

**WEST VIRGINIA**  
**DEPARTMENT OF ENVIRONMENTAL PROTECTION**

**OFFICE OF ABANDONED MINE LANDS  
AND RECLAMATION**

-----  
**COUNTY**  
**OF**  
**PRESTON**

-----  
**NAME OF PROJECT**  
**HOPEWELL CHURCH REFUSE AND DRAINAGE**

-----  
**NOTICE**

**ALL PAPERS BOUND WITH OR ATTACHED TO**  
**THE BID FORM ARE A NECESSARY PART**  
**THEREOF AND MUST NOT BE DETACHED**

# PROJECT SPECIFICATION BOOK

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**ARTICLE I - DEFINITIONS**

## ARTICLE I - DEFINITIONS

- 1.0 "Bidder" refers to the person, firm, or company offering to furnish the work called for by the specifications herein.
- 2.0 "Chief" shall mean the Chief of the West Virginia Department of Environmental Protection's, Office of Abandoned Mine Lands & Reclamation.
- 3.0 "Regional Engineer or Engineer" refers to the head of the Construction Group of the Office of Abandoned Mine Lands & Reclamation of the West Virginia Department of Environmental Protection in each regional office.
- 4.0 "Construction Supervisor" refers to the regional supervisor of the West Virginia Department of Environmental Protection, Office of Abandoned Mine Lands & Reclamation Construction Inspectors.
- 5.0 "Contract" refers to a purchase order placed by the West Virginia Department of Administration on behalf of the Department of Environmental Protection and accepted by the Contractor together with these specifications and all other documents incorporated therein by reference.
- 6.0 "Contract Documents" consist of all of the articles, sections, and attachments to the contract, including Information for Bidders, General Conditions, General Requirements, Special Conditions, drawings, specifications, all addenda issued prior to execution of the contract, and change orders and other written modifications issued after execution of the contract and executed by both parties to the contract.
- 7.0 "Contractor" refers to the person, firm or company contracting with the West Virginia Department of Environmental Protection to furnish the work called for in the contract.
- 8.0 "Cabinet Secretary" refers to the Cabinet Secretary of the West Virginia Department of Environmental Protection.
- 9.0 "DEP" means the West Virginia Department of Environmental Protection.
- 10.0 "Design Engineer" shall mean the representative of the Office of Abandoned Mine Lands & Reclamation's Engineering Section or the Architect/Engineering consulting firm, whichever designed the project.
- 11.0 "Inspector" shall refer to DEP's Inspector, who monitors all construction operations at the project site.
- 12.0 "Project" shall mean the Abandoned Mine Lands Project described and referred to by the specifications herein.
- 13.0 "Sub-contractor" refers to the person, firm or company contracting directly with the Contractor and not with DEP to furnish the Contractor with any portion of the work called for by the contract.

## ARTICLE I - DEFINITIONS

- 14.0 "Work" shall be understood to mean and include any and all of the labor, supervision, services, materials, machinery, equipment, tools, supplies and facilities called for by and required to complete the contract.
- 15.0 "Stabilization Measures" as noted in Section 5 Vegetative Practices shall be understood to mean and include any/all measures necessary for preventing erosion & sediment to the project site. This may include seeding and mulching, mulching without seed, silt fence, wattles. Check dikes, sumps or any other method required to stabilize a site that work has stopped for a time exceeding fourteen (14) days.

**ARTICLE II - GENERAL CONDITIONS**

## ARTICLE II – GENERAL CONDITIONS

### Sections Included:

- 1.0 Enumeration of Contract Documents
- 2.0 Correlation of Documents
- 3.0 Examination of Premises
- 4.0 Materials & Workmanship
- 5.0 Guarantee & Maintenance
- 6.0 Supervision & Construction Procedures
- 7.0 Permits, Laws, Regulations, & Rights of Entry
- 8.0 Safety Requirements
- 9.0 Protection of Persons & Property
- 10.0 Insurance & Worker's Compensation
- 11.0 Labor Laws, Ordinances, Wages & Other Conditions
- 12.0 Subcontractors
- 13.0 Time
- 14.0 Payments & Completion
- 15.0 Surety Bonds
- 16.0 Changes in the Work
- 17.0 Uncovering & Correction of Work
- 18.0 Assignment of Contract

**ARTICLE II - GENERAL CONDITIONS**

**1.0 ENUMERATION OF CONTRACT DOCUMENTS**

**1.1 Drawings**

Construction drawings (sheets) for the reclamation of the project as prepared by for the West Virginia Department of Environmental Protection, Office of Abandoned Mine Lands and Reclamation, 601 57th Street, SE, Charleston, West Virginia 25304-2345, Telephone (304) 926-0485.

**1.2 Specifications**

See Index

**1.3 Addenda**

No. _____	Date _____
No. _____	Date _____
No. _____	Date _____
No. _____	Date _____

**2.0 CORRELATION OF DOCUMENTS**

- 2.1** The intent of the contract documents is to include all labor, materials, equipment, operations and transportation necessary for the proper execution and completion of the work. The contract documents are complementary and what is required by one is required by all.
- 2.2** The Contractor shall carefully study and compare the contract documents and shall at once report to DEP any error, inconsistency or omission it may discover. Contractor shall not proceed with the work affected by such error, inconsistency, or omission until resolved to the satisfaction of itself and DEP.
- 2.3** The drawings and specifications are correlative and shall be accepted and used as a whole and not separately. Should any item be omitted from the drawings and be included in the specifications, and be required to complete the work under the contract, it shall be executed as if shown on both and contained in both; except that it is not intended that items or work not applicable or required be provided unless it is consistent therewith and reasonably inferable therefrom as being necessary to produce the intended results.
- 2.4** In case of disagreement or conflict between drawings and specifications, or inconsistencies, errors, or if omissions be discovered in the drawings and specifications, or if in any part the meaning of either or both shall be considered obscure or uncertain, the Chief or his/her authorized



## ARTICLE II - GENERAL CONDITIONS

representative shall be immediately notified thereof. No work so affected by such circumstances shall proceed until the Chief or his/her authorized representative renders a decision and/or interpretation thereon. Large scale drawing details shall take precedence over drawings of lesser scale. Words and abbreviations which have well known technical or trade meanings are used in the contract documents in accordance with such recognized meanings.

### 3.0 EXAMINATION OF PREMISES

- 3.1 Before submitting proposals for the work, each bidder will be held to have examined the premises and satisfied itself as to the existing conditions under which it will be obliged to operate, or that will in any manner affect the work under the contract. Bidders shall have become familiar with the drawings and specifications and have compared them with existent conditions.
- 3.2 By executing the contract, Contractor represents that it has visited the site, familiarized itself with the local conditions under which the work is to be performed, and correlated its observations with the contract documents. No allowance will subsequently be made by reason of neglect or error on the part of the Contractor for failing to inform itself of the requirements and conditions contained herein.

### 4.0 MATERIALS & WORKMANSHIP

- 4.1 All installed materials and equipment shall be new, and all materials, equipment, and workmanship shall be of kind and type specified, and in all cases, be of good quality. Contractor shall, if required, furnish satisfactory evidence as to kind and quality of its materials, equipment and workmanship.
- 4.2 The Contractor shall provide and pay for all labor, materials, equipment operations, tools, construction equipment, and machinery, transportation, water, heat, utilities, and other facilities and services necessary for the proper execution and completion of the work. The Contractor at all times shall supply sufficient skilled and other labor necessary to adequately fulfill the requirements of the drawings and specifications, and provide for expeditious and practicable execution of the work to its completion.
- 4.3 The installation or application of all devices and materials shall be in accordance with the manufacturer's installation application data, shop drawings and instructions, unless otherwise provided herein.

### 5.0 GUARANTEE & MAINTENANCE

- 5.1 The materials and workmanship affected by the Contractor are subject to the guarantee established by custom of the respective trades. In the absence

## ARTICLE II - GENERAL CONDITIONS

of a trade guarantee custom or a special guarantee provision, the work, both as to the materials and workmanship, shall upon acceptance of final inspection by the Contractor be considered guaranteed by the Contractor for one (1) year from the date of the acceptance of the work. Neither the final acceptance nor the final payment shall relieve the Contractor of responsibility for negligence or faulty materials, and for defects appearing within the guarantee period shall be remedied at the expense of the Contractor upon written notice.

- 5.2 During the one-year guarantee period, the Contractor will maintain the project to the conditions existing at the date of the acceptance of the work. Any failures due to the negligence or workmanship of the Contractor in any of the work which develop during the guarantee period shall be corrected by the Contractor at its expense.
- 5.3 The one-year guarantee period shall not be construed as being an extension of the performance time allotted for work under the contract. Failure to perform warranty work shall extend performance time until work is completed and accepted.
- 5.4 Guarantees concerning revegetation may be further defined in the technical specifications contained herein.

### 6.0 SUPERVISION & CONSTRUCTION PROCEDURES

- 6.1 The Contractor shall supervise and direct the work, using its best skill and attention. It shall be responsible for all construction means, methods, techniques, and procedures, coordinating all portions of the work, and for cooperating with appropriate DEP personnel and with other contractors in every way possible.
- 6.2 The Contractor shall be responsible to DEP for the acts and omissions of its employees, its subcontractors and their agents or employees, and other persons performing any of the work under a contract with the Contractor.
- 6.3 The Contractor will be supplied with three (3) copies of the plans and specifications. It shall have available on the work site at all times one (1) copy of said plans and specifications. Additional copies of plans and specifications may be obtained by the Contractor for the cost of reproduction.

### 7.0 PERMITS, LAWS, REGULATIONS, & RIGHTS OF ENTRY

- 7.1 The WVDEP-AML has obtained a Construction Storm Water General Permit for this project from WVDEP Division of Water and Waste Management (WVDEP DWWM). The registration for this reclamation project will be modified to include the Contractor as Co-Applicant #1, with the WVDEP-AML being Co-Applicant #2. As such, the Contractor shall assume responsibility for compliance with the terms and conditions of the permit including modifications and any future correspondence such as registration renewal invoices, inspection reports, and notices of violation shall be forwarded to the Contractor. Upon award of the contract, the Contractor shall complete a Co-Applicant #1 signature page and submit the completed form to WVDEP-AML prior to scheduling a Pre-Construction Conference.

Upon receipt of the completed form, WVDEP-AML will request the WVDEP DWWM to modify the existing NPDES registration for this project to make the Contractor the Co-Applicant #1 to the permit.

## ARTICLE II - GENERAL CONDITIONS

The WVDEP DWWM will notify the Contractor and WVDEP-AML when the successful transfer of registration under WV/NPDES Storm Water Construction General Permit (No.WV0115924) is completed. A Notice to Proceed will not be issued until the contractor signs the co-applicant form and submits to the Office of Abandoned Mine Lands.. Once the transfer has been completed, the WVDEP will continue to be responsible for any modification fees and annual renewal fees incurred up until the date of the final inspection of the project that occurs after completion of construction activities at the site. The Contractor shall be responsible for any and all costs associated with violations and fines assessed against the project that are a result of the Contractor's negligence, carelessness, or failure to install permanent controls as part of the work as scheduled.

The Contractor shall apply for a Notice of Termination (NOT) from WVDEP DWWM via the Construction Storm Water website <http://www.dep.wv.gov/Programs/stormwater/csw/Documents/Construction> upon completion of construction activities at the site. The NOT shall be issued by WVDEP DWWM upon completion of the project. The Contractor will continue to be bound by the terms and conditions of the permit until the NOT has been approved by WVDEP DWWM. Once the project is complete, the Contractor will still bear responsibility for the NPDES registration until a NOT is received from the WVDEP DWWM.

- 7.2 The Contractor shall comply with all laws, ordinances, rules, orders and regulations relating to the performance of the work, the protection of adjacent property, the maintaining of passageways, guard fences, or other protective facilities.
- 7.3 All applicable Federal and State laws and regulations, municipal ordinances, and the rules and regulations of all public authorities having jurisdiction over construction of the project shall apply to the contract throughout, and are incorporated herein by reference.
- 7.4 DEP shall be responsible for obtaining all construction rights of entry for the project unless otherwise provided for in the Construction Specifications.
- 7.5 The Contractor agrees to indemnify and hold harmless the DEP from all liability and/or damages resulting from the Contractor's use of property for which the Contractor was to obtain rights of entry for borrow, disposal, access or other purposes. Said indemnification shall include, but is not limited to, liability and damages resulting from the Contractor's failure to obtain any or not all the right of entry; failure to utilize appropriate language in the right of entry agreements; or failure to obtain the permission and signatures of all persons or entities holding a legal interest in the subject property(ies) covered by the rights of entry.
- 7.6 All right of entry agreements the Contractor obtains for borrow, disposal, access or other purposes for this project shall include a provision requiring the property owner to indemnify and hold harmless the DEP for the Contractor's actions and any injury or damages whatsoever resulting from the Contractor's use of the property.



## Co-Applicant #1 Signature Page

Co-Applicant#1: \_\_\_\_\_

New and/or Modification of NPDES Storm Water of Construction Project  
Name: \_\_\_\_\_

BY COMPLETING AND SUBMITTING THIS APPLICATION, I HAVE REVIEWED AND UNDERSTAND AND AGREE TO THE TERMS AND CONDITIONS OF THE GENERAL PERMIT ISSUED ON DECEMBER 05, 2012. I UNDERSTAND THAT PROVISIONS OF THE PERMIT ARE ENFORCEABLE BY LAW, VIOLATION OF ANY TERM AND CONDITION OF THE GENERAL PERMIT AND /OR OTHER APPLICABLE LAW OR REGULATIONS CAN LEAD TO ENFORCEMENT ACTION.

I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED ON THIS FORM AND ALL ATTACHMENTS AND THAT, BASED ON MY INQUIRING OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION. THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT.

\_\_\_\_\_  
(CO- APPLICANT #1 SIGNATURE)

\_\_\_\_\_  
DATE

Print Name: \_\_\_\_\_

Print Title: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Telephone Number: (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_

Email: \_\_\_\_\_

FEIN: \_\_\_\_\_

## ARTICLE II - GENERAL CONDITIONS

### 8.0 SAFETY REQUIREMENTS

- 8.1 Particular attention is directed to the "West Virginia Safety Code for Building Construction" as published by the West Virginia Department of Labor. Observance of and compliance with said laws, regulations and codes shall be solely with and without qualification the responsibility of the Contractor.
- 8.2 The Contractor, subcontractors, other contractors and all employees and workers shall comply with the provisions of the Occupational Safety and Health Act 29 CFR 1926. The Contractor shall be held liable to DEP for any health and safety infractions, on the Contractor's part, which cause DEP to receive a citation and/or fine from any local, State or Federal agency. Actual costs involved will be paid by the Contractor to the satisfaction of DEP.

### 9.0 PROTECTION OF PERSONS & PROPERTY

- 9.1 The Contractor shall be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the work.
- 9.2 Safety of Persons and Property: The Contractor shall take all reasonable precautions for the safety of, and shall provide all reasonable protection, preventing damage, injury, or loss to:
- (a) All employees on the work, and all other persons who may be affected thereby;
  - (b) All the work and all materials and equipment to be incorporated therein, whether in storage on or off the site, under the care, custody or control of the Contractor, or any of its subcontractors or their employees or subcontractors; and
  - (c) Other property on the site or adjacent thereto, including, but not limited to, paving, roadways, structures, utilities and permanent property boundaries, monuments or markers not designated for removal, or relocation, or replacement in the course of construction. Any damage to these items shall be repaired or replaced at the expense of the Contractor and to the satisfaction of DEP.

## ARTICLE II - GENERAL CONDITIONS

- 9.3 The Contractor shall give all notices and comply with all applicable laws, ordinances, rules, regulations, and lawful orders of any public authority, bearing on the safety of persons or property, or their protection from damage, injury, or loss.
- 9.4 The Contractor shall erect and maintain, as required by existing conditions and progress of the work, all reasonable and adequate safeguards for safety and protection. It shall post danger signs and provide other warnings as required against hazards and dangers to persons and property.
- 9.5 In case of an emergency which threatens injury, loss of life and/or damage to property, the Contractor will be permitted to act, without prior instruction from the Regional Engineer, in a diligent manner. It shall notify the Construction Supervisor immediately thereafter. Any claim for compensation by the Contractor due to such extra work shall be promptly submitted to the Construction Supervisor for verification and approval by the Regional Engineer.

The amount of reimbursement claimed by the Contractor for work arising out of any emergency situation shall be determined by the Chief or his/her authorized representative.

- 9.6 The Contractor shall be responsible for the verification of existing utilities that may be affected by its work in the project area. It shall be held responsible for any damage to and for maintenance and protection of existing utilities and structures during the performance of the work.

### 10.0 INSURANCE & WORKER'S COMPENSATION

#### 10.1 Contractor's and Subcontractor's Public Liability, Vehicle Liability and Property Damage Insurance.

The Contractor shall maintain insurance as follows:

- (a) Contractor's Public Liability Insurance and Comprehensive Vehicle Liability Insurance shall be in an amount not less than \$2,000,000.00 for bodily injury and property damage for each occurrence and not less than \$2,000,000.00 aggregate.

The required insurance must be written by a company or companies licensed to do business in West Virginia at the time the policy is issued and the policy must be countersigned by a licensed resident agent. Any property owner requiring additional insured shall be added to this policy.

- (b) Contractor shall either (1) require each of the subcontractors to procure and to maintain, during the life of its subcontract, subcontractor's Public Liability and Property Damage Insurance of the type and in the same amounts as specified in paragraph (a) above, or (2) insure the activities of its subcontractors in its own policy.

## ARTICLE II - GENERAL CONDITIONS

Contractor agrees to indemnify and hold harmless DEP from all liability for personal injury, including death resulting therefrom, and against all liability for property damage sustained by any person or persons, including persons employed by Contractor or subcontractors, which is caused in whole or in part by an act or omission, negligent or otherwise, of the Contractor, its agents, servants, or employees, and to assume the defense of any action brought by such persons to recover damages, and to pay all costs and expenses, including attorney's fees, incurred by DEP as result thereof.

Each party to the contract shall promptly notify the other of the assertion of any claim against which such party is held harmless pursuant to this Section, shall give such other party the opportunity to defend any such claim, and shall not settle any such claim without approval of the indemnifying party.

### 10.2 Proof of Carriage of Insurance.

The Contractor shall provide DEP, before work commences, with certificates issued by the insurance company or companies issuing the insurance policies required by this Section. The certificates shall show the type, amount, class of operations covered, effective dates, and dates of expiration of such policies. Such certificates shall provide that written notice shall be given to DEP prior to expiration, cancellation, or modification of any such policy, and shall contain substantially the following representation: "The insurance covered by this certificate will not be canceled, or materially modified or altered, except after ten (10) days written notice has been verified as received by the West Virginia Department of Environmental Protection".

### 10.3 Worker's Compensation Insurance.

All employees of the Contractor, and of subcontractors engaged in the work of this contract, shall be covered by West Virginia Worker's Compensation Insurance. Certificates shall be provided to DEP by the Contractor and subcontractors showing compliance with the Worker's Compensation Laws of West Virginia.

## 11.0 LABOR LAWS, ORDINANCES, WAGES, AND OTHER CONDITIONS

11.1 The Contractor shall obey and abide by all laws of the State of West Virginia, particularly with respect to the carrying out of public improvements.

The Contractor shall not pay less than the established prevailing minimum wage rate for each particular class of employment in the county in which the work is being performed. This rate shall include and and all time an employee is on the project.

## ARTICLE II - GENERAL CONDITIONS

11.2 During the performance of this contract, the Contractor agrees as follows:

- (a) The Contractor will not discriminate against any employee or applicant for employment because of race, creed, color, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, creed, color, or national origin. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship.  
Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notice, to be provided by the contracting officer, setting forth the provisions of this nondiscrimination clause.
- (b) Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, creed, color or national origin.
- (c) Contractor will send to each labor union or representative of workers with which it has a collective bargaining agreement or other contract understanding, a notice, to be provided by the agency contracting officer, advising the labor union or worker's representative of the Contractor's commitments under Section 202 of Presidential Executive Order #11246 of September 24, 1965 (hereinafter "Executive Order #11246"), as amended by Presidential Executive Order #11375 and supplemented by U.S. Department of Labor regulations 41 CFR Part 60 and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- (d) Contractor will comply with all provisions of Executive Order #11246, and with all of the applicable rules, regulations, and relevant orders of the U.S. Secretary of Labor (hereinafter "Secretary of Labor").
- (e) Contractor will furnish all information and reports required by Executive Order #11246, and by the applicable rules, regulations and orders of the Secretary of Labor, or pursuant thereto, and will permit access to its books, records, and accounts by the contracting agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations and orders. These provisions shall also apply to DEP or employees of the Federal Government or their designated representatives for the purpose of making audits, examinations, excerpts, or transcriptions.
- (f) In the event of the Contractor's noncompliance with these nondiscrimination clauses, this contract may be canceled, terminated, or suspended, in whole or in part, and the Contractor may be declared ineligible for further government contracts in accordance with procedures authorized in Executive Order #11246, and such other sanctions may be imposed and remedies invoked as provided in Executive Order #11246, or by rules, regulations, or orders of the Secretary of Labor, or as otherwise provided by law.



## ARTICLE II - GENERAL CONDITIONS

- (g) The Contractor will include the provisions of these paragraphs (a) through (g) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order #11246, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontractor or purchase order as the contracting agency may direct as a means of enforcing such provisions, including sanctions for noncompliance: Provided, however, that in the event the Contractor becomes involved in, or is threatened with litigation with a subcontractor or vendor as a result of such direction by the contracting agency, the Contractor may request DEP to enter into such litigation to protect the interests of DEP.
- (h) Copeland "Anti-Kickback" Act. Contractor or Subcontractor shall comply with the Copeland "Anti-Kickback" Act (18 USC 874) as supplemented in U.S. Department of Labor regulations (29 CFR Part 3). Said Act provides that each Contractor or subcontractor shall be prohibited from inducing, by any means, any person employed in the construction, completion, or repair of public works, to give up any part of the compensation to which it is otherwise entitled. The Contractor shall report all suspected or reported violations to DEP.
- (i) Clean Air & Water Acts. Should the amount of this contract exceed one-hundred thousand dollars (\$100,000.00), compliance will be required with all applicable standards, orders, or requirements issued under Section 306 of the Clean Air Act (42 USC 1857[h]), Section 508 of the Clean Water Act (33 USC 1368), Presidential Executive Order #11738, and Federal Environmental Protection Agency regulations (40 CFR Part 15), which prohibit the use under non-exempt Federal contracts, grants or loans of facilities included on the EPA List of Violating Facilities. Contractor shall report violations to DEP and to the U.S. EPA Assistant Administrator for Enforcement (EN-329).
- (j) Energy Policy & Conservation Act. The Contractor shall comply with mandatory standards and policies relating to energy efficiency which are contained in the State energy conservation plan issued in compliance with the Energy Policy and Conservation Act, Public Law 94-163.
- (k) Access to Records. DEP, the U.S. Department of Interior's Office of Surface Mining Reclamation & Enforcement, and the U.S. Comptroller General or their duly authorized representatives shall have access to any books, papers, and records of the Contractor which are directly pertinent to that specific contract, for the purpose of making audits, examinations, excerpts, and transcriptions.
- (l) Maintenance of Records. The Contractor shall maintain all required records for three (3) years after DEP processes final payments and all other pending matters are closed.
- (m) Termination of Contract by DEP. This contract may be cancelled in whole or in part in writing by the Director of Purchasing, without prejudice to any other right or remedy it may have, provided that the contractor is given not less than thirty (30) calendar days written notice, (delivered by certified mail, return receipt requested) of intent to terminate.

## ARTICLE II - GENERAL CONDITIONS

- (n) **Legal Remedies.** Unless otherwise provided by law or elsewhere in this contract, all claims, counter-claims, disputes and other matters in question between DEP and the Contractor arising out of, or relating to, this contract or the breach of it will be decided by arbitration if the parties mutually agree, or in a court of competent jurisdiction within the State of West Virginia.

### 11.3 **Wages.**

Attention is called to the prevailing rates of wages to be paid for labor on public improvements in County, West Virginia, as determined by the West Virginia Department of Labor. A copy of wage rates shall be posted in a conspicuous location on the job site. It is the responsibility of the Contractor to pay the wage rate in effect when the project was bid. The Contractor is to maintain and have available for inspection by DEP, upon request, certified copies of its payrolls.

The contractor/subcontractors shall pay the higher of the U.S. Department of Labor Davis-Bacon Act or the WV Prevailing wage rate as established for various county, pursuant to West Virginia Code 21-5A, Et, Seq. and 42CSR7 Rules & Regulations for the WV Prevailing Wage Act. For prevailing wage rates, please refer to <http://www.sos.wv.gov>

### 12.0 **SUBCONTRACTORS**

- 12.1 Unless otherwise required by the contract documents, the Contractor, as soon as practicable after award of the contract, shall furnish DEP in writing the names of subcontractors (including those who are to furnish materials or equipment fabricated to special design) proposed for performing portions of the work.
- 12.2 DEP reserves the right to disapprove any proposed subcontractor whose record of performance does not establish its experience, competence, and financial ability to perform the work for which it is proposed. Nothing contained in the contract documents shall create any contractual relation between any subcontractor and DEP.

### 13.0 **TIME**

- 13.1 The date of commencement of work is the date established in a written "Notice to Proceed" issued by DEP to the Contractor. The date of completion shall be the date that DEP finds the work acceptable under the contract documents and the contract fully performed.

## ARTICLE II – GENERAL CONDITIONS

### 13.2 Delays & Extensions of Time.

- (d) It is agreed that if the Contractor should be unavoidably delayed in fulfilling its obligations under this contract by acts of Providence or general strikes, or by Court injunctions, or by stopping of the work by DEP because of any Contractor toward final completion of the work hereunder, DEP may require the Contractor to prepare an itemized estimate of the amount of work performed, and material and equipment stored under the contract since the date of the last preceding estimate and Application for Payment. DEP may request that the Contractor submit such estimate along with supporting documentation in the form of certified payrolls, material invoices, weight slips, and Applications for Payment. Contractor is to maintain and have available such records for inspection by DEP upon request.

### 13.3 Progress Schedule.

The Contractor, immediately after being awarded the contract, shall prepare and submit, for DEP's information, an estimated progress schedule for the work. Such progress schedule shall be related to the entire project to the extent required by the contract documents, and shall provide for expeditious and practicable execution dates of the various stages of construction and may be revised as required by conditions of work, subject to DEP's approval.

## 14.0 PAYMENTS & COMPLETION

### 14.1 Contract Sum.

The contract sum as stated in the Contractor's executed Contract Acceptance Form, including any authorized adjustment(s) thereto, is the total amount payable by DEP to the Contractor for the performance of the work under the contract documents.

## ARTICLE II – GENERAL CONDITIONS

### 14.2 Schedule of Values.

Before submitting its first Application for Payment, the Contractor shall submit to DEP a schedule of values allocated to the various portions of the work, prepared in such form and supported by such data to substantiate its accuracy, as DEP may require. This schedule shall be used only as a basis for the Contractor's Applications for Payment.

### 14.3 Progress Estimates, Applications for Payment.

- (d) On the fifteenth (15<sup>th</sup>) and thirtieth (30<sup>th</sup>) day of each month during which progress has been made on the work under the contract by the Contractor toward final completion of the work hereunder, DEP may require the Contractor to prepare an itemized estimate of the amount of work performed since the date of the last preceding estimate and Application for Payment. DEP may request that the Contractor submit such estimate along with supporting documentation in the form of certified payrolls (not to include social security numbers), material invoices, weight slips, and Applications for Payment. Contractor is to maintain and have available such records for inspection by DEP upon request.
- (b) Upon approval by DEP of the Application and Certificate for Payment, DEP shall, as soon thereafter as practicable, process for the Contractor as a progress payment a sum equal to the contract value of the work performed since the last preceding estimate and Application for Payment, in accordance with Paragraphs 14.4 and 14.5 of this Section, less the aggregate of previous payments.
- © No Certificate for a progress payment, nor any progress payment, shall constitute acceptance or be deemed or construed as acceptance of any part of the work not in accordance with the contract documents.
- (d) The Contractor warrants and guarantees that title to all work, materials, and equipment covered by an Application for Payment, whether incorporated in the project or not, will pass to DEP upon the receipt of such payment by the Contractor, free and clear of all liens, claims, security interests or encumbrances, and that no work, materials, or equipment covered by an Application for Payment will have been acquired by the Contractor or by any other person performing the work at the site or furnishing materials and equipment for the project, subject to an agreement under which an interest therein or an encumbrance thereon is retained by the Contractor or otherwise imposed by the Contractor or such other person.

## ARTICLE II – GENERAL CONDITIONS

### 14.4 Payments Withheld.

The Regional Engineer or his representative may decline to approve an estimate or Application for Payment, to the extent necessary to protect DEP from loss because of:

- (b) Unsatisfactory, unrepresentative, and unverified amounts and items included in progress estimates of Paragraph 14.3(a) above.
- (ii) Unfulfilled provisions of Paragraphs 14.3(d) above.
- (iii) Defective work not remedied.
- (iv) Unsatisfactory performance of the work by the Contractor.
- (v) Failure of the Contractor to make payments properly to subcontractors, or for labor, materials, or equipment.
- (vi) Reasonable doubt that the remaining work can be completed for the unpaid balance of the contract sum.
- (vii) Reasonable indication that the work will not be completed within the contract time for completion.
- (viii) Third party claims filed, or reasonable evidence indicating probable filing of such claims.
- (ix) Damage to another contractor.

When the above grounds under 14.4 (i)-(ix) are removed, payment shall be approved for the amounts that were withheld because of them.

### 14.5 Final Completion & Final Payment.

- (b) Upon notice from the Contractor that the work is ready for final inspection, the Construction Supervisor will promptly make such inspection. If the Construction Supervisor upon his/her inspection finds the work acceptable under the contract documents and the contract fully performed, the Contractor shall submit a Final Estimate Application and Certificate for Payment to DEP for processing. Also, final quantity calculations shall be submitted to DEP by the Contractor prior to final inspection conference.
- (b) Final payment to the Contractor will be processed by DEP upon fulfillment of the provisions of the contract documents and the conditions thereof.

## ARTICLE II - GENERAL CONDITIONS

- (c) **The processing of final payment and the processing of payment of retained percentage shall constitute a waiver of all claims by DEP except those arising from:**
  - (i) **Unsettled liens.**
  - (ii) **Faulty or defective work appearing after final completion.**
  - (iii) **Failure of the work to comply with requirements of the contract documents.**
  - (iv) **Terms of any special warranties required by the contract documents.**
  - (v) **Affidavate of Payment**
- (d) **The acceptance of final payment shall constitute a waiver of all claims by the Contractor except those previously made in writing and identified by the Contractor as unsettled at the time of the final Application for Payment. No payment, however, final or otherwise, shall operate to release the Contractor or its sureties from any obligation under the contract documents, or the Performance Bond, and the Labor and Material Payment Bond. (See 15.1 below.)**

### **14.6 Application for Payment Forms.**

**Bound herewith on the preceeding pages are sample Application and Certificate for Payment forms which the Contractor shall use in the submittal of progress estimate Applications for Payment to DEP.**

DEPARTMENT OF ENVIRONMENTAL PROTECTION / OFFICE OF ABANDONED MINE LANDS & RECLAMATION

AML-7

Revised 5/09

**APPLICATION AND CERTIFICATE FOR PAYMENT**

Page 1 of \_\_\_\_ pages

Project Name: \_\_\_\_\_

Application No: \_\_\_\_\_

Contractor: \_\_\_\_\_

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

Address: \_\_\_\_\_

Performance Period From: \_\_\_\_\_ To: \_\_\_\_\_

ATTN (AML&R Inspector): \_\_\_\_\_  
 CHANGE ORDER SUMMARY \_\_\_\_\_

Application is made for payment, as shown below, in connection with contract. Continuation

Sheet is attached. The present status of the account for this contract is as follows:

Change Order Number	Approved (date)	Additions \$+	Deductions \$-

ORIGINAL CONTRACT SUM \$ \_\_\_\_\_

Net Change by Change Orders \$ \_\_\_\_\_

CONTRACT SUM TO DATE \$ \_\_\_\_\_

TOTAL COMPLETED & STORED TO DATE \$ \_\_\_\_\_  
 (Column "G" on Continuation Sheet)

LESS PREVIOUS CERTIFICATES FOR PAYMENT \$ \_\_\_\_\_

CURRENT PAYMENT DUE \$ \_\_\_\_\_

Total Completed & Stored to Date  
 % COMPLETE:..... X 100 = \_\_\_\_\_

Contract Sum to Date

Contractor: \_\_\_\_\_

Original Signature (Blue Ink) \_\_\_\_\_

Items listed hereon conform to specification, were received & are approved for payment.					Signed: _____, Inspector	
Date: _____	PO#: _____				Officer App	
P#: _____				Date		
FEIN/SS#: _____				FIMS Vendor #		
FINED	FY	ORIG	ACT	OBJ CODE	GRAMPT	PROJECT #
8708	20		130	830		

**CONTINUATION SHEET OF APPLICATION AND CERTIFICATE FOR PAYMENT**

Project Name: \_\_\_\_\_ Application No: \_\_\_\_\_

Page \_\_\_\_ of \_\_\_\_ pages

BID SCHEDULE PER CONTRACT				UNITS THIS APPLICATION	TOTAL COMPLETED AND STORED TO DATE	
ITEM # A	DESCRIPTION B	UNITS C	UNIT BID PRICE D	UNITS E	UNITS F	COST G=(DxF)
<b>SUBTOTAL OR TOTAL</b>						



## ARTICLE II - GENERAL CONDITIONS

### 15.0 SURETY BONDS

15.1 The Contractor shall provide and deliver to DEP's Buyer at the Purchasing Division of the Department of Administration at the time of execution of the contract, and prior to the performance of the work, satisfactory surety bonds in an amount of not less than one hundred percent (100%) of the contract sum which shall include a Performance Bond and Labor and Material Payment. An increase in the Surety Bond will be required to equal any increases to the contract amount created by a change order.

Bond, with sureties acceptable to DEP's Buyer, for the faithful fulfillment of the contract within the time specified. Said bonds shall also save and hold harmless DEP from all liens and claims arising out of the work. The Contractor shall pay for the bonds.

15.2 In the event that the surety on any contract or payment bond given by the Contractor becomes insolvent, or is placed in the hands of a receiver, or has its right to do business in this State revoked as provided by law, the Cabinet Secretary may at his/her election, withhold payment or any estimate until the Contractor shall give a good and sufficient bond in lieu of the bond so executed by such surety.

15.3 Attorneys-in-Fact who execute surety bonds issued pursuant to this Section must provide with each such bond a certified and properly executed Power of Attorney.

15.4 All performance bonds shall be in effect throughout the one-year guarantee period set out in Section 5.0. Bonds will be released upon completion of the guarantee period and acceptance of the project by DEP.

### 16.0 CHANGES IN THE WORK

#### 16.1 Change Orders

(a) DEP, without invalidating the contract, may order or the Contractor may request changes in the work within the general scope of the contract consisting of additions, deletions, or other revisions, the contract sum and the contract time being adjusted accordingly. All such changes in the work shall be authorized by change order, and shall be executed under the applicable conditions of the contract documents.

(b) A change order is a written order to the Contractor, properly executed as to form, issued after the execution of the contract, authorizing a change in the work or an adjustment in the contract sum or contract time. The contract sum or contract time may be changed only by a change order. A change order issued to the Contractor indicates its agreement therewith, including the adjustment in the contract sum or contract time set forth therein.

## ARTICLE II - GENERAL CONDITIONS

- (c) **The cost or credit to DEP resulting from a change in the work shall be determined in one or both of the following ways:**
  - (i) **By mutual acceptance of a lump sum properly itemized.**
  - (ii) **By unit prices stated in the contract documents or subsequently agreed upon.**
- (d) **If none of the methods set forth in 16.1(c) above is agreed upon, or the work to be performed is agreed by DEP and Contractor to be of such nature that it cannot be estimated in advance with sufficient exactness for mutual agreement, then DEP may direct the Contractor to perform the work by change order in accordance with the following provisions, and the Contractor shall promptly proceed with the work:**
  - (i) **The work shall then be performed for an amount equal to the actual and necessary net cost to the Contractor for material and labor cost necessarily used therein, including all taxes and delivery costs for materials, all required extra costs on labor, plus cost for superintendents, power, use of tools, equipment, plant, plus the Contractor's normal charge under the contract for overhead and profit. The Contractor shall keep and present to DEP for inclusion in the change order complete itemized accounting for all materials, complete identified time and payment records for all employees, and workmen actually performing the work covered by the change order, the cost accounting of work performed by subcontractors for work covered by the change order. DEP reserves the right to require verifications of all costs covered under the change order.**
  - (ii) **The amount of credit to be allowed by the Contractor to DEP for any deletion or change which results in a net decrease in the contract sum will be the actual net cost. When both additions and credits covering related work or substitutions are involved in one change, the allowance for overhead and profit shall be figured only on the basis of the increase, if any, with respect to that change.**

**16.2 The Chief is the only individual who can execute a change order committing DEP to the expenditure of public funds. No person other than the Chief or his/her authorized representative can make any changes to the terms, conditions, contract clauses, or other stipulations of this contract.**

**The Contractor shall not accept any instructions issued by any person other than the Chief or his/her authorized representative regarding changes in the work under the contract which affect the contract sum and/or contract time. No information, other than that which may be contained in an authorized modification to this contract, duly issued by the Chief or his/her authorized representative, which may be received from any person employed by DEP or otherwise, shall be considered grounds for deviation from any stipulation of the contract.**

## ARTICLE II - GENERAL CONDITIONS

### 16.3 Minor Changes in the Work.

Notwithstanding the requirements of Section 16.2 above, the Regional Engineer or his/her authorized representative shall have authority to order minor changes in the work not involving an adjustment in the contract sum or an extension of the contract time and not inconsistent with the intent of the contract documents. Such changes may be affected by field order or by other written order. Such changes shall be binding on DEP and the Contractor. The Contractor shall carry out such written orders promptly.

### 16.4 Omissions.

DEP may omit any item or items in the contract, provided that the notice of intent to omit such item or items is given to the Contractor before any material has been purchased or labor involved has been performed, and such omission shall not constitute grounds of any claim for damages or loss of anticipated profits. DEP may omit any item or items shown the estimate, at any time, by agreeing to compensate the Contractor for the reasonable expense already incurred and to take over at actual cost any unused material purchased in good faith for use for the item or items omitted.

## 17.0 UNCOVERING & CORRECTION OF WORK

### 17.1 Uncovering of Work.

- (a) If any work should be covered contrary to the request of DEP, it must, if required by DEP, be uncovered for its observation and be replaced at the Contractor's expense.
- (b) If any other work has been covered which DEP has not specifically requested to observe prior to being covered, DEP may request to see such work and it shall be uncovered by the Contractor. If such work is found to be in accordance with the contract documents, the cost of uncovering and replacement shall, by appropriate change order, be charged to DEP. If such work is found not to be in accordance with the contract documents, the Contractor shall pay such costs unless it is found that such condition was caused by a separate contractor employed by DEP and in that event DEP shall be responsible for the payment of such costs.

### 17.2 Correction of Work.

The Contractor shall promptly correct all work rejected by DEP as defective or as failing to conform to the contract documents whether observed before or after final completion and whether or not fabricated, installed or completed. The Contractor shall bear all cost of correcting such rejected work. All such defective or

## ARTICLE II - GENERAL CONDITIONS

non-conforming work shall be removed from the site if necessary, and the work shall be corrected to comply with the contract documents at no cost to DEP. If the Contractor fails to correct such defective or non-conforming work, DEP may correct it in accordance with Section 17.3 below or Section 11.2(m) of these General Conditions.

### 17.3 Acceptance of Non-Conforming Work.

If DEP prefers to accept non-conforming work, it may do so instead of requiring its removal and correction, in which case a change order will be issued to reflect an appropriate reduction in the contract sum, or, if the amount is determined after final payment, it shall be paid by the Contractor.

### 18.0 ASSIGNMENT OF CONTRACT

Contractor shall not assign or transfer this contract or sublet it as a whole without having first obtained the written consent of DEP to do so; and it is likewise agreed that the Contractor shall not assign legally or equitably any of the moneys payable to it under the contract, or its claim thereto, without having first obtained the written consent of DEP to do so.

AML CONTRACTOR INFORMATION FORM

You must complete this form for your AML contracting officer to request an eligibility evaluation from the Office of Surface Mining to determine if you are eligible to receive an AML contract. This requirement applies to contractors and their sub-contractors and is found under OSM's regulations at 30 CFR 874.16. When possible, please type your information onto this form to reduce errors on our end. NOTE: Signature and date this form is signed must be recent (within the last month) to be considered for a current bid

**Part A: General Information**

Business Name: \_\_\_\_\_ Tax Payer ID No.: \_\_\_\_\_  
Address: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_ Phone: \_\_\_\_\_  
Fax No.: \_\_\_\_\_ E-mail address: \_\_\_\_\_

**Part B: Legal Structure**

Corporation  Sole Proprietorship  Partnership  LLC  
 Other (please specify) \_\_\_\_\_

**Part C: Certifying and updating information in the Applicant/Violator System (AVS).** Select only one of the following options, follow the instructions for that option, and sign below.

I, \_\_\_\_\_, *have the express authority to certify that:*  
(print name)

- \_\_\_\_\_ Information on the **attached** Entity Organizational Family Tree (OFT) from AVS is accurate, complete, and up-to-date. If you select this option, you **must** attach an Entity OFT from AVS to this form. Sign and date below and do not complete Part D.
- \_\_\_\_\_ Part of the information on the **attached** Entity OFT from AVS is missing or incorrect and must be updated. If you select this option, you **must** attach an Entity OFT from AVS to this form. Use Part D to provide the missing or corrected information. Sign and date below and complete Part D.
- \_\_\_\_\_ Our business currently is not listed in AVS. If you select this option, you must provide all information required in Part D. Sign and date below and complete Part D.

\_\_\_\_\_ Date \_\_\_\_\_ Signature \_\_\_\_\_ Title

**IMPORTANT!** In order to certify in Part C to the accuracy of existing information in AVS, you must obtain a copy of your business' Entity OFT. To obtain an Entity OFT, contact the AVS Office, toll-free, at 800-643-9748 or from the AVS website at <https://avss.osmre.gov>.

**Part D.**

Contractor's Business Name: \_\_\_\_\_

If the current Entity OFT information for your business is incomplete or incorrect in AVS, or if there is no information in AVS for your business, you must provide all of the following information as it applies to your business. Please make as many copies of this page as you require.

- Every officer (President, Vice President, Secretary, Treasurer, etc.);
- All Directors;
- All persons performing a function similar to a Director;
- Every person or business that owns 10% or more of the voting stock in your business;
- Every partner, if your business is a partnership;
- Every member and manager, if your business is a limited liability company; and
- Any other person(s) who has the ability to determine the manner in which the AML reclamation project is being conducted.

Name	_____	Position/Title	_____
Address	_____	Telephone #	_____
	_____	% of Ownership	_____
Begin Date:	_____	Ending Date:	_____

Name	_____	Position/Title	_____
Address	_____	Telephone #	_____
	_____	% of Ownership	_____
Begin Date:	_____	Ending Date:	_____

Name	_____	Position/Title	_____
Address	_____	Telephone #	_____
	_____	% of Ownership	_____
Begin Date:	_____	Ending Date:	_____

Name	_____	Position/Title	_____
Address	_____	Telephone #	_____
	_____	% of Ownership	_____
Begin Date:	_____	Ending Date:	_____

**PAPERWORK REDUCTION STATEMENT**

The Paperwork Reduction Act of 1995 (44 U.S.C. 3501) requires us to inform you that: Federal Agencies may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. This information is necessary for all successful bidders prior to the distribution of AML funds, and is required to obtain a benefit.

Public reporting burden for this form is estimated to range from 15 minutes to 1 hour, with an average of 22 minutes per response, including time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. You may direct comments regarding the burden estimate or any other aspect of this form to the Information Collection Clearance Officer, Office of Surface Mining Reclamation and Enforcement, Room 202 SIB, Constitution Ave., NW, Washington, D.C. 20240.

**ARTICLE III - GENERAL REQUIREMENTS**

## ARTICLE III - GENERAL REQUIREMENTS

### Sections Included:

- 1.0 Summary of the Work
- 2.0 Quality Standards, Approvals
- 3.0 Superintendents, Coordination
- 4.0 Project Meetings
- 5.0 Authority & Duties of Inspectors
- 6.0 Shop Drawings, Product Data, Samples
- 7.0 Measurements, Manufacturer's Directions
- 8.0 Lines, Levels, Grades, Layout
- 9.0 Documents, Shop Drawings, Etc., at Site
- 10.0 Storage of Materials
- 11.0 Protection of Work, Damages
- 12.0 Temporary Facilities
- 13.0 Construction Sign
- 14.0 Cleaning and Final Clean-Up
- 15.0 Testing
- 16.0 Project Completion - Certificates



## ARTICLE III - GENERAL REQUIREMENTS

### 1.0 SUMMARY OF THE WORK

This Article briefly outlines and describes the work to be performed and is not intended to limit the faithful execution of the contract documents.

- 1.1 The scope of the work for this project, without attempting to restrict or limit the contractor's responsibility, consists of furnishing all plant, labor, materials, and equipment to construct abandoned mine drainage control structures described in the drawings and these specifications. The work shall include, but not be limited to, the following:

## ARTICLE III - GENERAL REQUIREMENTS

### 2.0 QUALITY STANDARDS, APPROVALS

- 2.1 Notwithstanding reference in the specifications or on the drawings to any article, item, product, material, equipment, or system by name, brand, make, or manufacturer, such reference shall be intended and interpreted as establishing a standard of quality, and shall not be taken, regarded, or construed as limiting competition.
- 2.2 Any article, item, product, material, equipment, or system which will perform adequately and satisfactorily the duties imposed by the general design will be considered equally acceptable to that specified or referenced, providing the article, item, product, material, equipment, or system so proposed is equal in quality, substance, design, manufacture, function and performance as that specified or referenced, and adjudged and determined to be so in the opinion of the Construction Supervisor and is approved by him/her. The approval of the Regional Engineer is required before purchase and installation.
- 2.3 Approvals.

Where the term "of approved manufacture" appears in the specifications, or an "approved" or "approved as equal" article or item is referred to, it shall mean that the article, item, workmanship, or material must meet the approval of the Construction Supervisor.

### 3.0 SUPERINTENDENTS, COORDINATION

#### 3.1 Superintendents.

The Contractor shall employ and keep a competent superintendent and assistants who shall be capable of effective communication as required on the job at all times and who shall give efficient supervision to the work, using his/her best skill and attention, and shall have knowledge and control of all trades. The superintendent shall be acceptable to the Construction Supervisor and shall not be changed without the Construction Supervisor's knowledge and consent. The Contractor also shall see that each respective sub-contractor provides a competent foreman for each trade.

#### 3.2 Coordination.

The Contractor and each sub-contractor shall coordinate the work and operations and shall cooperate with and assist each other on the job for the successful execution of the work within trade jurisdictional rulings. Each shall study all drawings and specifications and shall perform all work which properly comes under jurisdiction of the trade he/she represents.

### 4.0 PROJECT MEETINGS AND CONFERENCES

- 4.1 The following meetings shall be scheduled and held prior to commencement of the project and during execution of the work. DEP will schedule such

### ARTICLE III - GENERAL REQUIREMENTS

meetings and advise all parties concerned by written notice of the date, time, and location of such meetings.

- (a) **Pre-Bid Conference.** Conference with Engineer, bidders and appropriate DEP personnel as necessary, and others directly concerned for explanation of bidding and contract documents, project site familiarization as required, and for answering questions pertinent to the project. **Attendance by bidders is mandatory in order to be eligible to bid on the project.**

A date and time will be set for the on-site **mandatory** Prebid Conference. All interested parties are required to attend this meeting. Failure to attend the mandatory pre-bid shall result in disqualification of the bid. No one person may represent more than one bidder.

An attendance sheet will be made available for all potential bidders to complete. This will serve as the official document verifying attendance at the mandatory pre-bid. Failure to provide your company and representative name on the attendance sheet will result in disqualification of the bid. The State will not accept any other documentation to verify attendance. The bidder is responsible for ensuring they have completed the information required on the attendance sheet. The Purchasing Division and the state agency will not assume any responsibility for a bidder's failure to complete the pre-bid attendance sheet. In addition, we request that all potential bidders include their e-mail address and fax number.

All potential bidders are requested to arrive prior to the starting time for the pre-bid. Bidders who arrive after the pre-bid conference has ended will not be permitted to sign the attendance sheet or bid on the project work.

- (b) **Pre-Construction Conference.** Conference with Engineer, appropriate DEP personnel, Contractor, Sub-Contractors, and others directly concerned, after award of the contract and prior to commencement of construction, for discussion of the project, contract documents, scheduling, and for resolving questions concerning project execution and administration as required.

- (c) **Project Meetings.** Meetings shall be held at periodic intervals throughout the construction contract period for discussion of matters pertinent to the execution and administration of the project. The Regional Engineer, Construction Engineer, Construction Supervisor, Inspector, Contractor and/or its Superintendent, Subcontractors, Project Foremen, as required, and others directly concerned, as necessary, shall attend the meetings.

## **5.0 AUTHORITY & DUTIES OF INSPECTORS**

- 5.1** The Inspector, as the Regional Engineer's authorized representative, is authorized to make minor field changes to the plans and specifications that do not involve an increase or decrease in the contract sum or an increase or decrease in the contract time. The Inspector shall be authorized to inspect all work done, all material furnished, payroll records of personnel, material invoices and relevant data and records of the work, and the preparation, fabrication, or manufacture of the materials to be used. The Inspector is not authorized to revoke, alter, or waive any requirements of the plans and specifications that result in an increase or decrease in the amount of compensation due the Contractor or an increase or decrease in the contract time. The Inspector is authorized to call to the attention of the Contractor any failure of the work or materials to conform to the plans and specifications. The Inspector shall have the authority to reject materials or suspend the work until any questions at issue can be referred to and decided by the Regional Engineer.
- 5.2** The Inspector shall in no case act as foreman or perform other duties for the Contractor, nor interfere with the management of the work by the Contractor. Any advice which the Inspector may give the Contractor shall in no way be construed as binding the Regional Engineer in any way, or releasing the Contractor from fulfilling all of the terms of the contract.
- 5.3** If a problem arises that that the contractor will not correct and the Contractor refuses to suspend operations on verbal order, the Inspector shall issue a written order giving the reason for ordering the work to stop. After placing the order in the hands of the person in charge, the Inspector shall immediately leave the job, and the Contractor shall cease all operations.

## ARTICLE III - GENERAL REQUIREMENTS

### 6.0 SHOP DRAWINGS, PRODUCT DATA, SAMPLES

#### 6.1 Definitions.

- (a) "Shop drawings" are drawings, diagrams, schedules, and other data, prepared for the project by the Contractor, Sub-contractor, manufacturer, or supplier, to illustrate and/or install some portion of the work.
- (b) "Product data" are illustrative data, brochures, schedules, catalog cuts, charts, informative material and specifications to illustrate materials, articles, items, or products for use in some portion of the work.
- (c) "Samples" are physical examples which show and illustrate materials, finishes, equipment or workmanship of products proposed for use in some portion of the work.

#### 6.2 Submittals.

- (a) The Contractor shall review, approve, and submit to the Regional Engineer with reasonable promptness, and in such sequence to cause no delay in the work, all shop drawings, product data, and samples required by the contract documents.
- (b) No shop drawings, product data, or samples shall be submitted to the Regional Engineer except by the Contractor, who shall, before submission, verify all materials, check all details, measurements, verify all field measurements and field construction conditions, and other job coordination requirements. Upon review, check, and approval by the Contractor, the Contractor shall place its stamp of approval thereon before submitting to the Regional Engineer.
- (c) The Contractor shall not be relieved of responsibility for any deviation from the requirements of the contract documents by the Regional Engineer's approval of shop drawings, product data, or samples, nor shall it be relieved of responsibility for errors or omissions therein.
- (d) Shop drawings, product data, and samples shall be submitted in sufficient number for all approvals, with a minimum of two (2) copies or samples being retained by the Regional Engineer, and a number of copies and samples being retained by the Contractor as required for the execution of its work.

## ARTICLE III - GENERAL REQUIREMENTS

- (e) No portion of the work requiring submission of a shop drawing, product data, or sample shall be commenced until the submittal has been approved by the Regional Engineer. All such portions of the work shall be in accordance with approved submittals.
- (f) Shop drawings, product data, and samples shall be submitted for work, systems, articles, items, and equipment as specified. Other additional shop drawings, product data, and samples as may be requested for the work by the Regional Engineer shall be submitted to him/her for approval.

### 7.0 MEASUREMENTS, MANUFACTURER'S DIRECTIONS

#### 7.1 Measurements.

Before ordering any material, product, article, or doing any work, the Contractor shall take all necessary measurements at the project and shall be responsible for the correctness of same. No extra charge or compensation will be allowed on account of differences between actual dimensions and the dimensions indicated on the drawings. The Regional Engineer shall be notified of any differences found and work shall not proceed thereon until the Regional Engineer has rendered a decision.

#### 7.2 Manufacturers' Directions.

All manufactured articles, items, products, material, and equipment shall be applied, installed, connected, erected, used, cleaned, conditioned and put into operation or use as directed by the manufacturer's printed instructions, unless specified otherwise herein. The Contractor shall be responsible for obtaining all such instructions.

#### 7.3 Measurement of Quantities.

The Contractor shall be responsible for providing all necessary volumetric and weight measurement equipment necessary to measure quantities accurately for payment of contract unit items, and said equipment shall be subject to the Regional Engineer's approval. Volume and weight measurements shall be submitted to the Regional Engineer for approval.

### 8.0 LINES, LEVELS, GRADES, LAYOUT

#### 8.1 Lines, Levels, Grades.

- (a) Control points have been established in the field and are shown on the plans whereby the Contractor can properly control the work contracted for under these specifications. Such stakes and markings which the Engineer may have set for either his/her own guidance shall be scrupulously preserved by the Contractor, or its employees.

## ARTICLE III - GENERAL REQUIREMENTS

If any action by the Contractor should result in the destruction of such stakes or markings, an amount equal to the cost of replacing same may be deducted from subsequent estimates due the Contractor at the discretion of the Construction Supervisor. The Contractor shall satisfy itself as to the accuracy of all measurements before constructing any permanent structure and shall not take advantage of any errors which may have been made in laying out the work. Should any discrepancies become evident between the plans and the Contractor's field survey, the Contractor shall immediately notify the Inspector. If these discrepancies will create a change in any item in the Contractor's accepted final bid, the DEP reserves the right to re-design or negotiate. Should the Contractor fail to make notification of these discrepancies, DEP will not be held liable for any changes in the original quantities.

- (b) The Contractor shall make all field measurements necessary for its work and shall be responsible for the accuracy of all dimensions, lines, levels, and grades. If a survey is required, it shall be performed at the expense of the Contractor. All survey work shall be performed by a West Virginia Licensed Land Surveyor who shall certify as to the accuracy of the survey to DEP.

### 9.0 DOCUMENTS, SHOP DRAWINGS, ETC., AT THE SITE

- 9.1 The Contractor shall maintain at the project site for DEP one (1) record copy of all drawings, specifications, addenda, change orders, and other modifications, in good order, marked currently to record all changes made during construction, and all approved shop drawings, product data, and samples, properly filed and referenced. All such documents and samples shall be delivered to the Construction Supervisor upon completion of the work.
- 9.2 The Contractor shall furnish the Inspector in writing two (2) sets of daily reports showing all personnel (by classification), equipment, and tools engaged in the work, for use in accounting records.
- 9.3 The Contractor shall be responsible for submitting a daily activity summary which shall be used to report progress of the various construction activities performed at the subject site. The summary report shall be submitted to the Inspector on a weekly basis on the prescribed forms. Processing invoices may be delayed if summary reports are not submitted.

### 10.0 STORAGE OF MATERIALS

- 10.1 The Contractor, under and with the approval, supervision, and direction of DEP, shall assume full charge of the area or areas of the project premises allocated for the storage of materials and equipment as required, allocating the necessary site space to any sub-contractor(s) for storage sheds and space for the storage of materials and equipment. Such arrangement of storage facilities

## ARTICLE III - GENERAL REQUIREMENTS

shall be orderly, convenient, shall not obstruct movement on the site, the work of others, or construction operations. All storage sheds, enclosures, and facilities shall fully protect the stored materials. The Contractor shall arrange with appropriate landowner(s) for any storage areas located outside of the project limits and such storage areas shall also be subject to DEP's approval.

- 10.2 All materials subject to damage by moisture, water, or weather shall be fully protected. All flammable, toxic, and explosive materials shall be safely stored in conformity with applicable safety requirements of State and Federal regulations and safety standards of the National Fire Protection Association.

### 11.0 PROTECTION OF WORK; DAMAGES

#### 11.1 Protection and Replacement of Work.

- (a) The Contractor shall protect its work from damage of any kind until completion of construction. Each contractor or sub-contractor shall adequately protect all preceding work from damage caused by it or its work. Should any part of the construction be subject to freezing or exposure to the elements, the same shall be fully protected to prevent damage.
- (b) The Contractor and each sub-contractor shall provide protection against weather, frost, freezing, storms, and heat, to maintain all work, materials, installations, and equipment safe from injury and damage. The Contractor shall provide temporary covering and closures in the construction as required to protect it from damage by weather, until permanent construction provides such protection.
- (c) Damaged or defective work must be replaced; all other work injured or damaged in the replacing of such work or in any way incidental thereto must be brought back to its original condition or replaced by the Contractor performing the work, without additional cost to DEP.

#### 11.2 Damages to Existing Work.

All masonry damage, glass breakage, and other damage caused to existing buildings and appurtenances by the Contractor or by other contractors in the performance of work shall be properly replaced or repaired at the option of DEP, without additional cost to DEP.

### 12.0 TEMPORARY FACILITIES

#### 12.1 Utilities

- (a) General. All concerned with providing temporary utilities for use on the project are advised to determine locations of sources of supply and the conditions under which services can be brought to points of use on the site.



### ARTICLE III - GENERAL REQUIREMENTS

- (b) **Drinking Water.** The Contractor shall arrange for drinking water and containers to be provided on the site.
- (c) **Utility Connections.** The Contractor is to furnish power, gas, compressed air and any other utilities required for its own use during construction. The Contractor shall remove all temporary wiring, switches, lights, piping and connections to service facilities used during construction. Such connections shall not be made without approval of the Inspector.
- (d) **Temporary Supports.** The Contractor shall provide such temporary supports as may be required during construction, including those necessary to ensure the stability of the proposed excavation.
- (e) **Equipment.** The Contractor shall furnish all special apparatuses, welding machines, air compressors, hoisting equipment, tools, implements, cartage, scaffolding, ladders, planks, acetylene gas, oxygen gas, expendable materials, temporary light and heat, construction materials, shims and all other materials that may be required for the proper execution of the work.
- (f) **Temporary Buildings.** The Contractor will furnish, place, and equip, at its own expense, and as it deems necessary, any portable construction building(s) such as a trailer, storage sheds or chemical sanitary facilities. These portable facilities must be within the designated project limits; otherwise, the Contractor is solely responsible for making necessary arrangements with the proper landowner when the buildings are set up outside of the project limits. The type and number of buildings are subject to the approval of the Inspector. All written instructions, orders, and other communication delivered to the temporary construction office set up on the site shall be considered as having been delivered to the Contractor itself. The Contractor shall provide and pay for its own fire protection, watchman, temporary utility hookups, etc. The Contractor will promptly remove from the project any office facilities, equipment or materials when so instructed by the Inspector.
- (g) **Sanitation Facilities.** The Contractor shall provide and pay for adequate temporary toilet facilities for personnel during the project construction period. Toilets shall be of types approved by DEP and the State Division of Health, and situated only in approved locations. The Contractor shall be responsible for operation and sanitary maintenance of the temporary toilets and shall have them removed upon completion of construction.

## ARTICLE III - GENERAL REQUIREMENTS

### 13.0 CONSTRUCTION SIGN

#### 13.1 Work Required.

The work to be performed under this Section consists of providing all labor, material and equipment necessary to install a project sign as indicated on the detail included herein and as specified herein.

#### 13.2 Materials.

- (a) Sign face shall be 3/4" Marine Exterior plywood or aluminum composite material. Posts and cross-brace shall be No. 2 Grade Pine or Fir, kiln dried and pressure treated.
- (b) Hardware:
  - (1) All hardware shall be manufactured from good, commercial-quality material and meet all applicable ASTM standards.
  - (2) Spikes and nails shall be common wire-type and shall meet AISI steel specifications 1010 or 1020.
  - (3) All hardware shall be hot-dip galvanized in accordance with ASTM A-153.

#### 13.3 Execution.

- (a) Project Sign. The sign board shall be cut to the dimensions shown on the detail herein. The sign shall be painted with one (1) coat of primer and two (2) coats of white enamel. All exterior cut edges shall be smooth sanded prior to painting. All edges shall be double primed. The letters, border and strips shall be painted as shown on the detail drawing. Posts and cross-brace shall be painted with two (2) finished coats of brown enamel.

The Contractor shall bolt the sign to posts and provide required cross-bracing. The posts and sign shall be erected and posts set in gravel base, as shown on the drawings. One (1) sign is required and is to be located at the discretion of the Inspector.

- (b) Payment. Payment for the work which shall include installation of the project sign shall be part of the lump-sum bid for "Mobilization".



Earl Ray Tomblin  
Governor



Randy C. Huffman  
Cabinet Secretary

**AML**

Robert Rice  
Chief

# STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION

## Office of Abandoned Mine Lands & Reclamation

Project Cost: \$XXX,XXX.00

Funding: US Department of the Interior – OSM with fees paid by the Coal Industry

<p>Project Name: DEP#</p>	<p>Contractor: Joe Smith Contracting</p>	<p>Project Start Date: 01/01/01</p>
-------------------------------	--	-------------------------------------



77 1/4"

1 1/2"

17 1/4"

1 1/8"

15 3/4"



# STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION

27 3/4"

7 7/8"

Earl Ray Tomblin  
Governor

## Office of Abandoned Mine Lands & Reclamation

3 3/4"



Project Cost: \$XXX,XXX.00  
Funding: US Department of the Interior – OSM with fees paid by the Coal Industry

7 7/8"

Randy C. Huffman  
Cabinet Secretary

Project Name:  
DEP#

18"

3"



8 5/8"

Robert Rice  
Chief

Contractor: Joe Smith Contracting

Project Start Date: 01/01/01

2 1/4"

73 7/8"

48"

6"

36"

36"

6"

96"



STATE OF WEST VIRGINIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
Office of Abandoned Mine Lands & Reclamation

Earl Ray Tomblin  
Governor

Project Cost: \$XXX,XXX.00

Funding: US Department of the Interior – OSM with fees paid by the Coal Industry



Randy C. Huffman  
Cabinet Secretary

**AML**

Robert Ride  
Chief

Project Name:  
DEP#  
Contractor: Joe Smith Contracting  
Project Start Date: 01/01/01

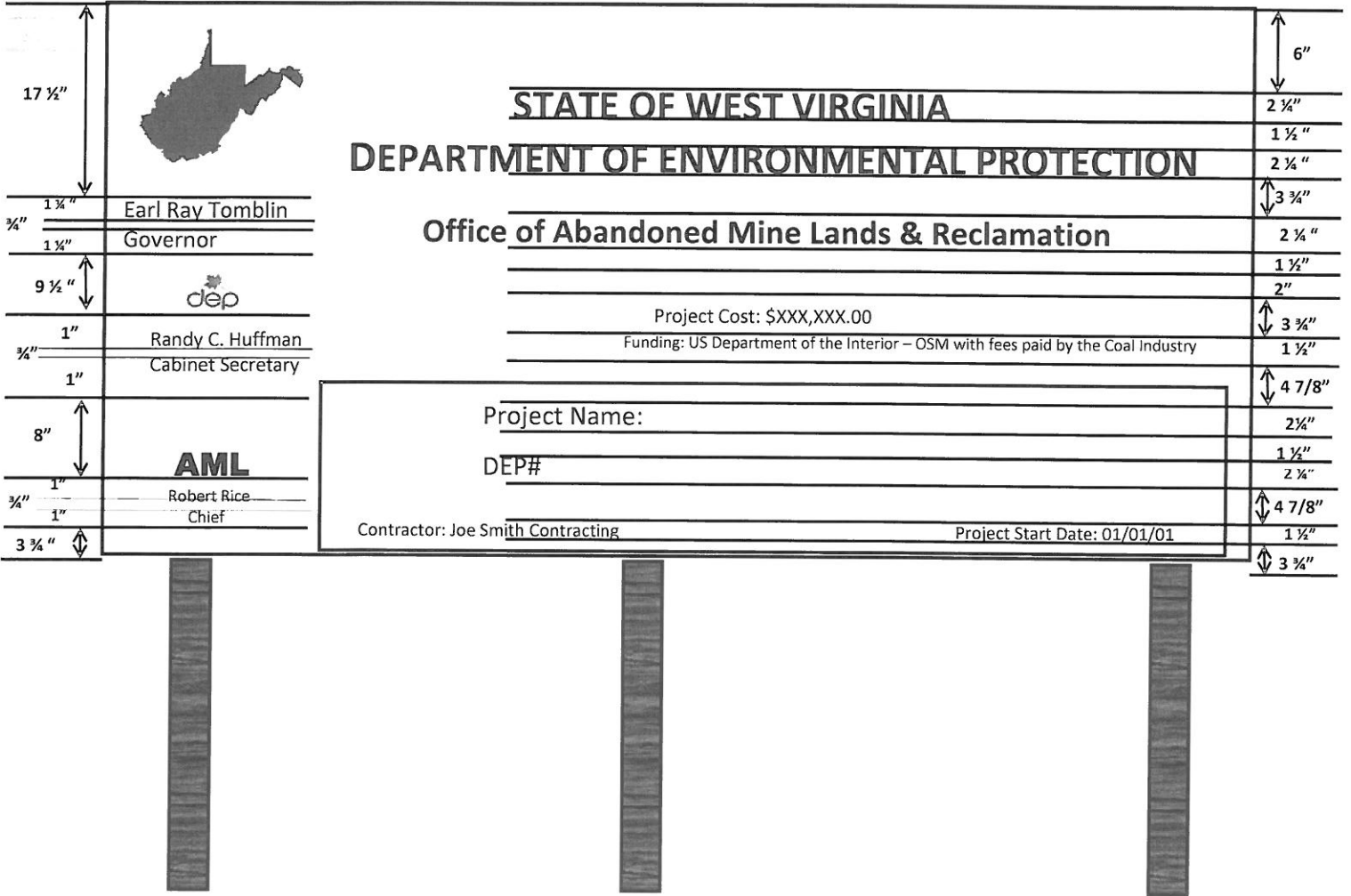
48"

5 1/4"

7 7/8"

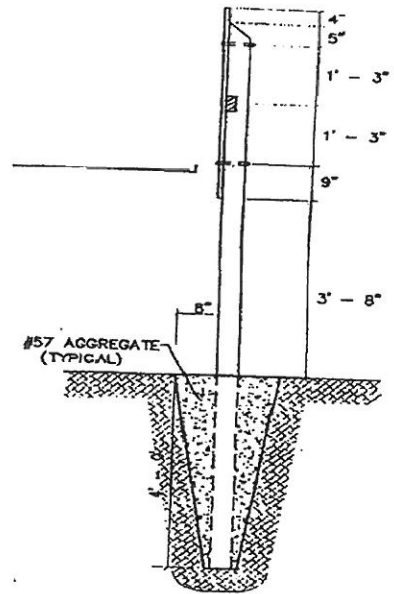
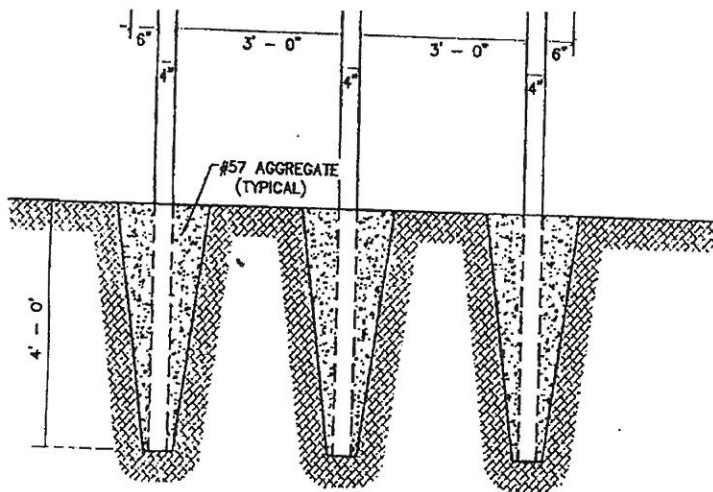
9 3/8"

81 3/8"



**Notes:**

1. Sign board to be  $\frac{3}{4}$ " by 4'X 8' marine plywood.
2. Sign board color is to be white and letter colors are to be dark green and sized as shown on the detail.
3. 2"X 4" treated cross brace let into posts.
4. Mount sign to posts using  $\frac{3}{8}$ "X 5" galvanized carriage bolt.
5. Posts are to be treated 4"X 4"X 12' and panted brown.
6. Location determined by WVDEP.



## ARTICLE III - GENERAL REQUIREMENTS

### 14.0 CLEANING & FINAL CLEAN-UP

#### 14.1 Housekeeping - Periodic Cleaning.

The Contractor shall at all times keep the construction site free of accumulations of waste materials and rubbish caused by its operations. Periodically during the progress of the work, and also when directed to do so by DEP, the Contractor shall remove, or cause to be removed by sub-contractors responsible, accumulated waste materials, rubbish, and debris, and leave the construction area in good order.

#### 14.2 Final Clean-Up.

The Contractor at all times shall dispose of all debris and waste resulting from work at the Contractor's dump site. The Contractor shall not put or spill any materials into any drainage system which would pollute area streams or waterways. The Contractor shall be liable for any stream pollution caused directly or indirectly by its own employees or those of its sub-contractors.

#### 14.3 Final.

Should disputes arise between Contractor and separate contractors, or sub-contractors as to responsibilities for cleaning-up, and refusals to do so result therefrom, DEP may hold final payment until the cleanup work is completed.

### 15.0 TESTING.

#### 15.1 When Testing Required.

Testing shall be performed as required by the specifications or ordered by the Regional Engineer. The Regional Engineer will determine the need, location, extent, and time of any testing herein specified, or in addition to that which is herein specified.

#### 15.2 Payment for Testing.

The Contractor shall select an independent testing laboratory or utilize a laboratory run by the Contractor, to perform all testing for compaction, concrete, and soils as specified herein. All laboratory reports must be signed by a registered civil professional engineer. The Contractor shall be responsible for testing payments as an incidental to the various items of the bid schedule. If the Contractor allows work to proceed beyond a testing point resulting in the disassembly of structures or the uncovering of work for testing, payment for such will be the responsibility of the Contractor at no extra cost to DEP.



## ARTICLE III - GENERAL REQUIREMENTS

### 16.0 PROJECT COMPLETION - CERTIFICATES

- 16.1 All certificates of testing, quality, compliance, and performance, as required, requested, and/or specified, shall be delivered to DEP upon delivery or completion of the work covered by the certificates.
- 16.2 All certificates of approval, compliance, and completion as required by codes, inspection and regulatory agencies, and local, State and Federal governmental authorities, shall be delivered to DEP upon completion of the work and inspections covered by such certificates.
- 16.3 The contractor shall submit to the WVDEP as built drawings certified by a Licensed Land Surveyor identifying all changes occurring on the project. The drawings shall be of professional quality. Unsuitable drawings will be returned for revisions. These drawings shall be approved by WVDEP prior to scheduling a Final Inspection.

**DEPARTMENT OF ENVIRONMENTAL PROTECTION  
OFFICE OF ABANDONED MILE LANDS & RECLAMATION**

Report for Week Ending: \_\_\_\_\_ Project Name: \_\_\_\_\_  
By: \_\_\_\_\_ Location: \_\_\_\_\_  
Title: \_\_\_\_\_ Contractor: \_\_\_\_\_

Daily Activity Summary

<b>Sunday</b>	
<b>Monday</b>	
<b>Tuesday</b>	
<b>Wednesday</b>	
<b>Thursday</b>	
<b>Friday</b>	
<b>Saturday</b>	

**DEPARTMENT OF ENVIRONMENTAL PROTECTION  
OFFICE OF ABANDONED MILE LANDS & RECLAMATION**

Weekly Quantity Summary

Report By: \_\_\_\_\_

For Week Ending: \_\_\_\_\_

Pay Item	Units	Quantity Performed

Attach any sheets applicable to this weeks work and check appropriate box.

Change Orders   
 Test Results   
 Other (explain)

Field Changes   
 Explanation of work stoppages not due to weather

**ARTICLE IV – SPECIAL CONDITIONS**

## ARTICLE IV - SPECIAL CONDITIONS

### Sections Included:

- 1.0 Use of Minority, Women's, & Small Business Enterprises
- 2.0 Erosion & Sediment Control
- 3.0 Debarment and Suspension Requirements
- 4.0 Certification Regarding Lobbying

## ARTICLE IV - SPECIAL CONDITIONS

### 1.0 USE OF MINORITY, WOMEN'S, & SMALL BUSINESS ENTERPRISES

- 1.1 Should the Contractor intend to sublet a portion of the work on this project, it shall seek out and consider minority, women's, and small business enterprises as potential sub-contractors. The Contractor shall contact minority, women's, and small businesses to solicit their interest, capability, and prices, and shall retain proper documentation to substantiate such contacts.
- 1.2 The Contractor will sign and provide the enclosed Minority, Women's and Small Business Affirmative Action Certification to DEP along with the name(s) of any subcontractor(s) it submits for approval.

**WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION  
CONSTRUCTION CONTRACTOR'S  
MINORITY, WOMEN'S AND SMALL BUSINESS  
AFFIRMATIVE ACTION CERTIFICATION**

We, \_\_\_\_\_, the undersigned, Construction Contractor on the Abandoned Mine Lands & Reclamation construction contract herein, intending to sub-contract a part of our contract work under Requisition No. \_\_\_\_\_, hereby certify as follows:

- 1) We will include qualified small, minority and women's businesses on solicitation lists;
- 2) We will assure that small, minority and women's businesses are solicited whenever they are potential sources;
- 3) We will, when economically feasible, divide total requirements into smaller tasks or quantities so as to permit maximum small, minority and women's business participation.
- 4) Where our requirements permit, we will establish delivery schedules which will encourage participation by small, minority and women's businesses.
- 5) We will utilize the services and assistance of the Small Business Administration, the Office of Minority Business Enterprise of the Department of Commerce and the Community Services Administration as required.

We understand that we may obtain the information required under the foregoing provisions from the Governor's Office of Community & Industrial Development's Small Business Development Center, 1115 Virginia Street, East, Charleston, West Virginia 25301, Phone 304/348-2960.

- 6) We will submit this certification to the Construction Supervisor when we submit proposed subcontractors for approval.
- 7) We agree that all documentation relative to affirmative action taken by us to seek out and consider the use of minority, women's and small business enterprises as sub-contractors shall be made available for inspection by representatives of the West Virginia Department of Environmental Protection and the U.S. Office of Surface Mining Reclamation and Enforcement;
- 8) This certification is an integral part of our proposal for the construction contract.

Signed this \_\_\_\_ day of \_\_\_\_\_, 20\_\_ .

\_\_\_\_\_  
Signature of Authorized Representative

\_\_\_\_\_  
Title

## ARTICLE IV - SPECIAL CONDITIONS

### 2.0 EROSION & SEDIMENT CONTROL

The manual entitled "West Virginia Department of Environmental Sediment Control Design Manual BMP", 2006, is incorporated herein by reference as a guide for erosion and sediment control, except that where any provision of said manual is in conflict with any special erosion and sediment control provision set out and contained in this specification book and/or in the plans for this project, the plans and/or specification book shall prevail and be followed.



## DISCLOSURE OF LOBBYING ACTIVITIES

Complete this form to disclose lobbying activities pursuant to 31 U.S.C. 1352

Approved by OMB

0348-0046

(See reverse for public burden disclosure.)

<b>1. Type of Federal Action:</b> <input type="checkbox"/> a. contract <input type="checkbox"/> b. grant <input type="checkbox"/> c. cooperative agreement <input type="checkbox"/> d. loan <input type="checkbox"/> e. loan guarantee <input type="checkbox"/> f. loan insurance	<b>2. Status of Federal Action:</b> <input type="checkbox"/> a. bid/offer/application <input type="checkbox"/> b. initial award <input type="checkbox"/> c. post-award	<b>3. Report Type:</b> <input type="checkbox"/> a. initial filing <input type="checkbox"/> b. material change <b>For Material Change Only:</b> year _____ quarter _____ date of last report _____
<b>4. Name and Address of Reporting Entity:</b> <input type="checkbox"/> Prime <input type="checkbox"/> Subawardee Tier _____, <i>if known</i> :  Congressional District, <i>if known</i> : 4c		<b>5. If Reporting Entity in No. 4 is a Subawardee, Enter Name and Address of Prime:</b>   Congressional District, <i>if known</i> :
<b>6. Federal Department/Agency:</b>	<b>7. Federal Program Name/Description:</b>  CFDA Number, <i>if applicable</i> : _____	
<b>8. Federal Action Number, if known:</b>	<b>9. Award Amount, if known:</b> \$ _____	
<b>10. a. Name and Address of Lobbying Registrant</b> <i>(if individual, last name, first name, MI):</i>	<b>b. Individuals Performing Services</b> <i>(including address if different from No. 10a)</i> <i>(last name, first name, MI):</i>	
<b>11.</b> Information requested through this form is authorized by title 31 U.S.C. section 1352. This disclosure of lobbying activities is a material representation of fact upon which reliance was placed by the tier above when this transaction was made or entered into. This disclosure is required pursuant to 31 U.S.C. 1352. This information will be available for public inspection. Any person who fails to file the required disclosure shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.	Signature: _____ Print Name: _____ Title: _____ Telephone No.: _____ Date: _____	
<b>Federal Use Only:</b>		Authorized for Local Reproduction Standard Form LLL (Rev. 7-97)

## INSTRUCTIONS FOR COMPLETION OF SF-LLL, DISCLOSURE OF LOBBYING ACTIVITIES

This disclosure form shall be completed by the reporting entity, whether subawardee or prime Federal recipient, at the initiation or receipt of a covered Federal action, or a material change to a previous filing, pursuant to title 31 U.S.C. section 1352. The filing of a form is required for each payment or agreement to make payment to any lobbying entity for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with a covered Federal action. Complete all items that apply for both the initial filing and material change report. Refer to the implementing guidance published by the Office of Management and Budget for additional information.

1. Identify the type of covered Federal action for which lobbying activity is and/or has been secured to influence the outcome of a covered Federal action.
2. Identify the status of the covered Federal action.
3. Identify the appropriate classification of this report. If this is a followup report caused by a material change to the information previously reported, enter the year and quarter in which the change occurred. Enter the date of the last previously submitted report by this reporting entity for this covered Federal action.
4. Enter the full name, address, city, State and zip code of the reporting entity. Include Congressional District, if known. Check the appropriate classification of the reporting entity that designates if it is, or expects to be, a prime or subaward recipient. Identify the tier of the subawardee, e.g., the first subawardee of the prime is the 1st tier. Subawards include but are not limited to subcontracts, subgrants and contract awards under grants.
5. If the organization filing the report in item 4 checks "Subawardee," then enter the full name, address, city, State and zip code of the prime Federal recipient. Include Congressional District, if known.
6. Enter the name of the Federal agency making the award or loan commitment. Include at least one organizational level below agency name, if known. For example, Department of Transportation, United States Coast Guard.
7. Enter the Federal program name or description for the covered Federal action (item 1). If known, enter the full Catalog of Federal Domestic Assistance (CFDA) number for grants, cooperative agreements, loans, and loan commitments.
8. Enter the most appropriate Federal identifying number available for the Federal action identified in item 1 (e.g., Request for Proposal (RFP) number; Invitation for Bid (IFB) number; grant announcement number; the contract, grant, or loan award number; the application/proposal control number assigned by the Federal agency). Include prefixes, e.g., "RFP-DE-90-001."
9. For a covered Federal action where there has been an award or loan commitment by the Federal agency, enter the Federal amount of the award/loan commitment for the prime entity identified in item 4 or 5.
10. (a) Enter the full name, address, city, State and zip code of the lobbying registrant under the Lobbying Disclosure Act of 1995 engaged by the reporting entity identified in item 4 to influence the covered Federal action.  
  
(b) Enter the full names of the individual(s) performing services, and include full address if different from 10 (a). Enter Last Name, First Name, and Middle Initial (MI).
11. The certifying official shall sign and date the form, print his/her name, title, and telephone number.

According to the Paperwork Reduction Act, as amended, no persons are required to respond to a collection of information unless it displays a valid OMB Control Number. The valid OMB control number for this information collection is OMB No. 0348-0046. Public reporting burden for this collection of information is estimated to average 10 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0046), Washington, DC 20503.

**ASSURANCE REQUIREMENT REGARDING EQUAL EMPLOYMENT OPPORTUNITY  
FOR VENDORS, SUPPLIERS AND CONTRACTORS ENGAGED IN  
COMMERCIAL TRANSACTIONS WITH  
THE WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION**

We, \_\_\_\_\_, the undersigned, desiring to avail ourselves of the benefits of engaging in commercial transactions with the West Virginia Department of Environmental Protection, hereby agree that:

- 1) All employment and personnel practices under this contract, Requisition No. \_\_\_\_\_, will be conducted without regard to race, sex, religion or national origin;
- 2) We will include in all recruitment advertisements the following wording:  
"An Equal Opportunity Employer"; and
- 3) We will provide the Chief of the Abandoned Mine Lands and Reclamation Division or his/her authorized representative, upon request, documentation that will enable him/her to judge the extent of our compliance with the requirements of Governor's Executive Order No. 4-65, of December 15, 1965.

Signed this \_\_\_\_ day of \_\_\_\_\_, 20\_\_.

\_\_\_\_\_  
Signature of Authorized Representative

\_\_\_\_\_  
Title

## ARTICLE IV - SPECIAL CONDITIONS

### **3.0 GOVERNMENT-WIDE DEBARMENT & SUSPENSION REQUIREMENTS**

#### **U. S. Department of the Interior**

#### **Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion**

#### **Lower Tier Covered Transactions**

---

- 1.** By signing and submitting this proposal, the prospective lower tier participant is providing the certification set out below.
- 2.** The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.
- 3.** The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
- 4.** The terms "covered transaction," "debarred", "suspended", "ineligible", "lower tier covered transaction", "participant", "person", "primary covered transaction", "principal", "proposal", and "voluntarily excluded", as used in this clause, have the meanings set out in the Definitions and Coverage sections of the rules implementing Executive Order 12549. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations.
- 5.** The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction originated.
- 6.** The prospective lower tier participant further agrees by submitting this proposal, that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
- 7.** A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the Non procurement List (Tel.#).
- 8.** Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- 9.** Except for transactions authorized under paragraph 6 of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

**U. S. Department of the Interior**  
**Certification Regarding**  
**Debarment, Suspension, Ineligibility and**  
**Voluntary Exclusion**

**Lower Tier Covered Transactions**

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This certification is required by the regulations implementing Executive Order 12549, Debarment and Suspension, 43 CFR Part 12, Section 12.510, Participants' responsibilities. The regulations were published as Part VII of the May 26, 1988 Federal Register (pages 19160-19211). For assistance in obtaining a copy of the regulations, contact the U.S. Department of the Interior, Acquisition and Assistance Division, Office of Acquisition and Property Management, 18th and C Streets, N.W., Washington D.C. 20240.

(1) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

(2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

---

Name and Title of Authorized Representative

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Signature

---

Date

## ARTICLE IV - SPECIAL CONDITIONS

### Instructions for Certification Regarding Lobbying

1. This certification and a disclosure form should be filed by each person as required, with each submission that initiates agency consideration of such person for: (1) award of a Federal contract, grant, or cooperative agreement exceeding \$100,000 or (2) an award of a Federal loan or a commitment providing for the United States to insure or guarantee a loan exceeding \$150,000.
2. This certification and a disclosure form should be filed by each person as required, upon receipt by such person of (1) a Federal contract, grant, or cooperative agreement exceeding \$100,000, or (2) a Federal loan or a commitment providing for the United States to insure or guarantee a loan exceeding \$150,000, unless such person previously filed a certification, and a disclosure form, if required, at the time agency consideration was initiated.
3. Any person who requests or receives from a person referred to in paragraphs (1) and (2) above: (1) a subcontract exceeding \$100,000 at any tier under a Federal contract; (2) a subgrant, contract, or subcontract exceeding \$100,000 at any tier under a Federal grant; (3) a contract or subcontract exceeding \$100,000 at any tier under a Federal loan exceeding \$150,000; or (4) a contract or subcontract exceeding \$100,000 at any tier under a Federal cooperative agreement, shall file a certification, and a disclosure form, as required, to the next tier above.
4. All disclosure forms, but not certifications, shall be forwarded from tier to tier until received by the person referred to in paragraphs(1) or (2) above. That person shall forward all disclosure forms to the appropriate Bureau/Office within the Department of the Interior.
5. Any certification or disclosure form filed under paragraph (4) above shall be treated as a material representation of fact upon which all receiving tiers shall rely. All liability arising from an erroneous representation shall be borne solely by the tier filing that representation and shall not be shared by any tier to which the erroneous representation is forwarded. Submitting an erroneous certification or disclosure constitutes a failure to file the required certification or disclosure, respectively. If a person fails to file a required certification or disclosure, the United States may pursue all available remedies, including those authorized by Section 1352, title 31, U.S. Code.

**U. S. Department of the Interior  
CERTIFICATION REGARDING LOBBYING**

---

**This certification is required by Section 1352, title 31, U. S. Code, entitled "Limitation on use of appropriated funds to influence certain Federal contracting and financial transactions."**

**(BEFORE COMPLETING CERTIFICATION, READ INSTRUCTIONS ON REVERSE)**

**Certification for Contracts, Grants, Loans, and Cooperative Agreements**

---

**The undersigned certifies, to the best of his or her knowledge and belief, that:**

**(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, and officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.**

**(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions. To obtain a Standard Form LLL, contact DEP or the U.S. Office of Surface Mining, 603 Morris Street, Charleston, WV 25301, phone number 347-7158.**

**(3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify accordingly.**

**This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.**

**Signature \_\_\_\_\_ Date \_\_\_\_\_**

**ARTICLE V - WAGE AND HOUR INFORMATION**



# **PREVAILING WAGE RATES**

**can be obtained by contacting:**

**WV Division of Labor  
Capitol Complex  
Bldg. 6, Room 749B  
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**ARTICLE VI - CONSTRUCTION SPECIFICATIONS**

# **SPECIFICATIONS**

## **Hopewell Church Refuse & Drainage**

**WVDEP # 16074**

**Preston County  
West Virginia**

**West Virginia Department of Environmental Protection**

**Office of Abandoned Mine Lands and Reclamation**

**Project No. 13100047MOR**

**October 2014**

**SPECIFICATIONS**

**FOR:**

**HOPEWELL CHURCH REFUSE & AMD**

**PRESTON COUNTY**

**WEST VIRGINIA**

**SUBMITTED TO:**

**WEST VIRGINIA DIVISION OF ENVIRONMENTAL PROTECTION**

**ABANDONED MINE LANDS AND RECLAMATION SECTION**

**101 Cambridge Place**

**BRIDGEPORT, WEST VIRGINIA 26330**

**SUBMITTED BY:**

**CTL ENGINEERING OF WEST VIRGINIA, INC.**

**733 FAIRMONT ROAD**

**MORGANTOWN, WEST VIRGINIA 26501**

**October 2014**

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Contractor's Bid Sheet  
Engineer's Estimate

## **DIVISION I: SPECIAL PROVISIONS**

### **1. LOCATION AND SITE DESCRIPTION**

The project shall consist of sealing mine portals with wet mine seals, regrading mine spoil piles and soil capping, removing abandoned structures and garbage, constructing drainage structures and re-vegetating.

#### **Directions to site:**

At junction of I-79 (exit 148) and I-68 take I-68 East 1.1 miles to Exit 1 turn onto US 119 South, follow US 119 South for 7.4 miles to Gladesville Road turn left onto Gladesville Road, follow Gladesville Road 6.3 miles to WV 92, turn right onto WV 92 for 2.4 miles, then turn left onto Irish Ridge Road (CR 58). Travel about 150 feet then bear left onto Pell Road (CR 58/2). Continue for 0.9 miles, past the AML doser station on the right, then turn right at the cemetery. Travel 0.2 mile, thru a metal gate, to the site along both sides of the road.

### **2. REFERENCE AND SPECIFICATIONS**

All reference to the "**Department**" or "**WVDEP**" shall mean the West Virginia Department of Environmental Protection, Office of Abandoned Mine Lands and Reclamation Representative.

All references to "**ASTM**" shall mean the American Society for Testing and Material Specifications, Latest Edition.

All references to "**AASHTO**" shall mean the Standard Specifications for Transportation Materials and Methods of Sampling and Testing by the American Association of State Highway and Transportation Officials, July 1992.

All references to "**ACI**" shall mean the American Concrete Institute Publications, Latest Edition.

All references to "**ASA**" shall mean the American Standards Association

All references to "**AWWA**" shall mean the American Water Works Association

All references to "**WVDOT**" shall mean the West Virginia Department of Transportation, Division of Highways Standard Specifications for Roads and Bridges, Adopted 2000.

All references to “**Contractor**” shall mean the successful bidder and/or firm or corporation undertaking the execution of the work under the terms of these plans and specifications.

All references to “**EPA**” shall mean the United States Environmental Protection Agency Publication EPA-600/2-76-184.

All references to “**OSMRE**” shall mean the United States Department of Interior, Office of Surface Mining.

All references to “**HMA**” shall mean Hot Mix Asphalt according to Section 400 of the Standard Specifications for Roads and Bridges, Adopted 2000.

All references to “**NEPA**” shall mean the National Environmental Policy Act

### **3. SCOPE OF WORK**

The scope of work covered by the special provisions, technical specifications and construction plans consists of furnishing all labor, plant, power, equipment and supplies and performing all necessary operations safely for the completion of the project as designed. The Contractor shall perform all operations necessary for:

- Construct and install erosion and sediment control.
- Clearing and Grubbing of site.
- Remove and properly dispose of all trash and waste.
- Install five mine seals using horizontal bores.
- Regrade refuse piles and cap with borrowed soil on site.
- Drainage structures to include rip rapped ditches and piping.
- Re-vegetation of site to include placement of lime, fertilizer, seed and mulch to establish vegetative cover to all disturbed areas.

The Contractor also shall be responsible for surveying, including establishing construction baseline, measuring and developing all completed quantities on the job, and for ordering, purchase and delivery of any and all materials required for construction or required for development of support areas. The Contractor shall perform all other operations as incidental to the program as specified herein.



**4. BIDDERS TO EXAMINE LOCATION**

Prospective bidders are required to examine the locations of the proposed work and to determine, each in their own way, the difficulties which may be encountered in the prosecution of the same. The submission of a bid shall be prima facie evidence that such examination and determinations have been made by the Bidder. No claims for additional compensation will be considered by WVDEP based on obstruction or conditions at the location of the work, which may add to the difficulties or costs of construction, even though such obstructions or conditions are not shown on the contract plans or indicated in the other construction documents. Prospective bidders are advised that should they deem it necessary to obtain any subsurface samples of test borings etc., at the site, they should obtain their own permission from the landowners.

**5. SCHEDULE OF WORK**

Before commencing work on this project, the Contractor shall prepare and submit a schedule of construction activities for approval by WVDEP.

Except where the Contractor is an individual and gives his personal superintendence to the work, the Contractor shall provide a competent superintendent, satisfactory to the WVDEP, on the work site at all times during working hours with full authority to act for the Contractor. The Contractor shall provide adequate supervision, labor, tools, equipment, and materials to prosecute the work energetically and complete the work within the time specified.

It is the intention not to delay the work for the checking of lines or grades, but if necessary, working operations shall be suspended for such reasonable time as WVDEP may require for the purpose. No special compensation shall be paid for the cost to the Contractor for any of the work or delay occasioned by checking lines and grades, by making other necessary measurements, or by inspection.

All work is to be conducted between 7:00 a.m. and 7:00 p.m. with no work performed on Sunday or any major holiday.

**6. MEASUREMENT OF QUANTITIES**

The Contractor shall be responsible for providing all necessary volumetric, dimension, and weight measurement equipment necessary to prosecute the work as shown on the Construction Drawings and to accurately determine quantities for payment of Contract Bid Items as approved by the WVDEP. Such

measurements and equipment shall be subject to the approval of the WVDEP for use in this project.

**7. BORROW (DISPOSAL) AREAS**

All borrow (disposal) areas must be approved by WVDEP. Should the Contractor decide to obtain and utilize any borrow areas outside of construction limits, or move material from one property owner to another unless designated the Contractor shall be responsible for obtaining from the property owner(s) of the borrow areas, all necessary rights of entry. This shall include rights of entry for WVDEP and OSMRE for inspection purposes. The said rights of entry agreement must state that the property owner(s) indemnify and hold harmless the WVDEP for the Contractor's actions for any injury or damages whatsoever resulting from the use of the property.

The Contractor also shall submit a borrow area reclamation plan for prior approval by WVDEP. The Contractor shall observe the following NEPA compliance schedule relative to selecting and utilizing any off site borrow areas and or any waste disposal areas.

- a. No borrow (disposal) site operations will affect a site listed in, eligible or proposed to be listed in the National Register of Historic Places.
- b. No borrow (disposal) operations will be located within one-quarter mile of any Federally listed established or prospective component of the National Wild and Scenic River System under 16 USC 1274 and 1276.
- c. Borrow (disposal) site operations will not cause a significant encroachment within the base floodplain (CE.O. 11988: Floodplain Management).
- d. Borrow (disposal) site operations will not be located in or affect a critical habitat of a federally listed endangered or threatened species under 16 USC 1531, et. seq.
- e. No borrow (disposal) operations will occur in wetland areas which are designated by appropriate agencies.
- f. Borrow (disposal) site operations will be consistent with any approved plans governing ambient air quality.

- g. Adherence to these mitigation measures does not relieve the Contractor of the obligation or responsibility to obtain any other Federal, State, or local approvals required to use borrow (disposal) areas and conduct such activities.
- h. Documentation: Copies of borrow (disposal) site approvals and concurrences will be submitted to the WVDEP prior to the commencement of reclamation activities.
- i. Site Monitoring: Borrow (disposal) activities will be monitored by the State to ensure compliance with contractual requirements, applicable Federal, State, and local laws, and any permit conditions.

**8. DISPOSAL OF UNSUITABLE MATERIAL**

All waste areas shall be obtained in accordance with Special Provisions Section of these specifications. All unsuitable materials (wood, trash, debris, and garbage) as determined by the WVDEP shall be wasted by the Contractor, at his/her expense, outside the limits of work conforming to the requirements of these Specifications. Wood may be burned in conformity with the regulations set forth in Section 13 of these special provisions. The Contractor shall obtain all required bonds and fees.

The Contractor shall observe the NEPA compliance schedule relative to selecting and utilizing any off-site disposal areas in accordance with Special Provisions of these Specifications.

**9. INTERPRETATION OF APPROXIMATE ESTIMATE OF QUANTITIES**

The estimate of quantities of work to be done and/or materials to be furnished under the Special Provisions and Technical Specifications, as shown on the Contract Bid Schedule, is approximate and is given only as a basis of calculation upon which the award of the Contract is to be made. WVDEP reserves the right to increase or decrease any or all of the quantities of work or to omit any of them, as it may deem necessary. Final quantities shall be determined by as-built surveys.

**10. SAFETY**

All regulations of the Occupational Safety and Health Act of 1970 (OSHA) are in effect for this Contract. WVDEP shall not be liable for any citations received by the Contractor as a result of failure to comply with applicable OSHA standards.

Compensation is to be included in the various items of the Contract for the expense involved in complying with these standards. In addition, the Contractor shall comply with Section 107.7 of the WVDOH Standard Specifications regarding public convenience and safety.

**11. REGULATIONS**

All appropriate Township, County, State, and Federal Regulations shall apply to this Contract. It shall be the Contractor's sole responsibility to be aware of these regulations and to comply with them. WVDEP shall not be liable for any citations received by the Contractor. The Contractor shall keep the existing roads open and safe to public vehicular traffic at all times and shall provide appropriate barriers and warning devices as directed by the WVDEP and WVDOH.

**12. LAWS TO BE OBSERVED**

The Contractor shall at all times, observe, comply with, and post as required all Federal, State, and local laws, ordinances, and regulations which in any manner affect the conduct of the work or applying to employees on the project as well as all orders or decrees which have been or may be promulgated or enacted by any legal bodies or tribunals having authority or jurisdiction over the work, materials, employees, or Contract. The Contractor shall protect and indemnify WVDEP and its representatives against any claim or liability arising from or based on the violation of any such law, ordinance, regulation, order, or decree whether by the Contractor or by the Contractor's employees.

**13. PERMITS, LICENSES AND FEES**

The Contractor shall meet all municipal regulations and procure all permits and licenses, pay all charges and fees, and give all notices necessary and incidental to the due and lawful prosecution of the work. Permits required for this project may include but not be limited to: Water Quality Certification from WVDEP; and PLC permit from Public Land Corporation and permit from WVDEP-Division of Air Quality and the Division of Forestry. A copy of the permits as procured shall be furnished to the WVDEP prior to initiation of the work under this Contract. Also, the Contractor shall limit interruptions to residential access to as little inconvenience as possible. Upon award of the contract, the Contractor shall become Co-Applicant to the NPDES permit as per Article III of General Conditions, Section 7.0.

**14. ELECTRICITY, WATER SUPPLY AND SANITARY FACILITIES**

There are no available supplies at the site of electricity and water and, additionally, there are no sanitary facilities. Arrangements for electric service, water supply and sanitary facilities shall be made by the Contractor, and all costs for such arrangements shall be borne by the Contractor at no additional cost to WVDEP.

**15. UTILITIES AND OTHER OBSTRUCTIONS**

The Contractor shall be solely responsible to correctly locate all existing active underground and overhead utilities at the project sites and take precautions to avoid damage to them. Any existing utility lines damaged by the Contractor shall be replaced by the Contractor or repaired at no cost to WVDEP. The Contractor shall notify the utility companies likely to be affected well in advance and before beginning any work within the project sites. In the event of damage to the existing utilities or other facilities, the Contractor shall notify the affected Utility Owner(s) and WVDEP immediately and make, or have made, all necessary repairs and bear the expense thereof and resulting damaged caused thereby. It shall be the responsibility of the Contractor to arrange for relocating the utility lines, where required and as directed by WVDEP, in accordance with the guidelines set forth by the Utility Company, prior to beginning construction. The Contractor will be reimbursed for actual charges invoiced by the Utility Company. The Utility Companies (and WVMISS) must be contacted by the Contractor at least one week prior to commencement of construction activities for the purpose of field locating and marking utility owned facilities within the project area. The name, address, and phone number of the WVMISS Utility location service and of the utility companies are as follows: **WV MISS UTILITY 1-800-245-4848.**

**16. SITE CLEANUP**

General site cleanup shall be performed upon completion of work and on a daily basis as determined by the WVDEP. The project area shall be kept clean of all rubbish, surplus and discarded materials, objectionable materials and debris of any kind from areas used or disturbed by the construction operations within or within sight of the project area. All barrels, cans, drums, rubbish, waste or other debris shall be disposed of in an approved landfill or other appropriate location, or as approved by the WVDEP. The Contractor shall be responsible for the removal of the project sign prior to the final inspection of the project, and upon approval from the WVDEP.

**17. ROCK BLASTING**

All blasting operations shall be conducted in strict accordance with applicable State and Federal laws relating to rock blasting and the storage and use of explosives. The Contractor shall maintain and keep in full force and effect blasting insurance to protect and indemnify the WVDEP and/or his agents or representative from claims for damages and shall defend all suits at law. The Contractor shall submit to the WVDEP a request for permission to blast rock, a reclamation plan for the area to be disturbed, and proof of blasting insurance coverage prior to initiating blasting operations. Failure to obtain approval for blasting prior to initiating the work will result in no payment for items utilizing this rock. No blasting will be required for this project.

**18. TEMPORARY ACCESS ROADS**

The Contractor shall construct and maintain temporary access roads for convenient access to the various parts of the work, and for other necessary purposes incidental to the performance of this Contract. The location of access roads shall be approved by WVDEP prior to construction. No separate payment for construction and maintenance of such roads will be made. The Contractor shall erect such temporary fences or guards as may be necessary to keep unauthorized persons away from the work. Grading and surfacing of temporary access roads, excavations, fills and embankments for purposes of construction, or for convenience, beyond the limits of ordered excavations and all temporary fences and guards, shall be provided by the Contractor and shall be maintained in good condition. The Contractor shall be required to maintain all roads used by his hauling equipment in a dust-controlled condition. Upon completion, the Contractor shall return the disturbed areas to the approximate original condition as approved by WVDEP.

**19. SITE CONDITIONS AND ENVIRONMENTAL PROTECTION**

Conditions at the site shall be examined by the Contractor, and he shall assume responsibility as to the contours and the character of the earth, rock, water and other items that may be encountered during the excavation and filling operations. Ground water may be encountered at various locations within the proposed work areas and pumping or diversion may be required to remove ground water from these locations prior to performing the work.

The Contractor shall be responsible for the operation and maintenance of any required diversion or pumping facilities for removing ground water from work areas during progress of the work under this Contract.

The Contractor shall take any necessary steps to prevent erosion or silting problems from occurring and to minimize pollution or sedimentation of the stream.

If any such problems develop, the Contractor shall be responsible to take immediate corrective action.

The Contractor shall conduct all work in such a manner that the amount of dust, erosion, clogging of existing drains and damage to local flora and fauna is minimized.

The Contractor shall be responsible for the repair or replacement of streets or driveways (blacktop, gravel & concrete), trees, shrubs, fences, or any other physical features disturbed by construction under this contract to original condition or better.

The Contractor shall be responsible for the replacement of any existing boundary or corner markers disturbed by construction activities.

The Contractor must adhere and follow the WVDEP, Division of Water and Waste Manual of Best Management Practices.

## **20. CONTROL AND REVIEW OF WORK BY WVDEP**

All services rendered by WVDEP consist of professional opinions and recommendations made in accordance with generally accepted engineering practice. Under no circumstances is it the intent of WVDEP to directly control the physical activities of the Contractor or the Contractor's workmen's accomplishment of work on this project.

The presence of the WVDEP Field Representative at the site is to provide a continuing source of professional advice; opinions and recommendations based upon WVDEP's observations of the Contractor's work and do not include any superintending, supervision or direction of the actual work of the Contractor or the Contractor's workmen.

Any construction review of the Contractor's performance conducted by the Engineer is not intended to include review of the adequacy of the Contractor's safety measures, in, or near the construction site.

## **21. CITATION OF OTHER SPECIFICATIONS**

Whenever the Specifications for this Contract refer to the specifications of any society, institute, association or government organization, then such specifications cited shall become a part of this Contract as if written in full. See Section 2 for commonly used abbreviations for societies, institutes, associations and government organizations. Where reference is made to a specification, it shall be the latest revision at the time called for bids, except as noted on the Plans or elsewhere herein.

**22. RIGHTS-OF-ENTRY**

The West Virginia Department of Environmental Protection (WVDEP) has obtained rights-of-entry on only those parcels shown on the Drawings within the contractors work limits. If the Contractor requires additional rights-of-entry, it will be the Contractor's responsibility to obtain these entry rights. The right-of-entry agreements between the Contractor and landowner shall provide the WVDEP with the right of inspection and require that the landowner shall indemnify and hold the WVDEP harmless from any injury or damages whatsoever resulting from the use of the property. The Contractor shall hold the WVDEP harmless for any damage to public or private property.

All proposed routes of access shall be subject to the approval of the WVDEP. The Contractor shall be responsible for removing and replacing any fences necessary for access to work areas, and providing any temporary fencing required, all at his own expense.

**23. NPDES STORMWATER PERMIT GUIDELINES**

**VEGETATIVE PRACTICES**

Except as noted below, stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than seven (7) days after the construction activity in that portion of the site has permanently ceased.

- Where the initiation of stabilization measures by the fourth day after construction activity temporarily or permanently ceases or is precluded by snow cover, stabilization measures shall be initiated as soon as conditions allow.
  
- Where construction activity will resume on a portion of the site within 21 days from when activities ceased, (e.g., the total time period that construction activity is temporarily halted is less than 21 days) then stabilization measures do not have to be initiated on that portion of the site by the seventh day after construction activities have temporarily ceased.

Areas where the seed has failed to germinate adequately (uniform perennial vegetative cover with a density of 70%) within 30 days after seeding and mulching must be reseeded immediately, or as soon as weather conditions allow.

Diversions must be stabilized prior to becoming functional



## **MAINTENANCE & INSPECTION**

At a minimum, all erosion and sediment controls on the site will be inspected at least once every seven (7) calendar days and within 24 hours after any storm event of greater than 0.5 inches of rain per 24-hour period.

All controls should be cleaned out when sediment reaches one half the sediment capacity of that control.

Inspection and maintenance records must be kept onsite.

## **EROSION & SEDIMENT CONTROL CONSTRUCTION SEQUENCE**

1. Install stabilized construction entrance as shown on site plans.
2. Install perimeter sediment control devices as shown on site plans.
3. Clear and grub site.
4. Provide sediment control for any topsoil stockpiles.
5. Install additional erosion and sediment controls as shown on site plans.
6. Commence rough grading of site. Continue to maintain and inspect all erosion and sediment controls.
7. Fine grade site.
8. Install additional erosion and sediment controls as shown on site plans.
9. Permanently seed and mulch all disturbed areas within seven (7) days of reaching final grade.
10. Upon completion of the project, including adequate stabilization, remove all remaining erosion and sediment controls.

## **24. CONSTRUCTION PLANS AND DRAWINGS**

The following construction plans and drawings form a part of these Special Provisions and Technical Specifications:

<b><u>TITLE</u></b>	<b><u>SHEET NO.</u></b>
Title Sheet	0
Existing Conditions	1
Tax Map Overlay	2
Sediment and Erosion	3
Proposed Grading Plan	4
Proposed Site Sections	5
Proposed Ditch Profiles	6
Detail Sheets	7-8

## **DIVISION II – TECHNICAL SPECIFICATIONS**

### **1.0 MOBILIZATION AND DEMOBILIZATION**

#### **1.1 Description**

This work shall consist of the performance of construction preparatory operations, including: the movement of personnel and equipment to the project site; erection and removal of the project sign, the establishment of the Contractor's offices, building and other facilities necessary to begin work on a substantial phase of the contract, in accordance with this Section and Special Provision Specifications. The Contractor shall establish an office on-site before beginning work. The Contractor shall obtain WVDEP approval on all equipment and material storage areas. It shall also include all demobilization activities.

**1.1.1.** Access to and from the sites shall be as shown on the plans, and any other access used shall be the responsibility of the Contractor. The Contractor will be required to obtain a right of entry agreement and any State, Federal or Local permits necessary for the office site, in accordance with this Section and Special Provision Specification Number 11.

#### **1.2 Method of Measurement**

The method of measurement for determining the mobilization and demobilization work done as described above will be on a lump sum basis, with partial payments as listed below.

#### **1.3 Basis of Payment**

The bid for Mobilization shall be a lump sum and cannot be more than 10% of the "**TOTAL AMOUNT BID**" for the project. Partial payments will be as follows:

**1.3.1** One-half of the amount bid will be released to the Contractor with the first estimate payable, not less than 15 days after the start of work at the project site.

**1.3.2** The final one-half of the amount bid shall be released with the estimate payable after the work is accepted by the WVDEP, and when Contractor has submitted and received approval for paper (hard copies) and two (2) copies of a CD-ROM with all "As Built" plans, in accordance with Specification Section 2.3.7.

Nothing herein shall be construed to limit or preclude partial payments otherwise provided for by the Contract. No deduction will be made, nor will any increase be made, in the lump sum mobilization item amount regardless of decreases or increases in the final total contract amount or for any other cause.

**1.4 Pay Item**

**Item 1.0** “**Mobilization and Demobilization**”, per lump sum. Cannot be more than 10% of the “**TOTAL AMOUNT BID**” for the project.

## **2.0 CONSTRUCTION LAYOUT**

### **2.1 Description**

The item consists of furnishing, placing, replacing and maintaining construction layout stakes, baseline stations, primary control points and any disturbed property location monuments as necessary for the proper performance of the work under this contract.

### **2.2 Materials**

Conventional survey stakes, flagging, drafting media, etc.

### **2.3 Construction Methods**

**2.3.1** The Engineer will have the following located and referenced for one time, and one time only, back sights and bench marks necessary for the proper layout of the work. The Contractor shall make all calculations involved and shall furnish and place all layout stakes.

**2.3.2** The Contractor shall provide a field work force and shall set all additional stakes needed, such as offset stakes, reference point stakes, slope stakes, grade stakes, stakes for drainage, or other structures, supplementary bench marks, and any other horizontal or vertical controls necessary to secure a correct layout of the work. The Contractor shall be responsible for having the layout staking work conform to the lines, grades, elevations, and dimensions called for on the Plans. The Contractor shall furnish a copy of his survey records for checking by the WVDEP and for the Owner's permanent file. These records shall be furnished as they are completed during the progress of the work.

Any inspection or checking of the Contractor's layout by the WVDEP and the acceptance of all or any part of it shall not relieve the Contractor of his responsibility to secure the proper dimensions, grades, and elevations.

**2.3.3** The Contractor shall exercise care in the preservation of existing stakes, property line markers and bench marks and shall have them reset at his expense when any are damaged, lost, displaced, or removed. The Contractor shall use primary control points for re-establishing baseline stations wherever previously surveyed stations have been destroyed or removed. At a minimum, the Contractor shall confirm the location of existing baseline stations by

field survey of each station's relationship to a suitable primary control point. Should any discrepancies be found, primary control points shall supersede any existing baseline stations.

- 2.3.4** The Contractor shall use competent personnel and suitable equipment for the layout work required and shall provide that it be done under the supervision of, or directed by, a Registered Professional Engineer or Licensed Land Surveyor.
- 2.3.5** All survey notes, calculations, sections, plans, or said Registered Professional Engineer or Licensed Land Surveyor shall certify other documents produced pursuant hereto as correct.
- 2.3.6** It shall be the sole responsibility of the Contractor to correctly locate all existing survey monuments and property corners. All necessary precautions shall be employed by the Contractor to ensure avoidance of and damage to said survey monuments and property corners. It shall be the responsibility of the Contractor to properly locate and monument all existing property corners in relation to the project monuments. Said existing property corners removed or damaged during construction shall be reset in its original position, or acceptable offset, upon completion of construction activities, but prior to demobilization activities. Said property corners shall be referenced and replaced by a Licensed Land Surveyor. Should offsets to original corner locations be required, a plat, certified by said Licensed Land Surveyor, showing offset monument locations and descriptions, as well as relationship to the original corner location, shall be submitted to WVDEP and the affected owners for their files.
- 2.3.7** The Contractor shall provide the WVDEP existing ground line cross-sections and notes for acceptance prior to any earthwork activities and as-built ground line cross-sections and notes as soon as practical after the completion of construction. Failure to do so could either preclude any future alteration to the total amount bid for earthwork and/or retard the final installment payment for earthwork.
- 2.3.8** "**As-Built**" Drawings, including the Reclamation Plan, shall show all vertical and horizontal locations of all permanently installed structures including drainage ditches, subsurface drains, wet mine seal and horizontal boring conveyance piping and their inverts and all grout borehole locations any other items specifically requested by the WVDEP. The preparation of the "As-Built" Drawings certified by a Registered Engineer or a Licensed Land Surveyor shall be included in the Construction Layout pay item and provided to the

WVDEP prior to the Final Inspection Meeting with two (2) hard copies and an electronic submission in Adobe (.pdf) and AutoCAD (.dwg) formats.

#### **2.4 Method of Measurement**

There shall be no measurement of this item as it is lump sum. Payment will be for furnishing, setting, maintaining, and resetting the stakes, when necessary; for furnishing all engineering personnel, equipment, materials, and all incidentals thereto; and for providing the WVDEP “as-built” drawings showing the reclamation plan, new grades, ditches and drainage structures.

#### **2.5 Basis of Payment**

This item shall be paid at the bid lump sum price. The amount shall not exceed five percent (5%) of the “**Total Amount Bid**” for the project. No deduction will be made, nor will any increase be made in the lump sum construction layout item amount regardless of decreases or increases in the final total contract amount or for any other cause.

#### **2.6 Pay Item**

**Item 2.0** “**Construction Layout**”, per lump sum. Cannot be more than 5% of the “**Total Amount Bid**” for the project.

### 3.0 **QUALITY CONTROL**

#### 3.1 **Description**

This work shall consist of assuring the aggregate and grout materials supplied and the compaction work performed are in conformance with these specifications.

#### 3.2 **Applicable Publications**

Work shall comply with, but not be limited to, the provisions of the following codes, standards and specifications:

ACI 301	<b>“Specifications for Structural Concrete For Buildings”.</b>
ASTM C-31	<b>“Standard Method of Making and Curing Concrete Test Specimens in the Field”.</b>
ASTM C-39	<b>“Standard Test Method For Compressive Strength of Cylindrical Concrete Specimens”.</b>
ASTM C-172	<b>“Fresh Concrete Sampling”.</b>
ASTM D-698	<b>“Test for Moisture-Density Relations of Soils and Soil-Aggregate Mixtures, Using 5.5 lb. Hammer and 12 in. Drop”.</b>
ASTM D-1556	<b>“Test for Density of Soil in-place by the Sandcone Method”.</b>
ASTM D-2922	<b>“Test for Density of Soil &amp; Soil Aggregate in-place by Nuclear Methods”.</b>
ASTM D-3017	<b>“Test for Moisture Content of Soil &amp; Soil Aggregate in-place by Nuclear Methods”.</b>
EPA-600/2-76-184	<b>Handbook for Soil and Water Analysis.</b>

#### 3.3 **Submittals**

**3.3.1** The Contractor shall submit a minimum of two (2) copies of shop drawings, catalog cuts and material certifications as applicable to



the WVDEP of all off-site materials to be incorporated into the work. Written approval from the WVDEP will be required prior to incorporation of these items into the work.

- 3.3.2** The Contractor shall submit at least two (2) copies of the results of all tests conducted on-site materials used in construction, as well as commercially purchased materials and concrete and grout. At a minimum, these tests will include moisture content & density tests of the soil in accordance with the provisions of **ASTM D698** (Standard Proctor); field density tests following compaction; soil tests to determine the lime and nutrient requirements of the areas to be revegetated; gradation (size), durability (soundness), fizz, and acid base (calcium carbonate equivalency) requirements for purchased or onsite borrowed and commercially purchased riprap and aggregate; compressive strength test for grout in accordance with **ASTM C109**; and compressive strength test for concrete in accordance with **ASTM C31 & C39**. Three (3) specimens are required for each concrete or grout test.

### **3.4 Construction Methods**

- 3.4.1** The Contractor shall furnish the services of his own testing laboratory or select an independent testing laboratory. The laboratory must operate under the direct supervision of a Registered Professional Civil Engineer for strength of material and compaction testing. The laboratory must be approved by the WVDEP.
- 3.4.2** Testing for compaction, soil classification, aggregate, rock, soil nutrient and lime requirements, etc., shall be performed as required by these specifications or as requested by the WVDEP in writing. The WVDEP will determine the locations and time of any testing herein specified and the need and extent of any testing in addition to that which is herein specified.
- 3.4.3** The Contractor shall be responsible to perform sampling and testing of the grout or concrete used in the construction.
- 3.4.4** Only new and first class materials that conform to the requirements of these Specifications shall be used unless specified otherwise. When requested by the WVDEP, the Contractor shall furnish a written statement of the origin, composition, and manufacturer of any or all materials (manufactured, produced, or grown) that are to be used in the work. The sources of supply of each material used shall be approved by the WVDEP before delivery is started. If, at any time, sources previously approved fail to produce materials

acceptable to the WVDEP, the Contractor shall furnish materials from other approved sources.

**3.4.5** Material shall be placed in no more than 12” vertical lifts, with each lift being compacted to 90% standard proctor and benched into the existing ground. Compaction tests will be quantified as lots. One (1) lot shall be equal to five (5) compaction tests. Compaction testing shall be performed on each lift placed or as directed by Engineer, the testing sites shall be random and not done in the same place between lifts. The slopes shall be graded as shown on the plans, no steeper than a 2:1 slope and immediately reclaimed as per Section 6.0 **Revegetation**.

**3.5 Method of Measurement**

The method of measurement for determining the quantity of quality control work done as described above will be on a lump sum basis.

**3.6 Basis of Payment**

The quantity of work done will be paid at the bid lump sum price for this item, which price and payment shall be full compensation for performing all the work herein prescribed in a workmanlike and acceptable manner; including the furnishing of all labor, materials, tools, equipment, supplies and incidentals necessary to complete the work.

**3.6.1** No deduction will be made, nor will any increase be made, in the lump sum quality control amount regardless of decreases or increases in the final total contract amount or for any other cause.

**3.7 Pay Item**

**Item 3.0** “**Quality Control**”, per lump sum cannot be more than 3% of the **Total Amount Bid** for the project.

## **4.0 SITE PREPARATION**

### **4.1 Description**

This work shall include the clearing and grubbing, demolition, construction entrance and preservation from injury to all vegetation, utilities, existing structures, etc. or other objects to remain. The Contractor shall be responsible for removing trash and tires as noted on Plans. The concrete slabs shall be placed at the area shown on the plans. This moving of the concrete slabs shall be coordinated with the WVDEP. The contractor shall make every responsible effort to avoid damaging the concrete slabs. However, broken slabs shall be buried in the backfill on site. This work also includes "Access Road Rehabilitation" which includes widening and placing crushed lime stone on the access road as shown on the plans.

### **4.2 Materials**

- 4.2.1** The Contractor shall stock pile all topsoil from the area to be disturbed in a protected area for use in revegetation operations.
- 4.2.2** Trunk damage to trees shall be painted with an antiseptic and waterproof paint with an asphaltic base. This paint shall not contain coal-tar creosote, turpentine or other materials harmful to plants or animals. Any replacement of landscape, trees, shrubs, etc., required shall be with nursery stock, as approved by WVDEP.
- 4.2.3** The specific areas to be cleared and grubbed are as shown on the contract drawings and are generally described as, but not limited to, those specific areas of excavation, backfill, soil borrow or drainage structure installation.
- 4.2.4** The Contractor shall clear the site within the limits of the areas to be regraded. The Owner shall exercise control over clearing and shall designate all trees, plants and other objects to be removed or to remain.
- 4.2.5** Clearing and grubbing shall be completed prior to initiation of earthwork operations only to the extent necessary to complete the work. The Contractor shall confine his operations strictly to required areas. If he clears and grubs beyond the required areas, whether knowingly or accidentally, he shall, at his expense, replant and otherwise restore all areas outside the limit lines to a condition equal to that existing prior to start of work.

- 4.2.6** All other timber eight (8) inches in diameter and larger at stump height shall be saw cut prior to grubbing operations. Timber shall be topped with the branches removed and stacked and stockpiled in an appropriate manner in an accessible location approved by the WVDEP on the property from which it was cut. Timber to be stockpiled shall not be pushed down by equipment prior to being cut nor can it be indiscriminately shoved into a stockpile.
- 4.2.7** All stumps, roots, buried logs and brush shall be removed. Grass, however, may be incorporated into the resoiling material. Taproots and other projections over 1-½ inches in diameter shall be grubbed out to a depth of at least ten (10) inches below the planned subgrade or slope elevation. All holes remaining after the grubbing operation shall have the sides broken down to flatten out the slopes, and shall be filled with suitable materials, moistened and properly compacted.
- 4.2.8** Cleared and grubbed areas shall be worked such that positive drainage is provided to prevent ponding of water except for the purpose of sediment control sumps as approved by the Owner.
- 4.2.9** All organic material resulting from clearing and grubbing operations shall be burned to ash in designated areas in accordance with **Special Provision 8 – Disposal of Unsuitable Material** and **Special Provision 13 – Permits, Licenses and Fees** or otherwise removed from the site and disposed in a manner approved by the Owner. The Contractor shall obtain all permits and licenses required prior to burning the material. A plan showing the location of material to be burned and all fire control measures to be implemented, including copies of permits and licenses, shall be submitted to the Owner's representative at the site for approval. The Contractor's burning plan shall include measures to protect nearby homes and other landowner constructions and facilities, gas wells and gas lines, and nearby trees, nearby utilities, and other vegetation from smoke, heat, and airborne residue. Cleared and grubbed organic materials shall be burned completely to ash or otherwise removed from the site in accordance with **Section 4.2.11** of these specifications. Other debris, including stumps and tree root balls, shall also be removed from the site in accordance with **Section 4.2.11** of these Specifications. No burning will be allowed on or near exposed coal refuse or near coal seams. Burning operations should be confined to areas as distant from houses, gas wells and gas lines, other utilities, and constructions, and standing timber and other vegetation designated to remain as possible.

- 4.2.10** All other materials generated from required clearing and grubbing operations or designated for removal on the plans shall be removed and disposed of by the Contractor. All garbage, construction debris, mining debris, etc., shall be disposed of in approved waste areas or landfills approved by the State to accept the type of waste or debris to be deposited. It shall be the responsibility of the Contractor to obtain, at no expense to the Owner, all necessary waste and borrow areas or landfills for the disposal of waste materials in accordance with any applicable local, state, and/or federal regulations including compliance with NEPA requirements (See **Section 7** for NEPA Compliance Schedule). All waste and borrow areas must be approved by the Owner and, the Contractor must provide a reclamation plan for approval. In addition, for all waste and borrow areas outside the construction limits, the Contractor must obtain from the property owner a right-of-entry agreement in which the property owner indemnifies and holds the WVDEP and OSMR harmless from any injury or damages whatsoever resulting from the use of the property. The Contractor may be required to submit proof the landfill is indeed permitted to accept the type of debris or waste to be deposited. Burning of tires, treated lumber, mine belt, or anything that might create black smoke is prohibited. The Contractor is required to visit the site and decide for their self the nature and quantity of garbage to be removed prior to submitting his bid.
- 4.2.11** Coal and/or refuse spillage, concrete, cinder blocks, and foundation ruins shall be excavated, specially handled in accordance with these Specifications, and/or removed from the site. Boulders, cut stone structures, concrete pads and blocks, and foundation ruins shall be broken and buried in the deepest portion of fill areas. Broken pieces shall be of size less than 2 feet in any dimension and not be consolidated in one area, but shall be dispersed throughout fill areas to ensure compaction requirements are achieved. Coal and/or refuse shall be buried beneath 12", minimum, of soil capable of supporting vegetation.
- 4.2.12** Trash, garbage, tires, plastic, metal, automobile parts or debris, household appliances, treated lumber, and other unsuitable material resulting from demolition or existing on-site shall be disposed of by the Contractor at his/her own responsibility and expense outside the work limits in a landfill, as approved by the Owner, unless otherwise directed. Bricks, concrete blocks, cut stone, and concrete foundations shall be disposed as per **Section 4.2.11** of these specifications.

**4.2.13** No offsite disposal shall be necessary but should an offsite borrow area be necessary, the Contractor shall observe the NEPA Compliance Schedule as per **Section 7** of the **Special Provisions**.

**4.2.14** Stone used for the access road rehabilitation shall be of Class I aggregate, 1-1/2 inch crusher run stone placed in accordance with these plans and specifications.

### **4.3 Construction Methods**

**4.3.1** The specific areas designated for site preparation shall include all areas of work within the limits of construction as shown on the Contract Drawings. Any Shrubs, landscaping, vegetation, trees, etc., shall not be removed without prior approval from WVDEP.

**4.3.2** All other materials generated from the required operations shall be removed and disposed of by the Contractor. All garbage, construction debris, mining debris, etc., to be eliminated, shall be disposed of in approved waste areas or landfills.

It shall be the responsibility of the Contractor to obtain access, at no expense to the WVDEP, to all necessary landfills for the disposal of waste materials in accordance with any applicable Local, State, and/or Federal regulations including compliance with NEPA requirements (See Special Provisions). All waste areas must be approved by the WVDEP, and the Contractor must provide a reclamation plan for approval. In addition, for all waste outside the construction limits the Contractor must obtain from the property owner, a right-of-entry agreement in which the Property Owner indemnifies and holds the WVDEP harmless from any injury or damages whatsoever resulting from the use of property.

**4.3.3** It shall be the sole responsibility of the Contractor to correctly locate and avoid all underground, on-ground, and overhead utilities, including but not limited to: structure overhangs, fences, driveways, and other structures and constructions, and for that purpose, shall employ all necessary precautions and methods to insure avoidance of and damage to such constructions.

**4.3.4** In the event damage does occur, the Contractor shall notify the Affected Owner and the WVDEP immediately and make or have made all necessary repairs and bear the expense thereof and resulting damage caused thereby.

- 4.3.5 The Contractor is responsible for locating and avoiding all underground and overhead utilities and constructions during access road upgrading and maintenance.
- 4.3.6 It is the responsibility of the Contractor to provide initial rehabilitation of the existing access road which shall include installation of culverts, re-grading of the roadway and placement of stone as shown on the contract drawings. Maintenance of the road throughout the duration of the project will be at no expense to the WVDEP.

#### 4.4 **Method of Measurement**

- 4.4.1 The method of measurement for Site Preparation will be on a lump basis and cannot be more than 10% of the **TOTAL AMOUNT BID** for the project. Site Preparation shall consist of but not limited; videotaping, clearing and grubbing, timber cutting and stockpiling, burning of organic matter: offsite disposal of garbage and items designated by the WVDEP to be removed from the site; plan preparation or permitting as required by these Specifications, traffic control; fence removal/replacement or temporary fence installation/removal etc. Roadway rehabilitation shall be a separate pay item which shall include culverts installation, re-grading and placement of stone. Moving of the concrete slabs shall be coordinated with the landowner. This pay item shall also include stripping and stockpiling topsoil for use as soil cover in re-vegetation of the site at completion and all other items as described herein.
- 4.4.2 Payment for the access road rehabilitation shall be per ton of Class I aggregate, 1-1/2" crusher run stone as shown on the plans or as directed and approved by the WVDEP.
- 4.4.3 There shall be no measurement for re-establishing existing property corners damaged by the construction of this work and placing crushed stone on the access road beginning at County Road as shown on the plans, shall be incidental to "Site Preparation".
- 4.4.4 No payment will be made for "Site Preparation" required for offsite borrow/disposal area(s). Payment for borrow/disposal area site preparation shall be incidental to the unclassified excavation pay item.
- 4.4.5 There is no method of measurement for constructing and reclaiming temporary access roads. All costs associated with this

work, including all regrading and backfilling constructed roads to approximate original contours, crushed stone, filling and compacting, and separation filter fabric, as directed and approved by the Owner shall be considered incidental to and included in the unit price bid for **Item 8.0 “Unclassified Excavation”**.

#### **4.5 Basis of Payment**

The quantity of work completed will be paid at the contract lump sum and unit price bid for these items, which price and payment shall be full compensation for doing all work herein prescribed in a workmanlike and acceptable manner; including the furnishing of all labor, materials, tools, equipment, supplies, and incidentals necessary to complete the work. No deduction will be made, nor will any increase be made, in the lump sum site preparation amount regardless of decreases or increases in the final total contract amount or for any other cause.

#### **4.6 Pay Items**

**Item 4.1**      **“Site Preparation”**, per lump sum cannot be more than 10% of the **Total Amount Bid** for the project.

**Item 4.2**      **“Access Road Rehabilitation”**, per ton.



## 5.0 **EROSION AND SEDIMENT CONTROL**

### 5.1 **Description**

This item shall consist of furnishing all materials, equipment, labor and incidentals necessary for the installation of straw wattles or silt fence as necessary to protect all down-gradient properties. Sediment control shall be installed about the perimeter of disturbed areas prior to any construction activities. Sediment control devices shall be installed on the graded slopes as shown on the Plans. Additional locations may be added at discretion of the WVDEP Representative. Sediment control devices will be removed from all yard areas upon completion of the project.

**5.1.1** The Contractor shall submit an erosion and sediment control plan to the owner at the pre-construction meeting for approval. This plan shall include measures to be utilized for temporary and permanent erosion and sediment control. This plan shall also include the measures contained in the approved NPDES permit, measures herein specified, and measures shown on the plans. The Owner's approval of this plan does not relieve the Contractor of his responsibility to be in compliance with any and all permits. All costs associated with meeting the Federal and/or State Regulations shall be the sole responsibility of the Contractor. The Contractor shall comply with the approved NPDES permit; train his personnel to be familiar with all permit requirements; and keep a copy at the job site at all times.

### 5.2 **Materials**

**5.2.1 Stakes:** The stakes for silt fence shall consist of 2" x 2" stakes, 48 inches in length made from suitable hardwoods. Other methods of anchoring may be used if specifically approved by the WVDEP Representative.

**5.2.2 Silt Fence:** Silt fence material shall be "Amoco Propex Silt Stop" or equivalent. Silt fencing materials and installation shall meet all applicable requirements of Sections 715.11.7 and 642.6 of the West Virginia Department of Highways "Standard Specifications for Roads and Bridges", 2010 Edition.

**5.2.2.1** Non-woven filter fabric shall be purchased in a continuous roll. Fabric shall contain ultraviolet ray inhibitors and stabilizers to provide a minimum of 6-months construction life at temperatures ranging from 0 to 120 degrees Fahrenheit. Preferred fabrics are Mirafi 100X, Exxon GTF,

or approved equal.

**5.2.2.2** Stakes shall consist of 2" by 2" oak or 2" by 4" pine and a minimum length of five feet (5'). Fasteners shall be heavy duty one-inch (1") staples or tie wires.

**5.2.2.3** If steel posts (standard "U" or "T" section) are used for silt fence construction they shall have a minimum weight of 1.33 pounds per linear foot and a minimum length of five feet (5').

**5.2.3 Super Silt Fence:** The fabric shall meet the requirements of **Section 5.2.2.**

**5.2.3.1** The posts shall be 2½" diameter by 72" long and meet the requirements of **Section 709.46** of the West Virginia Division of Highways **Standard Specifications for Roads and Bridges**, Adopted 2010. 4" by 4" by 72" treated posts may be substituted for steel posts with the approval of the Engineer.

**5.2.3.2** Wire ties or staples to connect the chain link fence to the posts and the fabric to the chain link fence shall be approved by the Engineer.

**5.2.4 Straw Wattles:** Straw Wattles shall be standard 12 inch diameter straw wrapped in a tubular encasement of heavy duty biodegradable knitted netting.

**5.2.4.1** Straw Wattles shall be installed at locations shown on the plans and in the approved NPDES permit application. Straw Waddles, also available from ACF Environmental ([acfenvironmental.com](http://acfenvironmental.com)), or approved equal shall be a standard size of 9 inches diameter by 25 feet in length. Straw wattles shall consist of an internal fill material of straw and an exterior encasement of a heavy duty biodegradable knitted cylindrical tube.

### **5.3 Maintenance**

During the course of the Project, sediment control shall be maintained in sound condition and accumulations of silt, which may threaten their effectiveness, shall be removed. Silt removed from the sediment control structures should be spread in the general vicinity, except when such practices may be a detriment to the environment and/or the project. Upon

the completion of the project, the WVDEP Representative may contact the Contractor to remove, clean or replace silt control structures and revegetate such disturbances in accordance with the Section 6.0 of these specifications.

- 5.3.1** Erosion and sediment control devices, including silt fence, super silt fence, straw wattles, etc. shall be inspected at a minimum once every seven calendar days and within 24 hours after any storm event greater than 0.5 inches per 24 hour period. Check to see if water has flowed around the edges of the structure. Replace and repair erosion and sediment control devices as necessary to maintain the correct height and configuration. Sediment should be removed from behind the erosion and sediment control devices when it has accumulated to one half of the original height of the structure.
- 5.3.2** Close attention shall be paid to the repair of damaged silt fence resulting from end runs and undercutting. If the fence is not installed on the contour (perpendicular to the flow of the water) both of these conditions can occur.
- 5.3.3** Should the fabric on a silt fence decompose or become ineffective prior to the end of the project and the barrier still is necessary, the fabric shall be replaced promptly.
- 5.3.4** Sediment deposits should be removed after each storm event. Deposits must be removed when deposits reach approximately one-half the height of the barrier. If any section of a sediment control structure is knocked down during a rain event (because it was installed in an area of concentrated flow), then other measures such as a sediment trap and diversion, or super silt fence must be installed.
- 5.3.5** Stone Construction Entrances shall be maintained in a condition that will prevent tracking or flowing of sediment onto public rights-of-way. This may require periodic top dressing with additional stone as conditions demand and repair and/or cleanout of any measures used to trap sediment. All sediment spilled, dropped, washed or tracked onto public rights-of-way must be removed immediately.
- 5.3.6** Stone Construction Entrance inspection and necessary maintenance should be provided daily but at a minimum every seven days and after every rain of 0.5 inches or greater.

- 5.3.7 Wheels on all vehicles shall be cleaned to remove sediment prior to entrance onto public rights-of-way. If washing is required, it shall be done on an area stabilized with stone and which drains into approved sediment trapping device. If the County Road is washed precautions must be taken to prevent muddy water from running into waterways.
- 5.3.8 Prior to demobilization operations, the Contractor will be required to regrade and repair all Stone Construction Entrances designated to remain, to the satisfaction of the Engineer. Top with 3" to 6" of crusher run stone.
- 5.3.9 The Contractor will be required to remove and discard all accumulated sediment, stone, and fabric from Stone Construction Entrances designated for removal by the Engineer. Installed pipes may or may not be removed and discarded at the direction of the Engineer. All disturbed areas shall be regraded to original contours and revegetated in accordance with **Section 6.0** of these specifications.

#### 5.4 **Installation**

- 5.4.1 The silt fence shall be installed end to end along the contour. The stakes shall penetrate a minimum of 14 inches into the ground. Ends of each run of fence shall be securely fastened to a common post or overlapped a 3" minimum. Typical installation details are provided on the Plans.
- 5.4.2 The straw wattles shall be installed on contour laid end to end with slight downward angle to prevent ponding. Stakes shall be driven through the middle of the wattles on 4 foot centers with minimum 2-3 of the stakes protruding above the waddle.
- 5.4.3 The Contractor shall comply with **Special Provisions Section 23. NPDES Stormwater Permit Guidelines** and the approved NPDES permit for this project.
- 5.4.4 The height of silt fence above original ground shall be 16", minimum, and shall not exceed 36". Filter fabric shall be purchased in a continuous roll and cut to length to minimize joints. When joints are unavoidable, the silt fence shall be joined together at a support post by twisting the fence ends or last post of each run around each other and securely sealed. A trench 4" by 4" shall be excavated on the uphill side of the posts. The fabric shall be fastened securely to the uphill side of the posts and extend into the trench. Do not staple

fabric to trees. The 4" by 4" trench shall be backfilled and compacted atop the fabric to eliminate under-piping. The end of fabric runs shall be turned slightly uphill to prevent runoff from going around. Silt fence shall be installed along the contour of the land with no section exceeding 5% slope in twenty feet (20'). Silt fence shall be overlapped a minimum of 10 feet (as measured from a line perpendicular to the land contour at each end of the silt fence and as shown on the Plans) where silt fence is stepped up or down hill to better follow the contour of the land or provide coverage for regrade areas

**5.4.5** Super Silt Fence shall be installed in a manner similar to Silt Fence. Chain link fence shall be installed securely to the posts with wire ties or staples. The fabric shall be attached to the chain link fence with ties spaced every 24" at the top and mid-section of the fence. A trench 12" by 12" shall be excavated on the uphill side of the posts. The fabric and fence shall be fastened securely to the uphill side of the posts and extend 12", minimum, into the trench. The 12" by 12" trench shall be backfilled and compacted against the fabric and fence to eliminate under-piping. Where two sections of fence join, they shall overlap 6", minimum, and the fabric folded.

**5.4.6** Straw wattles shall be installed according to manufacturer's recommendations and placed end to end along the contour at the locations shown on the Plans and approved NPDES permit or as directed and approved by Owner.

**5.4.6.1** Lines of straw wattles shall be overlapped a minimum of 10 feet (as measured from a line perpendicular to the land contour at each end of the line of wattles as shown on the Plans) where wattles are stepped up or down hill to better follow the contour of the land or provide coverage for regrade areas.

**5.4.6.2** Straw wattles shall be embedded into the soil 2" to 3", as shown on the plans, to prevent under-piping. Excavated soil shall be placed on the uphill side of the installation from the anchor trench and foot tamp-compacted against the wattle. Adjacent wattles should be tightly abutted.

**5.4.6.3** Straw wattles shall be anchored with 36" stakes spaced every 3 to 4 feet driven through the middle of the wattle. In addition, a stake shall be placed within 12" of each end of the wattle. The stakes shall be driven perpendicular to the ground line, and with a minimum of 18 inches of ground

penetration. In areas where sediment control barriers cross existing drains, more than one row of wattles or installation of straw/hay bales may be required to adequately prevent downstream sediment pollution. Also, additional staking may be required to anchor the straw wattles against concentrated storm runoff. The number of straw wattles and anchoring required in concentrated flow areas shall be at the discretion and direction of the Owner.

**5.4.6.4** Straw wattles shall not be removed but shall remain in place after all construction activities are complete.

**5.4.7** Stabilized Construction Entrances shall be built to the lines and grades shown on the plans.

**5.4.7.1** Prior to fabric and stone installation, the subgrade shall be prepared by removing all objectionable material to the satisfaction of the Owner. In the event coal refuse is encountered such material will be undercut a minimum of 12" and replaced with onsite suitable compacted material prior to placing fabric and stone. The subgrade shall then be proof rolled to insure compaction has been achieved to the satisfaction of the Owner.

**5.4.7.2** If in the opinion of the Owner the subgrade is unsuitable, the Contractor will be required to undercut the subgrade a minimum of 2.0 feet and place compacted suitable on-site fill material, as approved by the Owner, in 6" lifts back to subgrade elevations. In addition, some filling may be required after removing all objectionable material to bring the subgrade to proper elevations depicted on the Plans.

**5.4.7.3** Subgrade fill material shall be compacted to at least 95% of Standard Proctor maximum dry density at a moisture content of not less than 2% below nor greater than 3% above optimum. Testing frequency and locations shall be directed and approved by the Owner.

**5.4.7.4** Stabilized Construction Entrances will require excavating existing grades 3", minimum, as shown on the plans. Excavated material shall be taken to an onsite disposal area approved by the Engineer. Once excavation is complete to the satisfaction of the Owner, separation fabric meeting the requirements of **Specification Section 5.2.6** shall be placed in the excavation. Fabric shall be placed

the full length and width of the excavation as shown on the plans.

**5.4.7.5** Six inches (6") of 3" to 6" stone meeting the requirements of **Specification Section 5.2.5** shall be installed in the excavation atop the fabric. If in the opinion of the Owner, 3" to 6" stone placement has caused displacement or damage to the underlying separation fabric or sub-base, the Contractor shall remove the 3" to 6" stone and repair the displacement or damage and/or replace the fabric and 3" to 6" stone to the satisfaction of the Owner. All costs associated with the removal of 3" to 6" stone and necessary repair work shall be borne by the Contractor and at no cost to the Owner.

**5.4.7.6** Either a pipe or berm mound shall be installed at each Stone Construction Entrance.

**5.4.7.6.1** Berm mounds shall be 0.7 ft., minimum, above the placed 6" layer of 3" to 6" stone with a 3.0 foot, minimum, level top and 5 horizontal to 1 vertical slopes coming into and out of the berm mound as shown on the plans.

**5.4.7.6.2** Pipes meeting the requirements of **Specification 5.2.7** and as shown on the plans shall be excavated, installed, and backfilled in accordance with **Section 604** of the **WVDOH Standard Specifications Roads and Bridges**, Adopted 2010.

## **5.5 Method of Measurement**

The method of measurement for straw wattles or silt fence shall be performed to the nearest linear foot of sediment control placed in conformance with these specifications and accepted by the WVDEP Representative. Only that sediment control which is illustrated in the Drawings shall be included for measurement. Any additional sediment control installed by the Contractor to meet any applicable State or Federal Law or Regulation shall be the Contractor's sole responsibility and all costs pursuant thereto shall be born fully by the Contractor.

**5.5.1** Any sediment control that is not illustrated in the Drawing that the Contractor may install to protect streams for other purposes shall not be included for measurement and shall be the sole

responsibility of the Contractor. However, any sediment control approved by the WVDEP Representative prior to placement shall be included for measurement.

## **5.6 Basis of Payment**

Sediment Control shall be paid at the bid unit price per linear foot for silt fence placed and accepted by the WVDEP Representative. Erosion Control shall be paid at the bid unit price per linear foot for straw wattles placed and accepted by the WVDEP Representative. Stabilized Construction Entrance shall be paid at the bid unit price per each entrance placed and accepted by the WVDEP Representative. Payment shall constitute full compensation for all materials, labor, equipment and incidentals necessary to perform the work. Additionally, payment shall constitute full compensation for any required maintenance, sediment removal and disposal of installed sediment or erosion control features.

**5.6.1** The method of measurement for Straw Wattles shall be per linear foot installed and approved by the Engineer. The linear foot bid shall include all straw wattles, stakes, construction, and maintenance including all necessary materials, supplies, labor and equipment for installation and maintenance including sediment removal and disposal.

**5.6.2** Silt Fence, Super Silt Fence, or Straw Wattles displaced, destroyed, or removed by the Contractor, accumulated sediment, or flowing water shall be reinstalled in their original location and effectiveness and at the expense of the Contractor. No measurement is required for these reinstalled components.

**5.6.3** The method of measurement for Stabilized Construction Entrances shall be per each installed and approved by the Engineer. The unit price bid per each shall be full compensation for constructing the Stabilized Construction Entrances as shown on the plans and herein specified, including excavation; discarding excavated material; compaction; undercutting, filling, and compaction (if required); fabric; stone; maintenance; regrading and placing crusher run stone prior to demobilization operations to provide a smooth traveled surface; removal and discarding components; all as specified herein and shown on the plans.



**5.7 Pay Items**

**Item 5.1** “Sediment Control” (Silt Fence), per linear foot.

**Item 5.2** “Erosion Control”(Straw Wattles), per linear foot.

**Item 5.3** “Stabilized Construction Entrance”, per each.

## **6.0 Revegetation**

### **6.1 Description**

This work shall cover all operations incidental to the establishment of vegetation within the limits of construction as shown on the Construction Drawings and any other areas as directed by the WVDEP. This work also includes the furnishing and the application of fertilizer, agricultural limestone and mulch and the furnishing and sowing of seed, all in accordance with these Specifications and as designated herein.

**6.1.1** Revegetation shall begin on all graded areas that are at final grade within 7 days. Disturbed areas that will not be worked again for 21 days or more must be seeded and mulched within 7 days.

**6.1.2** No areas outside the limits of construction shall be disturbed without prior approval from the WVDEP in order to ensure that Right of Entry has been obtained. The Contractor at no expense to the WVDEP shall revegetate any areas outside the limits of construction, disturbed by the Contractor.

### **6.2 Materials**

#### **6.2.1 Fertilizer**

The commercial fertilizer to be used shall consist of a 10-20-20 grade of uniform composition and furnished in standard containers. These containers, in accordance with applicable State and Federal laws, must be clearly marked with the following information:

- a. Weight
- b. Name of Plant Nutrients
- c. Guaranteed Nutrients Percentages

Fertilizer rates shall be formulated from soil test results. In the absence of soil testing a rate of 1,000 lbs/acre will serve as a preferred minimum. Fertilizer shall be applied immediately to all areas reaching final grade by one of the two following methods:

- a. Apply and incorporate fertilizer during seedbed preparation.
- b. Apply fertilizer in hydroseeding mixture following seedbed preparation.

## **6.2.2 Limestone**

The lime to be used will be an agricultural grade pulverized limestone containing not less than 75% total carbonates. Fineness will be such that not less than 75% will pass through a #100 sieve and 100% will pass through a #10 sieve.

**6.2.2.1** Lime rate shall be formulated from soil test results. In the absence of soil testing a rate of five (5) tons/acre will serve as a preferred minimum. Lime should be thoroughly mixed into the top six (6) inches of soil.

## **6.2.3 Seed Mixtures**

The variety of grass and legume seed furnished for the project shall bear a tag, in accordance with applicable State and Federal laws, with the following information listed:

1. Lot Number
2. Seed Producers Name
3. Percent Purity
4. Percent Germination
5. Date of Germination Testing
6. Weed Seed Content (should be <25% by weight)

**6.2.3.1** All leguminous seed shall be inoculated with the specified strain of rhizobia that shall be a pure culture of bacteria selected for maximum vitality. No rhizobia shall be used which has passed the expiration date on each package. The inoculant shall be applied at five times the recommended rate except when used in a hydroseeding mixture when the rate will be ten times the recommended rate.

### **6.2.3.2 Temporary Seed Mixtures**

All stockpiles and other disturbed areas which will require further disturbance that will be delayed for a period of three (3) weeks or longer shall be vegetated according to the following guidelines:

Variety of Seed	Spring 3/15-5/15	Summer 5/31-8/15	Fall 8/15-10/15	Winter 10/15-11/15
	Lbs/acre			
Annual Ryegrass (Lolium multiflorum)	40		40	
German Millet* (Setaria italica)		40		
Cereal Rye (Secale Cereale)				170

**\*Do Not Use Japanese Millet**

All areas to be temporarily seeded which are to be redisturbed shall be fertilized with 500 lbs/acre of 10-20-20. All areas reaching final grade to be temporarily seeded shall be fertilized according to Section 8.2.1. Lime shall be applied according to Section 8.2.2 and mulch according to Section 8.2.4.

**6.2.3.3 Permanent Seed Mixtures Lawns**

Rate Lb/1000 sq. ft.	Seed Variety	Minimum Specifications	
		%Purity	% Total Germination
0.45	Red Fescue (Pennlawn)	98	85
0.90	Kentucky Bluegrass	85	75
0.70	Merion Bluegrass	90	75
0.20	Annual Ryegrass*	95	85

\*Use annual ryegrass only in mixtures seeded after August 1 and May 15

### 6.2.3.4 Permanent Seed Mixtures Pasture

Variety of Seed	Spring 3/15-5/30	Fall 8/16-10/14
lbs/acres (1)		
Orchard grass (Dactylis glomerata)	30	30
Birdsfoot Trefoil (2) (Lotus corniculatus)	15	15
Red Clover (Trifolium pratense)	10	10
Annual Ryegrass (Lolium Multiforum)	25	25
Bicolor Lespedeza	1	1
Foxtail Millet or	12	12
Hairy Vetch (3) (Vicia Villosa) or	5	5
Winter Wheat	0	90

1- seed-rate suggested is for Pure Live Seed (PLS) in lbs/acre.

2- Herbaceous legumes must be treated with an appropriate bacterium before seeding. On areas which are steeply sloping (steeper than 1.7:1) or slide-prone, substitute Crownvetch (Coronilla varia) at 20lbs/acre for Birdsfoot Trefoil.

3-Used only if the area is shaded.

### 6.2.4 Mulch Material

#### 6.2.4.1 Straw

Straw mulch (not hay) shall include baled wheat or oats straw or baled grass hay. Straw mulch shall be dry and reasonable free of weed sticks, sticks or other foreign material. Straw mulch shall be applied at a rate of two (2) tons/acre. The straw mulch shall be anchored with 100

gallons/acre asphalt emulsion or 750 lbs/acre wood cellulose fiber.

#### **6.2.4.2 Wood Cellulose Fiber**

Wood cellulose fiber may only be used on slopes greater than 2:1 at a rate of 1,500 lbs/acre. Mulch for use with the hydraulic application of seed, fertilizer and lime shall consist of wood cellulose fiber. It shall be processed in such a manner that it will contain no growth or germination inhibiting factors and shall be dyed green. It shall be manufactured in such a manner that:

- (1) After addition and agitation in slurry tanks with fertilizers, lime seeds, and water, the fibers in the material will become uniformly suspended to form a homogeneous slurry, and:
- (2) The material, when hydraulically sprayed on the ground, will form a blotter-like ground cover impregnated uniformly with seed, and will allow rainfall to percolate to the underlying soil. The wood cellulose fiber shall be supplied in packages having a gross weight not to exceed 100 pounds. Weight specifications of this material from suppliers, and for all applications, shall refer only to air-dry weight of the fiber material. Air-dry weight is based on the normal weight standard of the Technical Association of the Pulp and Paper Industry for Wood Cellulose and is considered equivalent to 10% moisture. Each package of the cellulose fiber shall be marked by the manufacturer to show the air-dry weight content.

#### **6.2.5 Water**

Water shall be reasonably free from injurious and other toxic substances harmful to plant life. The source of water is subject to the approval of the WVDEP.

### **6.3 Construction Methods**

**6.3.1** All Site restoration shall begin on each area immediately after completion of construction activities required for that area, so as to

utilize the fine soil material as a seedbed before this material is lost via erosion from subsequent rainfall.

- 6.3.2** On sites where appropriate equipment can operate, the seedbed shall be prepared by breaking up surface crusts and loosening the soil material to a minimum of three (3) inches. Discing, harrowing, cultipacking or other acceptable tillage operations may be used to prepare the seedbed. Seedbed preparation shall be suspended when soil moisture conditions are not suitable for the preparation of a satisfactory seedbed as determined by the WVDEP.
- 6.3.3** Reclamation and revegetation of areas where equipment cannot operate shall require hand raking and removal of rocks larger than two (2) inches in diameter. After broadcasting or otherwise applying seed, the surface of the seedbed shall be raked, culti-packed, or very lightly brush dragged to insure seed contact with soil. All raking shall be done parallel with the contour. Seedbed preparation shall be suspended when soil moisture conditions are not suitable for the preparation of a satisfactory seedbed as determined by the WVDEP.
- 6.3.4** Mulching operations may also require manual applications within small areas. Mulch that becomes displaced shall be re-applied at once, together with necessary reseeded, all at no expense to WVDEP.
- 6.3.5** Seedbed preparation and seeding shall take place progressively as construction proceeds.
- 6.3.6** All seeding operations shall be performed immediately following seedbed preparation in such a manner that the seed is applied in the specified quantities uniformly on the designated areas.
- 6.3.7** Seed application shall consist of approved hydro seeding methods where feasible.
- 6.3.8** Any seed left in hydroseeder overnight shall be re-inoculated before that seed shall be applied. Other methods of seed application maybe utilized for site-specific reasons when approved by the WVDEP.
- 6.3.9** Any area failing to establish a vegetative stand due to weather or adverse soil conditions shall be re-seeded, re-limed, re-fertilized and re-mulched as directed by the WVDEP.

**6.3.10** The Contractor shall maintain all seeded areas until final acceptance of the project. All areas shall be protected from any further equipment traffic and any damaged areas shall be repaired and re-seeded.

**6.3.11** Maintaining seeded areas shall consist of watering, refilling, re-fertilizing, re-liming, re-seeding and re-mulching erosion gullies and all bare areas.

**6.3.12** A second and third seeding will be applied as needed, or as directed by the WVDEP.

**6.3.12.1 Second Step Seeding**

The second step seeding will take place during the first defined seeding period following the initial seeding. No payment shall be made for second step seeding, this work is part of the contract if completed before the final inspection, or shall be considered warranty if completed after the final inspection. The following shall be used as a guide for second step application:

- a. For areas with less than a 50% stand or subject to severe erosion, apply the complete amount of seed, fertilizer, lime and mulch as specified.
- b. For areas with over 50% stand apply one half the original fertilizer, lime and seed. If erosion is a problem, apply one half of the original mulch specified in Section 6.2.4.

**6.3.12.2 Third Step Seeding**

The third step seeding shall consist of spot applications on areas not showing a satisfactory stand. The seeding shall take place at the next defined seeding period following the second step application.

The quantity of material to be used shall be determined on the same basis as for the second step application in Section 6.3.10.1

Second and third step seeding shall be considered part of the contract if completed before the final inspection or considered warranty if completed after the final inspection.



#### **6.4 Method of Measurement**

**6.4.1** The Contractor shall be paid only for those areas disturbed and revegetated during operations necessary for completion of the work as shown on the Plans. The quantity shall not include areas disturbed for storage facilities and staging areas unless prior approval was obtained from the WVDEP. No payment shall be made for any seeding conducted after the final inspection; this work is considered warranty.

#### **6.5 Basis of Payment**

**6.5.1** The quantities of work completed will be paid at the contract bid price for each item. That price and payment shall be full compensation for doing all the work herein prescribed in a workmanlike and acceptable manner; including the furnishing of all labor, materials, tools, equipment, supplies and incidentals necessary to complete the work.

**6.5.2** No payment will be made for seeding after the initial seeding. All work done after initial seeding will be done as maintenance of a completed phase of work or as warranty work after the final inspection.

#### **6.6 Pay Items**

**Item 6.0 "Revegetation"**, per plan view acre.

## **7.0 DRAINAGE STRUCTURES**

### **7.1 Description**

**7.1.1** This work shall consist of furnishing all labor, equipment and materials necessary to construct the drainage structures shown on the drawings. Drainage structures shown include, but are not limited to bench drains, pipe, low water crossings, riprap trapezoidal and vee ditches.

### **7.2 Materials**

**7.2.1** Rock for rip rap ditches with slopes less than 40% shall consist of hard durable limestone and shall have a d50 of 12 inches. The rock shall range in size from 6 inches minimum to 18 inches maximum diameter with no more than 15 percent by weight less than 6 inches. When the channels slope exceeds 40% the remainder of the channel shall be grouted.

**7.2.2** Pipe bedding shall consist minimum 6 inches of select backfill material or 1-1/2" crusher run stone.

**7.2.3** The grout mix shall be as follows:

- a.** Cement: Type IA, Type I or Type II with an air entraining admixture, 6 sacks or 564 lbs./c.y.
- b.** Fine Coarse Aggregate: 1,128 lbs./c.y. (surface dry weight).
- c.** Coarse Concrete Aggregate: Pea Gravel, 1,692 lbs./c.y.(surface dry weight) Size No. 67, 7 or 8 as per ASTM C-33.
- d.** Water: 45 gal./c.y., or enough to provide a thick creamy consistency.
- e.** Air Content: 6 to 10 percent.

**7.2.4** All SDR-35 piping shall meet the latest ASTM D-3034 Standard.

**7.2.5** The Contractor should be aware that no provisions have been made to obtain rock on site. All rock rip rap used throughout the project site shall consist of locally available, commercially purchased, calcareous stone (except as noted otherwise) meeting the following requirements. The rock rip rap shall have a maximum weighted loss of thirty percent when subjected to five (5) cycles of the Sodium Sulfate Soundness Test – ASTM C88 (ASTM C88-99a Standard Test Method for Soundness of Aggregates by Use of Sodium Sulfate or Magnesium Sulfate), as modified by the American Association of State Highway and Transportation Officials (AASHTO) T-104. The use of on-site rock materials for rip rap, regardless of its quality or durability, will not be permitted.

### **7.3 Construction Methods**

- 7.3.1 The ditches shall be constructed to the approximate line, grade, and templates as shown on the plans or as directed by the WVDEP. Excess material from ditch and pipe trench excavation that is suitable for soil cover may be segregated, stockpiled and utilized to support "Revegetation" operations. Otherwise, excess material from ditch and pipe trench excavation will be required to be disposed of by the Contractor in an on-site disposal area. In the event an off-site disposal area is required, the Contractor shall obtain all necessary permits, etc., required and be in accordance with Section VIII of the Special Provisions for these specifications. Sections of ditches that are cut to rock shall not require rock rip rap but shall be paid the appropriate size rip-rap ditch.
- 7.3.2 Rip rap shall be placed in accordance with Section 218.3.2 of the WVDOT **Standard Specifications for Roads and Bridges**, Adopted 2010.
- 7.3.3 Any rip rap ditch having a slope less than 40% shall consist of 12" rip rap. If at any point the slope is greater than 40%, grouted rip rap shall be used. Grout shall be placed as soon as possible after placement of riprap. The riprap stone shall be free of any objectionable material and thoroughly wet immediately before grout is applied. A transition back to 12" rip rap that is not grouted will not occur once the 40% slope is encountered.

### **7.4 Method of Measurement**

- 7.4.1 The method of measurement for the rip rap ditches, grouted rip rap ditches and reinforced vegetated ditches and grouted low water crossings shall be on a linear foot basis measured along the flow line of the channel. The unit price shall include excavation, purchase and placement of rock and grout and all equipment and labor necessary for their installation. Culvert piping shall be measured on a linear foot basis. The unit price for culvert shall include excavation, purchase and placement and all equipment and labor necessary for installation. The unit price for grouted low water crossing shall be measured per each.

### **7.5 Basis of Payment**

- 7.5.1 The basis of payment for drainage structures shall be per foot for ditches and per each for low water crossings and will include all costs for materials, equipment and labor for their installation.

**7.6 Pay Items**

**Item 7.1 Rip Rap Channel (2' Bottom)", per linear foot**

**Item 7.2 Grouted Rip Rap Channel (2' Bottom)", per linear foot**

**Item 7.3 "24" HDPE Pipe", per linear foot**

**Item 7.4 "15" HDPE Pipe", per linear foot**

**Item 7.5 "Low Water Crossing", per each.**

## 8.0 UNCLASSIFIED EXCAVATION

### 8.1 Description

This work consists of re-grading of approximately 3,000 cubic yards of material to backfill the highwalls as shown on the drawings. Any mine spoil encountered shall be covered with a minimum of 1' of good soil material.

**8.1.1** Fill material for embankments shall be considered a mixture of soil or rock or soil and rock commingled with coal refuse encountered during excavation operations. For purposes of payment only, no distinction shall be made between soil, rock, refuse, or other material encountered, as all shall be deemed Unclassified Excavation. Top soil encountered during clearing and grubbing operations or in excavation operations shall be stockpiled and used as a final cover at final grades. Fill material placed next to highwalls shall be benched into the highwall with the dozer blade where the strata will allow. The backfill material shall be placed in horizontal lifts and lifts being no more than 12 inches. Each lift shall be compacted to 90% standard proctor.

### 8.2 Equipment

Standard excavating and earth moving equipment can be used. The equipment must be capable of excavating to the depths as indicated on the Plans.

The excavating equipment must be equipped with an exhaust system meeting the original manufacturer's recommendation. All air compressors used onsite will meet manufacturer's specifications pertaining to exhaust and operating noise levels. All high-pressure airline connections will be equipped with safety collars or lanyards. All fluid leaks or discharges must be prevented or cleaned up to the approval of WVDEP.

### 8.3 Borrow/Disposal Area

There are no designated disposal areas shown on the plans. Soil cover shall be obtained as designated areas shown on the plans. No separate payment or measurement shall be made for soil cover required unless off-site borrow areas become necessary, in which case payment shall be included in "**Unclassified Excavation**" quantities, otherwise, soil cover shall be considered incidental. However, if off-site borrow/disposal areas should be necessary to provide for material shortages or if excess material disposal is other than an approved landfill, then the Contractor is responsible for locating these areas and obtaining right-of-entry

agreements in which the property owner indemnifies and holds the Owner and OSMRE harmless from any injury or damage whatsoever resulting from the Contractor's use of the property. All prospective Contractors and Bidders must obtain their own permission from the landowner for any subsurface tests, borings, or pits. The Contractor shall be held responsible for compliance with all NEPA requirements and shall provide proof of such compliance to the Owner. The Contractor shall submit a reclamation plan to the Owner and must obtain approval for said plan prior to any disturbance to the disposal/borrow site. The regrading depicted on the construction plans provides a balanced cut and fill earthwork construction project.

#### **8.4 Soil Cover**

This work consists of covering all areas reaching final grade with a one foot (1') thick layer of suitable soil material capable of supporting vegetation. The soil cover material shall be obtained in conjunction with clearing and grubbing operations, regrading and/or drainage feature and other planned excavations and as directed and approved by the Owner. The Contractor is advised that portions of the project area covered by coal, coal refuse, and dark gray to black carbonaceous shale. Soil from the designated borrow areas shall be used as a general cover of the site at final grade and a soil cover for encountered coal refuse, exposed coal seams, bedrock, and buried materials at final grade elevations. Areas reaching final grade in exposed coal or coal refuse shall be undercut a minimum of 12 inches with a minimum of 12 inches of soil material placed over the exposed coal or refuse to the lines and grades shown on the plans. Excavation of soil cover shall be as per **Section 8.5.2**. It is anticipated an adequate amount of soil cover will be available to cover the sites. The Contractor is responsible for securing a borrow area outside the Contractor's Work Limits in the event that adequate soil material is not available on site and at no additional cost to Owner. If, during the course of construction, the need for off-site borrow areas becomes evident, the Contractor shall obtain prior approval from the Owner for such borrowing and the borrow area must comply with NEPA regulations and **Special Provision Number 7** of these specifications. The Contractor shall obtain Right-of-Entry Agreements for any soil, clay, or rock borrow areas outside the construction limits that also provide for entry by the Owner and OSM for inspection purposes, and with such agreements stating that the property owner(s) indemnifies and holds the Owner and OSM harmless from injury or damage whatsoever resulting from the use of the property.

#### **8.5 Method of Construction**

**8.5.1** The Contractor shall comply with all special provisions, with particular attention to **Special Provision 5, Schedule of Work** and

## **Special Provision 10, Safety.**

- 8.5.1.1** The Contractor shall maintain and protect traffic, protect the work in progress, protect adjacent property from excess dust resulting from the construction and maintain traffic through, around, or adjacent to the construction area. The Contractor shall comply with **OSHA Regulation 29CFR1926 Subpart P** for excavation of trenches associated with pipe, culvert, subsurface drains, wet mine seal constructions, and similar constructions. The Contractor shall also protect pedestrian and vehicular traffic around excavations and trenches in compliance with the **U.S. Federal Highway Administration Manual of Uniform Traffic Control Devices** and the **WVDOT “Manual on Traffic Control for Streets and Highway”** 2006 edition, dated March 2006. The Contractor will be required to comply with all WVDOT rules, regulations, weight limits, and speed limits associated with and posted on public roads used by the Contractor to access the project. The Contractor will be required to coordinate his operations with landowners and provide unrestricted access to them at all times. The Contractor will also be required to keep existing access roads used during construction of the project free of fugitive dust and clean of mud and other debris from the job site deposited by construction and other vehicles entering or leaving the project area.
- 8.5.1.2** The Contractor’s work hours for this project shall be from 7:00 a.m. to 7:00 p.m. Monday through Saturday. Work on Sunday and major holidays, as defined by the Engineer, will not be allowed on this project.
- 8.5.1.3** The sequence of operations shall be at the discretion of the Contractor. However, at a minimum, water shall not be allowed to enter into or pool in constructed ditches or pipes until all components have been installed and are operational and the construction has been approved by the Owner. Work shall proceed downstream to upstream, bringing the site to grade and installing drainage control structures. The Contractor shall comply with sequence of operations outlined in **Special provision 23, NPDES Stormwater Permit Guidelines** and the approved NPDES Permit in regards to controlling sediment and erosion from the project and to protect the local environment.

## 8.5.2 Excavation

Material excavation shall consist of the required removal of materials from areas shown and the sloping and finishing of the areas to the required lines and grades depicted on the construction drawings. The slopes may be varied only by permission of the Owner. Any excavation beyond planned grades will not be paid for unless prior authorization is obtained from the Owner. Slopes shall be trimmed neatly to present a uniform surface, free from hollows and protrusions and loose or overhanging rocks. The tops of all slopes shall be rounded to form a smooth, uniform transition to existing ground. Areas cut to grade in exposed coal refuse or coal shall be undercut one foot (1.0') below final grades shown on the reclamation plans with final grades achieved by placing one foot (1.0') of soil cover atop the undercut areas.

**8.5.2.1** The regrading depicted on the construction plans provides a balanced cut and fill earthwork construction project. Generally the refuse piles are graded to a 2:1 or milder slope with the refuse piles graded to direct the surface water away from the face of the refuse pile and to a swale where the refuse pile intersects with the existing ground. The swale should be placed in the existing ground.

**8.5.2.2** The reclamation approach described in these construction specifications and shown on the plans is intended to provide a lasting, stable configuration. The Contractor is required to exercise care to avoid conditions which may result in unstable conditions during the construction process. The Contractor shall be responsible for protecting residences, businesses and their constructions from damage. The Contractor must utilize material removal techniques, which are generally considered to be conducive to retaining slope stability. Additionally, disturbed slopes shall be brought to the design template as soon as practical and shall be protected in accordance with **Specification Section 6.0, "Revegetation"**.

## 8.5.3 Material Placement

The regrading plan contains balanced cut and fill areas. All excavated materials shall be moved and deposited as shown on the plans and detailed in these specifications. Off-site disposal areas (if necessary) shall comply with **Specification Section 8.3** and **Special Provision VII**. Every effort has been made to estimate



quantities as accurately as possible, however, the amount of earthwork estimated is for information purposes only and the Owner in no way guarantees the quantities listed. Field adjustments to elevations, lines, and grades may be required to correctly construct this project as shown on the plans. Such adjustments shall be made by the Contractor at no additional costs to the Owner. Owner reserves the right to increase or decrease any or all of the quantities of work or to omit any of them, as it may deem necessary.

**8.5.3.1** Iron precipitate, coal or coal refuse, and black or dark gray shales, acidic materials, and other on-site potentially toxic materials shall be specially handled to the satisfaction of the Owner. Coal and coal refuse, black or dark gray shales, acidic material, and other on-site similar materials to be buried in-place shall not be placed within one foot (1'), minimum, vertically of any coal seam and shall be compacted and placed beneath a cap of twelve inches (12"), minimum, of soil cover (capable of supporting vegetation) and proposed final grades depicted on the plans. Coal and coal refuse, black or dark gray shales, acidic material, and other on-site similar materials shall not be buried or placed beneath or within twenty five feet (25.0') of constructed or existing drainage conveyances.

**8.5.3.2** Boulders are apparent on the surface of the Project area. Boulders to be incorporated into the fill shall be sized less than 2 feet in any dimension, segregated and not concentrated in any fill location, and shall be buried at least twelve inches (12") below finished grade.

**8.5.3.3** Depositing and compacting fill in layers shall be started at the lowest point in the fill below grade, at the bottom of ravines and at the toe of the slope on side hill fills. Prior to fill placement, existing foundation for the embankment will be proof-rolled and approved by the Owner, with all unsuitable material, as determined by the Owner, removed.

Excavated material shall be placed in embankments in successive layers not to exceed one foot (1') in thickness before compaction. The layers shall be constructed approximately horizontal. Each layer, before starting the next, shall be leveled and smoothed by means of power driven graders, dozers, or other suitable equipment with adequate weight, capacity, and power to do the work. Layers shall be extended across the entire fill at the level of

deposition unless otherwise authorized by the Owner. Each layer, before starting the next, shall be compacted.

- 8.5.3.4** Fill materials to be used in any area of embankment or fill placement shall be free from trash, debris, frozen soil, organic material or other foreign material. No burning refuse (defined as greater than 140° F) and/or combustible material shall be placed in fill areas. No burning refuse was observed during initial investigations.
- 8.5.3.5** Embankment fill and embankment subgrade materials shall be compacted to at least 90% of Standard Proctor maximum dry density at a moisture content of not less than 2% below nor greater than 3% above optimum. Testing shall be at a frequency as indicated in Section 3.4.5 of Quality Control.
- 8.5.3.6** Embankment fill material that does not contain sufficient moisture to be compacted to the requirements specified herein shall receive applications of water necessary for compaction. Water shall be applied with suitable sprinkling devices and shall be thoroughly incorporated into the material that is to be compacted. Embankment fill material that contains excess moisture shall be dried prior to compaction. Sufficient discing equipment shall be continuously available at the site and shall be used to add water or remove excess moisture from fill materials.
- 8.5.3.7** If in the opinion of the WVDEP the hauling equipment causes horizontal shears or slicken slides, rutting, quaking, heaving, cracking, or excessive deformation where material is placed, the Contractor shall limit the type, load or travel speed of the hauling equipment on areas where the material is placed. During material placement, the Contractor shall remove from the areas of fill any material the Owner considers objectionable and shall dispose of such material and refill the area as directed and at no additional cost to the Owner. The Contractor shall select compaction equipment that will produce the specified density. Compaction equipment that produces a sealed, slick surface will not be allowed in fill areas. Should fill areas become sealed with a slick surface, the Contractor will be required to scarify the surface to a depth of four inches (4") prior to placement of the next lift.
- 8.5.3.8** At the close of each day's work, or when work is to be stopped for a period of time, the entire surface of the

compacted fill shall be sealed by a method approved by the Owner. If, after a prolonged rainfall, the surface of embankments is too wet and plastic to work properly, the top material shall be removed to expose firm material. Ruts in the surface of any layer shall be suitably filled or eliminated by grading before compaction. The disturbed areas shall be revegetated in accordance with **Specification 6.0, "Revegetation"**.

- 8.5.3.9** The regrading plan shall be conducted in a manner such that topsoil encountered and stockpiled shall be uniformly spread over the entire final graded area. The soil cover shall not be compacted to the specifications stated for fill compaction, but shall be placed in a manner to allow for proper establishment of vegetation as described in the seedbed preparation, **Specification Section 6.0 "Revegetation"**, portion of these specifications. The required soil amendments are to be incorporated into this top-dressing material while it is in a loose state, to facilitate proper mixing of these materials within the soil matrix. The soil cover shall then be prepared by tracking-in with a dozer perpendicular to the slope. The Owner may require that the soil cover be scarified prior to seeding if compaction is considered excessive or if rills develop. All disturbed areas will be revegetated according to **Specification Section 6.0, "Revegetation"**.

#### **8.5.4 Coal Refuse**

The Contractor is advised that coal refuse and black or dark gray shales, acidic materials, and other on-site potentially toxic materials are located on the surface within the project. Topsoil encountered during excavation operations shall be stockpiled and used as a general cover of the site at final grade.

- 8.5.4.1** Areas cut to grade in exposed coal refuse or coal shall be undercut one foot (1.0') below final grades shown on the reclamation plans with final grades achieved by placing one foot (1.0') of soil cover atop the undercut areas.
- 8.5.4.2** Coal and coal refuse, black or dark gray shales, acidic material, and other on-site similar materials to be buried in-place shall not be placed within one foot (1'), minimum, vertically of any coal seam and shall be compacted and placed beneath a cap of twelve inches (12"), minimum, of soil cover (capable of supporting vegetation) and proposed final grades depicted on the plans.

**8.5.4.3** Should the Contractor decide to place coal refuse, black or dark gray shale, acid producing material, and other on-site similar materials above the coal pavement in coal pits and against highwalls, this potentially toxic material shall be compacted and entombed as shown on the plans, placed beneath a cap of three foot (3.0') of soil cover (capable of supporting vegetation) and proposed final grades depicted on the plans and revegetated.

**8.5.4.4** Coal and coal refuse, black or dark gray shales, acidic material, and other on-site similar materials shall not be buried or placed beneath or within twenty five feet (25.0') of constructed or existing drainage conveyances.

## **8.6 Method of Measurement**

The method of measurement for unclassified excavation shall be per cubic yard of excavation (cut) defined by proposed final grades and cross sections shown on the plans and herein specified. The unit price bid shall also include all topsoil, soil, and soil covering operations as specified, as well as special handling, burying, and entombing of coal, coal refuse, and black or dark gray shale. Acceptable volume calculation of cut material are: the average end method based on as-built cross-sectional areas, or the Contractor has the option of performing a topographic survey of the finished ground to produce a surface that can be compared to the original (existing) ground using a computer-aided drafting program. It is recommended that the comparison of the finished and original ground surfaces be calculated using the grid volume method with a cut/fill factor of 1.0 foot. Field survey and volume calculations shall be certified by a Professional Land Surveyor or Professional Engineer.

**8.6.1** Excavation of materials required to place and install ditch lining materials to install pipes, to install cleanouts and to install subsurface drains shall not be included for payment in this Item, but shall be considered incidental to the installation or construction where they are located.

**8.6.2** Excavation and placement of materials for undercutting beneath drainage ditches and pipes shall not be included for payment in this Item, but shall be included in **Section 7.0 Drainage Structures** in the unit price bid for the drainage ditch, pipe, box culvert, or inlet.

**8.6.3** Excavation and placement of materials to upgrade, repair, and maintain access roads and driveways shall not be included for payment in this Item, but shall be considered incidental to **Item 4.1 "Site Preparation"**.

**8.6.4** Soil cover shall be obtained as detailed in **Specification Section 8.4**. No measurement shall be required unless off-site borrow areas become necessary, in which case payment shall be included in **Item 8.0 “Unclassified Excavation”**, otherwise, soil cover shall be considered incidental. It is anticipated that material encountered during excavation operations shall produce sufficient suitable soil material for use as soil cover. Undercutting of exposed coal refuse at final grades shall not be submitted for payment but shall be considered incidental to **Item 8.0 “Unclassified Excavation”**.

**8.7** **Basis of Payment**

Payment for material excavated to achieve final grades will be paid by the unit price bid for **“Unclassified Excavation”**, which shall include regrading and filling of excavated materials as well as off-site disposal (if required) as shown on the plans and herein specified. Soil cover shall be obtained as detailed in **Specification Section 8.4** of these **Specifications**. No separate payment shall be required unless off-site borrow areas become necessary, in which case payment shall be included in **Item 8.0 “Unclassified Excavation”**, otherwise, soil cover shall be considered incidental to unclassified excavation. It is anticipated that material encountered during excavation operations shall produce sufficient suitable soil material for use as soil cover.

**8.8** **Pay Items**

**Item 8.0** **“Unclassified Excavation”**, per cubic yard.

## **12.0 HORIZONTAL BORING**

### **Description**

Horizontal mine drains shall be installed as shown on the Design Drawings. The location, grade, alignment, and length of the mine drains installed shall be approved by the WV DEP at the time of installation. The mine pool shall be dewatered prior to installation of mine drains by pumping from wells or sumps as approved by the Engineer and in accordance with these Specifications. The Contractor shall prepare and submit a dewatering and AMD treatment plan to the WV DEP for approval prior to beginning work onsite.

### **12.1 Materials**

- 12.1.1.** Mine Drain Pipe: 12 inch diameter PVC pipe, caps, and fittings, SDR-35 perforated and non-perforated as shown on the Drawings.
- 12.1.2.** Casing Pipe: Pipe for the 16 inch diameter casing shall be Schedule 40 carbon steel, perforated as a minimum 20 feet at its inby end and/or as modified by the WV DEP based on pilot hold drilling data.
- 12.1.3.** Grout: A suitable grout mix (one part cement and two parts fly ash with sufficient water to produce a workable consistency) used to fill the annular space between the steel casing pipe and the non-perforated portion of the 12 inch mine drain pipe.
- 12.1.4.** Conveyance Pipe and Fittings: Conveyance pipe shall consist of 12 inch diameter SDR 35 PVC. Fittings shall consist of Schedule 40 PVC or cast iron with gasketed bell and spigot joints as shown on the plans.

### **12.2 Equipment**

- 12.2.1.** A suitable boring machine capable of drilling a minimum of 4 inch and a maximum of 18 inch hole horizontally maintaining the alignment and grade as shown on the plans.
- 12.2.2.** A suitable self leveling laser or similar equipment to check the line and grade of the drill hole for mine drain pipe.

- 12.2.3.** Suitable drill bits and stabilizer that provide a full diameter, straight hole whether horizontal or inclined.
- 12.2.4.** Such casing (standpipes), valves, fittings, and other accessories as may be necessary to provide safe drilling of the pilot holes for dewatering the remaining mine pool in a controlled manner, capable of shutting off the mine pool discharge whenever deemed necessary by the WV DEP and to avoid flooding of the jacking pit.
- 12.2.5.** Suitable grout pump, pipes, or tubes for grouting the annular space between the drill hole and the mine drain pipe.

### **12.3 Construction Methods**

- 12.3.1.** Drain and dewater the mine reservoir by pumping from wells or sumps as required to drawdown the reservoir to a safe level so that the jacking pit is not flooded during installation of pilot holes or horizontal mine drains. A dewatering and AMD treatment plan must be prepared and submitted to the DEP for review and approval prior to beginning work.
- 12.3.2.** Horizontal Mine Drainage System: Prior to installing permanent mine drains, the existing mine pool shall be drained to a safe level by pumping from wells or sumps. After the reservoir is drained to the extent practical and to a safe level, and any remaining mine pool shall be drained completely in a safe and controlled manner through one or two (2) – 6 inch diameter pilot holes drilled from a boring pit to facilitate the horizontal drilling activities at each mine drain location. The pilot holes shall be drilled about four feet apart at the approximate mine drain alignment and grade shown on the Drawings. A drilling log shall be completed and kept at the site during all phases of the pilot hole installation. Depending on the results of the drilling for the first pilot hole, the drilling of the second pilot hole may be waived or altered as directed by the WV DEP.
- 12.3.3.** The drilling sites will require excavation to provide access for the drilling assembly. Measures must be employed to assure that the site preparation is conducted in a safe manner. All appropriate accessories for the drill to function properly including motor controls, wiring, and three phase power shall be properly installed and provided with safety measures to prevent electrocution

hazards to all persons who may visit the site. All material common to the operation must be stored and maintained properly.

- 12.3.4.** The mine workings to be dewatered were located by the test borings P-1 and P-2 as shown on the Plans. Piezometers installed in P-1 and P-2 are available for the Contractor's use in evaluating dewatering activity. P-2 was drilled into a mine void but at the time of the drilling there was no mine pool at that location. The existing borings may be used as a guide to intercept the mine workings. Since the exact location of the mine workings was not identified, extra footage has been included in the bid item for pilot hole drilling. The Contractor will then have more than one opportunity for the pilot hole to intercept the mine workings. There are two (2) piezometers that may be used for monitoring the mine water level. The Contractor shall monitor the water level within the mine and perform the dewatering work in the safest manner possible. Any damage due to improperly controlled flows from the proposed borings shall be the sole responsibility of the Contractor. The Contractor will be required to submit surveying information, proposed hole alignment and other relevant information to the WV DEP for approval before drilling.
- 12.3.5.** Pilot holes for dewatering the mine pool shall be drilled through proper standpipe casing and valves so that once the pilot holes encounter water; the outflow can be controlled and/or, if required, can be shut off. Adequate piping is to be installed or other arrangements shall be made that are previously approved by the WV DEP, so that the water discharging from the pilot holes can be safely drained and the boring pit can be maintained relatively dry, and soil erosion can be minimized. The discharge shall be pumped or piped to a mine drainage treatment pond(s). AMD treatment areas are shown on the plans. The location, size, and configuration of the treatment pond(s) shall be determined by the Contractor and approved by the WV DEP. Water which exhibits sediment or a pH which is less than 6.0 and more than 9.0 shall not be discharged to the receiving stream.
- 12.3.6.** The Contractor shall use a self leveling laser or similar instrument to check the line and grade elevation during drilling operations. At every 20 ft. of drilling advancement, and at the beginning of each work shift, the Contractor shall remove the drilling tool from the



hole; “defog” the casing pipe and check the line and grade elevation. If misalignment occurs during the operations, the Contractor shall be responsible for abandoning the hole, backfilling and sealing the misaligned hole with grout, and drilling a new hole at the desired alignment and grade. No payment shall be made for a misaligned hole.

- 12.3.7.** Advancement of the pilot holes (and subsequent construction of permanent mine drains) beyond the limits shown on the plans may be required if significant water volumes are not encountered. Following the completion of the pilot hole drilling, the Contractor shall allow the existing mine pool to drain while periodically measuring the mine pool elevation through the piezometers. Discharged mine water shall be tested for pH throughout the dewatering process and may have to be treated with soda ash briquettes. A mine water neutralization system shall be constructed as necessary and the discharge treated as directed by the WV DEP.
- 12.3.8.** All excess material generated by the work involved in this section will be used as Random Fill.
- 12.3.9.** After the existing mine pool is drained, the Contractor shall enlarge the pilot holes by reaming to sufficient diameter so that 16-inch diameter steel casing can be installed. Pipe sections shall be welded together as drilling advances. The pipe shall be field perforated with 1 inch diameter holes on the inby end for a minimum of 20 ft. and/or as determined by the WV DEP from the information obtained from the pilot hole drill log.
- 12.3.10.** A permanent 12 inch diameter PVC drain pipe shall be installed inside the 16 inch steel casing as directed by the WVDEP.
- 12.3.11.** Each permanent 12 inch PVC mine drain at its inby end shall provided with stainless steel rod guards to prevent entry of obstructions into the mine drain.
- 12.3.12.** After the permanent mine drain pipes are installed, the annular space between the 12 inch diameter PVC pipe and the 16 inch diameter steel casing shall be filled along the non-perforated section with grout.

- 12.3.13.** Trenches and excavation for the boring pit exceeding 5 ft. in depth shall be adequately supported with suitable temporary shoring/bracing or other means with all trenching and excavation activities being performed in accordance with OSHA regulations 29 CFR Part 1926 and as approved by the WV DEP to prevent caving, slipping, or cracking of the sides and to protect workmen from injury. Any temporary shoring installed shall be removed promptly following backfilling the trench and excavation. It shall be the responsibility of the Contractor to design the shoring or other means of supporting the trench and excavation sides to prevent failure. Excavation stability and safety, as with all other safety aspects of this project, are the Contractor's responsibility, with the WV DEP and Engineer accepting no responsibility or liability for damage or injuries arising from the work described herein.
- 12.3.14.** At completion of dewatering, all excavated areas shall be backfilled in twelve inch loose lifts, and compacted in accordance with Section 8.0. Backfill material shall be suitable offsite or onsite material which is dry to damp and free of organic material. Any material planned for use as backfill material shall be approved by the WVDEP before use. If offsite material is utilized, the Contractor will be required to obtain an agreement from the borrow area landowner as indicated in Section VII.
- 12.3.15.** All remaining disturbed areas shall be regarded to the approximate original contour as directed by the WVDEP, including the drilling access roads and re-vegetated in accordance with Section 6.0.
- 12.3.16.** Piezometer Abandonment: Two piezometers which have been installed for the Contractor's use must be removed and abandoned by a person who has been certified by the State of West Virginia in accordance with 47CSR59 "Monitoring Well Regulations". This certification is necessary for any person to operate in the State of West Virginia and includes construction, installation, alteration and/or abandonment of any monitoring wells and select boreholes. The site of the piezometers shall be re-graded and re-vegetated in accordance with these Specifications. This removal and abandonment should be considered as incidental costs to the Site Preparation Item.

## **12.4. Method of Measurement**

- 12.4.1.** The method of measurement for installation of “Pilot Holes” shall be per the linear foot, properly installed. This shall include the cost of furnishing all labor, materials, tools, and equipment required for dewatering, installing the holes, removing all cuttings and maintaining the holes open and clean until enlarged and incidental work connected therewith is complete.
- 12.4.2.** The method of measurement for installation of “12 inch Diameter Mine Drain” shall be per the linear foot, properly installed. This shall include the cost of furnishing all labor, material, tools, and equipment required for dewatering, installing the drain, including the removal and disposal of all cuttings, proper installation of the 16 inch diameter steel casing, 12 inch diameter SDR-35 PVC solid and perforated pipe, grouting and all incidental work connected therewith.
- 12.4.3.** The method of measurement for the construction of the SDR 35 “12-inch PVC drainage conveyance pipe” shall be on a linear foot basis of the un-perforated pipe as measured from the end of the horizontal mine drain as shown on the plans to the downstream outlet. Trench excavation, furnishing and placement of the pipe and fittings, cleanouts, compacted on-site backfill, and minor grading, including all ancillary materials and operations required to construct the drainage conveyance pipes, will not be measured, but shall be considered incidental to this construction.
- 12.4.4.** Abandonment of piezometers shall not be measured. This work will be considered incidental to site preparation and no separate payment will be made.
- 12.4.5.** Dewatering of mine workings and AMD treatment systems necessary other than Soda Ash Briquettes shall be incidental to the horizontal mine drain installation and no separate payment will be made.
- 12.4.6.** Soda Ash Briquettes shall be measured per 50 lb bag required and used onsite to treat AMD as approved by the WV DEP.

**12.5. Basis of Payment**

- 12.5.1.** The basis of payment for “Pilot Holes” shall be per linear foot, properly installed. Said linear foot price shall include full compensation for all labor, drilling equipment, materials, and incidentals including treatments of mine drainage necessary to complete the work.
- 12.5.2.** The basis of payment for “16 inch Diameter Steel Casing” shall be per the linear foot, properly installed. Said linear foot price shall include full compensation for all labor, drilling, pipe grout equipment, materials, dewatering/treatment of AMD, and incidentals necessary to complete the work.
- 12.5.3.** 12” diameter conveyance pipe shall be measured and paid based on the unit price bid per linear foot of pipe installed measured end to end including all fittings and cleanouts complete as approved by the WV DEP.
- 12.5.4.** Soda Ash Briquettes required to adjust the pH of the mine discharge in accordance with these Specifications shall be paid at the unit price bid per each 50 lb bag used as directed and approved by the WV DEP. Said price shall include all material, labor, and material necessary to fully treat AMD

**12.6. Pay Item**

- Item 12.1** “Pilot Hole”, per linear foot
- Item 12.2** “16 inch Diameter Steel Casing”, per linear foot
- Item 12.3** “12-inch Diameter SDR-35 Conveyance Pipe”, per linear foot
- Item 12.4** “Soda Ash Briquettes – 50 lb. Bag”, per each

## Hopewell Church Refuse & Drainage DEP# 16074 Contractor's Bid Sheet

Vendors Name: \_\_\_\_\_

The DEP reserves the right to request additional information and supporting documentation regarding unit prices when the unit price appears to be unreasonable.

ITEM NO.	QUANTITY	DESCRIPTION	UNIT PRICE	AMOUNT
1.0	1	Mobilization/Demobilization (Shall Not Exceed 10%) (Lump Sum)	L.S.	\$
2.0	1	Construction Layout (Shall Not Exceed 5%) (Lump Sum)	L.S.	\$
3.0	1	Quality Control (Shall Not Exceed 3%) (Lump Sum)	L.S.	\$
4.1	1	Site Preparation (Shall Not Exceed 10%) (Lump Sum)	L.S.	\$
4.2	15,761	Access Road Rehabilitation	Ton	\$
5.1	900	Sediment Control (Silt Fence)	L.F.	\$
5.2	670	Erosion Control (Straw Wattles)	L.F.	\$
5.3	1	Stabilized Construction Entrance	Each	\$
6.0	2.9	Revegetation	Plan View Ac.	\$
7.1	865	Rip Rap Channel (2' Bottom)	L.F.	\$
7.2	25	Grouted Rip Rap Channel (2' Bottom)	L.F.	\$
7.3	40	24" HDPE Culvert	L.F.	\$
7.4	40	15" HDPE Culvert	L.F.	\$
7.5	1	Low Water Crossing	Each	\$
8.0	2,676	Unclassified Excavation	C.Y.	\$
12.1	788	Pilot Holes	L.F.	\$
12.2	788	16" Diameter Steel Casing	L.F.	\$
12.3	788	12" Diameter SDR-35 PVC Pipe	L.F.	\$
12.4	35	Soda Ash Briquettes (50#)	Each	\$
<b>TOTAL</b>				\$