System, Method 1 shall apply. Quality control personnel will be identified within 2 calendar days after notice to proceed.
- (3) In Section D, Quality Control Personnel, Method 1 shall apply.
- (4) In Section I, Payment, shall not apply. No separate payment will be made for Contractor Quality Control. Compensation for this item is subsidiary to and included in the payment for **Bid Item 3, Rock Riprap - Type D, 4"-12", Construction Specification 61, Bid Item 4, Rock Riprap - Type C, 6"-18", Construction Specification 61 and Bid Item 5, WVDOH Class I, Construction Specification 401.**

Construction Specification 95 — Geotextile

Title 210 – Engineering

Part 642 – Specifications for Construction Contracts

Subpart B – National Construction Specifications

June 2024

A. Scope

1. This work consists of furnishing all material, equipment, and labor necessary for the installation of geotextiles.

B. Quality

1. Geotextiles must conform to the requirements of Material Specification 592 and this specification.

C. Storage

1. Before use, store the geotextile in a clean, dry location out of direct sunlight, not subject to extremes of either hot or cold temperatures, and with the manufacturer's protective cover undisturbed. Receiving, storage, and handling at the jobsite must be in accordance with the requirements listed in ASTM D4873.

D. Surface preparation

1. The surface on which the geotextile is to be placed must be graded to the neat lines and grades as shown on the drawings. The surface must be reasonably smooth and free of loose rock and clods, holes, depressions, projections, muddy conditions, and standing or flowing water (unless otherwise specified in section G of this specification).

E. Placement

1. Before the geotextile is placed, the soil surface will be reviewed for quality assurance of the design and construction. Place the geotextile on the approved prepared surface at the locations and in accordance with the details shown on the drawings and specified in section G of this specification. It must be unrolled along the placement area and loosely laid, without stretching, in such a manner that it conforms to the surface irregularities when material or gabions are placed on or against it. The geotextile may be folded and overlapped to permit proper placement in designated areas.
2. Method 1.
 - a. Join the geotextile by machine sewing using thread material meeting the chemical requirements for the geotextile fibers or yarn. Thread must be polypropylene, polyester, or Kevlar™ aramid thread unless a specific thread type is specified. The thread must consist of two parallel stitched rows at a

spacing of about 1 inch and must not cross (except for any required re-stitching). The stitching must be a lock-type stitch. Each row of stitching must be located a minimum of 2 inches from the geotextile edge. Unless otherwise specified, the seam tensile strength as measured according to ASTM D4884 must be a minimum of 90 percent of the geotextile tensile strength in the weakest principal direction as measured according to ASTM D4632.

- b. The geotextile must be temporarily secured during placement of overlying material to prevent slippage, folding, wrinkling, or other displacement of the geotextile. Unless otherwise specified, methods of securing must not cause punctures, tears, or other openings to be formed in the geotextile.
3. Method 2.
 - a. Join the geotextile by overlapping a minimum of 18 inches (unless otherwise specified) and secured against the underlying foundation material. Securing pins, approved and provided by the geotextile manufacturer, must be placed along the edge of the panel or roll material to adequately hold it in place during installation. Pins must be steel or fiberglass formed as a U, L, or T shape or must contain ears to prevent total penetration through the geotextile. Provide steel washers on all but the U-shaped pins. The upstream or upslope geotextile must overlap the abutting downslope geotextile. At vertical laps, securing pins must be inserted through the bottom layers along a line through approximately the midpoint of the overlap. At horizontal laps and across slope laps, securing must be inserted through the bottom layer only. Securing pins must be placed along a line about 2 inches in from the edge of the placed geotextile at intervals not to exceed 12 feet unless otherwise specified. Install additional pins as necessary and where appropriate to prevent any undue slippage or movement of the geotextile. The use of securing pins will be held to the minimum necessary. Pins are to remain in place unless otherwise specified.
 - b. Should the geotextile be torn or punctured or the overlaps or sewn joint disturbed as evidenced by visible geotextile damage, subgrade pumping, intrusion, or grade distortion, the backfill around the damaged or displaced area must be removed and restored to the original approved condition. The repair must consist of a patch of the same type of geotextile being used and overlaying the existing geotextile. When the geotextile seams are required to be sewn, extend the overlay patch a minimum of 1 foot beyond the edge of any damaged area and join by sewing as required for the original geotextile except that the sewing must be a minimum of 6 inches from the edge of the damaged geotextile. Geotextile panels joined by overlap must have the patch extend a minimum of 2 feet from the edge of any damaged area.
 4. Place geotextile in accordance with the following applicable specification according to the use indicated in section G:
 - a. Slope protection. The geotextile must not be placed until it can be anchored and protected with the specified covering within 48 hours or protected from exposure to ultraviolet light. In no case may material be dropped on uncovered geotextile from a height of more than 3 feet.

- b. Subsurface drains. The geotextile must not be placed until drainfill or other material can be used to provide cover within the same working day. Drainfill material must be placed in a manner that prevents damage to the geotextile. In no case may material be dropped on uncovered geotextile from a height of more than 5 feet.
- c. Road stabilization. The geotextile must be unrolled in a direction parallel to the roadway centerline in a loose manner permitting conformation to the surface irregularities when the roadway fill material is placed on its surface. In no case may material be dropped on uncovered geotextile from a height of more than 5 feet. Unless otherwise specified, the minimum overlap of geotextile panels joined without sewing must be 24 inches. The geotextile may be temporarily secured with pins recommended or provided by the manufacturer, but they must be removed before the permanent covering material is placed.

F. Measurement and payment

- 1. Method 1. For items of work for which specific unit prices are established in the contract, the quantity of geotextile for each type placed within the specified limits is determined to the nearest specified unit by measurements of the covered surfaces only, disregarding that required for anchorage, seams, and overlaps. Payment is made at the contract unit price. Such payment constitutes full compensation for the completion of the work.
- 2. Method 2. For items of work for which specific unit prices are established in the contract, the quantity of geotextile for each type placed with the specified limits is determined to the nearest specified unit by computing the area of the actual roll size or partial roll size installed. The computed area will include the amount required for overlap, seams, and anchorage as specified. Payment is made at the contract unit price. Such payment constitutes full compensation for the completion of the work.
- 3. Method 3. For items of work for which specific lump sum prices are established in the contract, the quantity of geotextile is not measured for payment. Payment for geotextiles is made at the contract lump sum price and constitutes full compensation for the completion of the work.
- 4. All Methods. The following provisions apply to all methods of measurement and payment. Compensation for any item of work described in the contract but not listed in the bid schedule is included in the payment for the item of work to which it is made subsidiary. Such items and the items to which they are made subsidiary are identified in section G of this specification.

G. Items of work and construction details

Items of work to be performed according to this specification and the construction details are:

1. Subsidiary Item, Geotextile
 - a. This item shall consist of furnishing all labor, equipment, and materials required to install the geotextile as shown on the drawings.
 - b. The geotextile shall be Class I, non-woven, and shall be supplied according to Material Specification 592. The apparent opening size (AOS) shall range from a maximum of #40 to a minimum of #80 (U.S. standard sieve size according to ASTM D4751).
 - c. Place cover material over the geotextile in a manner that prevents damage to the geotextile. Geotextile damaged during placement or by equipment crossovers shall be replaced or repaired at no additional cost to the Government. All repairs shall be by replacement or by placing an additional sheet of geotextile over the damaged area, ensuring a minimum of 1 foot overlap on undamaged geotextile. Place geotextile so that no edge of the fabric are exposed outside the limits of the area to be covered.
 - d. Method 2 of Section E, Placement, shall apply.
 - e. Geotextile for any rock riprap for streambank stabilization, cross drain protection, and rock lined gutter shall be installed as shown on the drawings.
 - f. In Section F, Measurement and Payment, shall not apply. No separate payment shall be made for Geotextile. Compensation for this item is subsidiary to and included in the payment for **Bid Item 3, Rock Riprap - Type D, 4"-12", Construction Specification 61, and Bid Item 4, Rock Riprap - Type C, 6"-18", Construction Specification 61.**

Construction Specification 401 — WVDOH Class I Aggregate

Title 210 – Engineering
Part 642.107 – One-Time-Use Specifications
December 2024

A. Scope

1. The work shall consist of furnishing and placing aggregate as shown on the drawings.

B. Reference Specifications

1. The Standard Specifications of the West Virginia Department of Highways, latest edition, shall apply to this specification.

C. Material

1. Aggregate shall meet the requirements of Section 307 of the WVDOH Specifications.

D. Placement and Compaction

1. Unless otherwise specified, the aggregate shall be placed to the full thickness in one lift.
2. Compaction shall consist of at least four passes over the entire surface of a smooth drum vibrating roller with a drum diameter of at least 48 inches. The final surface shall be smooth and shall be free draining.

E. Measurement and Payment

1. For items of work for which specific unit prices are established in the contract, the quantity of aggregate base course placed within the specified limits is computed to the nearest 0.1 ton by actual weight. For each load of aggregate base course placed as specified, the contractor shall furnish to the CO a statement of delivery ticket showing the weight to the nearest 0.1 ton.
2. Payment for aggregate base course will be in accordance with measured quantities and established unit prices, with no change in unit prices permitted for variations in quantities, regardless of amount. Such payment constitutes full compensation for all labor, materials, equipment, and all other items necessary and incidental to completion of the work.
3. Compensation for any item of work described in the contract, but not listed in the bid schedule, is included in the payment for the item of work to which it is made subsidiary. Such items and the items to which they are made subsidiary are identified in Section F.

F. Items of Work and Construction Details

Items of work to be performed in conformance with this specification and construction details therefore are:

- a. Bid Item 5, WVDOH Aggregate Base Course, Class I
 - (1) This item shall consist of furnishing and installing the WVDOH aggregate base course, class 1, at the locations shown on the drawings.
 - (2) Class I Aggregate must be from a WVDOH Approved Source.
 - (3) Items of work subsidiary to this bid item are:
 - a. Traffic Control, Construction Specification 9
 - b. Contractor Quality Control, Construction Specification 94

Part 642 – Specifications

Chapter 3 – National Standard Material Specifications

Material Specification 523—Rock for Riprap

A. Scope

This specification covers the quality of rock to be used in the construction of rock riprap.

B. Quality

- (1) Individual rock fragments must be dense, sound, and free from cracks, seams, and other defects conducive to accelerated weathering. Except as otherwise specified, the rock fragments must be angular to subrounded. The least dimension of an individual rock fragment must be not less than one-third the greatest dimension of the fragment. ASTM D4992 provides guidance on selecting rock from a source.
- (2) Except as otherwise provided, the rock must be tested and must have the following properties:
 - (i) Rock type 1
 - Bulk specific gravity (saturated surface-dry basis)—Not less than 2.5 when tested in accordance with ASTM D6473 on samples prepared as described for soundness testing.
 - Absorption—Not more than 2 percent when tested in accordance with ASTM D6473 on samples prepared as described for soundness testing.
 - Soundness—The weight loss in 5 cycles must not be more than 10 percent when sodium sulfate is used or more than 15 percent when magnesium sulfate is used.
 - (ii) Rock type 2
 - Bulk specific gravity (saturated surface-dry basis)—Not less than 2.5 when tested in accordance with ASTM D6473 on samples prepared as described for soundness testing.
 - Absorption—Not more than 2 percent when tested in accordance with ASTM D6473 on samples prepared as described for soundness testing.
 - Soundness—The weight loss in 5 cycles must be not more than 20 percent when sodium sulfate is used or more than 25 percent when magnesium sulfate is used.
 - (iii) Rock type 3
 - Bulk specific gravity (saturated surface-dry basis)—Not less than 2.3 when tested in accordance with ASTM D6473 on samples prepared as described for soundness testing.
 - Absorption—Not more than 4 percent when tested in accordance with ASTM D6473 on samples prepared as described for soundness testing.
 - Soundness—The weight loss in 5 cycles must be not more than 20 percent when sodium sulfate is used or more than 25 percent when magnesium sulfate is used.

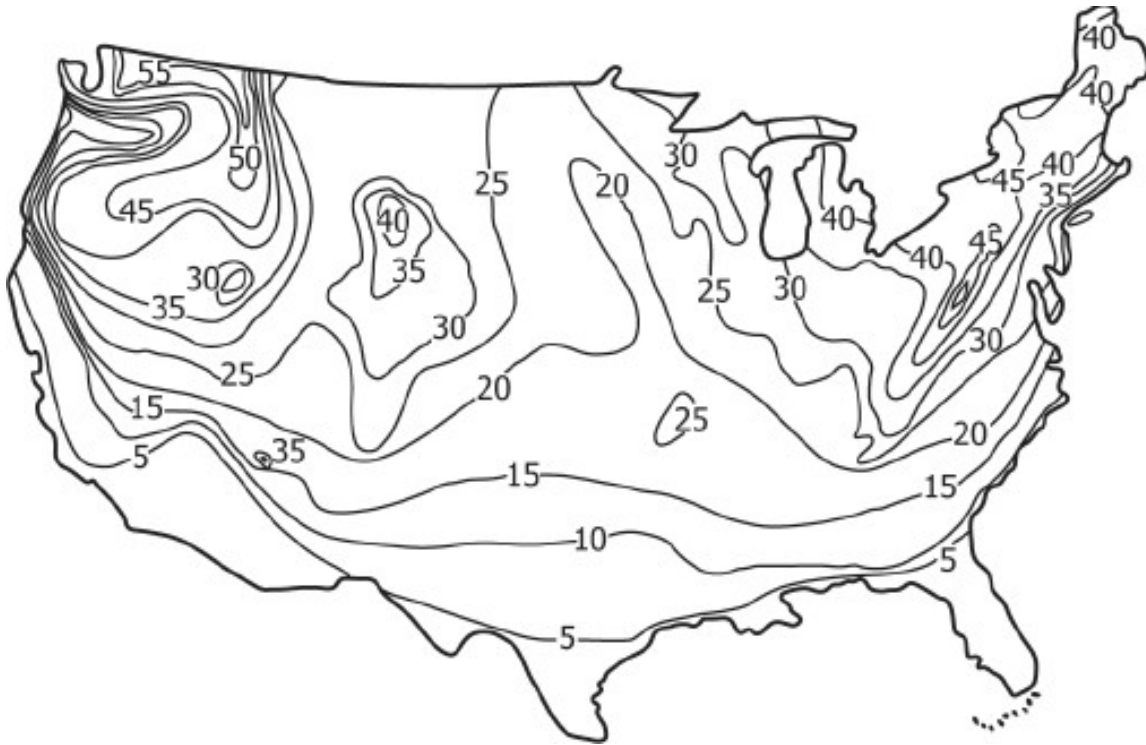
C. Methods of Soundness Testing

- (1) Rock cube soundness—
 - (i) The sodium or magnesium sulfate soundness test for all rock types (1, 2, or 3) must be performed on a test sample of $5,000 \pm 300$ grams of rock fragments, reasonably uniform in size and cubical in shape, and weighing, after sampling, about 100 grams each. They must be obtained from rock samples that are representative of the total rock mass, as noted in ASTM D4992, and that have been sawed into slabs as described in ASTM

D5121. The samples must further be reduced in size by sawing the slabs into cubical blocks. The thickness of the slabs and the size of the sawed fragments must be determined by the size of the available test apparatus and as necessary to provide, after sawing, the approximate 100-gram samples. The cubes must undergo five cycles of soundness testing in accordance with ASTM C88.

- (ii) Internal defects may cause some of the cubes to break during the sawing process or during the initial soaking period. Do not test any of the cubes that break during this preparatory process. Such breakage, including an approximation of the percentage of cubes that break, must be noted in the test report.
 - (iii) After the sample has been dried following completion of the final test cycle and washed to remove the sodium sulfate or magnesium sulfate, the loss of weight must be determined by subtracting from the original weight of the sample the final weight of all fragments that have not broken into three or more fragments.
 - (iv) The test report must show the percentage loss of the weight and the results of the qualitative examination.
- (2) Rock slab soundness—
- (i) When specified, the rock must also be tested in accordance with ASTM D5240. Deterioration of more than 25 percent of the number of blocks must be cause for rejection of rock from this source. Rock must also meet the requirements for average percent weight loss stated below.
 - (ii) For projects located north of the Number 20 Freeze-Thaw Severity Index Isoline (fig. 523–1 below), unless otherwise specified, the average percent weight loss for Rock Type 1 must not exceed 20 percent when sodium sulfate is used or 25 percent when magnesium sulfate is used. For Rock Types 2 and 3, the average percent weight loss must not exceed 25 percent for sodium sulfate soundness or 30 percent for magnesium sulfate soundness.
 - (iii) For projects located south of the Number 20 Freeze-Thaw Severity Index Isoline, unless otherwise specified, the average percent weight loss for Rock Type 1 must not exceed 30 percent when sodium sulfate is used or 38 percent when magnesium sulfate is used. For Rock Types 2 and 3, the average percent weight loss must not exceed 38 percent for sodium sulfate soundness or 45 percent for magnesium sulfate soundness.

Figure 523–1 Isoline Map of the Freeze-Thaw Severity Index for Contiguous 48 United States (map is from ASTM D5312)



D. Field Durability Inspection

- (1) Rock that fails to meet the material requirements stated above (if specified), may be accepted only if similar rock from the same source has been demonstrated to be sound after 5 years or more of service under conditions of weather, wetting and drying, and erosive forces similar to those anticipated for the rock to be installed under this specification.
- (2) A rock source may be rejected if the rock from that source deteriorates in less than 5 years under similar use and exposure conditions expected for the rock to be installed under this specification, even though it meets the testing requirements stated above.
- (3) Deterioration is defined as the loss of more than one-quarter of the original rock volume, or severe cracking that would cause a block to split. Measurements of deterioration are taken from linear or surface area particle counts to determine the percentage of deteriorated blocks. Deterioration of more than 25 percent of the pieces must be cause for rejection of rock from the source.

E. Grading

The rock must conform to the specified grading limits after it has been placed within the matrix of the rock riprap. Grading tests must be performed, as necessary, according to ASTM D5519, Method A, B, or C, as applicable.

Part 642 – Specifications

Chapter 3 – National Standard Material Specifications

Material Specification 592—Geotextile

A. Scope

This specification covers the quality of geotextile, including geotextile for temporary silt fence.

B. General Requirements

- (1) Fibers (threads and yarns) used in the manufacture of geotextile must consist of synthetic polymers composed of a minimum of 85 percent by weight polypropylene, polyester, polyamide, polyethylene, polyolefin, or polyvinylidene-chloride. The fiber must be formed into a stable network of filaments retaining dimensional stability relative to each other. The geotextile must be free of defects, such as holes, tears, and abrasions. The geotextile must be free of any chemical treatment or coating that significantly reduces its porosity. Fibers must contain stabilizers, inhibitors, or both to enhance resistance to ultraviolet light. Geotextile other than for temporary silt fence must conform to the requirements in Figure 592-1 or 592-2, as applicable. Geotextile for temporary silt fence must conform to ASTM D6461.
- (2) Thread used for factory or field sewing must be of a color contrasting to the color of the fabric and made of high-strength polypropylene, polyester, or polyamide material. It must be as resistant to ultraviolet light as the geotextile being sewn.

C. Classification

- (1) There are two geotextile classifications, woven and nonwoven. Geotextile for temporary silt fence may be either woven or nonwoven. Silt film woven geotextile may not be used except for temporary silt fence.
- (2) Woven geotextiles are made from fabric that is formed by the uniform and regular interweaving of the threads or yarns in two directions. Woven fabrics must be manufactured from monofilament yarn formed into a uniform pattern with distinct and measurable openings, retaining their position relative to each other. The fabric must have a selvage edge or otherwise be finished to prevent unraveling.
- (3) Nonwoven geotextiles are made from fabric that is formed by a random placement of threads in a mat and bonded by needle punching, heat bonding, or resin bonding. Nonwoven geotextiles must have distinct but variable small openings, retaining their position relative to each other when bonded. The use of heat- or resin-bonded nonwovens is restricted as specified in note 2 of Figure 592-2.

D. Sampling and Testing

The geotextile must conform to Figure 592-1 or 592-2 or ASTM D6461, as applicable, for the product type shown on the label. Documentation described in either (i) or (ii) below is required to verify the product meets the specified requirements:

- (i) Product properties as listed in the latest edition of the "Specifiers Guide," Geosynthetics (Industrial Fabrics Association International, 1801 County Road B, West Roseville, MN 55113-4061 or at <http://www.geosindex.com>), and that represent average roll values, are acceptable.

- (ii) Test data from the geotextile production run for each of the specified tests listed in Figure 592-1 or 592-2 or ASTM D6461, as applicable.

E. Shipping and Storage

Each roll of geotextile must be labeled or tagged to clearly identify the brand, class, and individual production run in accordance with ASTM D4873. The geotextile must be shipped and transported in rolls wrapped with a cover for protection from moisture, dust, dirt, debris, and ultraviolet light. The cover must be maintained undisturbed to the maximum extent possible before placement.

Figure 592-1 Requirements for Woven Geotextiles ^{1/}

Property	Test method	Class I	Class II	Class III	Class IV
Grab tensile strength (lb)	ASTM D4632	247 minimum	180 minimum	180 minimum	315
Elongation at failure (%)	ASTM D4632	<50	<50	<50	<50
Trapezoidal tear strength (lb)	ASTM D4533	90 minimum	67 minimum	67 minimum	112 minimum
Puncture strength (lb)	ASTM D6241	495 minimum	371 minimum	371 minimum	618 minimum
Ultraviolet stability (% retained strength)	ASTM D4355	50 minimum	50 minimum	50 minimum	70 minimum
Permittivity (sec ⁻¹)	ASTM D4491	as specified			
Apparent opening size (AOS) ^{2/}	ASTM D4751	as specified			
Percent open area (POA) (%)	USACE ^{3/} CWO-02215-86	as specified			

^{1/} All values are minimum average roll values (MARV) in the weakest principal direction, unless otherwise noted.

^{2/} Maximum average roll value.

^{3/} Note: CWO is a USACE reference.

Figure 592-2 Requirements for Non-Woven Geotextiles ^{1/}

Property	Test method	Class I ^{2/}	Class II ^{2/}	Class III ^{2/}	Class IV ^{2/}
Grab tensile strength (lb)	ASTM D4632 grab test	202 minimum	157 minimum	112 minimum	202 minimum
Elongation at failure (%)	ASTM D4632	50 minimum	50 minimum	50 minimum	50 minimum
Trapezoidal tear strength (lb)	ASTM D4533	79 minimum	56 minimum	40 minimum	79 minimum
Puncture strength (lb)	ASTM D6241	433 minimum	309 minimum	223 minimum	433 minimum
Ultraviolet light (% retained strength)	ASTM D4355	50 minimum	50 minimum	50 minimum	50 minimum
Permittivity sec ⁻¹	ASTM D4491	0.70 minimum or as specified			
Apparent opening size (AOS) (mm) ^{3/}	ASTM D4751	0.22 maximum or as specified			

^{1/} All values are minimum average roll values (MARV) in the weakest principal direction, unless otherwise noted.

^{2/} Needle punched geotextiles may be used for all classes. Heat-bonded or resin-bonded geotextiles may be used for class IV only.

^{3/} Maximum average roll value.

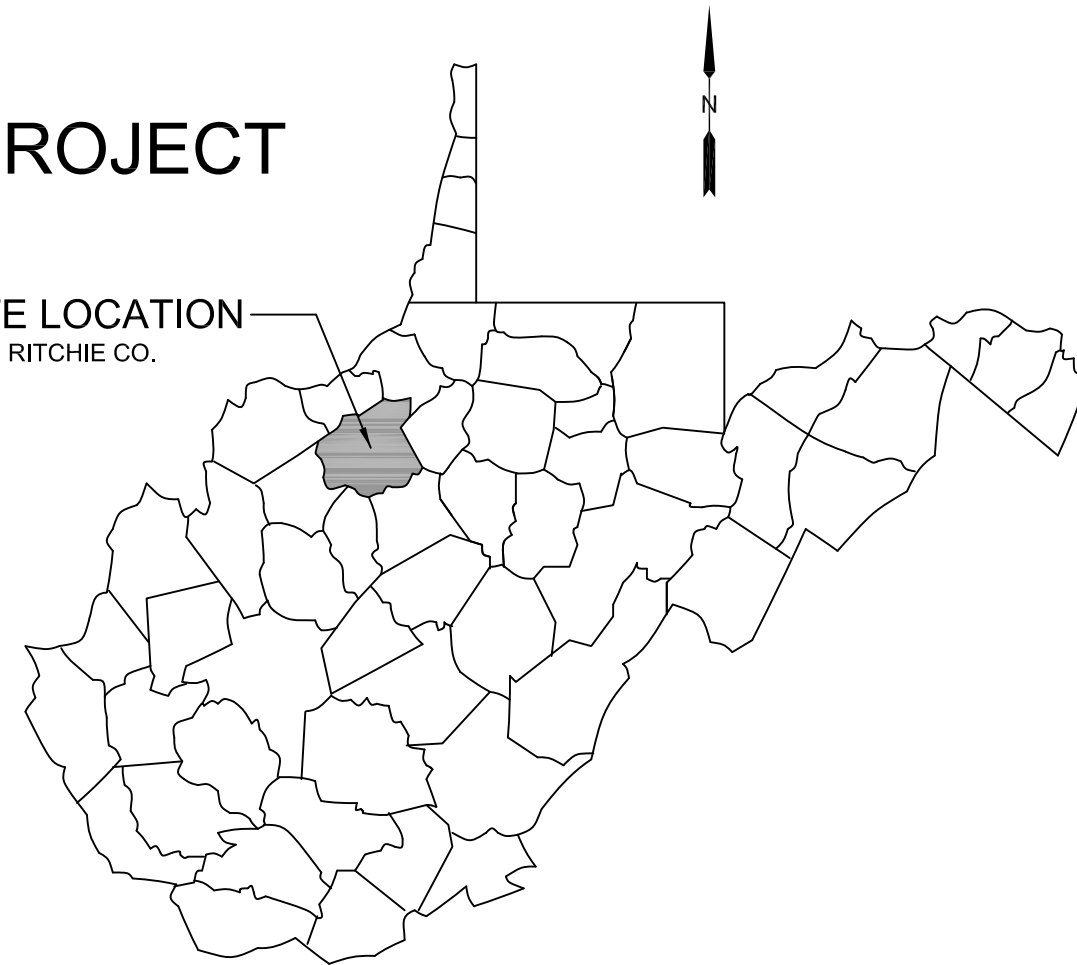
EXHIBIT D - DRAWINGS

NORTH FORK HUGHES RIVER OUTLET CHANNEL - LEFT BANK STABILIZATION PROJECT RITCHIE COUNTY, WEST VIRGINIA

APPALACHIAN REGIONAL COMMISSION
and the
NATURAL RESOURCES CONSERVATION SERVICE
U.S. DEPARTMENT OF AGRICULTURE
cooperating with
WEST VIRGINIA CONSERVATION AGENCY
LITTLE KANAWHA CONSERVATION DISTRICT
and
WEST VIRGINIA DIVISION OF NATURAL RESOURCES

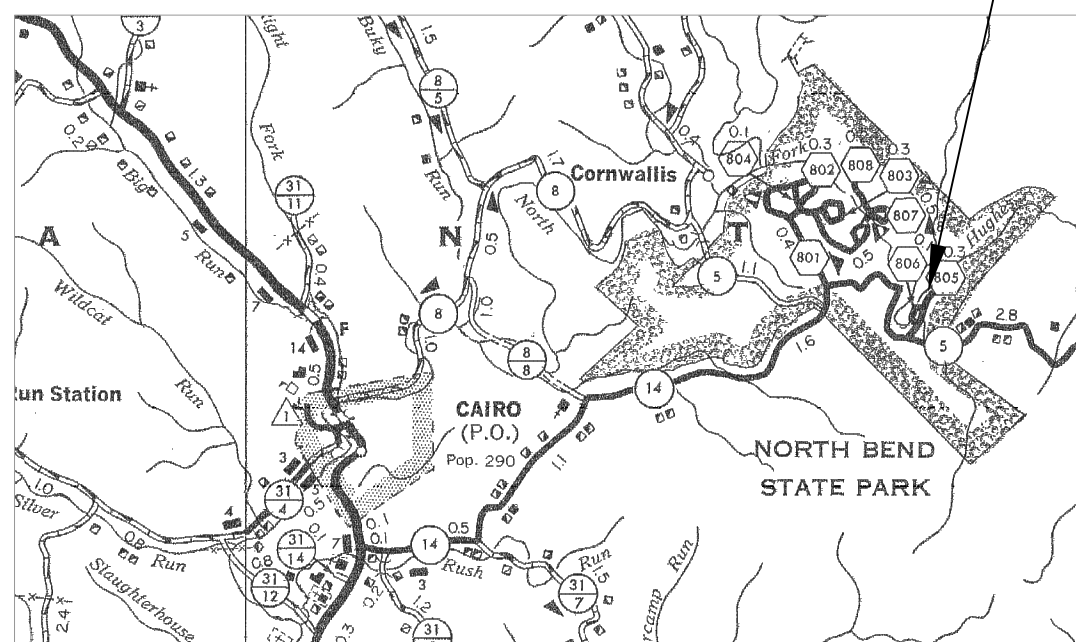
Class VIII Job Approval

SITE LOCATION
RITCHIE CO.



INDEX OF SHEETS	
1	Cover Sheet
2	Streambank Details and Plan View
3	Existing Road Rehabilitation Plan View
4	Existing Road Rehabilitation Details

SITE LOCATION



EXISTING ROAD REHABILITATION

ROCK RIPRAP STREAMBANK STABILIZATION



UTILITY NOTIFICATION

"The Natural Resources Conservation Service makes no representation as to the existence or non-existence of any utilities at the construction site. Shown on these construction drawings are those utilities which have been identified. It is the responsibility of the landowners or operators and contractors to assure themselves that no hazard exists or damage will occur to utilities."

Date	Designed	Drawn	Checked	Approved
12/2024	D. Sweeney	D. Sweeney	A. Deichert	A. Deichert
12/2024				
04/2025				
04/2025				

NORTH FORK HUGHES RIVER
OUTLET CHANNEL STREAMBANK STABILIZATION
COVER SHEET

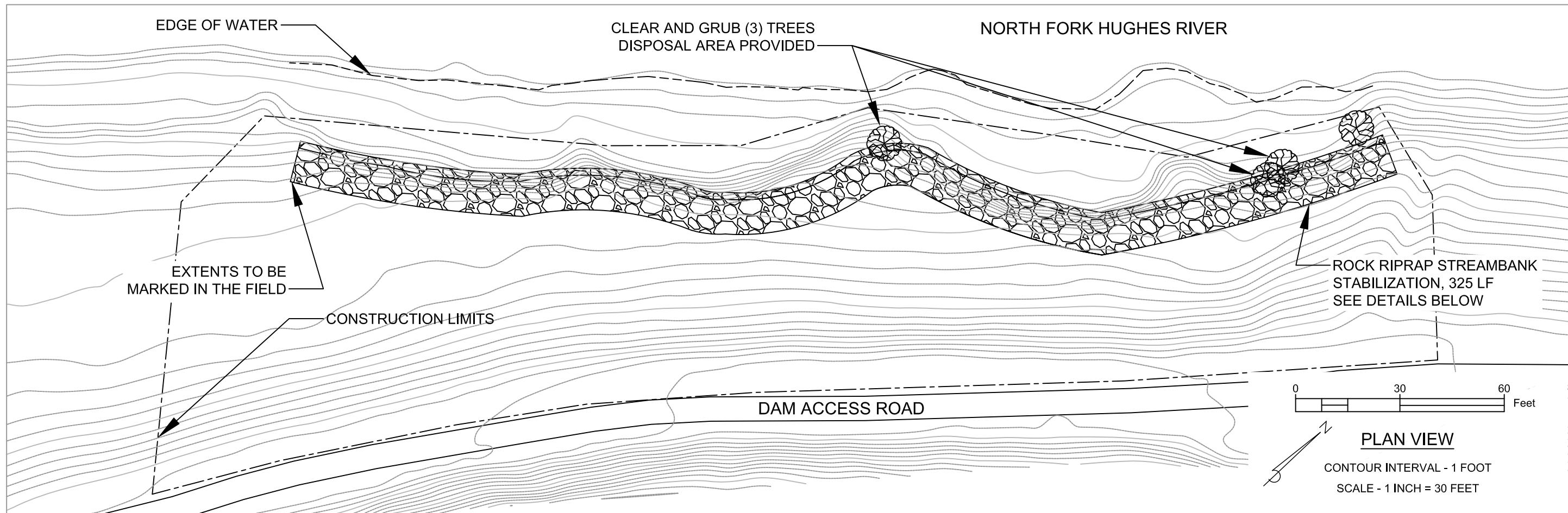
Ritchie County, West Virginia



File No.
NFHR Left Bank
Stabilization1.dwg

Drawing No.
COVER

Sheet 1 of 4

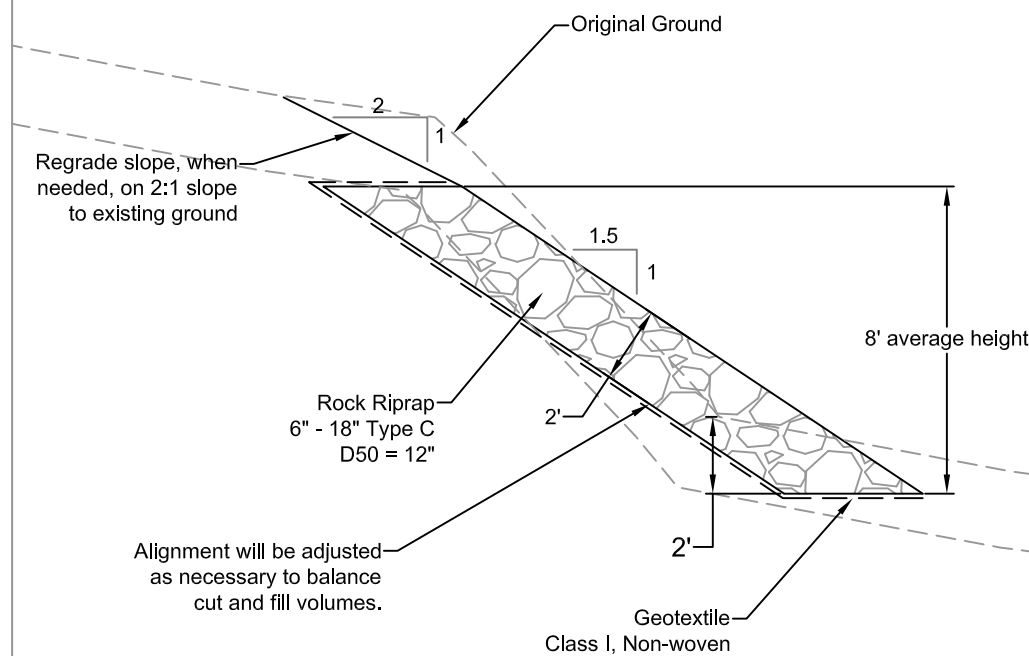


Date	12/2024
Designed	D. Sweeney
Drawn	D. Sweeney
Checked	A. Deichert
Approved	A. Deichert

NORTH FORK HUGHES RIVER
 OUTLET CHANNEL STREAMBANK STABILIZATION
 STREAMBANK DETAILS AND PLAN VIEW
 Ritchie County, West Virginia

TYPICAL SECTION OF STREAMBANK STABILIZATION

Not to Scale

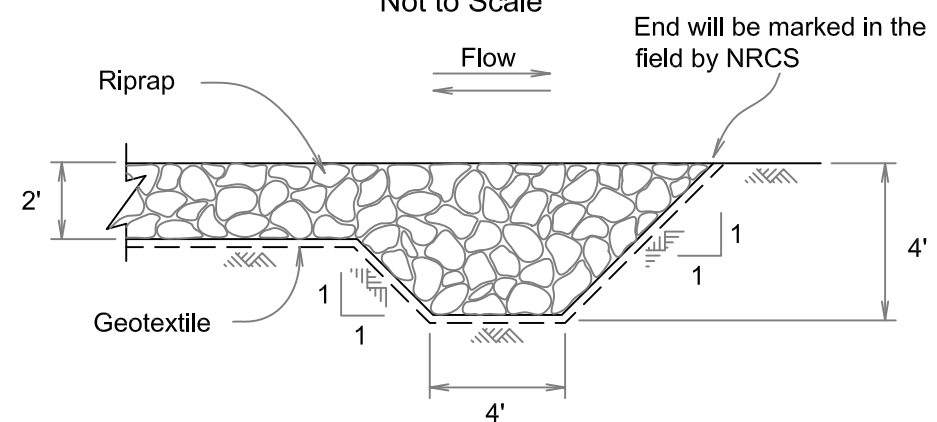


QUANTITIES	
Rock Riprap - Type C, 6"-18"	625 TN
Geotextile - Class I, Non-woven	6,525 SF

RIPRAP KEY @ UPSTREAM AND DOWNSTREAM END

Sectional View - top of bank looking down channel slope (Perpendicular to Slope)

Not to Scale



NOTE: Key shall extend from the toe of the slope to the top of bank.

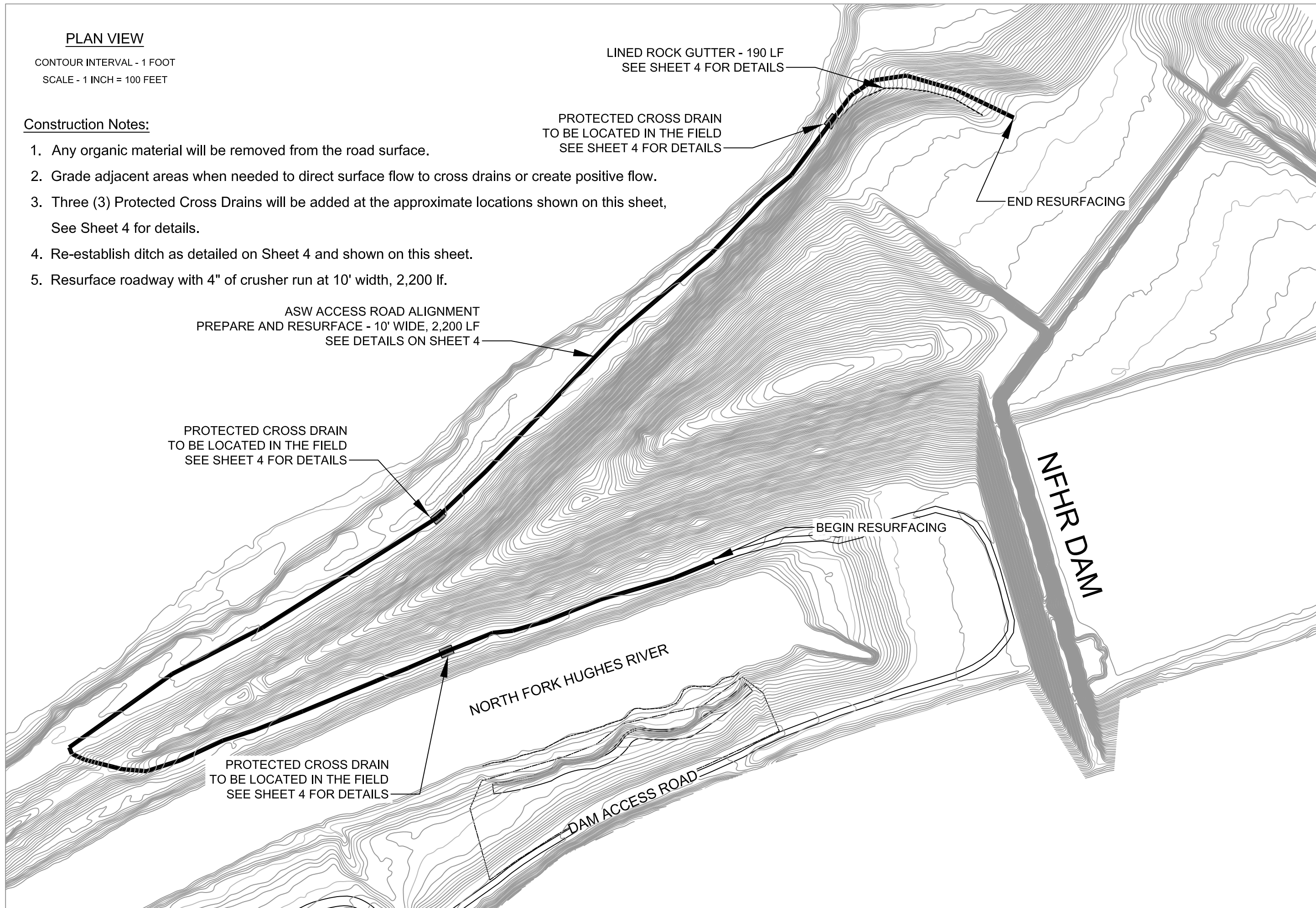
Water Surface

PLAN VIEW

CONTOUR INTERVAL - 1 FOOT
SCALE - 1 INCH = 100 FEET

Construction Notes:

1. Any organic material will be removed from the road surface.
2. Grade adjacent areas when needed to direct surface flow to cross drains or create positive flow.
3. Three (3) Protected Cross Drains will be added at the approximate locations shown on this sheet, See Sheet 4 for details.
4. Re-establish ditch as detailed on Sheet 4 and shown on this sheet.
5. Resurface roadway with 4" of crusher run at 10' width, 2,200 lf.



Date	12/2024
Designed	D. Sweeney
Drawn	D. Sweeney
Checked	A. Deichert
Approved	A. Deichert

**NORTH FORK HUGHES RIVER
OUTLET CHANNEL STREAMBANK STABILIZATION
EXISTING ROAD REHABILITATION PLAN VIEW**
Ritchie County, West Virginia

United States
Department of
Agriculture

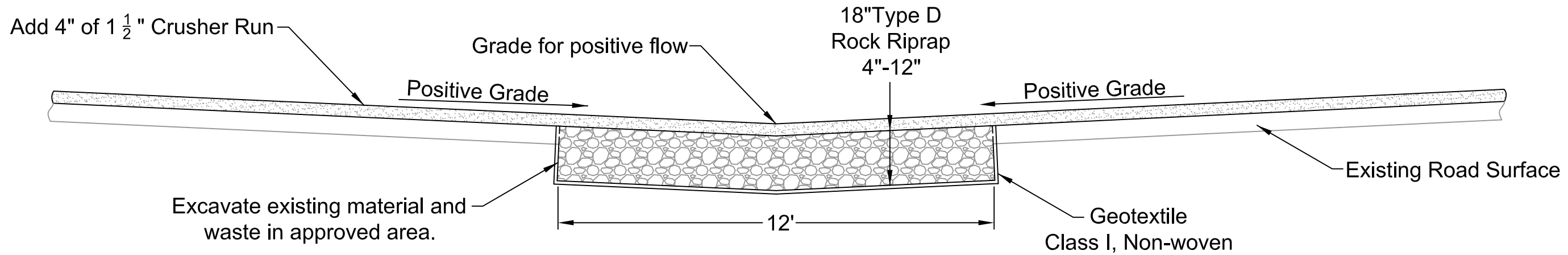


Natural Resources
Conservation Service

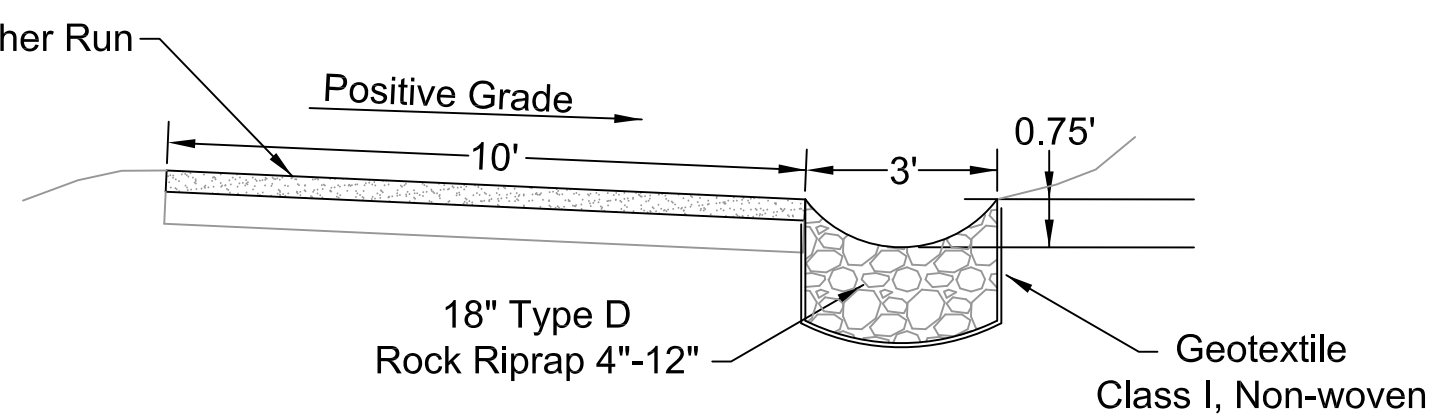
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Drawing No.
PLAN VIEW

Sheet 3 of 4



PROTECTED CROSS DRAIN TYPICAL SECTION



ROCK LINED GUTTER TYPICAL SECTION

QUANTITIES	
Rock Riprap - Type D, 4"-12"	90 TN
Crusher Run 1 1/2" Limestone	500 TN
Geotextile - Class I, Non-woven	1,500 SF

SCALE: 1 INCH = 3 FEET

Designed	D. Sweeney	Date	12/2024
Drawn	D. Sweeney	Date	12/2024
Checked	A. Deichert	Date	04/2025
Approved	A. Deichert	Date	04/2025

NORTH FORK HUGHES RIVER
OUTLET CHANNEL STREAMBANK STABILIZATION
 EXISTING ROAD REHABILITATION DETAILS
 Ritchie County, West Virginia

United States
 Department of
 Agriculture

Natural Resources
 Conservation Service

File No.
 NFHR Left Bank
 Stabilization1.dwg

Drawing No.
 PLAN VIEW

Sheet 4 of 4