Abandoned Mine Lands

Project Manual
Including Plans and Specifications
for Construction of

COOKES PEAK WEST MINE SAFEGUARD PROJECT - PHASE II

Luna County, New Mexico

PROJECT NO.
EMNRD-MMD-2016-02

AUTHORIZED BY:

ABANDONED MINE LAND PROGRAM
MINING and MINERALS DIVISION
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
STATE OF NEW MEXICO

(with reclamation fees paid by the New Mexico Coal Industry)

May 2016
PROJECT NAME: Cookes Peak West Mine Safeguard Project - Phase II

LOCATION: Deming, New Mexico

PROJECT NUMBER: EMNRD-MMD-2016-02

ENGINEER OF RECORD: Michael W. Tompson, P.E.
Mining and Minerals Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505
Telephone 505.476.3427

The technical material and data contained in the specifications were prepared under the supervision and direction of the undersigned, whose seal as a Professional Engineer (P.E.), licensed to practice in the State of New Mexico, is affixed below.

---

Michael W Tompson, P.E. (Project Engineer) 17409
License No.

Authorized Representative/Title Date
Energy, Minerals and
Natural Resources Department

Susana Martinez, Governor

All questions about the meaning or intent of these documents shall be submitted only to the Engineer of Record, stated above, in writing. Refer to Section 00120 - Supplementary Instructions to Bidders as to interpretations.
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- Figure 2: Site Location Map
- Figure 3: F55 – Culvert with Bat Gate
- Figure 4: F77 – Bat Gate in Rock Bulkhead
- Figure 5: Horizontal Bat Gate (Sheet 1)
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- Figure 8: Removable Crossbar Lock Detail
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II. STATUTES

The following statutes may be referenced in the text:

- NMSA 1978, §§ 13-1-28 through 199: Procurement Code
- NMSA 1978, §§ 13-4-1 through 30: Public Works Contracts
- NMSA 1978, §§ 13-4-31 through 43: Subcontractors Fair Practices Act
- NMSA 1978, §§ 41-4-1 through 27: Tort Claims Act
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- NMSA 1978, §§ 74-13-1, et seq.: Recycling and Illegal Dumping Act
- NMSA 1978, §§ 76-10-11 through 22: New Mexico Seed Law

III. TABLES

The following tables are referenced in the text:

- Table I: Seed Mix Table
- Table II: Project Summary Table
INVITATION TO BID
CONSTRUCTION CONTRACT

BID NUMBER: 60-521-16-05821

Sealed bid opening FORMAL
NM STATE PURCHASING DIVISION

DATE: Friday, June 17, 2016
TIME: 2:00pm

Procurement Officer: Clarke Fountain
Contact Number: 505-670-9723

ARCHITECT/ENGINEER OF RECORD
Michael W. Tompson, P.E.
Telephone: (505) 476.3427
FAX: (505) 476.3402

OWNER/POINT OF CONTACT:
Abandoned Mine Land Program
Mining and Minerals Division
Energy, Minerals and Natural Resources
Department
State of New Mexico
1220 S. St. Francis Drive
Santa Fe, New Mexico 87505
Telephone: (505) 476.3400

IMPORTANT
FOR MAILED-IN BIDS: bids must be submitted in a sealed envelope with the bid number and opening date clearly indicated on the bottom left hand side of the front of the envelope.

FOR ELECTRONICALLY UPLOADED BIDS: such bids will be time-stamped in the system when Bidder clicks “OK” after “Review and Submit.” You will receive a confirmation email of the submission for your records. Such electronic submissions will be considered sealed bids in conformance with statute.
To register as a Supplier with the State of New Mexico, or to log in if already registered go to: https://suppliers.sciquest.com/StateOfNewMexico

SEALED BIDS WILL BE RECEIVED UNTIL THE ABOVE-SPECIFIED DATE AND LOCAL TIME, THEN PUBLICLY OPENED AT THE NEW MEXICO STATE PURCHASING DIVISION BID ROOM AND READ ALOUD. HAND DELIVER OR MAIL BIDS TO THE STATE PURCHASING DIVISION, JOSEPH M. MONTOYA BLDG. AT THE ADDRESSES STATED IN THE ABOVE LETTERHEAD.

THIS BID IS SUBJECT TO THE REQUIREMENTS OF THE BIDDING DOCUMENTS AS DEFINED IN THE "INSTRUCTIONS TO BIDDERS."

THE BID PROPOSAL FORM MUST BE ACCOMPANIED BY A SURETY BOND, SUBCONTRACTOR LISTING FORM, AND DOCUMENTS SPECIFIED IN THE "INSTRUCTIONS TO BIDDERS."

PLEASE NOTE: HAND DELIVER OR MAIL BIDS TO THE STATE PURCHASING DIVISION, JOSEPH M. MONTOYA BLDG. AT THE ADDRESSES STATED IN THE ABOVE LETTERHEAD.

This mailing contains four pages
INVITATION TO BID page 2

**Bidding Documents**: Bidding documents, plans, specifications, drawings etc. may be obtained at the office of the Architect / Engineer of Record upon payment of **$0.00** for each complete set. CHECKS SHOULD BE MADE PAYABLE TO N/A. Incomplete sets will not be issued. The successful Bidder will receive refund of his deposit, and any unsuccessful Bidder who returns the Bidding Documents in good and complete condition within fifteen (15) days of the Bid Opening will also receive refund of this deposit. No deposits will be returned after the fifteen-day period.

**Bidding Documents may be obtained / reviewed at the following locations:**

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<tr>
<th>Location</th>
<th>Address</th>
<th>Phone Numbers</th>
<th>Email Addresses</th>
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<tr>
<td>ARCHITECT/ENGINEER OF RECORD</td>
<td>1220 S. ST. FRANCIS DRIVE</td>
<td>(505) 476.3430</td>
<td><a href="mailto:MIKE.TOMPSON@STATE.NM.US">MIKE.TOMPSON@STATE.NM.US</a></td>
</tr>
<tr>
<td></td>
<td>SANTA FE, NM  87505</td>
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<tr>
<td>THE PLAN ROOM AT SUN GLASS, INC.</td>
<td>650 WEST BROADWAY, SUITE B</td>
<td>1.800.748.2789 OR 505.327.0700</td>
<td><a href="mailto:PLANROOM@SUNGLASSNM.COM">PLANROOM@SUNGLASSNM.COM</a></td>
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<tr>
<td></td>
<td>FARMINGTON, NM 87401</td>
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<td></td>
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<tr>
<td></td>
<td>ALBUQUERQUE, NEW MEXICO  87102</td>
<td>(505) 243.2817</td>
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<td>(505) 243.2817</td>
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<td>1609 SECOND STREET NW</td>
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<td></td>
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<td>ALBUQUERQUE, NM 87197</td>
<td>(505) 243.9793</td>
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<td></td>
<td>ALBUQUERQUE, NEW MEXICO  87107</td>
<td>(505) 884.1752</td>
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<tr>
<td></td>
<td>1359 LOMA LAND, SUITE 106</td>
<td></td>
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<tr>
<td></td>
<td>EL PASO, TX 79935</td>
<td>915.585.1533</td>
<td><a href="mailto:AGC@AGCELPASO.ORG">AGC@AGCELPASO.ORG</a></td>
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<td>FAX:  915.781.2902</td>
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The Bidding Documents contain a time for completion of the work and further impose liquidated damages for failure to complete the work within that time period.

Bids shall be presented in the form of a total Base Bid proposal under a Lump Sum Contract plus any additive or deductive alternates that are selected by the Owner. A bid must be submitted on all bid items and alternates; segregated bids will not be accepted.

**NOTE**: Base Bid price shall not include state gross receipts or local options taxes. Taxes will be included in the Contracted Amount at prevailing rates as a separate item to be paid by Owner.

In submitting this bid, each Bidder must satisfy all terms and conditions of the Bidding Documents. No Bidder may withdraw his bid for **60 DAYS** after the actual date of the opening thereof.
INVITATION TO BID page 3

Wage Rates & Workforce Solutions Registration: Pursuant to the Public Works Minimum Wage Act, Section 13-4-10 to 13-4-17 NMSA 1978, all work covered by this Invitation to Bid shall be in accordance with applicable state laws and, if the bid amount is sixty thousand dollars ($60,000) or more, is subject to the minimum wage rate determination issued by the New Mexico Department of Workforce Solutions, Labor Relations Division, Public Works Unit. Section 13-4-13.1 requires Contractors when their bid is over $60,000 and subcontractors of all tiers when their portion of the work is over $60,000, to be registered with the Labor Relations Division of the Department of Workforce Solutions. This registration is available under the “Contractor Registration” section at the following website:

http://www.dws.state.nm.us/LaborRelations/LaborInformation/PublicWorks

There may be some administrative delay in processing your registration. Pursuant to Section 13-4-13.1 NMSA 1978, the State Purchasing Division cannot accept your bid if you are not registered at the time of bid opening.

Please direct all questions concerning registration to DWS at (505) 841-4400.

A completed Subcontractor Listing Form must accompany each bid.

Bonds: Bid Security in the form of a surety bond executed by a surety company authorized to do business in the state of New Mexico in the amount of five percent (5%) of the total bid, or the equivalent in cash by means of a cashier's check or in a form satisfactory to the Owner, must accompany each bid in accordance with the Instructions to Bidders.

A 100% Performance Bond and a 100% Payment and Materials Bond for the total contract amount, including appropriate New Mexico Gross Receipts Tax, executed by a surety company authorized to do business in the state of New Mexico shall be required from the successful Bidder prior to award of contract. A subcontractor shall provide performance and payment bonds if the subcontractor’s contract (to the Contractor) for work to be performed is $125,000 or more. Failure of a subcontractor to provide the required bonds shall not subject owner to any increase in cost due to approved substitution of subcontractor.

Pay Equity Reporting Requirements: Pay Equity Form PE10-249 must accompany each bid unless the bidder is exempt. If exempt, the bidder must check the appropriate box on the Bid Form which identifies the reason for the exemption. Please go to the following website for complete instructions and forms necessary to meet these requirements:

http://www.generalservices.state.nm.us/statepurchasing/Pay_Equity.aspx

The Owner intends to award this Project to the lowest responsible Bidder. The Owner reserves the right to reject any and all bids, to waive technical irregularities, and to award the contract to the Bidder whose bid it deems to be in the best interest of the Owner.

Preferences: Applicants for in-state / veteran preferences for all resident businesses, veterans, and contractors will have to obtain preference numbers from the New Mexico Department of Taxation & Revenue. Vendor must submit a copy of their preference certificate with each solicitation in order to receive the preference. Applications are available for download at the following website:

Attention of the Bidder who normally qualifies for a preference is particularly directed to the provisions of Sections 13-4-1 through 13-4-4 NMSA 1978 as they shall not apply to federal aid construction projects or when the expenditure of federal funds designated for a specific contract is involved. All contracts executed in violation of this act shall be void and of no effect.

A Mandatory Pre-Bid Meeting will be held as follows: **Mandatory**

**DATE:**  **Wednesday, June 8, 2016**

**TIME:**  **9:00 am**

**LOCATION:**  **5R Travel Center**  
**1695 US-180,**  
**Deming, NM 88030**

This is just south of the intersection of 180 and 26 (Hatch Highway). We will meet at this location and then caravan to the project site.

**POINT OF CONTACT:**  Michael W. Tompson, P.E.  
Telephone: (505) 690-8063  
Mike.tompon@state.nm.us
PURSUANT TO INTERNAL REVENUE SERVICE REGULATIONS, VENDORS MUST FURNISH THEIR TAXPAYER IDENTIFICATION NUMBER (TIN) TO THE STATE. IF THIS NUMBER IS NOT PROVIDED, THE VENDOR MAY BE SUBJECT TO A 20% WITHHOLDING ON EACH PAYMENT. TO AVOID THIS 20% WITHHOLDING AND TO ENSURE ACCURATE TAX INFORMATION IS REPORTED TO THE INTERNAL REVENUE SERVICE AND THE STATE, PLEASE USE THIS FORM TO PROVIDE THE REQUESTED INFORMATION.

Legal Business Name: ________________________________________________

______________________________________________
Address: ________________________________________________

Telephone Number: ________________________________________________

9 DIGIT TAXPAYER IDENTIFICATION NUMBER

Social Security Number: _________ - _________ - _________

---- or ----
Federal Employer Identification Number ________________________________

Type of Business (Check One):   Individual
   Sole Proprietorship
   Partnership
   General   Limited
   Corporation
   Public Service Corporation__Government/Nonprofit
   Other (please specify)

OTHER TAX ACCOUNT NUMBERS

New Mexico CRS Identification Number: ________________________________

State Unemployment Tax Number: ________________________________

Under penalties of perjury, I hereby declare that I have examined this form and to the best of my knowledge and belief, it is true and correct, and complete.

_________________________________________  ________________
Name (print or type)                    Title (print or type)                

_________________________________________  ______________________________
Signature                              Date
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Title IV of the federal Surface Mining Control and Reclamation Act (SMCRA) of 1977, 30 U.S.C. Section 1201, et seq, provides for the reclamation of abandoned mine lands. All operators of coal mining operations subject to the provisions of the Act pay to the Secretary of the Interior Department, for deposit in the fund, a reclamation fee of 31.5 cents per ton of coal produced by surface coal mining and 13.5 cents per ton of coal produced by underground mining. Under SMCRA, individual states acquire federal funds from the Office of Surface Mining, Reclamation, and Enforcement (OSMRE) to administer an approved state reclamation program and to implement specific reclamation projects. The New Mexico Energy, Minerals and Natural Resources Department (EMNRD) administers the Abandoned Mine Land (AML) Program within New Mexico pursuant to a state approved plan and the requirements of the New Mexico Abandoned Mine Reclamation Act, NMSA 1978, § 69-25B-1, et seq. The supervision and coordination of work done under the AML Program are conducted by the Mining and Minerals Division (MMD) of EMNRD. Wherever the term Owner is used, it shall mean the MMD Director. EMNRD, MMD and Owner may be collectively referred to as “EMNRD.”

MMD has obtained 100% federal funds for this construction project. MMD is, by this Invitation to Bid (ITB), requesting bids from responsible, qualified Bidders for the construction project in accordance with the terms of this ITB. Bidders are advised that responsive bids are invited from both profit making and nonprofit organizations. EMNRD is an affirmative action and equal opportunity employer.

The deadline date for receipt of bids is no later than as listed in the Invitation to Bid. One each of the required bid documents, with original signature, must be received and stamped in at the State Purchasing Division of the General Services Department, Room 2016, Joseph M. Montoya Building, 1100 Saint Francis Drive, Santa Fe, New Mexico 87505 (1.505.827.0472). Bids in response to this ITB will be opened publicly at the State Purchasing Division, Joseph M. Montoya Building, 1100 Saint Francis Drive, Santa Fe, New Mexico 87503. The name of each Bidder, the lump sum of each bid, and the Bidder’s Contractor License Number will be announced.

The Contract Time for project completion shall be no later than 240 calendar days, including all Sundays, holidays, and non-work days, after the Contractor receives a Notice to Proceed via USPS mail.

An abstract of the bids may be available for public inspection from the State Purchasing Division upon request. Those portions of any bid for which a Bidder has made a written request for confidentiality and for which the MMD Director has made a finding which concurs in that confidentiality shall be withheld from public inspection.
**IMPORTANT -** BIDS MUST BE SUBMITTED IN A SEALED ENVELOPE WITH THE INVITATION TO BID NUMBER AND OPENING DATE CLEARLY INDICATED ON THE BOTTOM LEFT-HAND SIDE OF THE FRONT OF THE ENVELOPE.

**00120 – SUPPLEMENTARY INSTRUCTIONS TO BIDDERS**

The following shall be included with each responsive bid:

I. **Information**

A fully completed Vendor Information Form (see Section 00010, Pre-Bid Information), including the name, address, telephone number, Taxpayer Identification Numbers, and signature of the Bidder, or of an officer or employee who has the authority of the Bidder. Do not leave blanks. This signature shall signify that the matters stated or certified on the form are true and accurate to the best of the Bidder’s knowledge.

II. **Bid**

A fully completed Bid Form (Section 00300), including the name, address, telephone number, New Mexico Contractor’s License Number, Contractor and Subcontractor New Mexico Labor Enforcement Fund Registration Numbers for bids and subcontracts greater than $50,000.00, and signature of the Bidder, or of an officer or employee who has the authority to bind the Bidder. Do not leave blanks. This signature shall signify that the matters stated or certified in the bid are true and accurate to the best of the Bidder’s knowledge and that the bid was made without collusion or fraud.

III. **Security**

Bid security shall be required of Bidders for construction contracts procured by competitive sealed bid. A bid security shall be in the form of a negotiable Surety Bond (see an example in Section 00410), Cashier’s Check, Certified Check, or Money Order in the amount of at least 5% of the total bid payable to the Energy, Minerals and Natural Resources Department. A letter of credit is not acceptable.

IV. **References**

A list of the Bidder’s general background including relevant resources, capabilities, experience, and references with telephone numbers (Section 00420). Do not leave blanks. The Bidder must have a minimum of five years of related construction experience to qualify.
V. Supplements

A complete listing of all subcontractors (Section 00430), if applicable, including for each subcontractor: the work to be performed; the subcontractor’s name, address, telephone number, and New Mexico Contractor License Number, if applicable; and a complete listing of pertinent equipment (Section 00450) including for each piece of equipment: the type, manufacturer, model, capacity, and condition. Do not leave blanks.

If for any reason this ITB requires further amendment, such amendments shall be sent via addenda to all parties recorded by the Project Engineer as having received the Bidding Documents. Each Bidder shall be required to acknowledge the receipt of any addenda on the bid form. If such addenda become necessary, they will be distributed within a reasonable time to allow the Bidders to consider the amendment in preparation of their bid.

A responsive bid to the ITB shall be submitted as a sealed bid and shall include project costs for each work task on the Bid Form (Section 00300). Prices quoted in these sealed bids shall be firm fixed prices for both lump sum and/or unit prices as listed on the Bid Form. This ITB shall become a part of the final contract agreement.

The total bid amounts as read at the Bid Opening are tentative only and subject to verification of mathematical accuracy. Such verification may result in a change to the order of the bids. The Bidder with the lowest overall total bid price will be announced as the apparent low Bidder. The apparent low Bidder’s bid will be carefully evaluated to insure that it complies with the evaluation criteria listed below and the other requirements of this ITB. The bid will be awarded with reasonable promptness by written Notice of Award via certified mail to the lowest responsible, qualified Bidder. If for any reason the apparent low Bidder does not meet all of the evaluation criteria listed below or comply with all of the requirements of this ITB, the next lowest Bidder will be evaluated and awarded the contract if the evaluation criteria are met.

The evaluation criteria include:

1. possession of a valid New Mexico Contractor License appropriate for the work;

2. proof of registration with Labor Relations Division of the New Mexico Department of Workforce Solutions for contractor and all subcontractors when Bidder submits a bid valued at more than $60,000;

3. proven records of satisfactory work performance for both Bidder and listed subcontractors; and

4. a completed and signed employee pay equity form (PE 10-249 or PE250), or, for Bidders who fall within an exception to the Pay Equity Reporting Requirement, an indication on the bid form that Bidder is exempt and why.
This evaluation is not conducted to determine whether one Bidder’s offering is superior to another Bidder’s but only to determine that a Bidder’s offering is acceptable as set forth in the ITB.

Each Bidder shall submit information sufficient to evaluate the bid based on documentation of the Bidder’s proven ability to perform the required tasks. Failure to provide the information required to evaluate the bid shall result in rejection of the bid without further discussion.

All questions about the meaning or intent of the Bidding Documents shall be submitted to the Project Engineer in writing. Replies will be issued by Addenda mailed or delivered to all parties recorded by the Project Engineer as having received the Bidding Documents. Questions received less than 10 business days before the date for opening of Bids will not be answered. Only questions answered by formal written Addenda will be binding. Oral and other interpretations or clarifications will be without effect. Bidders or the Contractor shall promptly notify the Project Engineer of any ambiguity, inconsistency, or error which they may perceive upon examination of the Bidding Documents or of the site and local conditions.

Note: Because this project is 100% federally funded, neither the 5% New Mexico Resident Contractor’s Preference nor the New Mexico Resident Veterans preference, apply to this procurement.

VI. New Mexico Employees Health Insurance

A. If Bidder has, or grows to, six or more employees who work, or who are expected to work, an average of at least 20 hours per week over a six-month period during the term of any Agreement which may result from this ITB, Bidder agrees, by submitting a bid, to have in place, and agree to maintain for the Agreement’s term, health insurance for those employees and offer that health insurance to those employees if the expected annual value in the aggregate of any and all contracts between Bidder and the state exceed $250,000.

2. Bidder agrees to maintain a record of the number of employees who have:
   
   1) accepted health insurance;
   
   2) declined health insurance due to other health insurance coverage already in place; or
   
   3) declined health insurance for other reasons.

   These records are subject to review and audit by a representative of the state.

3. Bidder agrees to advise all employees of the availability of state publicly-financed health care coverage programs.
VII. Employee Pay Equity Reporting

A. Bidder agrees if it has 10 or more New Mexico employees OR eight or more employees in the same job classification, at any time during the term of any Agreement that may result from this RFP, to complete and submit the PE10-249 form on the annual anniversary of the initial report submittal for contracts up to one year in duration.

B. If Bidder has 250 or more employees, Bidder must complete and submit the PE250 form on the annual anniversary of the initial report submittal for contracts up to one year in duration.

C. For contracts that extend beyond one calendar year, or are extended beyond one calendar year, Bidder also agrees to complete and submit the PE10-249 or PE250 form, whichever is applicable, within 30 days of the annual contract anniversary date of the initial submittal date or, if more than 180 days has elapsed since submittal of the last report, at the completion of the contract, whichever comes first.

D. Should Bidder not meet the size requirement for reporting at the time of contract award but subsequently grows such that Contractor meets or exceeds the size requirement for reporting, Bidder agrees to provide the required report within 90 days of meeting or exceeding the size requirement. That submittal date shall serve as the basis for submittals required thereafter.

E. Bidder also agrees to levy the requirements of this Section VII on any subcontractor(s) performing more than 10% of the dollar value of this Agreement if said subcontractor(s) meets, or grows to meet, the stated employee size thresholds during the term of the contract. Bidder further agrees that, should one or more subcontractor not meet the size requirement for reporting at the time of contract award but subsequently grows such that the subcontractor meets or exceeds the size requirement for reporting, Bidder shall submit the required report, for each such subcontractor, within 90 days of that subcontractor meeting or exceeding the size requirement. Subsequent report submittals, on behalf of each such subcontractor, shall be due on the annual anniversary of the initial report submittal.

F. Bidder shall submit the required form(s) to the State Purchasing Division of the General Services Department, and other departments as may be determined, on behalf of the applicable subcontractor(s) in accordance with the schedule contained in this paragraph. Bidder acknowledges that this subcontractor requirement applies even though Bidder itself may not meet the size requirement for reporting and be required to report itself.

VIII. Additional Pay Equity Reporting Information

A. For the purposes of complying with Section VII., Employee Pay Equity Reporting:
1. “Job Classification” means an arrangement of tasks in an establishment or industry into a limited series of jobs or occupations, rated in terms of skill, responsibility, experience, training, and similar considerations, usually for wage setting purposes. This term, or job class, refers to a single cluster of jobs of approximately equal “worth.”

2. “New Mexico Employee” (also “Employee”) means a person working within the State of New Mexico at a New Mexico facility, regardless where the employee legally resides, and regardless of the origin of compensation checks.

3. “PE10-249 form” means the reporting form to be used by contractors that meet or exceed the minimum size thresholds for reporting but have less than 250 New Mexico employees.

4. “PE250 form” means the reporting form to be used by contractors that have 250 or more New Mexico employees.

5. “Solicitation” means an Invitation to Bid or a Request for Proposals.

B. The successful Bidder shall not be required to report more frequently than annually unless more than 180 calendar days has elapsed since submittal of the last report and the contract has reached completion. The requirement for reporting at contract completion shall not apply in the case of a one-time fulfillment of a purchase order.

C. Exceptions to the Pay Equity Reporting Requirement:

1. Subject to the subcontractor reporting requirement of Subsection VII.F., Bidders with fewer than 10 employees are exempt, unless they have at least eight employees in the same job classification.

2. Bidders receiving a contract resulting from an emergency procurement are exempt, unless they hold other contracts that would already subject them to the requirement.

D. Bidders who are subject to the Pay Equity Reporting Requirement shall complete and sign the applicable pay equity form (PE 10-249 or PE250) and submit the form with their bid. Bidders who fall within an exception to the Pay Equity Reporting Requirement shall submit an affirmative statement with their bid indicating they are not subject to the Pay Equity Reporting Requirement, and listing which exemption they fall under.

IX. Use of Brand Name Specifications

Use of any brand name herein is for the purpose of describing the standard of quality, performance and characteristics desired and is not intended to limit or restrict competition.
00125 – BID ASSURANCES

In addition to the requirements above, the Bidder must make, include, and agree to the following assurances as a part of the responsive bid submitted in response to this Invitation for Bids (ITB)

I. General

This ITB does not commit EMNRD to pay any costs incurred by any Bidder in the submission of a responsive bid, in making necessary studies and designs for the responsive bid, or in procuring or contracting for services or supplies for the preparation of the responsive bid. Issuance of this ITB does not constitute an award commitment by EMNRD. An ITB may be canceled and any or all bids may be rejected in whole or in part, when it is in the best interest of the State of New Mexico. EMNRD may waive, in its sole discretion, technical irregularities that do not affect the contractual conditions, delivery, price, quality, or quantity of the construction, services, or items of tangible personal property that are bid. EMNRD specifically reserves the right to reject responsible, qualified bids from which EMNRD is not able to determine the true amount of the bid, and bids that exceed EMNRD’s budgeted or available funds for the project. Final approval for funding is contingent upon approval from the Department of the Interior: Office of Surface Mining - Albuquerque Field Office.

II. Confidentiality

It is further understood that all bids shall become a part of the official file on this matter without obligation of EMNRD and shall be made available for public inspection, unless the Bidder specifies in writing that specific portions of the bid are confidential and are to be held confidential by EMNRD in accordance with NMSA 1978, § 71-2-8. All matter intended to be confidential shall be submitted in a sealed envelope marked “confidential” and each page of the material shall also be marked clearly with the word “confidential”. EMNRD reserves the right to review information submitted as to confidentiality. For this purpose, confidential information includes, but is not limited to, matter that relates to trade secrets or which is privileged commercial or financial information that affects the competitive rights of the person, firm, or corporation that submits it.

III. Inspection

To assure EMNRD that the Bidder has the competence, equipment, facilities, and staff to furnish the services required under this contract, EMNRD shall be allowed to determine the adequacy of the competence, equipment, facilities, and staff of any Bidder considered for the contract award. For this purpose, if EMNRD deems it appropriate, the Bidder shall permit representatives of EMNRD to make an inspection of the Bidder’s equipment and facilities.
IV. Samples

Bid samples or descriptive literature should not be submitted unless expressly requested. Regardless of any attempt by a Bidder to condition the bid, unsolicited bid samples or descriptive literature, which are submitted at the Bidder’s risk, will not be examined or tested, and will not be deemed to vary any of the provisions of this ITB.

V. Cancellation

Failure by the successful Bidder to return the signed contract with acceptable contract bond and insurance within 10 business days after receipt via certified mail of the Notice of Award shall be just cause for the cancellation of the award and the forfeiture of the proposal guaranty which shall become the property of EMNRD, not as a penalty, but in liquidation of damages sustained.

00130 – MANDATORY PRE-BID CONFERENCE

Prospective Bidders are required to attend the pre-bid conference, if one is held, in order to inspect the site where the work is to be conducted to familiarize themselves with the existing conditions that may affect the performance of the contract work. The work sites are located behind a locked gate on private and BLM land. Subcontractors and suppliers are not required to attend the pre-bid conference; however, failure to inspect the site will not relieve subcontractors and suppliers from the responsibility of properly estimating the difficulty and cost of performing their portion of the work.

The mandatory pre-bid conference and site showing will be held at the project site to explain the work requirements. AML representatives will guide potential Bidders through the proposed work sites and will answer any questions. See the Invitation to Bid for date, location, and time.

Those wishing to attend are advised to be prompt.

The site showing is expected to take one to four hours. Access is across bumpy dirt roads and may require four-wheel drive vehicles. Prospective Bidders must provide their own transportation to the site. On-site roads are unimproved, and narrow. Access to some sites also requires walking across scrubby, sometimes steep and rocky terrain. AML advises attendees to bring food, water, and appropriate clothing and shoes.

NOTE: NOTHING STATED AT THE PRE-BID CONFERENCE SHALL CHANGE THIS INVITATION FOR BIDS UNLESS SUCH CHANGE IS MADE BY WRITTEN AMENDMENT.
ATTACHMENT CHECKLIST

THIS IS THE ATTACHMENT CHECKLIST:
A. _____ Bid Security Bond with Agent's Affidavit
B. _____ Subcontractors Listing
C. _____ Certificate of Insurance with Agency named as additional insured. (All subcontractors also insured.) (due at time of award)
D. _____ Valid NM Contractor’s License issued by Construction Industries Division (CID) per NMSA 1978, Section 60-13-12
E. _____ New Mexico Employee Health Coverage Form
F. _____ List of 3 Customer References
G. _____ Public Works Registration Number
H. _____ Wage Rate Determination if bid amount is $60,000 or more issued by NM Dept. of Workforce Solutions (due at time of award)
I. _____ Performance Bond and Payment & Materials Bond (due at time of award)
J. _____ Pay Equity Form PE 249 (due at time of award or Exemption checked ).
### 00300 – BID FORMS

<table>
<thead>
<tr>
<th>BID ITEM</th>
<th>MATERIAL OR WORK DESCRIPTION</th>
<th>ESTIMATED QUANTITY</th>
<th>BID AMOUNT</th>
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</thead>
<tbody>
<tr>
<td>1.</td>
<td>Mobilization (Not to exceed 10% of TOTAL BASE BID)</td>
<td>For the lump sum of</td>
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<td>(Written Whole Dollars and Zero Cents)</td>
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<td>2.</td>
<td>Backfill Features 10, 11, and 14</td>
<td>For the lump sum of</td>
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<td>3.</td>
<td>Backfill Features 36 and 37</td>
<td>For the lump sum of</td>
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<td>(Written Whole Dollars and Zero Cents)</td>
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<td>4.</td>
<td>Construct Culvert with Bat Gate at Feature 55</td>
<td>For the lump sum of</td>
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<td>5.</td>
<td>Construct Bat Gate in Rock Bulkhead at Feature 77</td>
<td>For the lump sum of</td>
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<td>(Written Whole Dollars and Zero Cents)</td>
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</table>

1. The estimated quantities of materials and work required to complete the project are approximations only and are given as a basis for calculation upon which the contract award will be determined.

2. The bid amount shall exclude the applicable state gross receipts tax or applicable local option tax.
<table>
<thead>
<tr>
<th>ITEM</th>
<th>MATERIAL OR WORK DESCRIPTION</th>
<th>ESTIMATED QUANTITY</th>
<th>BID AMOUNT</th>
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<tbody>
<tr>
<td>6.</td>
<td>Hand Excavate Two Cubic Yards of Material from Inner Adit Opening at Feature 77</td>
<td>For the lump sum of</td>
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<td>(Written Whole Dollars and Zero Cents)</td>
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<td>7.</td>
<td>Backfill Features 83 and 84</td>
<td>For the lump sum of</td>
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<td>(Written Whole Dollars and Zero Cents)</td>
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<td>8.</td>
<td>Backfill Features 95, 101, and 105</td>
<td>For the lump sum of</td>
<td>( $ )</td>
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<td>(Written Whole Dollars and Zero Cents)</td>
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<tr>
<td>9.</td>
<td>Backfill Features 109, 110, and 114</td>
<td>For the lump sum of</td>
<td>( $ )</td>
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<td>(Written Whole Dollars and Zero Cents)</td>
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<tr>
<td>10.</td>
<td>Backfill Features 117, 118, 119, 120, 121, 122, and 123</td>
<td>For the lump sum of</td>
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<td>(Written Whole Dollars and Zero Cents)</td>
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1 The estimated quantities of materials and work required to complete the project are approximations only and are given as a basis for calculation upon which the contract award will be determined.
2 The bid amount shall exclude the applicable state gross receipts tax or applicable local option tax.
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<tr>
<th>BID ITEM</th>
<th>MATERIAL OR WORK DESCRIPTION</th>
<th>ESTIMATED QUANTITY¹</th>
<th>BID AMOUNT²</th>
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<tr>
<td>11.</td>
<td>Backfill Features 154</td>
<td>For the lump sum of</td>
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<td>________________Dollars ($ ___________ )</td>
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<td>12.</td>
<td>Backfill Features 162 and 162.01</td>
<td>For the lump sum of</td>
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<td>________________Dollars ($ ___________ )</td>
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<td>13.</td>
<td>Backfill Features 280, and 282</td>
<td>For the lump sum of</td>
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<td>________________Dollars ($ ___________ )</td>
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<td>14.</td>
<td>Horizontal Bat Gate (TS4x2x¾), Complete in Place</td>
<td>For the unit price of</td>
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<td>________________Dollars per Linear Foot ($ ___________ )</td>
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<td>________________Dollars ($ ___________ )</td>
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<th>ESTIMATED QUANTITY</th>
<th>BID AMOUNT</th>
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<tr>
<td>15.</td>
<td>Beam Support with Two Anchors, Complete in Place</td>
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<td>16.</td>
<td>Beam Support with One Anchor, Complete in Place</td>
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<td>17.</td>
<td>Removable Bar on Horizontal Bat Gate, Complete in Place</td>
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<td>X 26 Bars =</td>
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1. The estimated quantities of materials and work required to complete the project are approximations only and are given as a basis for calculation upon which the contract award will be determined.

2. The bid amount shall exclude the applicable state gross receipts tax or applicable local option tax.
<table>
<thead>
<tr>
<th>ITEM</th>
<th>WORK DESCRIPTION</th>
<th>ESTIMATED QUANTITY</th>
<th>BID AMOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>18.</td>
<td>Seeding, Complete in Place</td>
<td>For the unit price of</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Dollars per Acre ($__) PER AC</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>X 8 Acres =</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dollars ($___)</td>
<td></td>
</tr>
<tr>
<td>19.</td>
<td>Mulching, Complete in Place</td>
<td>For the unit price of</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dollars per Acre ($__) PER AC</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>X 1 Acre =</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dollars ($___)</td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL BASE BID**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dollars ($___)</td>
</tr>
<tr>
<td></td>
<td>(Written Whole Dollars and Zero Cents)</td>
</tr>
</tbody>
</table>

(Amounts shall be shown in both words and figures. In case of discrepancy, the amount shown in words shall govern.

---

1. *The estimated quantities of materials and work required to complete the project are approximations only and are given as a basis for calculation upon which the contract award will be determined.*
2. *The bid amount shall exclude the applicable state gross receipts tax or applicable local option tax.*
3. *The bid amount shall exclude the applicable state gross receipts tax or applicable local option tax.*
I agree to the assurances set out in the Invitation to Bid, all of which are incorporated and included in this Bid Form by reference. I certify that I have the authority to bind the Bidder. The matters stated in this bid are true and accurate to the best of the Bidder’s knowledge. This bid is made without collusion or fraud.

SIGNED: __________________________________________

TITLE: ____________________________________________

DATE: ____________________________________________

BIDDER’S NAME: ___________________________________

ADDRESS: _________________________________________

TELEPHONE NO.: ________________________________

NEW MEXICO CONTRACTOR’S LICENSE NO:____________

LICENSE CATEGORIES: _______________________________

CONTRACTOR NM LABOR ENFORCEMENT FUND REGISTRATION NO.: 1

SUBCONTRACTOR LABOR ENFORCEMENT FUND REGISTRATION NO.(S): 1

__________________________________________________

1 Required for bids and subcontracts valued at more than fifty thousand dollars ($50,000).
Pay Equity Compliance

Please mark the appropriate box below:

☐ Bidder is subject to the Employee Pay Equity Reporting requirement and has provided a completed and signed employee pay equity form (PE 10-249 or PE250), along with this Bid Form.

☐ Bidder is exempted from the Employee Pay Equity Reporting Requirement. (Bidders who have fewer than 10 employees, or fewer than eight employees in the same job classification, are exempt UNLESS they have at least eight employees in the same job classification.)

I (we) do hereby acknowledge receipt of the following addenda to the project documents:

Addendum No. ____________________ Dated: ____________________

Addendum No. ____________________ Dated: ____________________

Addendum No.: ____________________ Dated: ____________________
00400 – SUPPLEMENTS TO BID FORMS

00410 - Bid Security Form

KNOW ALL MEN BY THESE PRESENTS, that we ____________________________

(Insert full name and address or legal title of Contractor)

as Principal, hereinafter called the Principal, and ____________________________

(Insert full name and address or legal title of Surety)

a corporation duly organized under the laws of the State of New Mexico as Surety, hereinafter called the Surety, are held and firmly bound unto the Energy, Minerals and Natural Resources Department, 1220 South St. Francis Drive, Santa Fe, New Mexico 87505, as Obligee, hereinafter called the Obligee, in the sum of ____________________________ Dollars ($_____________), for the payment of which sum well and truly to be made, the said Principal and the said Surety, bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has submitted a bid for the Project.

NOW, THEREFORE, if the Obligee shall accept the bid of the Principal and the Principal shall enter into a Contract with the Obligee in accordance with the terms of such bid, and give such bond or bonds as may be specified in the bidding or Contract Documents with good and sufficient surety for the faithful performance of such Contract and for the prompt payment of labor and material furnished in the prosecution thereof, or in the event of the failure of the Principal to enter such Contract or give such bond or bonds, if the Principal shall pay to the Obligee the difference not to exceed the penalty hereof between the amount specified in said bid and such larger amount for which the Obligee may in good faith contract with another party to perform the Work covered by said bid, then this obligation shall be null and void, otherwise to remain in full force and effect.

Signed and sealed this __________________ day of __________________, 20__.

PRINCIPAL (Seal)

WITNESS

TITLE

SURETY (Seal)

WITNESS

TITLE
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CONTRACTOR’S QUALIFICATION STATEMENT

To be filled out by the Bidder and returned with the responsive Bid.

BIDDER: ____________________________________________________________

I. Experience

List the major construction projects that your organization has completed in the past five (5) years, giving the name of the project, project owner, contract amount, date of completion, and percentage of the cost of the work performed with your own forces. Do not leave blanks.

1. Project Name: ______________________________________________________________________
   Owner: ____________________________________________________________________________
   Contract Amount: $__________________________________________________________________
   Completion Date: ________________ Percentage: __________________

2. Project Name: ______________________________________________________________________
   Owner: ____________________________________________________________________________
   Contract Amount: $_______________________________
   Completion Date: ________________ Percentage: __________________

3. Project Name: ______________________________________________________________________
   Owner: ____________________________________________________________________________
   Contract Amount: $_______________________________
   Completion Date: ________________ Percentage: __________________
4. Project Name: ____________________________________________

Owner: ____________________________________________________

Contract Amount: $__________________________________________

Completion Date: _________________  Percentage: ________________

5. Project Name: ____________________________________________

Owner: ____________________________________________________

Contract Amount: $__________________________________________

Completion Date: _________________  Percentage: ________________

II. References

List references for the above projects including work performed, contact person, firm represented, mailing address, and phone number with area code. Do not leave blanks.

1. Work Performed: ____________________________________________

   Contact Name: _____________________________________________

   Firm Represented: __________________________________________

   Mailing Address: ____________________________________________

   __________________________________________________________

   Phone Number: (_____ ) ________________________________

2. Work Performed: ____________________________________________

   Contact Name: _____________________________________________

   Firm Represented: __________________________________________

   Mailing Address: ____________________________________________

   __________________________________________________________

   Phone Number: (_____ ) ________________________________
3. Work Performed: ________________________________
   ________________________________
   Contact Name: ________________________________
   Firm Represented: ________________________________
   Mailing Address: ________________________________
   Phone Number: (____) ____________________

4. Work Performed: ________________________________
   ________________________________
   Contact Name: ________________________________
   Firm Represented: ________________________________
   Mailing Address: ________________________________
   Phone Number: (____) ____________________

5. Work Performed: ________________________________
   ________________________________
   Contact Name: ________________________________
   Firm Represented: ________________________________
   Mailing Address: ________________________________
   Phone Number: (____) ____________________
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LIST OF SUBCONTRACTORS AND EQUIPMENT
To be filled out by the Bidder and returned with the responsive Bid.

BIDDER: __________________________

00430 – SUBCONTRACTORS LIST

Any person submitting a bid shall in this bid set forth the name and location of the place of business of each subcontractor under subcontract to the Contractor who will perform work or labor or render service to the Contractor in or about the construction of the public works construction project and whose total contract will be in excess of $5,000.00 and the nature of the work which will be done by each subcontractor under the New Mexico Subcontractors Fair Practices Act, NMSA 1978, § 13-4-34. The Contractor shall list only one subcontractor for each category as defined by the Contractor in this bid. Do not leave blanks. If no subcontractors, indicate such. The statute does not require listings of second tier subcontractors, material suppliers, and subcontractors whose contracts are less than $5,000.

1. Work: __________________________________________

   Firm Represented: __________________________________
   Mailing Address: _____________________________________
   City: _______________ State: ____ Zip Code: ___________
   Phone No.: (____) _____________ License No.: ___________

2. Work: __________________________________________

   Firm Represented: __________________________________
   Mailing Address: _____________________________________
   City: _______________ State: ____ Zip Code: ___________
   Phone No.: (____) _____________ License No.: ___________
3. Work: ____________________________________________

Firm Represented: _______________________________________

Mailing Address: ________________________________________

City: __________________________ State: Zip Code:___________

Phone No.: (____)___________ License No.: _________________

4. Work: ____________________________________________

Firm Represented: _______________________________________

Mailing Address: ________________________________________

City: __________________________ State: Zip Code:___________

Phone No.: (____)___________ License No.: _________________

5. Work: ____________________________________________

Firm Represented: _______________________________________

Mailing Address: ________________________________________

City: __________________________ State: Zip Code:___________

Phone No.: (____)___________ License No.: _________________

6. Work: ____________________________________________

Firm Represented: _______________________________________

Mailing Address: ________________________________________

City: __________________________ State: Zip Code:___________

Phone No.: (____)___________ License No.: _________________
00450 – EQUIPMENT LIST

List all pertinent equipment proposed to be employed on the above Project as required by the bidding documents. Attach a list on a separate piece of paper if more space is needed.

<table>
<thead>
<tr>
<th>Equipment Type</th>
<th>Manufacturer</th>
<th>Model</th>
<th>Capacity</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>B</td>
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<tr>
<td>C</td>
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<tr>
<td>D</td>
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<td></td>
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</tr>
<tr>
<td>E</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>
0500 – AGREEMENT FORMS

SHARE Contract No. xx-521-xxxx-xxxx

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

CONSTRUCTION SERVICES CONTRACT

THIS AGREEMENT is made and entered into by and between the State of New Mexico Energy, Minerals and Natural Resources Department (EMNRD), and ___________________________ (Contractor). EMNRD’s Director and staff of the Mining and Minerals Division (MMD) shall supervise and coordinate the work under this Construction Services Contract (Agreement).

IT IS MUTUALLY AGREED BETWEEN THE PARTIES:

I. Scope of Work

A. The Contractor shall perform the work described in the Specifications for the Cookes Peak West Mine Safeguard Project Phase II, Deming, New Mexico in the Project Manual which is part of Invitation to Bids (ITB) No. EMNRD-MMD-2016-02. The ITB was solicited by the General Services Department, State Purchasing Division ITB No. ______________________. The Project Manual, Specifications, ITB, and Contractor’s completed ITB are all incorporated into and made a part of this Agreement by reference. EMNRD shall have the sole authority to approve any changes to the Scope of Work and the Specifications and to approve the Contractor’s final work product.

B. Within 10 business days of receiving the written Notice to Proceed (NTP) via certified mail, the Contractor shall mobilize to the site and commence work. Prior to commencement of work, the Contractor shall obtain all necessary permits required for this work.

C. BEFORE ANY WORK IS INITIATED, the Contractor shall give notice to all utility companies that provide service to the contract site and inform the utility companies of the work to be performed. In the event that work performed in connection with this Agreement may disturb utilities, Contractor shall coordinate with utility companies to ensure that locations of overhead or buried utilities and appurtenances are marked. Prior to work taking place, Contractor shall provide advance notice to consumers who may be affected by service disruption.

II. Compensation

A. EMNRD shall pay the Contractor in current funds for the performance of the Work, subject to additions and deductions by Change Order as provided in the Contract Documents, the Contract Sum of ___________________________.
($____________________), including New Mexico Gross Receipts Taxes, if applicable.

The Contract Sum is determined as follows:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Base Bid</td>
<td>$__________</td>
</tr>
<tr>
<td>Gross Receipts Tax @ ____%</td>
<td>$__________</td>
</tr>
<tr>
<td>Total Contract Sum</td>
<td>$__________</td>
</tr>
</tbody>
</table>

If the state gross receipts tax or local option tax increases the Contractor must submit a request for a change order in order to increase the state gross receipts tax or local option tax on this Agreement (1.4.1.24 NMAC).

Agreements solicited by competitive sealed bids shall require that the bid amount exclude the applicable state gross tax or local option tax but that the bid amount exclude the applicable state gross receipts tax or local option tax but that EMNRD shall be required to pay the tax including any increase in the tax becoming effective after this Agreement is entered into. The tax shall be shown as a separate amount on each billing or requires for payment made under this Agreement.

B. Subject to subparagraph II.A. above, and based on Applications for Payment (invoice), a copy of which is included herein at Section 00900 of the Project Manual, submitted to the EMNRD Project Engineer by the Contractor and Certificates for Payment issued by the EMNRD Project Engineer, EMNRD shall make progress payments on account of the Contract Sum, to the Contractor as provided in the Contract Documents for the period ending the last day of the month as follows: no later than 21 days following receipt by EMNRD of the undisputed Application for Payment, one hundred percent (100%) of the portion of the Contract Sum properly allocable to labor, materials, and equipment incorporated in the Work, and one hundred percent (100%) of the portion of the Contract Sum properly allocable to materials and equipment suitably stored at the site or some other location agreed upon in writing for the period covered by the Application for Payment, less the aggregate of previous payments made by EMNRD; and upon Substantial Completion of the entire Work, a sum sufficient to increase the total payments to one hundred percent ((100%) of the Contract Sum, less such amounts as the EMND Project Engineer shall determine for all incomplete Work and unsettled claims as provided in the Contract Documents, which shall be paid in accordance with this Compensation Section.

C. Prompt Payment Act Compliance: Contractor shall comply with the Prompt Payment Act, NMSA 1978, § 57-28-5(C), in making prompt payments to its subcontractors and suppliers for amounts owed for work performed relating to this Agreement within seven days of receipt of payment from EMNRD.

D. Final Payment: Final payment constituting the entire undisputed and unpaid balance of the Contract Sum shall be paid by EMNRD to the Contractor within 10 days after the
EMNRD Project Engineer completes a final inspection and the EMNRD Project Manager notifies the Project Engineer that all incomplete and unacceptable work that was noted during the Final Inspection has been corrected.

III.  Term and Liquidated Damage for Inconvenience and Increased Administrative Cost

The Work to be performed under this Agreement shall commence no later than _10_ consecutive calendar days after the date of written “Notice to Proceed.” Project completion (see Section 00100 of the Project Manual) shall be no later than __240_ days, including all Sundays, holidays, and non-work days, after the Contractor receives a written Notice to Proceed, except as hereafter extended by EMNRD by valid written Change Order.

The parties agree that time for the performance of this Agreement is of the essence. Should the Contractor fail to perform the entire project within the Contract Time for project completion, the Contractor agrees to the charge of $300 per calendar day of liquidated damages representing inconvenience and increased administrative cost. Such damages shall begin to accrue on the calendar day following the last day for performance of work under this Agreement. The Contract stipulates that EMNRD may withhold additional payments under this Agreement or attach the performance bond to cover the liquidated damages set forth above or to cover the cost of any duplicative work that is made necessary by Contractor’s failure to perform as required by this Agreement. Liquidated damages shall continue until written notice of satisfactory completion is forwarded by the Project Manager to the Project Engineer. This provision is limited to damages for inconvenience and increased administrative cost, and shall not otherwise affect EMNRD’s right to see other remedies including other damages, at law or in equity.

IV.  Termination

A.  For Reasons Beyond Contractor’s Control

1.   EMNRD may, by written order, terminate this Agreement or any portion thereof after determining that, for reasons beyond Contractor’s control, the Contractor is prevented from proceeding with or completing the work as originally contracted for, and that termination would therefore be in the public interest. Such reasons for termination may include, but need not be limited to, executive orders of the President relating to prosecution of war or national defense, acts of God, labor strikes, a national emergency which creates a serious shortage of materials, orders from duly constituted authorities relating to energy conservation, and restraining orders or injunctions obtained by third-party citizen action resulting from national, state or local environmental protection laws or where the issuance of such order or injunction is primarily caused by acts or omissions of persons or agencies other than the Contractor.

2.   If EMNRD orders termination of this Agreement effective on a certain date, payment shall be made for the actual number of units or items of work completed at the
contract unit price, or as mutually agreed for items of work partially completed.

3. Acceptable materials Contractor obtains for the work but which have not been incorporated therein, may, at EMNRD’s option, be purchased from the Contractor at actual cost, delivered to a prescribed location, or otherwise disposed of as mutually agreed.

4. After receipt of EMNRD’s notice of termination issued pursuant to this Section IV.A., the Contractor may submit a claim for costs not covered above or elsewhere in the Specifications. Such claim may include such cost items as reasonable idle equipment time, mobilization efforts, overhead expenses attributable to the project terminated, legal and accounting charges involved solely in preparing the claim for costs, subcontractor costs not otherwise paid for, actual idle labor costs if work is stopped in advance of termination date, and guaranteed payments for private land usage as part of the original contract. In no event, however, shall loss of anticipated profits be considered as part of any settlement.

5. The Contractor agrees to make all cost records available upon EMNRD’s request.

6. Termination of a contract or portion thereof shall not relieve the Contractor of any contractual responsibilities for the work completed, nor shall it relieve the surety of its obligation for and concerning any just claim arising out of the work performed.

B. For Reasons Within Contractor’s Control:

1. If the Contractor:
   a. fails to begin the work under this Agreement within the time specified in the Notice to Proceed;
   b. fails to perform the work with sufficient skilled workers and equipment or with sufficient proper materials to assure the prompt completion of said work;
   c. fails to comply with laws, ordinances, rules, regulations or orders of public authority having jurisdiction;
   d. performs the work unsuitably or neglects or refuses to remove materials or to perform anew such work as may be rejected as unacceptable and unsuitable;
   e. discontinues the prosecution of the work, without EMNRD’s prior written approval;
   f. fails to resume work which has been discontinued without EMNRD’s prior written approval within a reasonable time after notice to do so;
   g. becomes insolvent or files for bankruptcy or is placed into bankruptcy by creditors, or commits any acts of bankruptcy or insolvency;
   h. allows a final judgment, in a suit filed in connection with this
Agreement, to stand against the Contractor unsatisfied for a period of 30 business days;

i. makes an assignment, in connection with this Agreement, for the benefit of creditors;

j. fails to carry on the work in an acceptable manner; or

k. otherwise has committed a material breach of this Agreement.

If EMNRD wishes to terminate this Agreement for any of the above reasons, EMNRD shall give notice in writing to Contractor and the surety of the occurrence(s) upon which EMNRD bases the termination, and the corrective measures to be taken (Default Notice), if any. Failure of EMNRD to provide a default notice or terminate this Agreement shall not operate as a waiver by EMNRD either at the time of such failure or in the future.

If the Contractor or surety, within a period of 10 business days after such notice, does not proceed in accordance therewith, then EMNRD shall have full power and authority without violating this Agreement to take possession of the premises and of all materials thereon and finish the work by whatever method it may deem expedient. In such case, the Contractor shall not be entitled to receive any further payment for the work that Contractor performed after the date of the Default Notice until the work is finished. EMNRD shall also have all remedies available to it at law and in equity.

V. Status of the Contractor

The Contractor and its agents and employees are independent Contractors performing construction services for EMNRD and are not employees of the State of New Mexico. The Contractor and its agents and employees shall not accrue leave, retirement, insurance, bonding, use of state vehicles, or any other benefits afforded to employees of the State of New Mexico as a result of this Agreement.

VI. Assignment

The Contractor shall not assign or transfer any interest in this Agreement or assign any claims for money due or to become due under this Agreement without the prior written approval of EMNRD.

VII. Subcontracting

The Contractor shall comply fully with the provisions of the New Mexico Subcontractors Fair Practices Act, NMSA 1978, §§ 13-4-31 through 13-4-42. The Contractor shall not subcontract any portion of the services to be performed under this Agreement or obligate itself in any manner to any third party, with respect to any rights or responsibilities under this Agreement, without the prior written approval of EMNRD.
VIII. Records and Audit

The Contractor shall maintain detailed time and expenditure records that show the date, time, nature and cost of services rendered under this Agreement and retain them until __________________________. These records shall be maintained and available within the State of New Mexico if the Contractor has an office within the state; otherwise, Contractor shall make such records available to EMNRD within New Mexico within five business days upon EMNRD’s request. The records shall be subject to inspection by EMNRD, DFA, the State Auditor and the U.S. Department of the Interior (DOI). Contractor further agrees to include in all subcontracts hereunder the same right of inspection and audit against all subcontractors. EMNRD shall have the right to audit billings both before and after payment. Payment under this Agreement shall not foreclose EMNRD's right to recover excessive or illegal payments. The periods of inspection and audit may be extended for records, which relate to litigation or settlement of claims arising out of performance of this Agreement and costs and expenses of this Agreement for which exception is under consideration by DOI or any authorized representative and shall continue until all potential litigation, appeals, claims or exceptions have expired or been resolved.

B. If Contractor receives $750,000 or more in federal funding from all sources in the aggregate in a fiscal year, Contractor’s financial records involving services and procurement under this Agreement shall be audited annually pursuant to all federal, state and local government audit requirements, and in accordance with the Single Audit Act Amendments of 1996, 2 C.F.R. 200, Subpart F – Audit Requirements, OMB Circular Compliance Supplement and Government Auditing Standards, as prescribed by the Single Audit Act of 1984, or any subsequent OMB Circular. Contractors who do not meet the $750,000 audit threshold (Tier 7), must complete the State of New Mexico – Office of the State Auditor Certification Form for Tier 1 and Tier 2, or the Office of the State Auditor Agreed Upon Procedures (Tiers 3-6) in accordance with the Audit Act, NMSA 1978, §§ 12-6-1 through 12-6-14, and 2.2.2.16 NMAC, Annual Financial Procedures Required for Local Public Bodies with Annual Revenues Less than Five Hundred Thousand Dollars. In order to comply with state audit requirements, Contractors shall have one of the above-mentioned Forms or Agreed Upon Procedures on file with the Office of the State Auditor. Contractor shall provide EMNRD with a copy of the independent financial audit, either in hard copy format or on disk, no more than 45 days after the audit’s completion for each fiscal year this Agreement is in effect.

IX. Appropriations

The terms of this Agreement are contingent upon sufficient appropriations and authorization being made by the Legislature of New Mexico, the federal Congress, and DOI for the performance of this Agreement. If sufficient appropriations and authorization are not made, this Agreement shall terminate upon written notice being given by EMNRD to the Contractor. EMNRD’s decision as to whether sufficient appropriations are available shall be accepted by the Contractor and shall be final.
X.  Release

The Contractor, upon final payment of the amount due under this Agreement, releases EMNRD, its officers and employees, and the State of New Mexico from all liabilities, claims, and obligations whatsoever arising from or under this Agreement. This release is self-executing upon such final payment. The Contractor agrees not to purport to bind the State of New Mexico to any obligation unless the Contractor has express written authority to do so, and then only within the strict limits of that authority.

XI.  Confidentiality

Any confidential information provided to or developed by the Contractor in the performance of this Agreement shall be kept confidential and shall not be made available to any individual or organization by the Contractor without the prior written approval of EMNRD.

XII.  Amendment

This Agreement shall not be altered, changed, or amended except by instrument in writing executed by the parties hereto.

XIII.  Scope of Agreement

This Agreement incorporates all of the agreements, covenants, and understandings between the parties hereto concerning the subject matter hereof, and all such agreements, covenants, and understandings have been merged into this written Agreement. No prior agreements or understandings, verbal or otherwise, of the parties or their agents shall be valid or enforceable unless expressly incorporated into this Agreement.

XIV.  Civil and Criminal Liability Notice

The Procurement Code, NMSA 1978, §§ 13-1-28 through 13-1-199, imposes civil and misdemeanor criminal penalties for its violation. In addition, the New Mexico criminal statutes impose felony penalties for bribes, gratuities, and kick-backs.

XV.  Equal Opportunity Compliance

Contractor agrees to abide by all federal and state laws and rules and regulations, and executive orders of the Governor of the State of New Mexico, pertaining to equal employment opportunity. In accordance with all such laws of the State of New Mexico, Contractor assures that no person in the United States shall, on the grounds of race, religion, color, national origin, ancestry, sex, age, physical or mental handicap, or serious medical condition, spousal affiliation, sexual orientation or gender identity, be excluded from employment with or participation in, be
denied the benefits of, or be otherwise subjected to discrimination under any program or activity performed under this Agreement. If Contractor is found not to be in compliance with these requirements during the life of this Agreement, Contractor agrees to take appropriate steps to correct these deficiencies.

XVI. Applicable Law

This Agreement shall be governed by the laws of the State of New Mexico, without giving effect to its choice of law provisions. In any lawsuit filed that relates to or arises from this Agreement or any obligations hereunder, venue shall be only in the New Mexico State District Court in Santa Fe, New Mexico. By executing this Agreement, Contractor agrees and consents to the personal jurisdiction of the State Court of New Mexico over any and all lawsuits relating to or arising from this Agreement or any obligation hereunder.

XVII. Waiver

No waiver of any of the terms or conditions of this Agreement shall be valid or binding unless the waiver request is submitted in writing by the party making the request and then approved and signed by the party granting the waiver.

XVIII. Notices

A. Unless EMNRD specifies otherwise in a writing that is delivered pursuant to this Paragraph, notices and all other matters concerning the work to be performed hereunder shall be addressed to EMNRD as follows:

Project Engineer: Michael Tompson  
Contracting Division: Mining and Minerals Division  
Energy, Minerals and Natural Resources Department  
1220 South St. Francis Drive  
Santa Fe, New Mexico 87505  
1.505.476.3427

B. Unless the Contractor shall specify otherwise in a writing that is delivered pursuant to this Paragraph, notices and all other matters concerning the work to be performed hereunder shall be addressed to the Contractor as follows:

NAME OF CONTRACTOR  
ADDRESS  
ADDITIONAL ADDRESS  
CITY, ST, ZIP  
(XXX) XXX-XXXX

C. Any and all notices or other communications required or permitted by this
Agreement or by law to be served or given to either party hereto by the other party hereto shall be in writing and shall be deemed duly served and given upon actual receipt by or three business days subsequent to certified mailing to the party to whom it is directed, whichever is earlier.

XIX. **Indemnification**

The Contractor shall defend, indemnify, and hold harmless EMNRD, and its officers, employees, agents and representatives, and the State of New Mexico from all actions, proceedings, claims, demands, costs, damages, attorneys’ fees, and all other liabilities and expenses of any kind from any source that may arise out of this Agreement’s performance, caused by the negligent or intentional act or failure to act of Contractor, its officers, employees, servants, subcontractors, consultants, clients, or agents, resulting in injury or damage to persons or property during the time when Contractor, its officers, employees, servants, subcontractors, or consultants has or is performing services pursuant to this Agreement. In the event that any action, suit, or proceeding related to the services performed by Contractor, its officers, agents, employees, servants, subcontractors, clients, consultants under this Agreement is brought against Contractor, or any of its officers, agents, employees, servants, subcontractors or consultants, Contractor shall, as soon as practicable but no later than two days after it receives notice thereof, notify EMNRD’s legal counsel and the Risk Management Division of the New Mexico General Services Department by certified mail. Nothing in this Agreement shall be deemed to be a waiver by the State of New Mexico of the provisions of the Tort Claims Act, NMSA 1978, §§ 41-4-1 et seq.

XX. **Duty to Insure**

A. In respect solely to the work occasioned by this Agreement, the Contractor shall obtain and maintain at all times during the term of this Agreement, and any extension thereof, insurance of the kind and in the amounts herein specified. Such insurance shall be provided by insurance companies authorized to do business in New Mexico and shall name the “State of New Mexico, EMNRD, MMD, and its agents and employees thereof” as either additional insured, co-insured, or third-party beneficiaries and shall specifically state the coverage provide under the policy is primary over any other valid and collectible insurance and provide a waiver of subrogation.

1. **General Liability.** Bodily injury liability and property damage liability insurance in the following minimum amounts: $500,000.00 for damages to or destruction of property arising out of a single occurrence; $1,000,000.00 to any person for any number of claims arising out of a single occurrence for all damages other than property damages, and $1,000,000.00 for all claims arising out of a single occurrence.

2. **Automobile Liability.** Automobile liability insurance covering the ownership, operation, and maintenance of owned, non-owned, and hired vehicles, in the following amounts:

**Bodily injury liability –**
$700,000.00 each person
$1,000,000.00 each occurrence;

**Property damage liability**--
$1,000,000.00 each occurrence.

3. **Workers’ Compensation.** The Contractor shall comply fully with the provisions of the New Mexico Workers’ Compensation Act, NMSA 1978, §§ 52-1-1 through 52-1-70.

B. The Contractor shall furnish EMNRD with certificates of insurance and such other proof of insurance as EMNRD may require, prior to commencing work under this Agreement, and shall not commence any work under this Agreement until the required insurance coverage is obtained. The insurance coverage shall not be changed, canceled, or allowed to lapse without giving EMNRD 30 business days’ prior written notice.

XXI. **New Mexico Employees Health Insurance**

A. If Contractor has, or grows to, six or more employees who work, or who are expected to work, an average of at least 20 hours per week over a six-month period during the term of this Agreement, Contractor certifies, by signing this Agreement, to have in place, and agree to maintain for this Agreement’s term, health insurance for those employees and offer that health insurance to those employees if the expected annual value in the aggregate of any and all contracts between Contractor and the state exceed $250,000.

B. Contractor agrees to maintain a record of the number of employees who have:
1) accepted health insurance;
2) declined health insurance due to other health insurance coverage already in place; or
3) declined health insurance for other reasons.

These records are subject to review and audit by a representative of the state.

C. Contractor agrees to advise all employees of the availability of state publicly-financed health care coverage programs.

XXII. **Employee Pay Equity Reporting**

A. Contractor agrees if it has 10 or more New Mexico employees OR eight or more employees in the same job classification, at any time during the term of this Agreement, to complete and submit the PE10-249 form on the annual anniversary of the initial report submittal for contracts up to one year in duration.
B. If Contractor has 250 or more employees, Contractor must complete and submit the PE250 form on the annual anniversary of the initial report submittal for contracts up to one year in duration.

C. For contracts that extend beyond one calendar year, or are extended beyond one calendar year, Contractor also agrees to complete and submit the PE10-249 or PE250 form, whichever is applicable, within 30 days of the annual contract anniversary date of the initial submittal date or, if more than 180 days has elapsed since submittal of the last report, at the completion of this Agreement, whichever comes first.

D. Should Contractor not meet the size requirement for reporting at contract award but subsequently grows such that Contractor meets or exceeds the size requirement for reporting, Contractor agrees to provide the required report within 90 days of meeting or exceeding the size requirement. That submittal date shall serve as the basis for submittals required thereafter.

E. Contractor also agrees to levy this requirement on any subcontractor(s) performing more than 10% of the dollar value of this Agreement if said subcontractor(s) meets, or grows to meet, the stated employee size thresholds during the term of this Agreement. Contractor further agrees that, should one or more subcontractor not meet the size requirement for reporting at contract award but subsequently grows such that the subcontractor meets or exceeds the size requirement for reporting, Contractor shall submit the required report, for each such subcontractor, within 90 days of that subcontractor meeting or exceeding the size requirement. Subsequent report submittals, on behalf of each such subcontractor, shall be due on the annual anniversary of the initial report submittal.

F. Contractor shall submit the required form(s) to the State Purchasing Division of the General Services Department, and other departments as may be determined, on behalf of the applicable subcontractor(s) in accordance with the schedule contained in this paragraph. Contractor acknowledges that this subcontractor requirement applies even though Contractor itself may not meet the size requirement for reporting and be required to report itself.

G. Notwithstanding the foregoing, if this Agreement was procured pursuant to a solicitation, and if Contractor has already submitted the required report accompanying Contractor’s response to such solicitation, the report does not need to be re-submitted with this Agreement.

XXIII. Additional Pay Equity Reporting Information

A. For the purposes of complying with Section XXII, Employee Pay Equity Reporting Information:

1. “Job Classification” means an arrangement of tasks in an establishment or
industry into a limited series of jobs or occupations, rated in terms of skill, responsibility, experience, training, and similar considerations, usually for wage setting purposes. This term, or job class, refers to a single cluster of jobs of approximately equal “worth.”

2. “New Mexico Employee” (also “Employee”) means a person working within the State of New Mexico at a New Mexico facility, regardless where the employee legally resides, and regardless of the origin of compensation checks.

3. “PE10-249 form” means the reporting form to be used by contractors that meet or exceed the minimum size thresholds for reporting but have less than 250 New Mexico employees.

4. “PE250 form” means the reporting form to be used by contractors that have 250 or more New Mexico employees.

5. “Solicitation” means an Invitation to Bid or a Request for Proposals.

B. Exceptions to the Pay Equity Reporting Requirement:

1. Contractors with fewer than 10 employees are exempt, unless they have at least eight employees in the same job classification.

2. Contractors receiving a contract resulting from an emergency procurement are exempt, unless they hold other contracts that would already subject them to the requirement.

XXIV. Disputes

Any dispute, other than the Contractor’s acts set forth in Section IV, Termination, B., For Reasons Within Contractor’s Control, concerning a question of fact arising under this Agreement, not disposed of by agreement, shall, first, be decided by the MMD Director, who shall reduce a decision to writing and furnish a signed copy to the Contractor. Such decision shall be final and conclusive unless, within 30 calendar days from the date of notification of the decision by certified mail, the Contractor mails or otherwise furnishes to the MMD Director, a written appeal, addressed to the EMNRD Secretary, to which MMD may respond in 10 business days. The Contractor shall be afforded an opportunity to be heard. The decision of the EMNRD Secretary or the authorized representative thereof, shall be final and conclusive.

XXV. Suspension of Work

A Suspension of Work Notice may be issued by the Project Manager if the Project Manager believes that any action of the Contractor is contrary to the intent of this Agreement or that any health or safety standard is violated or that a threat to public health or safety exists. No work performed after issuance of a Suspension of Work Notice shall be eligible for payment while such notice is in effect. No work shall proceed until such notice is vacated, in writing, by
XXVI. Compliance with the Public Works Minimum Wage Act and Minimum Wage Rate Decision

A. If the Work to be performed under this Agreement is subject to the provisions of the Public Works Minimum Wage Act, NMSA 1978, Section 13-4-11 et seq., Contractor shall comply with such act and applicable state rules. Each Application for Payment submitted to EMNRD shall include a certification by Contractor that it has complied with the provisions of NMSA 1978, Section 13-4-11 and applicable state rules when making wage payments for work performed pursuant to this Agreement.

B. This Agreement is within the scope of the Public Works Minimum Wage Act, NMSA 1978, §§ 13-4-10, et seq. The Minimum Wage Rate Decision No. “__________________” of the New Mexico Labor and Industrial Division (1.505.841.4408) shall be complied with by the Contractor and any subcontractors. A copy of the Decision is included at Section 00830 of the Project Manual.

C. If compensation to be paid under this Agreement is in excess of sixty thousand dollars ($60,000.00), the minimum wages and fringe benefits to be paid to various classes of laborers and mechanics, shall be based upon the wages and benefits that will be determined by the Director (Director) of the Labor Relations Division (LRD) of the New Mexico Workforce Solutions Department, to be prevailing for the corresponding classes of laborers and mechanics employed on contract work of a similar nature in the state or locality.

D. The Contractor, subcontractor, employer or a person acting as a contractor shall pay all mechanics and laborers employed on the site of the project, unconditionally and not less often than once a week and without subsequent unlawful deduction or rebate on any account, the full amounts accrued at time of payment computed at wage rates and fringe benefit rates not less than those determined pursuant to NMSA 1978, Section 13-4-11.B to be the prevailing wage rates and prevailing fringe benefit rates issued for this project.

E. Pursuant to 11.1.2.9.B(6) through (10) NMAC, Public Works Minimum Wage Act Policy Manual, Contractor and all tiers of subcontractors shall submit certified weekly payroll records to EMNRD on a bi-weekly basis, and, to the LRD Director when requested by the Director or an interested party such as contractors, contracting agencies, labor organizations and contractor associations.

1. All payroll records provided to EMNRD must contain the following information in the specified format:

   (a) the employee’s full name and address need only appear on the first payroll on which the employee’s name appears, unless a change of address necessitates an additional submittal to reflect the new address;
(b) the employee’s classification (or classifications);
(c) the employee’s hourly wage rate (or rates); the employee’s hourly fringe benefits; and where applicable, the employee’s overtime hourly wage rate (or rates);
(d) the daily and weekly hours worked in each classification, including actual overtime hours worked (not adjusted);
(e) the itemized deductions made;
(f) the net wages paid; and
(g) the number of the wage rate decision issued on the project by the Director.

2. All payrolls shall be numbered, starting with number one for the first payroll at the beginning of the job and continuing in numerical order until the job is completed.

3. Contractor and each of his or her subcontractors shall submit a bi-weekly statement of compliance in the following form:

Date ______________________

I, _________________________, (Name of Signatory Party)
(Title)
do hereby state:

That I pay or supervise the payment of the persons employed by ______________________________________ (contractor or subcontractor) on the _____________________________; that (building or work) during the payroll period commencing on the ______ day of _____________, 20_______, and ending the ______ day of _____________, 20_______, all persons employed on said project have been paid the full weekly wages earned, that no rebates have been or will be made either directly or indirectly to or on behalf of said ______________________________________ (Contractor or subcontractor) from the full weekly wages earned by any person and that no deductions have been made either directly or indirectly from the full wages earned by any person, other than deductions permitted by law.

That any payrolls under this Agreement required to be submitted for the above period are correct and complete; that the wage rates for laborers or mechanics contained therein are not less than the applicable wage rates incorporated into the Agreement; that the classifications set forth therein for each laborer or mechanic conform with the work he performed. That any apprentices or trainees employed in the above period are duly registered in a bona fide apprenticeship program registered with a state apprenticeship agency recognized by the office of apprenticeship United States department of labor, or properly enrolled in a bona fide training program approved for application on public works construction projects by the appropriate state or federal agency(ies) if and as required by law and applicable federal regulation.

I, _________________________, being first duly sworn on oath under penalty of perjury, swear that the foregoing information is true and correct.

Notary: Subscribed and sworn to before me at __________ this ____________ day of ____________, 20_____.

__________________________________________
Notary public

______________________________   ______________________
(SIGNATURE)      (DATE)

My commission expires: _______________________
4. The Contractor and all subcontractors and their tiers shall deliver or mail to EMNRD legible copies of the certified weekly payrolls prepared in accordance with these regulations to the prime contractor and the contracting agency no more than five working days following the close of the second payroll period. Weekly payrolls shall be submitted bi-weekly.

5. The affidavit form must be filed prior to the final payment to a Contractor. Bond monies and retainage will be released only to Contractors who have filed affidavits pursuant to the provisions of 11.1.2. NMAC. Any Contractor or subcontractor who files a false statement or refuses to file any statement or record required to be filed under the provisions of 11.1.2 NMAC shall be considered as non-compliant and shall be subject to debarment proceedings. EMNRD and Contractor shall keep all certified payroll records for four years after the completion of this Agreement.

F. EMNRD shall require wage rate inspections during the period of construction.

G. Contractors and all contracting tiers on projects must file a statement of intent to pay prevailing wages (intent), and an affidavit of wages paid (affidavit). The intent form must be filed with EMNRD within three business days of the award of each respective contract. EMNRD will make no payments to a non-compliant contractor until an intent form is filed.

H. Contractor or subcontractor shall post minimum wage rates in a prominent, easily accessible place at the site of each particular project.

I. The LRD Director shall furnish EMNRD with a poster containing the minimum wage rates. EMNRD shall forward said poster to Contractor for posting at each particular project site.

J. Contractor and subcontractor shall comply with all requirements imposed by the Public Works Minimum Wage Act and 11.1.2 NMAC.

K. Contractor’s records shall be subject to inspection by state and federal agencies that have jurisdiction over such matters to determine compliance with the provisions of NMSA 1978, Section 13-4-11 et seq., as provided above or by an applicable federal or state law. If Contractor fails to comply with the provisions of this Section XXVII, EMNRD may terminate this Agreement by giving notice in the manner provided herein.

XXVII. Required Bond for Public Works Contractor

This Agreement is within the scope of NMSA 1978, §§ 13-4-18 through 13-4-20. BEFORE BEGINNING ANY WORK UNDER THIS AGREEMENT, the Contractor shall furnish a performance bond (see example in Section 00610 of the Project Manual) and a payment bond (see example in Section 00620 of the Project Manual) both executed by the Contractor and issued by a surety authorized to do business in the State of New Mexico in an amount equal to
100% of the total Agreement price. Agreement price equals bid total plus gross receipts tax. A letter of credit is not acceptable.

The performance bond shall be conditioned upon the Contractor’s performance and faithful completion of this Agreement, according to the terms, in compliance with all requirements of law. The payment bond shall guarantee payments of all just claims for the labor performed and for materials and supplies furnished, whether the labor and supplies are furnished to the prime Contractor or any subcontractors. These bonds shall be in the form approved by EMNRD. The surety shall be subject to the approval of EMNRD. The decision of EMNRD shall be accepted by the Contractor as final.

XXIII. Compliance with Trafficking Victims Protection Act of 2000

A. Pursuant to 2 C.F.R, Chapter 1, Part 175, § 175, EMNRD may immediately and unilaterally terminate this Agreement without penalty if the Contractor or subcontractor:

1) engages in severe forms of trafficking in persons during this Agreement’s term;

2) procures a commercial sex act during this Agreement’s term; or

3) uses forced labor in the performance of this Agreement.

B. Contractor shall immediately inform EMNRD of any information Contractor receives from any source alleging a violation of a prohibition in Paragraph A. of this Section 13.28.

C. Contractor shall include the requirements of this Section XXIII in any subcontract which may result from this Agreement.

XXIX. Compliance with use of Minority Business Enterprises (MBEs) and Women’s Business Enterprises (WBEs)

Contractor shall take affirmative steps to assure that MBEs and WBEs are used when possible as sources of supplies, equipment, construction, and services. The affirmative steps shall include the following:

a) including qualified MBEs/WBEs on solicitation lists;

b) assuring that MBEs/WBEs are solicited once they are identified;

c) when economically feasible, dividing total requirements into smaller tasks or quantities so as to permit maximum MBE/WBE participation;
d) where feasible, establishing delivery schedules which will encourage MBE/WBE participation;

e) encouraging use of the services of the U.S. Department of Commerce's Minority Business Development Agency and the U. S. Small Business Administration to identify MBEs/WBEs, as required; and

e) if any subcontracts are to be let, requiring the subcontractor to take the affirmative steps listed above.

XXX. Compliance with Federal Laws

If this Agreement is valued at more than $100,000, Contractor shall comply with all applicable standards orders or requirements issued under the federal Clean Air Act (42 U.S.C. §7401 et seq.); Clean Water Act (33 U.S.C. §1251 et seq.); Executive Order 11738 (Providing for Administration of the Clean Air Act and the Federal Water Pollution Control Act With Respect to Federal Contracts, Grants, or Loans); and U.S. Environmental Protection Agency regulations.

[This space intentionally left blank.]
IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written below.

STATE OF NEW MEXICO, ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

By: ___________________________  Date: ___________________________
Cabinet Secretary or Designee

CONTRACTOR

Federal I.D. Number: ___________________________

By: ___________________________  Date: ___________________________
Authorized Representative

Printed Name and Title

STATE OF NEW MEXICO, GENERAL SERVICES DEPARTMENT, STATE PURCHASING DIVISION

By: ___________________________  Date: ___________________________
State Purchasing Agent
The records of the Taxation and Revenue Department reflect that the Contractor is registered with the Taxation and Revenue Department of the State of New Mexico to pay gross receipts and compensating taxes.

STATE OF NEW MEXICO
TAXATION AND REVENUE
DEPARTMENT

Contractor Name: ______________________

NM I.D. No.: ______________________

By: ________________________________

Date: ______________________________
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00600 – BONDS AND CERTIFICATES

00610 - Performance Bonds

Bond No. _________

KNOW ALL MEN BY THESE PRESENTS: that ____________________________

(Insert full name and address or legal title of Contractor)

as Principal, hereinafter called Contractor, and, ____________________________

(Insert full name and address or legal title of Surety)

as Surety, hereinafter called Surety, are held and firmly bound unto the Energy, Minerals and Natural Resources Department, 1220 South St. Francis Drive, Santa Fe, New Mexico 87505, as Obligee, hereinafter called the Owner, in the amount of ________________________ Dollars ($_________), for the payment whereof Contractor and Surety bind themselves, their heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

WHEREAS, Contractor has by written agreement dated ________________, 20__, entered into a contract with Owner for the Cookes Peak West Mine Safeguard Project - Phase II, Project No. EMNRD-MMD-2016-02, Luna County, New Mexico, in accordance with the enclosed Drawings and Specifications, which contract is by reference made a part hereof, and is hereinafter referred to as the Contract.
Performance Bond

NOW THEREFORE, THE CONDITION OF THIS OBLIGATION is such that, if Contractor shall promptly and faithfully perform said Contract, then this obligation shall be null and void; otherwise it shall remain in full force and effect.

The surety hereby waives notice of any alteration or extension of time made by the Owner.

Whenever Contractor shall be, and declared by Owner to be in default under the Contract, the Owner having performed Owner’s obligations thereunder, the Surety may promptly remedy the default, or shall promptly

1) Complete the Contract in accordance with its terms and conditions, or
2) Obtain a bid or bids for completing the Contract in accordance with its terms and conditions, and upon determination by Surety of the lowest responsible bidder, or, if the Owner elects, upon determination by the Owner and the Surety jointly of the lowest responsible bidder, arrange for a contract between such bidder and Owner, and make available as Work progresses (even though there should be a default or a succession of defaults under the contract or contracts of completion arranged under this paragraph) sufficient funds to pay the cost of completion less the balance of the contract price; but not exceeding, including other costs and damages for which the Surety may be liable hereunder, the amount set forth in the first paragraph hereof. The term “balance of the contract price,” as used in this paragraph, shall mean the total amount payable by Owner to Contractor under the Contract and any amendments thereto, less the amount properly paid by Owner to Contractor.

Any suit under this bond must be instituted before the expiration of two (2) years from the date on which final payment under the Contract falls due.

No right of action shall accrue on this bond to or for the use of any person or corporation other than the Owner named herein or the heirs, executors, administrators, or successors of the Owner.

Signed and sealed this __________________ day of ______________________, 20__.  

__________________________________________
WITNESS

__________________________________________
PRINCIPAL (Seal)

__________________________________________
TITLE

__________________________________________
SURETY (Seal)

__________________________________________
TITLE
00620 - Payment Bonds

Bond No. ________

THIS BOND IS ISSUED SIMULTANEOUSLY WITH PERFORMANCE BOND IN FAVOR OF THE OWNER CONDITIONED ON THE FULL AND FAITHFUL PERFORMANCE OF THE CONTRACT.

KNOW ALL MEN BY THESE PRESENTS: that __________________________

______________________________
(Insert full name and address or legal title of Contractor)

as Principal, hereinafter called Contractor, and,

______________________________
(Insert full name and address or legal title of Surety)

as Surety, hereinafter called Surety, are held and firmly bound unto the Energy, Minerals and Natural Resources Department, 1220 South St. Francis Drive, Santa Fe, New Mexico 87505, as Obligee, hereinafter called the Owner, in the amount of Dollars ($_________), for the payment whereof Principal and Surety bind themselves, their heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

WHEREAS, Principal has by written agreement dated ________________________, 20__, entered into a contract with Owner for the Cookes Peak West Mine Safeguard Project - Phase II, Project No. EMNRD-MMD-2016-02, Luna County, New Mexico, in accordance with the enclosed Drawings and Specifications, which contract is by reference made a part hereof, and is hereinafter referred to as the Contract.
Labor and Material Payment Bond

NOW THEREFORE, THE CONDITION OF THIS OBLIGATION is such that, if Principal shall promptly make payment to all claimants as hereinafter defined, for all labor and material used or reasonably required for use in the performance of the Contract, then this obligation shall be void; otherwise it shall remain in full force and effect, subject, however, to the following conditions:

1. A claimant is defined as one having a direct contract with the Principal or with a Subcontractor of the Principal for labor, material, or both, used or reasonably required for use in the performance of the Contract, labor and material being construed to include that part of water, gas, power, light, heat, oil, gasoline, telephone service, or rental of equipment directly applicable to the Contract.
2. The above named Principal and Surety hereby jointly and severally agree with the Owner that every claimant as herein defined, who has not been paid in full before the expiration of a period of ninety (90) days after the date on which the last of such claimant’s work or labor was done or performed, or materials were furnished by such claimant, may sue on this bond for the use of such claimant, prosecute the suit to final judgment for such sum or sums as may be justly due claimant, and have execution thereon. The Owner shall not be liable for the payment of any costs or expenses of any such suit.
3. No suit or action shall be commenced hereunder by any claimant:
   a) Unless claimant, other than one having a direct contract with the Principal, shall have given written notice to any two (2) of the following: the Principal, the Owner, or the Surety above named, within ninety (90) days after such claimant did or performed the last of the work or labor, or furnished the last of the materials for which said claim is made, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were furnished, or for whom the work or labor was done or performed. Such notice shall be served by mailing the same by registered mail or certified mail, postage prepaid, in an envelope addressed to the Principal, Owner, or Surety, at any place where an office is regularly maintained for the transaction of business, or served in any manner in which legal process may be served in the state in which the aforesaid project is located, save that such service need not be made by a public officer.
   b) After the expiration of one (1) year following the date on which Principal ceased Work on said Contract, it being understood, however, that if any limitation embodied in this bond is prohibited by any law controlling the construction hereof such limitation shall be deemed to be amended so as to be equal to the minimum period of limitation permitted by such law.
   c) Other than in a state court of competent jurisdiction in and for the county or other political subdivision of the state in which the Project, or any part thereof, is situated, or in the United States District Court for the district in which the Project, or any part thereof, is situated, and not elsewhere.
4. The amount of this bond shall be reduced by and to the extent of any payment or payments made in good faith hereunder, inclusive of the payment by Surety of mechanics’ liens which may be filed of record against said improvement, whether or not claim for the amount of such lien be presented under and against this bond.

Signed and sealed this __________ day of ______________________, 20__.  

PRINCIPAL  (Seal)

WITNESS

TITLE

SURETY  (Seal)

WITNESS

TITLE

EMNRD-MMD-2016-02  59  12/17/09
# 00650 – CERTIFICATE OF INSURANCE

This certificate is issued as a matter of information only and confers no rights upon the addressee. It does not amend, extend, or alter the coverage afforded by the policies listed below.

## Name and Address of Insured

**Covering (Project Name and Location):**

- Mining and Minerals Division
- Energy, Minerals and Natural Resources Department
- State of New Mexico
- 1220 South St. Francis Drive
- Santa Fe, New Mexico  87505

## COMPANIES AFFORDING COVERAGE

<table>
<thead>
<tr>
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<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
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</table>

This is to certify that the following described policies, subject to their terms, conditions, and exclusions, have been issued to the above named insured and are in force at this time.

<table>
<thead>
<tr>
<th>TYPE OF INSURANCE</th>
<th>CO. CODE</th>
<th>POLICY NUMBER</th>
<th>EXPIRATION DATE</th>
<th>LIMITS OF LIABILITY IN THOUSANDS</th>
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<tbody>
<tr>
<td>(a) Worker’s Compensation</td>
<td></td>
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<td></td>
<td>Statutory</td>
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<tr>
<td>(b) Employer’s Liability</td>
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<td>Property Damage</td>
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<tr>
<td>Comprehensive General Liability including:</td>
<td></td>
<td></td>
<td></td>
<td>Bodily Injury and Property Damage Combined</td>
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<tr>
<td>Premises – Operations</td>
<td></td>
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<td>Bodily Injury (Each Person)</td>
</tr>
<tr>
<td>Independent Contractors</td>
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<td></td>
<td></td>
<td>Bodily Injury (Each Accident)</td>
</tr>
<tr>
<td>Products and Completed Operations</td>
<td></td>
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<td>Property Damage</td>
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<td>Broad Form Property Damage</td>
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<td>Bodily Injury and Property Damage Combined</td>
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<tr>
<td>Contractual Liability</td>
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<td>*Applies to Products and Completed Operations Hazard</td>
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<tr>
<td>Explosion and Collapse Hazard</td>
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<td>(Personal Injury)</td>
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<tr>
<td>Underground Hazard</td>
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<td></td>
<td>Bodily Injury and Property Damage Combined</td>
</tr>
<tr>
<td>Personal Injury with Employment Exclusion Deleted</td>
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<td></td>
<td></td>
<td>Bodily Injury and Property Damage Combined</td>
</tr>
</tbody>
</table>

| Comprehensive Automobile Liability | | | | Bodily Injury (Each Person) | $ |
| Owned | | | | Bodily Injury (Each Accident) | $ |
| Hired | | | | Property Damage | $ |
| Non-Owned | | | | Bodily Injury and Property Damage Combined | $ |

| Excess Liability | | | | Bodily Injury and Property Damage Combined | $ |
| Umbrella Form | | | | The State of New Mexico, EMNRD, MMD, and its agents and employees thereof are either additional insured, co-insured, or principal beneficiary. |
| Other than Umbrella | | | | |

1. Products and completed Operations coverage will be maintained for a minimum period of [ ] 1 [ ] 2 year(s) after final payment
2. Has each of the above listed policies been endorsed to reflect the company’s obligation to notify the addressee in the event of cancellation or non-renewal? [ ] Yes  [ ] No

## CERTIFICATION

I hereby certify that I am an authorized representative of each of the insurance companies listed above, and that the coverage’s afforded under the policies listed above will not be canceled or allowed to expire unless thirty (30) days written notice has been given to the addressee of this certificate.

Name of Issuing Agency

Signature of Authorized Representative

Address

Date of Issue

EMNRD-MMD-2016-02  60  6/1/2016
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00700 – GENERAL CONDITIONS

00704 - Differing Site Conditions

During the progress of work, if subsurface or latent physical conditions are encountered at the site differing materially from those indicated in the contract or if unknown physical conditions of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in the work provided for in the contract, are encountered at the site, the party discovering such conditions shall promptly notify the other party in writing of the specific differing conditions before they are disturbed and before the affected work is performed.

Upon written notification, the Project Engineer will investigate the conditions, and if the Project Engineer determines that the conditions materially differ and cause an increase or decrease in the cost or time required for the performance of any work under the contract, an adjustment, excluding loss of anticipated profits, will be made and the contract modified in writing accordingly. The Project Engineer will notify the Contractor of the determination whether or not an adjustment of the contract is warranted.

No contract adjustment that results in a benefit to the Contractor will be allowed unless the Contractor has provided the required written notice.

No contract adjustment will be allowed under this clause for any effects caused by unchanged work.

00713 – Warranty and Guarantee

The Contractor shall obtain and assign to EMNRD all manufacturers’ and producers’ guarantees or warranties which are normally provided as customary trade practice for items and materials incorporated into the work. In the absence of a manufacturer’s or producer’s guarantee, the Contractor warrants that equipment and material incorporated into the work is free from any defects or imperfections in workmanship and material for a period of one year after acceptance by EMNRD. The Contractor shall promptly, without cost to EMNRD, and in accordance with EMNRD’s written instructions, either correct such defective work, or, if it has been rejected by EMNRD, remove it from the site and replace it with nondefective work. If the Contractor does not promptly comply with the terms of such instructions, or in an emergency where delay would cause serious risk of loss or damage, EMNRD may have the defective work removed and replaced, and all direct, indirect, and consequential costs of such removal and replacement (including but not limited to fees and charges of engineers, architects, attorneys, and other professionals) will be paid by the Contractor.
00720 - Duties, Responsibilities and Limitations of Authority of the Project Manager

A. General

The Project Manager is the EMNRD employee who monitors construction, who acts as directed by and under the supervision of the Project Engineer, and who will confer with the Project Engineer regarding his actions. The Project Manager's dealings in matters pertaining to the on-site work shall in general be only with the Project Engineer and the Contractor, and dealings with subcontractors shall only be through or with the full knowledge of the Contractor. Written communication with EMNRD will be through or as directed by the Project Engineer.

B. Duties and Responsibilities.

The Project Manager will:

1. **Schedules:** Review the progress schedule prepared by the Contractor and consult with the Project Engineer concerning acceptability.

2. **Conferences:** Attend preconstruction conferences, progress meetings, job conferences as required in consultation with the Project Engineer, and other project related meetings.

3. **Liaison:** Serve as the Project Engineer's liaison with the Contractor, working principally through the Contractor's superintendent and assist him in understanding the intent of the Contract Documents.

4. **Shop Drawings and Samples:**
   a. Receive and record date of receipt of shop drawings and samples, receive samples that are furnished at the site by the Contractor, and notify the Project Engineer of their availability for examination.
   b. Advise the Project Engineer and the Contractor or its superintendent immediately of the commencement of any work requiring a shop drawing or sample submission if the Project Engineer has not accepted the submission.

5. **Review of Work, Rejection of Defective Work, Inspections and Tests:**
   a. Conduct on-site observations of the work in progress to assist the Project Engineer in determining if the work is proceeding in accordance with the Contract Documents, and that completed work will conform to the Contract Documents.
   b. Report to the Project Engineer whenever he believes that any work is unsatisfactory, faulty or defective or does not conform to the Contract Documents, or
does not meet the requirements of any inspections, tests or approvals required to be made, or has been damaged prior to final payment; and advise the Project Engineer when he believes work should be corrected or rejected or should be uncovered for observation, or requires special testing, inspection or approval.

c. Verify that tests, equipment and systems startups and operating and maintenance instructions are conducted as required by the Contract Documents and in presence of the required personnel, and that the Contractor maintains adequate records thereof; observe, record and report to the Project Engineer appropriate details relative to the test procedures and startups.

d. Accompany visiting inspectors representing public or other agencies having jurisdiction over the Project, record the outcome of these inspections and report to the Project Engineer.

6. **Interpretation of Contract Documents:** Transmit to Contractor the Project Engineer's clarifications and interpretations of the Contract Documents.

7. **Modifications:** Consider and evaluate the Contractor's suggestions for modifications in drawings or Specifications and report them with recommendations to the Project Engineer.

8. **Records:**

   a. Maintain at the job site orderly files for correspondence, reports of job conferences, shop drawings and samples submissions, reproductions of original Contract Documents including all addenda, change orders, field orders, additional drawings issued subsequent to the execution of the Contract, the Project Engineer's clarifications and interpretations of the Contract Documents, progress reports, and other Project related documents.

   b. Keep a diary or log book, recording hours on the job site, weather conditions, data relative to questions of extras or deductions, list of visiting officials and representatives of manufacturers, fabricators, suppliers and distributors, daily activities, decisions, observations in general and specific observations in more detail as in the case of observing test procedures. Send copies to the Project Engineer.

   c. Record names, addresses and telephone numbers of all the Contractors, subcontractors and major suppliers of materials and equipment.

9. **Reports:**

   a. Furnish the Project Engineer periodic reports as required of progress of the work and the Contractor's compliance with the approved progress schedule and schedule of shop drawing submissions.
b. Consult with the Project Engineer in advance of scheduled major tests, inspections or start of important phases of the work.

c. Report immediately to the Project Engineer upon the occurrence of any accident.

10. **Payment Requisitions:** Review Applications for Payment with the Contractor for compliance with the established procedure for their submission and forward them with recommendations to the Project Engineer, noting particularly their relation to the schedule of values, work completed and materials and equipment delivered at the site but not incorporated in the work.

11. **Certificates, Maintenance and Operation manuals:** During the course of the work, verify that certificates, maintenance and operation manuals and other data required to be assembled and furnished by the Contractor are applicable to the items actually installed; and deliver this material to the Project Engineer for his review prior to final acceptance of the work.

12. **Completion:**

   a. Before the Contractor issues written certification to the Project Engineer that the project is complete, submit to the Contractor a pre-final list of observed items requiring completion or correction.

   b. Conduct final inspection in the company of the Project Engineer and the Contractor and prepare a final list of items to be completed or corrected.

   c. Verify that all items on final list have been completed or corrected and make recommendations to the Project Engineer concerning acceptance.

C. **Limitations of Authority.**

   Except upon written instructions of the Project Engineer and notification to the Contractor, the Project Manager:

   A. Shall not authorize any deviation from the Contract Documents or approve any substitute materials or equipment.

   B. Shall not exceed limitations on the Project Engineer's authority as set forth in the Contract Documents.

   C. Shall not undertake any of the responsibilities of the Contractor, subcontractors or the Contractor's superintendent, or expedite the work.
D. Shall not issue directions relative to any aspect of the means, methods, techniques, sequences or procedures of construction unless such is specifically called for in the Contract Documents.

E. Shall not issue directions as to safety precautions and programs in connection with the work.

6. Shall not participate in specialized field or laboratory test, unless such is specifically called for in the Contract Documents.

7. Shall not receive any materials, supplies, equipment, etc. on behalf of the Contractor.
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00800 – SUPPLEMENTARY CONDITIONS

00825 – CERTIFICATION REGARDING DEBARMENT, SUSPENSION AND OTHER RESPONSIBILITY MATTERS, DRUG-FREE WORKPLACE REQUIREMENTS AND LOBBYING

U.S. DEPARTMENT OF THE INTERIOR
Office of Surface Mining Reclamation and Enforcement

Certifications Regarding Debarment, Suspension and Other Responsibility Matters, Drug-Free Workplace Requirements and Lobbying

Persons signing this form should refer to the regulations referenced below for complete instructions.

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – Lower Tier Covered Transactions (See Appendix B of Subpart D of 43 CFR 12).

Certification Regarding Drug-Free Workplace Requirements (Grantees Other Than Individuals) (See Appendix C of Subpart D of 43 CFR 12).

Certification Regarding Lobbying (See 43 CFR 18).

Signature on this form provides for compliance with certification requirements under 43 CFR Parts 12 and 18. The certifications shall be treated as a material representation of fact upon which reliance will be placed when the Office of Surface Mining determines to award the covered transaction, grant or cooperative agreement.

PART A: Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – Lower Tier Covered Transactions

CHECK IF THIS CERTIFICATION IS FOR A LOWER TIER COVERED TRANSACTION AND IS APPLICABLE.

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.

PART B: Certification Regarding Drug Free Workplace Requirements

CHECK IF THIS CERTIFICATION IS FOR AN APPLICANT WHO IS NOT AN INDIVIDUAL.

1. The grantee certifies that it will or continue to provide a drug-free workplace by:

   (a) Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession or use of a controlled substance is prohibited in the grantee’s workplace and specifying the actions that will be taken against employees for violation of such prohibition;
(b) Establishing an ongoing drug-free awareness program to inform employees about –
   (1) The dangers of drug abuse in the workplace;
   (2) The grantees policy of maintaining a drug-free workplace;
   (3) Any available drug counseling, rehabilitation and employee assistance programs; and
   (4) The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace;

I Making it a requirement that each employee to be engaged in the performance of the grant be given a copy of the statement required by paragraph (a);

(d) Notifying the employee in the statement required by paragraph (a) that, as a condition of employment under the grant, the employee will –
   (1) Abide by the terms of the statement and
   (2) Notify the employer in writing of his or her conviction for a violation of a criminal drug statute occurring in the workplace no later than five calendar days after such conviction;

(e) Notifying the agency in writing, within 10 calendar days after receiving notice under subparagraph (d)(2) from an employee or otherwise receiving actual notice of such conviction. Employers of convicted employees must provide notice, including position title, to every grant officer on whose grant activity the convicted employee was working, unless the Federal agency has designated a central point for the receipt of such notices. Notice shall include the identification numbers(s) of each affected grant;

(f) Taking one of the following actions, within 30 calendar days of receiving notice under subparagraph (d)(2), with respect to any employee who is so convicted –
   (1) Taking appropriate personnel action against such an employee, up to and including termination, consistent with the requirements of the Rehabilitation Act of 1973, as amended; or
   (2) Requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State or local health, law enforcement, or other appropriate agency;

(g) Making a good faith effort to continue to maintain a drug-free workplace through implementation of paragraphs (a), (b), (c), (d), (e) and (f).

2. The grantee shall provide below the site(s) of the performance of work done in connection with the specific grant:

Place of Performance (Street address, city, county, state, zip code)

_________________________________________________________________________________

_________________________________________________________________________________

_________________________________________________________________________________

____ Check if there are workplaces on file that are not identified here.
PART C: Certification Regarding Lobbying

CHECK IF CERTIFICATION IS FOR THE AWARD OF ANY OF THE FOLLOWING AND THE AMOUNT EXCEEDS $100,000: A FEDERAL GRANT OR COOPERATIVE AGREEMENT; SUBCONTRACT OR SUBGRANT UNDER THE GRANT OR COOPERATIVE AGREEMENT.

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 an 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.

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.

As the authorized certifying official, I hereby certify that the above specified certifications are true.

SIGNATURE OF AUTHORIZED CERTIFYING OFFICIAL

NAME                   DATE

TITLE

00826 – APPLICANT/VIOLATOR SYSTEM INFORMATION

Instructions for Completing AML Contractor Form OMB #1029-01191

Part A: General Information. Part A should be completed by the AML Contractor.

Part B: Legal Structure. Part B should be completed by the AML Contractor.

Part C: Certifying and updating information in the Applicant/Violator System (AVS). Part C should be completed by the AML Contractor, selecting the statement that best describes their situation.

If information is accurate, complete and up-to-date, then check the first statement and sign and date. Attach the Entity OFT printout to the OMB #1029-0119 form and submit the form and attachment to the AML Contracting Officer your business is working with.

Upon reviewing an Entity OFT printout, if you discover the information contained in AVS is not accurate, complete and up-to-date, then check the second statement and complete Part D to provide missing or corrected information that needs reflected in AVS. Attach the Entity OFT printout to the OMB #1029-0119 form and submit the form and attachment to the AML Contracting Officer your business is working with.

If your business does not appear to have any information in AVS, then check the third statement and complete Part D. Submit the OMB #1029-0119 form to the AML Contracting Officer your business is working with.

Part D:

If current Entity OFT information for your business is incomplete, incorrect, or if you believe there is no information currently in the AVS for your business, you must complete Part D. Submit the OMB #1029-0119 form to the AML Contracting Officer your business is working with.

¹If you need any assistance completing OMB #1029-0119, please contact the AVS Office at 800.643.9748.
²You may obtain your business' Entity OFT for certification purposes two ways. One way is to contact the AVS Office at 800.643.9748 and request the information. The second way is to access the AVS from your personal computer by visiting https://avss.osmre.gov. Click “Access AVS”, and then Login as Guest. Place your cursor on the “Entity” Module and “Click”. Type your business name in search box and press enter key. If more than one entity record appears, select your company and then “Click” on the “relationship” tab to display your Entity OFT information. Print the Entity OFT from AVS.
REQUEST FOR AN APPLICANT/VIOLATOR SYSTEM (AVS) 
AML CONTRACTOR DATA EVALUATION

An AVS data evaluation for AML contractors is required under the Federal rules at 30 CFR 874.16. Please provide the information requested below and send your request via postal mail, e-mail or FAX to:

Liz Cox
Office of Surface Mining
Applicant/Violator System Office
2679 Regency Road
Lexington, Kentucky 40503
Telephone: 800.643.9748 ext.472
FAX: 859.260.8418
E-mail: lcox@osmre.gov

Date_____________________
Requesting Office ________________________________
Contact ________________________________
Contact’s Telephone ______________
Preferred response method:
E-MAIL: _______________________
or
FAX: (______) ___________________

Level of your request: Emergency
(Expect your response within 4 hrs if received before 3 PM Eastern)

Non-Emergency __________
(Expect your response with two business days)

Note to Evaluator:
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.

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:

( ) 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 has no information 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 Name:**

If the current entity and 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 affiliations. 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.

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<th>Name</th>
<th>Position/Title</th>
<th>Address</th>
<th>Telephone #</th>
<th>% of Ownership</th>
<th>Begin Date</th>
<th>Ending Date</th>
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</table>

**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 average 45 minutes per response, including time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. 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 210 SIB, Constitution Ave., NW, Washington, D.C. 20240.
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PUBLIC WORKS PROJECT REQUIREMENTS

As a participant in a Public Works project valued at more than $60,000 in the State of New Mexico, the following list addresses many of the responsibilities that are defined by statute or regulation to each project stakeholder.

Contracting Agency

- Ensure that all Contractors wishing to bid on a Public Works project when the project is $60,000 or more are actively registered with the Public Works and Apprenticeship Application (PWAA) website: http://www.dws.state.nm.us/pwaa (Contractor Registration) prior to bidding.
- Please submit Notice of Award (NOA) and Subcontractor List(s) to the PWAA website promptly after the project is awarded.
- Please update the Subcontractor List(s) on the PWAA website whenever changes occur.

General Contractor

- Provide a complete Subcontractor List and Statements of Intent (SOI) to pay Prevailing Wages for each Contractor to the Contracting Agency within 3 (three) days of award.
- Ensure that all Subcontractors wishing to bid on a Public Works project have an active Contractor Registration with the Public Works and Apprenticeship Application (PWAA) website: http://www.dws.state.nm.us/pwaa prior to bidding when their bid will exceed $60,000.
- Submit bi-weekly certified payrolls to the Contracting Agency.
- Make certain the Public Works Apprentice and Training Act contributions are paid either to an approved Apprenticeship Program or to the Public Works Apprentice and Training Fund.
- Confirm the Wage Rate poster, provided in PWAA, is displayed at the job site in an easily accessible place.
- Make sure, when a project has been completed, the Affidavits of Wages Paid (AWP) is sent to the Contracting Agency.

Subcontractor

- Ensure that all Subcontractors wishing to bid on a Public Works project have an active Contractor Registration with the Public Works and Apprenticeship Application (PWAA) website: http://www.dws.state.nm.us/pwaa prior to bidding when their bid will exceed $60,000.
- Submit bi-weekly certified payrolls to the General Contractor(s).
• Make certain the Public Works Apprentice and Training Act contributions are paid either to an approved Apprenticeship Program or to the Public Works Apprentice and Training Fund.

Additional Information

Reference material and forms may be found at New Mexico Department of Workforce Solutions Public Works web pages at: [http://www.dws.state.nm.us/new/Labor_Relations/publicworks.html](http://www.dws.state.nm.us/new/Labor_Relations/publicworks.html).

CONTACT INFORMATION

Contact the Labor Relations Division for any questions relating to Public Works projects by email at public.works@state.nm.us or call (505) 841-4400.
# TYPE "A" - STREET, HIGHWAY, UTILITY & LIGHT ENGINEERING

Effective January 1, 2016

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<th>Trade Classification</th>
<th>Base Rate</th>
<th>Fringe Rate</th>
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<tr>
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<tr>
<td>Carpenter/Lather</td>
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<td>Cement Mason</td>
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<td><strong>Electricians (outside)</strong></td>
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**NOTE:** SUBSISTENCE, ZONE AND INCENTIVE PAY APPLY ACCORDING TO THE PARTICULAR TRADES COLLECTIVE BARGAINING AGREEMENT. DETAILS ARE LOCATED AT [WWW.DWS.STATE.NM.US](http://WWW.DWS.STATE.NM.US).
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# 00900 – APPLICATION FOR PAYMENT

**APPLICATION FOR PAYMENT**

Cookes Peak West Mine Safeguard Project - Phase II  
Deming, New Mexico  
EMNRD-MMD-2016-02

Contract No. ________________  
Contractor: ________________  
Billing No. ________________  
Billing Date ________________  
Terminate ________________

Mailing Address: ____________________________  
Billing represents work completed through (date) ________________

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<th>MATERIAL OR WORK DESCRIPTION</th>
<th>ESTIMATED QUANTITY</th>
<th>CONTRACT AMOUNT</th>
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<th>AMOUNTS THIS BILLING</th>
<th>UNITS PREVIOUS BILLINGS</th>
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<th>UNITS REMAINING</th>
<th>AMOUNTS REMAINING</th>
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<td>2.</td>
<td>Backfill Features 10, 11, and 14</td>
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<td>3.</td>
<td>Backfill Features 36 and 37</td>
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<td>4.</td>
<td>Construct Culvert with Bat Gate at 55</td>
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<td>5.</td>
<td>Construct Bat Gate in Rock Bulkhead at 77</td>
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<td>6.</td>
<td>Hand Excavate Two Cubic Yards of Material from Inner Adit Opening at 77</td>
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<td>Backfill Features 83 and 84</td>
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<td>Backfill Features 95, 101, and 105</td>
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<td>9.</td>
<td>Backfill Features 109, 110, and 114</td>
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<td>10.</td>
<td>Backfill Features 117, 118, 119, 120, 121, 122, and 123</td>
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<td>Backfill Features 154</td>
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<td>12.</td>
<td>Backfill Features 162 and 162.01</td>
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<td>13.</td>
<td>Backfill Features 280, and 282</td>
<td>For the lump sum of</td>
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<td>14.</td>
<td>Horizontal Bat Gate (TS4x2x¼), Complete in Place</td>
<td>For the lump sum of</td>
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<td>15.</td>
<td>Beam Support with Two Anchors, Complete in Place</td>
<td>For the lump sum of</td>
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<td>16.</td>
<td>Beam Support with One Anchor, Complete in Place</td>
<td>For the lump sum of</td>
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<td>17.</td>
<td>Removable Bar on Horizontal Bat Gate, Complete in Place</td>
<td>For the lump sum of</td>
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<td>18.</td>
<td>Seeding, Complete in Place</td>
<td>For the lump sum of</td>
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<td>19.</td>
<td>Mulching, Complete in Place</td>
<td>For the lump sum of</td>
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Subtotal: $_____

GROSS RECEIPTS
TAX = LOCAL RATE
(6.8750% through 6/30/15) x Subtotal

TOTAL CONTRACT: $_____

CERTIFICATION

I do hereby certify that the work described herein has been performed and that no previous payment for the Total Amount Due this Statement, as shown above, has been received.

By: ___________________________ By: ___________________________ By: ___________________________
Mining and Minerals Division Director Contractor AML Project Engineer

DATE: ___________________________ DATE: ___________________________ DATE: ___________________________
SPECIFICATIONS

Please Note – Use of Brand Name Specifications: Use of any brand name herein is for the purpose of describing the standard of quality, performance and characteristics desired and is not intended to limit or restrict competition.

DIVISION 1 - GENERAL REQUIREMENTS

The following sections describe the general requirements of this project.

01010 – SUMMARY OF WORK

The Cookes Peak West Mine Safeguard Project - Phase II area is located twenty miles north of the city of Deming, in Luna County, New Mexico. The project area (see Figures 1 and 2) is on BLM land in Sections 14 and 23 of Township 20 South, Range 9 West.

This project involves the following work:

- Backfilling 25 mine features using mine waste and other nearby material, some of which have limited access available and will require backfilling by hand;
- Construction of horizontal bat gates at 31 mine shafts or stopes;
- Construction of a bat gate in rock bulkhead at one adit;
- Construction of bat gate placed inside a corrugated steel pipe culvert at one adit;
- Seeding of all areas disturbed by construction.

Note the time restrictions for closure of some of the mine features, as detailed in Table II of Division 2. See Sections 01011, 01012 and 01550 for terrain access restrictions.

Demobilization shall be conducted in such a manner to ensure that the Contractor leaves all project areas in as good or better condition than before disturbance.

01011 – SUMMARY OF PROJECT AND CONSTRUCTION ACCESS

The project site consists of 54 shafts, three adits, and one pit, all of which are dangerous to the public at large. Mine features to be safeguarded in this project and the methods and time restrictions for safeguarding are summarized in Table II in Division 2.

The project is located in an Area of Critical Environmental Concern as designed by the Bureau of Land Management. Surface disturbance caused by the project’s activities shall be
minimized to the maximum extent practicable. Ground disturbances shall be limited to perimeter of twenty (20) feet from each mine feature. The Contractor shall use the access paths as delineated by AML staff and shall avoid all marked archaeological avoidance areas. Equipment trips to the mine features from established roads shall be kept to an absolute minimum and materials shall be hand carried to avoid excessive traffic. Equipment shall be rubber-tired and large equipment shall not be allowed. All heavy equipment shall be washed with a high pressure washer to remove any possible noxious weed seed prior to arrival in the project area. The Contractor shall include surface disturbance minimization measures in the appropriate bid item.

The Contractor shall be responsible for thoroughly investigating site conditions and scheduling his equipment, equipment operations, personnel, and safety procedures to prevent accidents and injuries.

**01012 – AVOIDANCE AREAS FOR PRESERVATION OF CULTURAL AND BIOLOGICAL RESOURCES**

The Contractor shall avoid all designated cultural and biological resources including those shown in the Drawings and those discovered during construction. The Contractor shall avoid these areas with all equipment, vehicles, foot traffic, and any other ground surface disturbing activities.

Avoidance areas extend up to 50 feet (15 meters) from the designated cultural and biological resources, unless otherwise indicated and except where these limits are logistically impracticable to complete construction activities. Where it is infeasible to complete construction activities, avoidance area distances and access may be adjusted, in coordination with AML cultural resource staff, to accommodate construction activities. The Contractor shall also coordinate with the Project Manager and AML cultural resource staff for access routes to be taken around designated avoidance areas to construction work sites. Disturbance adjacent to designated avoidance areas shall be minimized as practicable.

The Project Manager or Project Engineer may designate additional avoidance areas as deemed necessary. No construction disturbances including excavation, fill, stockpiling of construction materials, staging, etc. shall take place within designated avoidance areas.

When the Contractor is working near designated avoidance areas and where construction access routes pass next to these locations, the Contractor shall place four-foot high, temporary, high-visibility barrier fencing (Hi-Vis, ADPI, or equivalent) around the features. Barrier fencing shall be removed upon completion of work.

The Contractor shall bear all direct, indirect, and consequential costs of mitigation or repairs due to unauthorized damage caused by his operations to cultural or biological resources within designated avoidance areas. These costs shall include but are not limited to fees and charges of engineers, attorneys, and other professionals, made necessary thereby.
The Contractor shall cooperate fully to preserve archaeological and historic artifacts and any threatened or endangered species found within the project area. Moving, removal or collecting of archaeological or historic materials or biological specimens from the project area or vicinity is prohibited. If the Contractor encounters a previously unidentified archaeological site, historic site, artifacts, or species listed as or proposed to be listed as threatened or endangered, the Contractor shall terminate all operation in that immediate area (100 foot radius, 30 meters) until the archaeological or biological preservation agencies have been notified and had the opportunity to assess the discovery site. This termination shall not preclude continuation of work in other areas nor shall it entitle the Contractor to additional payment in any form, other than an extension of time, unless the Contractor is substantially precluded from working on the entire project.

01015 – CONTRACTOR'S USE OF THE PREMISES

The Contractor shall take reasonable measures to avoid traffic conflicts between vehicles of the Contractor's employees and private citizens and to avoid overloading of any driveways, roads and streets. The Contractor shall limit the access of equipment and trucks to the project site and provide protection for any improvements over which trucks and equipment must pass to reach the job site.

01025 – MEASUREMENT AND PAYMENT

The measurement for payment is as defined below. Payment shall be made based on the applicable unit or lump sum price bid therefor in the Bid Form (Section 00300). The estimated quantities of materials and work required to complete the project are approximations only and are given as a basis for calculation upon which the contract award will be determined. All estimated quantities could vary considerably and will depend on the actual conditions encountered at the time the work is performed. AML reserves the right to decrease or increase any or all of the quantities of materials or work as may be deemed necessary during the project.

01027 – APPLICATIONS FOR PAYMENT

All Applications for Payment for work performed under this contract shall whenever practicable, first be reviewed by the Project Manager before being submitted to:

Mining and Minerals Division
Energy, Minerals, and Natural Resources Department
State of New Mexico
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

All Applications for Payment shall include appropriate backup, such as daily reports, load counts, etc. Contract amount equals total base bid plus gross receipts tax.
01028 – PRICES

The following subsections describe the lump sum and unit prices to be paid under this contract.

I. Lump Sum Prices

The basis of payment of lump sum prices as outlined in the Bid Form is as follows:

A. Mobilization

Payment for Mobilization will be made at the lump sum prices bid therefor in the Bid Form but shall not 10% of the total base bid. It is the intent of this specification to provide for the Contractor to receive 100% of the mobilization bid item by the time he has completed ten percent of his total original contract amount less mobilization. Total original contract amount less mobilization shall mean the total amount bid as compensation for the contract, excluding gross receipts tax, less the amount bid for mobilization. For lesser amounts of work completed (less than 10%), the Contractor shall receive a prorated portion of the mobilization.

In addition, payment for Mobilization will not be made until the Project Engineer's approval of an adequate performance. An "adequate performance" will be satisfied when the Contractor has shown the ability to successfully perform the required tasks of this project as outlined in these Specifications to the satisfaction of the Project Engineer. In case of any weather delays, compensation for additional Mobilization will not be made.

Payment for Mobilization shall include all equipment, fees, fuel, insurance, labor, permits, personnel, supervision and transportation to assemble, drive, operate, place, position, provide security measures for, and transport equipment, field offices, fuel, implements, machinery, materials, and support facilities to and at the job site in conformance with the Project Manager's directives and these Specifications. This amount shall include complete Mobilization no matter how often equipment is transported to individual sites within the project area.

B. Backfilling of Specified Mine Feature

Payment for backfilling to close the specified mine feature will be made at the lump sum price bid therefor in the Bid Form. This price shall include all work necessary to complete the backfilling in accordance with the specifications. This work shall include the tasks necessary to access the mine feature, including clearing as necessary; excavation, transportation, and placement of backfill; grading of backfill and borrow areas; extreme roughening; constructing and installing survey marker; and including all equipment, labor, material, and supervision costs necessary to complete installation and mitigate associated land disturbances according to the specifications.
C. Construction of Culverts with Bat Gates/Bat Gate in Rock Bulkheads

Payment for construction of the specified horizontal bat compatible closures, airflow closures, bat gates, bat gates in culverts, bat gates in rock bulkheads and bat cupolas will be made at the lump sum price bid therefor in the Bid Form. This price shall include all work necessary to complete the installation in accordance with the drawings and specifications, including access to site and closure of temporary access roads, site preparation, excavation and backfill, fabrication, formwork, construction materials, other than polyurethane foam, where required (including structural steel and steel assemblies, grating, corrugated steel pipe, precast concrete units, cast-in-place concrete, grout, reinforcing steel, anchor bolts, rock, bolts and nuts, drain pipes, scoria fill and drainage aggregate), welding, and all equipment, labor, and supervision necessary for complete installation and mitigate associated land disturbances according to the specifications.

II. Unit Prices

The methods of measurement and the basis of payment of unit prices as outlined in the Bid Form are as follows:

A. Horizontal Bat Gate Bars (Support Beams and Crossbars)

Measurement for payment for installing 2x4x¼ tubular steel bars for horizontal bat gate crossbars and support beams will be made by the linear foot installed. Payment for this item will be made at the unit price per linear foot bid therefore in the Bid Form. This price shall include all work necessary to complete the installation of horizontal bat gates in accordance with the drawings and specifications, including site preparation, materials (including steel, steel plates and accessories), cutting, welding and grinding as required and all equipment, labor, material and supervision costs necessary to complete installation. This does not include the support beam ends which are covered under a different bid item.

B. Horizontal Bat Gate Beam Support with Two Anchors

Measurement for payment for installing beam supports with two anchors will be made by the number of units properly installed. Payment for this item will be made at the unit price per beam support with two anchors bid therefore in the Bid Form. This price shall include all work necessary to complete the installation of the beam support in accordance with the drawings and specifications, including site preparation, drilling, materials (including anchors, steel plates, and accessories), cutting, welding and grinding as required and all equipment, labor, material and supervision costs necessary to complete installation.

C. Horizontal Bat Gate Beam Support with One Anchor
Measurement for payment for installing beam supports with one anchor will be made by the number of units properly installed. Payment for this item will be made at the unit price per beam support with one anchor bid therefore in the Bid Form. This price shall include all work necessary to complete the installation of the beam support in accordance with the drawings and specifications, including site preparation, drilling, materials (including anchors, steel plates, grout, forms and accessories), cutting, welding and grinding as required and all equipment, labor, material and supervision costs necessary to complete installation.

D. Horizontal Bat Gate Removable Bars

Measurement for payment for installing removable bars will be made by the number of units properly installed. Payment for this item will be made at the unit price per removable bar bid therefore in the Bid Form. This price shall include all work necessary to complete the installation of the removable bar in accordance with the drawings and specifications, including site preparation, drilling, materials (including steel shapes, plates, nuts and accessories), cutting, welding and grinding as required and all equipment, labor, material and supervision costs necessary to complete installation. If one bat gate has two removable bars, each bar is considered a separate unit.

E. Seeding

Measurement for payment for seeding will be made by the acre, as measured in the field, parallel to the seeded surface using methods acceptable to the Project Engineer.

Payment for seeding will be made at the unit price bid therefor in the Bid Form. This price shall include soil preparation including tilling, topdressing, incorporating specified soil amendments and seeding by broadcasting including all equipment, labor, material and supervision costs necessary to complete installation, of all areas disturbed by construction activities.

Disturbed areas include on-site borrow areas, depressions and mounds at shafts, filled areas at adits, temporary access routes and obliterated roads, areas occupied by the Contractor for campsites, office, plant sites, equipment parking, haul roads, closed access trails, stockpile and storage areas, service areas and areas stripped of native covering.

F. Mulching

Measurement for payment for mulching will be made by the acre, as measured in the field, parallel to the mulched surface using methods acceptable to the Project Engineer.

Payment for mulching will be made at the unit price bid therefor in the Bid Form. This price shall include staging bales, mulching by broadcasting, and all equipment, labor, material and supervision costs necessary to complete installation, of specified areas disturbed by construction activities. The BLM does not want all disturbed areas to be mulched.
Specified disturbed areas include certain temporary access routes and obliterated roads, areas occupied by the Contractor for campsites, office, plant sites, equipment parking, haul roads, closed access trails, stockpile and storage areas, service areas and areas stripped of native covering as designated by the Project Manager.

01030 – ALTERNATES

Whenever equipment or materials are specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular supplier, the naming of the item is intended to establish the type, function, and quality required. Unless the name is followed by words indicating that no substitution is permitted, the Project Engineer may accept equipment or materials of other suppliers if the Contractor submits sufficient information to allow for adequate determination that the equipment or materials proposed are equivalent or equal to that named.

01035 – MODIFICATION PROCEDURES

The following section describes procedures for making modifications to the contract by change orders. Modifications may involve changes in contract sum, contract time, and scope.

01036 – CHANGE ORDER PROCEDURES

The Contractor shall submit a request for any changes in the work under this contract, in writing, to the Project Engineer. No changes in work or quantities shown shall be authorized until a properly executed Change Order has been issued by MMD. Any work performed outside the original quantities or scope of work, before the issuance of a properly executed Change Order, shall be at the Contractor's risk.

The Contract Time may only be changed by a Change Order. Any claim for an extension in the Contract Time shall be based on written notice delivered to the Project Engineer within fifteen working days of the occurrence of the event causing the claim. The extent of the claim with supporting data shall be included unless the Project Engineer allows additional time to ascertain more accurate data. The Project Engineer shall determine all claims for adjustment in the Contract Time. Any change in the Contract Time resulting from any such claim shall be incorporated in a Change Order. The Contract Time will be extended in an amount equal to time lost due to delays beyond the control of the Contractor if a claim is made therefore as provided above. Such delays shall include, but may not be restricted to, acts or neglect beyond the Contractor's control, epidemics, fires, floods, labor disputes, abnormal weather conditions, or acts of nature. In the event delays in construction occur due to weather, the conditions as outlined above will be in effect. If the Contractor leaves the project area due to a weather delay, the Contractor shall be responsible for assuring that all areas are left in a clean and safe condition as
approved and directed by the Project Manager. In case of any weather delays, compensation for additional Mobilization or Demobilization will not be made.

01040 – COORDINATION

The following sections define the parties responsible for coordination of the contract work at the project and job site levels.

01041 - PROJECT COORDINATION

The Project Engineer will send the Contractor Notices to Proceed, Change Orders, other contract documents, and approvals on Applications for Payment. The Project Manager or Project Engineer may issue a Suspension of Work Notice if he has any reasonable basis to believe that the Contractor is violating any condition or term of the contract or specifications, or that violations of health and safety standards will occur unless such notice is issued. No work shall proceed until the Suspension of Work Notice has been vacated.

01042 – MECHANICAL AND ELECTRICAL COORDINATION

The Contractor shall be responsible for the coordination of all mechanical and electrical aspects of the contract work. This includes overseeing of the general operation and maintenance of that equipment.

01043 – JOB SITE ADMINISTRATION

The Contractor shall be responsible for the administration of the contract work at the job site. This includes assuring that all equipment and materials used for the contract work meet the required specifications set forth and that all work is performed in a timely and orderly manner. The Contractor shall be responsible for initiating, maintaining, and supervising all safety precautions and programs concerning the work. The Contractor shall designate a full time on-site superintendent or authorized representative who shall be present or can be contacted readily during project working hours. This person shall represent the Contractor in dealing with the Project Manager and shall insure adherence to these specifications and any other directives.

01050 – FIELD ENGINEERING

The Contractor shall be responsible for locating and avoiding all underground utilities at the contract work site. If damage to the utilities occurs during the contract work, the damage shall be repaired at the Contractor's expense.

The Contractor shall also be responsible for the proper setting of all construction staking. The Contractor shall provide engineering surveys for construction to establish reference points that are necessary to enable the Work to proceed. The Contractor shall be responsible for
surveying and laying out the Work, shall protect and preserve any established reference points, and shall make no changes or relocations without the prior written approval of the Project Engineer. The Contractor shall report to the Project Engineer whenever any reference point is lost or destroyed or requires relocation because of necessary changes in grades or locations. The Contractor shall replace and accurately relocate all reference points so destroyed, lost, or moved. When it becomes necessary in the construction of public works, to remove or obliterate any triangulation station, bench mark, corner monument, stake, witness mark, or other reference mark, it shall be the duty of the Contractor in charge of the work to cause to be established by a New Mexico registered land surveyor one or more permanent reference marks which shall be plainly marked as witness corners or reference marks, as near as practicable to the original mark, and to record a map, field notes, or both, with the county clerk and county surveyor of the county wherein located, showing clearly the position of the marks established with reference to the position of the original work. The surveys or measurements made to connect the reference marks with the original mark shall be of at least the same order of precision as the original survey.

01060 – REGULATORY REQUIREMENTS

The Contractor shall keep fully informed of all federal and state laws, all local laws, ordinances, and regulations, and all orders and decrees of bodies or tribunals having any jurisdiction or authority which in any manner affect those engaged or employed on the work or which in any way affect the conduct of the work. The Contractor shall at all times observe and comply with all such laws, ordinances, regulations, orders, and decrees and shall protect and indemnify the State of New Mexico 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 any employees. The Contractor shall procure all permits and licenses, pay all charges, fees, royalties, and taxes, and give all notices necessary and incidental to the due and lawful prosecution of the work.

01090 – REFERENCES

Reference to standard specifications, manuals, or codes of any technical association, organization, or society, or to laws or regulations of any governmental authority, whether such reference be specific or by implication, shall mean the latest standard specification, manual, code, laws, or regulation in effect at the time of opening of Bids, except as may be otherwise specifically stated. However, no provision of any referenced standard specification, manual, or code (whether or not specifically incorporated by reference in the Contract Documents) shall be effective to change the duties and responsibilities of the Contractor.

01092 - ABBREVIATIONS

The following is an explanation of the abbreviations that may be used in the contract documents:
01094 – DEFINITIONS

The following is a definition of the terms that may be used in the contract documents (source: A Dictionary of Mining, Mineral, and Related Terms, Paul W. Thrush, Bureau of Mines, Department of the Interior, Washington, D.C., 1968):

1. adit A horizontal or nearly horizontal passage driven from the surface for the working or dewatering of a mine.

2. back The roof or upper part in any underground mining cavity.

3. cribbing The close setting of timber supports when shaft sinking through loose ground.

4. collar Timbering or concrete around the mouth or top of a shaft; the junction of a mine shaft and the surface.

5. drift A horizontal passage underground.

6. entry A haulage road, gangway, or airway to the surface.

7. gob pile A pile of heap mine refuse on the surface.

8. incline A shaft not vertical; usually on the dip of a vein.

9. lagging Planks, slabs, or small timbers placed over the caps or behind the posts of the timbering, not to carry the main weight, but to form a ceiling or a wall, preventing fragments or rock from falling through.

10. lining The brick, concrete, cast iron, or steel casing placed around a tunnel or shaft as a support.
11. loading chute A three-sided tray for loading or for transfer of material from one transport unit to another.
12. portal Any entrance to a mine.
13. red dog Material of a reddish color resulting from the combustion of shale and other mine waste dumps on the surface.
14. shaft An excavation of limited area compared with its depth, made for finding or mining ore or coal, raising water, ore, rock, or coal, hoisting and lowering personnel and material, or ventilating underground workings.
15. spoil The overburden or on-ore material removed in gaining access to the ore or mineral material in surface mining.
16. stope An excavation in which ore has been excavated in a series of steps.
17. stull A timber prop set between the walls of a stope, or supporting the mine roof.
18. subsidence A sinking down of a part of the earth's crust.
19. talus A heap of coarse rock waste at the foot of a cliff.
20. tipple Originally the place where the mine cars were tipped and emptied of their coal, and still used in that sense, although now more generally applied to the surface structures of a mine, including the preparation plant and loading tracks.
21. winze Interior mine shaft.

01100 – SPECIAL PROJECT PROCEDURES

The following section describes special procedures for alteration, preservation, security, hazardous materials, and other types of projects demanding unique procedures.

01135 - HAZARDOUS AND CONFINED AREA PROCEDURES

This project requires construction work in, around, and over hazardous and unprotected mine shafts, stopes, adits, and other openings which may be open to the surface or hidden from view by vegetation, trash, debris, or thin and unstable layers of surface materials or rock. The Contractor shall be responsible for thoroughly investigating the site conditions and scheduling his equipment, equipment operations, personnel, and safety procedures to prevent accidents and injuries.

Before entry, the Contractor shall review safety procedures with all persons entering the mine. At least one standby person, whenever possible someone who is trained in CPR and mine
rescue procedures, shall remain outside the mine during entry by others. The standby person(s) shall have access to first aid, appropriate rescue equipment, and a vehicle and shall know where the nearest telephone for emergency calls is found. A communication system shall be established between the person(s) working inside the mine and the standby person(s) outside.

All persons entering the mine opening shall wear appropriate clothing and carry appropriate gear, including, as required for the conditions present, harnesses, head, hand and foot protection, life lines, respirators or self-contained breathing apparatuses, and other special equipment. Proper ventilation and adequate lighting at the workplace inside the mine entry shall be provided. The Contractor shall review with his workers and personnel the use of hazardous chemicals or materials, electrical power, or internal combustion engines inside mine entries for safety precautions and procedures.

The Contractor is fully responsible for construction safety and shall keep the Project Manager informed of his hazardous area safety procedures. Following is a discussion of some common abandoned mine hazards and appropriate procedures to be followed.

I. **Bad Air**

Miners use the term "bad air" to describe an atmosphere that will not support life. The poor air circulation in some mine openings can allow carbon dioxide (CO₂), carbon monoxide (CO), methane, hydrogen sulfide (H₂S), or radon gas to accumulate. These gases are treacherous inside mine openings and even experienced miners have been killed or harmed by entering areas containing them. Carbon monoxide cannot be readily detected and is lethal in very small amounts. The Contractor shall follow the following and other appropriate hazardous bad air procedures.

An oxygen meter shall be used to test air before and while any personnel work inside a mine opening. The oxygen meter shall be a National Mine Service (NMS) OX231 oxygen meter or equivalent. The oxygen meter shall continuously monitor oxygen levels and have an audible warning signal. If the oxygen level falls below 19 percent, all personnel shall withdraw from the working area in the mine until the oxygen content increases to safe levels.

Any remedy for increasing oxygen content of the working area or providing ventilation from the surface shall be determined in consultation with the Project Manager.

II. **Adit Cave-ins**

Cave-ins are a danger in any abandoned mine. Disturbances such as vibrations caused by walking, speaking, blasting, hammering, percussion drilling, or construction equipment may cause a cave-in inside an inactive mine. The Contractor shall follow appropriate adit cave-in protection procedures, including scaling and barring of loose rock before beginning work in an area, shoring of decayed or weak timber framing, and shoring, jacking, or rock bolting of materials in the back (roof) and sides of the adits.
III. Collar Cave-ins

The collar or top of a shaft, stope, or subsidence often contains decomposed rock, decayed timbers, and other conditions that allow for rapid disintegration at the opening. With the additional weight and vibration of construction machinery, workers, and backfilling operations near the mine opening, the area around the collar can slide into the opening, along with nearby machinery and men. Backfilling operations can tear loose cribbing or lining in a shaft leading to collapse at the collar. The Contractor shall follow appropriate collar cave-in protection procedures.

IV. Falling

Because a shaft or stope has little light, the feeling of height and normal reaction to "pull back" is not evident to most persons. Many abandoned mine shafts, stopes, and winzes are deep enough to insure that anyone that falls down them is badly injured or killed. Rescue operations of a fallen person can also be extremely hazardous.

The Contractor shall follow appropriate hazardous fall protection procedures. This includes proper lighting, barricades, fences, personal fall arrest systems, guardrails, covers, safety net systems, safety monitoring systems, and other protection as suitable for the conditions. Fall protection shall be in accordance with OSHA regulations regarding construction fall protection (OSHA 29 CFR Subpart M). These regulations establish a six-foot threshold for the height at which fall protection is required, require employers to provide training for each employee who might be exposed to a fall hazard, and prohibit the use of body belts for fall protection and the use of non-locking snap hooks.

V. Loose Rock

A mineshaft or open stope will weather in much the same way as a cliff. Loose rocks are always found on timbers or on the walls. A small rock that falls a sufficient distance can penetrate a person's skull. The Contractor shall follow appropriate hazardous loose rock protection procedures, including scaling of loose rock, construction of shields, and wearing of head protection.

01170 - INDUSTRIAL WASTES AND TOXIC SUBSTANCES

The Contractor shall comply with all applicable laws and regulations existing or hereafter enacted or promulgated regarding industrial wastes and toxic substances. In any event, the Contractor shall comply with the Toxic Substances Control Act of 1976, as amended (15 U.S.C. 2601, et seq.) regarding any toxic substances that are used, generated by or stored at the project site. See 40 C.F.R., Part 702799. Additionally, any release of toxic substances (leaks, spills, etc.) greater than the reportable quantity established by 40 C.F.R., Part 117, shall be reported as required by the Comprehensive Environmental Response, Compensation and Liability Act of
1980, Section 102b. A copy of any report required or requested by any federal agency or state
government because of a reportable release or spill of any toxic substances shall be furnished to
the Project Engineer concurrent with the filing of the reports to the involved federal agency or
state government.

01200 – PROJECT MEETINGS

The following sections describe the required project meetings that the Contractor is
expected to attend.

01210 - PRECONSTRUCTION CONFERENCES

Before starting work at the site, a conference will be held to review the construction
schedules; to establish procedures for handling documents, drawings, other submissions, and for
processing Applications for Payment; and to establish a working understanding between the
parties as to the nature of the project. Present at the conference will be the Project Manager, the
Project Engineer, the Contractor, the Contractor's superintendent, and other persons as
appropriate. The Contractor shall present his progress schedule at the preconstruction conference
as specified in Section 01310 below and his fire prevention and awareness plan as specified in
Section 01565 below.

01220 - PROGRESS MEETINGS

Progress meetings may be held during construction for purposes of scheduling and
coordination of work. Throughout the life of the project, the Contractor shall keep the Project
Manager and Project Engineer well informed of the schedule of work.

01300 – SUBMITTALS

The following sections describe the required documents and reports to be submitted by
the Contractor during the contract work.

01310 - PROGRESS SCHEDULES

The Contractor shall provide a detailed progress schedule to be followed in completing
the work. This schedule shall be submitted in writing at the preconstruction conference and shall
show the anticipated time required by the Contractor to complete each item of work in the Bid
Form. Schedules may be prepared as a horizontal bar chart with a separate bar for each major
portion of work or operation, identifying the first workday of each week.
**01320 - PROGRESS REPORTS**

The Contractor shall submit written accurate daily progress reports to the Project Manager. The reports shall include but are not limited to work accomplished, quantities of unit price bid items installed, including load tickets as appropriate, records of any complaints including corrective actions taken, records of visitors to the site, and records of any personal injury or property damage incidents. The Contractor's authorized representative shall meet the Project Manager a minimum of once each week to verify and sign-off on all payable units of work performed during that week. The authorized representatives from both parties shall be designated at the start of the project during the preconstruction conference.

**01340 - SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES**

The Contractor shall submit shop drawings, product data, and samples as required in the specifications. Submittals shall be organized such that each submittal covers items in no more than one specification section. The Contractor shall allow a minimum of 21 calendar days for the Project Engineer's review; shorter periods for Project Engineer's review will not be acceptable. The Contractor shall allow acceptable time for the entire review process including transmittal, initial Project Engineer's review, correction and resubmission, final review, and distribution.

Engineering data and shop drawings covering all equipment and fabricated materials shall be submitted to the Project Engineer for review and comments. These data shall include drawings and descriptive information in sufficient detail to show the kind, size, arrangement, and operation of component materials and devices; the external connections, anchorages, and supports required; and performance characteristics and dimensions needed for installation and correlation with other materials and equipment. Data submitted shall include drawings showing essential details of any changes proposed by the Contractor.

It shall be the duty of the Contractor to check all data and shop drawings for completeness before submittal for Project Engineer's review. Each drawing or data sheet shall have indicated thereon the proposed use of the item as it pertains to the Work. Catalog cuts, pages, or copies submitted for review shall have items proposed for use in the Work clearly marked and identified. The current catalog number, date, and revision and drawing number (if applicable) shall be included.

Deviations from the drawings or specifications shall be identified on each submittal and shall be referenced in the Contractor's transmittal letter. The submittal for such deviations shall also include details of changes proposed and modifications required for all affected portions of the Work.

Shop drawings and other review data shall be submitted to the Project Engineer only from the Contractor.
The Contractor's submittal of shop drawings and other review material shall represent that he has reviewed the details and requirements of the Contract Documents, that he has coordinated the subject of the submittal with other portions of the Work, and that he has verified dimensions, quantities, construction details, materials, and installation criteria, as applicable for the Work. The Contractor shall accept full responsibility for the completeness of each submittal and, for re-submittals, verify that exceptions noted on the previous submittal have been accounted for.

Any requirement for more than one resubmission or delay in obtaining Project Engineer's review of submittals will not entitle the Contractor to an extension of Contract Time unless authorized by Change Order.

The Project Engineer's review of drawings and data submitted by the Contractor will cover only general conformity to the drawings and specifications, external connections, and dimensions that affect the plans and layout. The Project Engineer's disposition of submittals will not constitute a blanket approval of all dimensions, quantities, and details of the material, equipment, or item shown. Regardless of the corrections made in, or disposition given to, such drawings and data by the Project Engineer, the Contractor shall be responsible for the accuracy of such drawings and data and for their conformity and compliance with the contract documents.

No work shall be performed in connection with the fabrication or manufacture of materials and equipment, nor shall any material, accessory, or appurtenance be purchased until the drawings and data therefor have been reviewed.

Four copies of each drawing and necessary data shall be submitted to the Project Engineer. Each drawing or data sheet shall be clearly marked as instructed above. Submittals will be accepted only from the Contractor.

When the drawings and data are returned NOT APPROVED or RETURNED FOR CORRECTION, corrections shall be made as noted by the Project Engineer and four corrected copies resubmitted as instructed above.

When drawings and data are returned marked NO EXCEPTIONS NOTED, EXCEPTIONS NOTED, or RECORD COPY, no additional copies need be submitted.

The Project Engineer will return two copies with comments to the Contractor. The Contractor shall send additional copies with the original submittal if the Contractor requires more than two copies.

All drawings and data, after final processing by the Project Engineer, shall become a part of the contract documents and the work shown or described thereby shall be performed in conformity therewith unless otherwise required by the Project Engineer.
01380 - CONSTRUCTION PHOTOGRAPHS

The Contractor may provide routine periodic construction photographs to support Applications for Payment and to supplement Project Record Documents.

01400 – QUALITY CONTROL

The following sections outline the duties, responsibilities, and qualifications of inspectors, testing laboratories, and the Contractor's quality control requirements required to perform the contract work.

01405 - CONTRACT QUALITY CONTROL

The Contractor shall be responsible for the maintenance of quality control throughout the period of the contract work. This includes making periodic spot checks to assure that equipment, materials, and construction quality, meet the contract specifications.

01410 - TESTING LABORATORY SERVICES

Independent commercial testing laboratories shall perform all tests required by the contract documents to determine compliance with the specifications. The testing laboratories shall be acceptable to the Project Engineer. The laboratories shall be in the regular business of testing services in accordance with the specifications for which tests are required, and shall be staffed with trained and experienced technicians, equipped properly, and fully qualified to perform the specified tests in accordance with reference standards.

All testing services for tests of materials required by the contract documents shall be the responsibility of the Contractor. The Project Engineer shall review all sources of materials before delivery of the materials to the job site. Before the performance of any testing, the Contractor shall obtain the concurrence of the Project Engineer for the laboratory or laboratories selected by the Contractor.

The Contractor shall require the producer or manufacturer of materials, for which the specifications require inspection or testing services during the production or manufacturing process, to arrange for and pay an independent organization to perform the specified services.

The Project Manager will determine the exact time and location of field sampling and testing. The Project Manager or Project Engineer may require additional sampling and testing as necessary to assure that materials conform to the contract documents. The Contractor shall pay the costs of any retesting or re-sampling required when initial tests or samples fail to meet the specified requirements.

Written reports of tests furnished by the Contractor for the Project Engineer's review shall be submitted in conformance to the procedures set forth in Section 01340.
01500 – CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS

The following sections specify the types of construction facilities and temporary controls the Contractor shall provide for completion of the contract work.

01505 - MOBILIZATION

The Contractor shall furnish and mobilize all specified construction facilities, temporary controls, equipment, labor, materials, power, supervision, and supplies to the site and commence work within ten working days after receipt via certified mail of the Notice to Proceed. Mobilization includes everything necessary to complete the required contract work. The Contractor shall inform the Project Manager of plans and schedules to move all equipment, machinery, and supplies to the job site. The Contractor shall locate and position the staging area including field offices, parking, storage, and support facilities as directed and approved by the Project Manager. All equipment and machinery shall be moved onto the job site in conformance with previously approved plans and schedules. All heavy equipment shall be washed with a high pressure washer to remove any possible noxious weed seed prior to arrival in the project area. It is the Contractor's responsibility to arrange for storage facilities for equipment and materials. City, state, federal, or other public or private property shall not be used as temporary storage or parking areas for any equipment or materials unless written clearance is obtained by the Contractor from the appropriate public officials or private individuals. The Contractor must be prepared to move all necessary equipment to each construction site within the project area. This movement of equipment shall be at the Contractor's expense and should be covered under Bid Item No. 1, Mobilization, on the Bid Form.

01510 - TEMPORARY UTILITIES

The following sections describe temporary utilities, controls, facilities, and construction aids required during construction. They include requirements for installation, maintenance, and removal.

01516 - TEMPORARY SANITARY FACILITIES

The Contractor may provide temporary sanitation facilities during the contract work. The facility shall be installed on the project site in a location removed from the immediate contract work area. The facility shall be locked to prevent unauthorized access during the times work is not conducted. The Contractor shall remove the facility upon completion of the contract work and restore the area.

01530 – BARRIERS AND ENCLOSURES

The Contractor shall provide barricades with blinking markers for all equipment on roadways and pedestrian walkways. The barricades shall be no less than twenty feet from the
front and rear of any equipment in the described rights-of-way. Traffic control devices shall be in substantial conformance with the American Traffic Services Association (ATSA) Guide for Work Area Traffic Control. The Contractor shall remove the barricades upon completion of the contract work.

01533 - TREE, PLANT AND WILDLIFE PROTECTION

I. Tree and Plant Protection

Environmental disturbance shall be kept to a practical minimum.

In steep areas and around vegetation, the Contractor shall, before beginning work, discuss the planned extent and nature of disturbance with the Project Manager. Existing plants and trees shall be protected from damage or injury resulting from the Contractor's operations. Damaged trees and shrubs shall be trimmed to remove broken limbs where minor damage has occurred. Where directed by the Project Manager, cut or scarred surfaces of trees or shrubs shall be treated with a heavy coat of a tree sealant approved by the Project Manager.

II. Wildlife Protection

All area wildlife, including bats and owls, that may use the mine features are protected, and this hazard abatement effort shall not adversely affect them. Shooting at and chasing wildlife is prohibited.

At or before the preconstruction conference, the Contractor shall submit a construction schedule, which includes anticipated dates of closure of specified mine features, in accordance with Section 01310. Based on this schedule the AML biological staff will give authorization to proceed on closure of the mine features that require netting, tarping, or smoke bombing to exclude animals before closure. It is solely the Contractor's responsibility to obtain this authorization. Normally a minimum of one week written notice of the dates of closure is needed from the Contractor to the AML biological staff. After approval of the schedule, any need for changes shall be coordinated with the AML biological staff a minimum of 48 hours before closure of the features. The Contractor's failure to follow this procedure may result in stoppage of the construction activity at his expense until the biological staff can reschedule netting and tarping of the specified features.

The Contractor shall aid AML staff in using smoke bombs to expel remaining bats or other animals before backfilling or closing a mine feature, in covering the entrances of designated mine features with tarps or other barricades after the animals have exited and in removing the barricades following closure. The Contractor shall provide sufficient numbers and sizes of tarps, polyethylene sheets or other satisfactory covers for this purpose.

All mine openings, except those whose workings can be fully visually checked by the Project Manager and those which are safeguarded by the construction of bat closures, airflow
closures or high-strength steel mesh, shall be tarped or netted before closure and require agreement on the dates of closure.

During construction of bat closures, the Contractor shall schedule his activities so the bats can readily pass through the partially completed closures from one hour before sunset until sunrise. In addition, during construction of bat closures at shafts, the Contractor shall take positive measures to reduce the rock and other material that drop into those mine features.

Internal combustion engines, including those used on air compressors, shall be placed such that exhaust from the engine is not drawn into the mine openings.

01535 - PROTECTION OF INSTALLED WORK

The Contractor shall protect installed work and control traffic in the immediate area to prevent damage from subsequent operations.

01540 – SECURITY

The Contractor shall act to assure the protection of the contract work and equipment at the contract work site. The Contractor shall furnish, install, and maintain safety fences around any hazardous or high-voltage equipment at the site for the duration of the project. Where appropriate, the Contractor shall restrict access to the project site by barricading access roads during off-hours and by posting "No Admittance" and "Hard Hat Area" signs.

01550 – ACCESS ROADS, PARKING AREAS AND STAGING AREAS

The project is located in an Area of Critical Environmental Concern as designed by the Bureau of Land Management. Surface disturbance caused by the project’s activities shall be minimized to the maximum extent practicable. Unless otherwise indicated, all Contractor personnel and equipment shall enter and leave the project site via existing roads and trails. Upon the regrading, recontouring, or reclamation of any part of the site, further vehicular use shall be limited to that necessary to complete operations. Any access routes that are determined by the Project Manager to be maintained throughout the project duration shall be left in as good or better condition than the condition before the start of the project. Existing roads and trails shall be used whenever possible. The Project Engineer will identify a staging and parking area during the mandatory pre-bid meeting which shall be used by the Contractor for all storage needs. Trips to and from the staging area and work sites shall be minimized to the maximum extent practicable.

Equipment shall be "walked" or operated cross-country to travel to work sites where roads do not exist, using a path designated by the Project Manager. No equipment or vehicles shall be operated off the existing roads from the period starting at noon on Friday to noon on Monday unless the Project Manager is present. No new paths shall be bladed or improved.
Overland access routes shall be smoothed by hand tools within 24 hours of having been disturbed. Equipment trips to the mine features from established roads shall be kept to an absolute minimum and materials may need to be hand carried to avoid excessive traffic. Equipment shall be rubber-tired and large equipment will not be allowed. All unspecified roads, trails, or travel routes shall be regraded to approximate original contours, reclaimed, and revegetated, as necessary, in conformance with the specifications at no additional cost to EMNRD. Where directed by the Project Manager, the Contractor shall build earthen berms to discourage vehicular traffic and to control erosion on closed temporary construction access roads.

01560 – TEMPORARY CONTROLS

The Contractor shall take all reasonable steps to reduce any inconvenience and disruption to the public because of this project. The Contractor shall provide the following temporary controls for the duration of the contract work.

01561 - CONSTRUCTION CLEANING

The Contractor shall keep the contract work area, equipment, and adjacent areas free from spillages of construction and maintenance materials during the contract work. The Contractor shall also provide for the containment of solid debris created by unpackaging construction materials and waste from meals consumed at the contract work site. The Contractor shall assure the cleanup and removal of all spillages and solid debris to an approved disposal site at the end of each contract workday.

01562 - DUST CONTROL

The Contractor shall take all necessary measures to control dust emanations from the construction equipment. The Contractor shall assure that the equipment used in the contract work is fitted with all standard dust control devices. To maintain the health and safety of project personnel, dust control measures at this site shall comply with all local, state, and federal health and safety regulations. The Contractor shall be prepared to begin dust control measures anytime at the request of the Project Manager. Water for dust control shall be distributed in sufficient quantity and at proper times by water trucks equipped with spray bars approved by the Project Manager. The quantity of water required and the frequency of watering shall be dependent upon the weather and the site's surface conditions and may vary throughout the project duration.

01564 - NOISE CONTROL

The Contractor shall assure that all equipment used in the contract work is fitted with standard noise suppression devices.

01565 - FIRE PREVENTION AND SAFETY AWARENESS
The Contractor shall develop an emergency plan that will outline precautionary measures and identify initial attack resources and procedures in case of a fire incident. This plan will be submitted to the Project Manager at the Pre-Construction meeting. The Project Manager will then provide feedback about the plan. The Contractor shall provide the fire emergency plan to all individuals working on this project.

Examples of precautionary measures might be:

1. Inspect all motorized and mechanized equipment to insure mufflers and spark arresters are operating properly.

2. Insure personnel are properly trained on the safe use of welding torches, arc welders, generators, saws, power grinders, chainsaws, and other tools and are also familiar with the potential of this equipment to create hot sparks and ignite fires.

3. Avoid welding or cutting in areas next to and above flammable materials or during windy conditions. This would pertain to materials inside the mine as well as outside the mine. Welding shall not take place within 25 feet of polyurethane foam during application. After its application, welding shall not take place above it without first covering the surface with at least 6" of fill material.

Examples of resources and procedures might be:

1. Maintain adequate fire extinguishers, water tanks, sprayers, and other equipment at the work site that would enable personnel to immediately extinguish any accidental ignition.

2. Have personnel observe the work area while welders are operating (welders cannot see where the sparks are falling when he is under the welding hood).

3. Assign an individual to be responsible for the area being "safe" (no hot sparks, iron is cold) before leaving the work site.

4. Develop an emergency notification procedure in case the fire incident is or appears to be reaching an out-of-control status.

The Contractor shall obey all fire restrictions declared by the landowner(s) (i.e. U.S. Forest Service or Bureau of Land Management).

01570 – TRAFFIC REGULATION

The Contractor shall take the following measures for regulation of traffic at the contract work site.
01572 - FLAGGERS

The Contractor shall post flaggers during the off-loading and on-loading of equipment or materials in roadways at the contract work site. The flaggers shall halt traffic during the off-loading or on-loading process or direct traffic to an alternate route.

01574 - HAUL ROUTES

The Contractor shall consult with the authority having jurisdiction in establishing public thoroughfares to be used for haul routes and site access.

01580 – PROJECT IDENTIFICATION AND SIGNS

At least one temporary project sign shall be furnished and erected by the Contractor at the most convenient point of public access to the project site. The project identification sign shall be installed within ten working days after the receipt via certified mail of the Notice to Proceed or within five days after the Contractor initially mobilizes to the project site, whichever comes first. The sign is to be a minimum of four feet by eight feet by three quarter inch (4' x 8' x 3/4") exterior grade plywood and is to give the project title, project number, and other data within the box on the Title Page (Section 00001). Exterior quality paint in contrasting colors shall be used. The Contractor shall remove sign, framing, supports, and foundations at completion of Project and restore the area. The costs connected to the construction, painting, erection, and later removal of the sign should be covered under Bid Item No. 1, Mobilization, on the Bid Form.

01590 – FIELD OFFICES AND SHEDS

Portable or mobile buildings, or buildings constructed with floors raised above ground, may be provided by the Contractor in locations approved by the Project Manager and the landowner. At completion of work, the Contractor shall remove all buildings, foundations, utility services, and debris and restore areas.

01600 – MATERIALS AND EQUIPMENT

All materials and equipment required to complete the work shall be as specified. Any substitution to the specified products requires prior approval by the Project Engineer.

01700 – CONTRACT CLOSEOUT

The following sections specify the duties and responsibilities of the Contractor to close out the contract.
**01701 - CONTRACT CLOSEOUT PROCEDURES**

When work is completed, the Contractor shall submit project record documents to the Project Manager.

**01702 - FINAL INSPECTION**

Upon written notice from the Contractor that the entire Work or an agreed portion thereof is complete, the Project Engineer will make a final inspection with the Project Manager and Contractor and will notify the Contractor in writing of all particulars in which this inspection reveals that the Work is incomplete or defective. The Contractor shall immediately take such measures as are necessary to remedy such deficiencies.

**01710 - FINAL CLEANING**

After completion of all work, the Contractor shall demobilize and remove all equipment, materials, spills, supplies, and trash from the project site and shall reclaim all areas disturbed by the Contractor's activities. Unless otherwise specified, developed, maintained roads that existed before commencement of the Contractor's activities need not be reclaimed, but must be left in a condition equal to or better than what existed before the Contractor's activities began. Fences, gates, plants, sod, and other surface materials disrupted by these operations shall be replaced or restored to original or better conditions immediately upon completion of work at the site. Other damage to private or public property shall be immediately repaired. All such cleanup, repair, or replacement work shall be done at the Contractor's expense and to the satisfaction of the Project Manager pending approval of the appropriate public officials and property owners. Payment for Demobilization should be covered under Bid Item No. 1, Mobilization, on the Bid Form.

**01720 – PROJECT RECORD DOCUMENTS**

The Contractor shall prepare final Project Record Documents providing information regarding all aspects of the Work, both concealed and visible, to enable future modification of the Work to proceed without lengthy and expensive site measurement, investigation, and examination. At Contract closeout, the Contractor shall deliver Project Record Documents and samples under provisions of Section 01701.
DIVISION 2 – SITEWORK

The following sections describe the sitework to be performed under this contract.

02050 – DEMOLITION

The following section describes selective demolition to be performed under this contract.

02070 - SELECTIVE DEMOLITION

The mine openings may require the removal of debris such as boards, signs, timbers, wire, etcetera. Salvageable materials shall be neatly stacked on the site, while trash shall be properly disposed of at the Contractor's expense at an appropriate licensed landfill. All fasteners shall be removed from the lumber and timbers. All specified or established avoidance areas shall be avoided and the recommendations of the archaeological report and the State Historic Preservation Office (SHPO) will be followed.

Other debris and timbers that may cause bridging of backfill material or otherwise interfere with construction shall be removed as directed by the Project Manager.

02100 – SITE PREPARATION

Before closure of the mine features, the Contractor shall provide tarps and assist AML biological staff in excluding animals from the features to be closed. Refer to the requirements in Section 01533.

02110 - SITE CLEARING

This work shall consist of clearing, grubbing, trimming, removing and disposing of vegetation and debris in accordance with these specifications, except those items designated to remain. This work shall also include the preservation from damage or defacement of all vegetation and items designated to remain.

Within construction limits for borrowing backfill material, all surface debris, roots, stumps, trees, and other objectionable protruding obstructions shall be cleared with the Project Manager's concurrence.

02200 – EARTHWORK

The following sections describe the earthwork to be performed under this contract.
**02210 - GRADING**

The following sections describe the grading to be performed under this contract.

**02211 - ROUGH GRADING**

Unless otherwise specified or indicated, all cut and fill slopes shall be rough graded so that slopes are not steeper than three horizontal to one vertical (3h:1v) in earth, two horizontal to one vertical (2h:1v) in incompetent rock and very rocky soils, and one half horizontal to one vertical (0.5h:1v) in competent rock. Where specified and as directed by the Project Manager, the Contractor shall grade sites and construct drainage ditches around safeguarded mine features to divert storm water away from those features. Diverted flows shall not be directed onto identified cultural resource or endangered plant areas.

Where cut slopes in competent rock are steeper than one and a half horizontal to one vertical (1.5h:1v), the maximum uninterrupted vertical height of the slopes shall be no more than ten feet. A series of slopes, each at between one half horizontal to one vertical (0.5h:1v) and one and a half horizontal to one vertical (1.5h:1v), may be constructed in competent rock if horizontal benches or terraces a minimum of six feet wide, with inslopes of at least 4 percent, are built at a vertical spacing of no more than ten feet.

**02212 - DECOMPACTION**

Before construction demobilization and following the need for any construction access to each abandoned mine site, the Contractor shall decompact areas compacted by construction activity, including temporary work areas and access trails, and staging, storage and parking areas. Areas where more than four feet of overburden material has been removed shall also be decompacted.

Where bedrock is exposed at the surface, such decompaction will not be required. Decompaction methods shall be effective at reducing soil density to a minimum depth of twelve inches (except where bedrock is closer to the surface) and shall be accomplished without inverting the soil layers. Where practicable, ripping shall be done along the contour. Alternatives to ripping or auguring for decompaction shall be acceptable to the Project Engineer.

**02216 - ACCESS ROAD CLOSURES**

Before construction demobilization and following the need for any construction access to the abandoned mine site, the Contractor shall close temporary construction access roads as specified and as directed by the Project Manager. The Contractor shall outslope the road surface and remove all berms along the outer edge of the road. By grading material toward the cut bank, the Contractor shall take care not to spill graded material over the fill slope. The outslope shall be enough to divert water over the bank at approximately four to eight percent. The surface of
the closed road shall be covered with topsoil to a minimum depth of six (6) inches and made uneven using extreme roughening as specified in Section 02900 – Landscaping.

The Contractor shall construct berms and cross-ditches, as shown in the drawings and as directed by the Project Manager, to restrict vehicular access and control erosion.

In addition, cross-drains shall be located to divert water where the road traverses a ridge, above and below road junctions, above steep incurves to prevent bank cutting and to keep road surface water from entering a draw, below sharp incurves to prevent water from a draw from coursing down the road, and below seeps and springs.

02220 - EXCAVATING, BACKFILLING, AND COMPACTING

The following sections describe the excavating, backfilling, and compacting to be performed under this contract.

02222 - EXCAVATION

The Contractor shall reopen as necessary the adits that may be partially closed, by mucking out the debris, earth, and rock plugging or partially plugging them. Before removing any backfill or borrow, the Contractor shall discuss with the Project Manager where material shall be excavated, and shall obtain the Project Manager's approval of the excavation plan.

02223 - BACKFILLING OF MINE OPENINGS

This work shall consist of backfilling mine openings with onsite or imported fill materials as designated in the specifications or as directed by the Project Manager.

I. General

Before backfilling mine openings, the Contractor shall remove cribbing, garbage, wood and other materials as specified and as directed by the Project Manager. All trash and debris shall be hauled to a permitted landfill or transfer station.

Backfill material shall be free of snow, ice, frozen lumps, logs, timbers, significant amounts of woody or vegetative debris, other deleterious materials and materials of such size and shape that they may bridge the opening being filled.

Hand backfilling is an option at sites difficult for equipment access or too steep to operate equipment safely.

II. Adit Backfilling

Unless otherwise specified, adits shall be backfilled to a minimum depth of fifteen feet from the inner top of the fill to the outer top of the fill. No spaces shall be left between the top of the
fill and the back (roof) of the adit that exceed three inches and no space shall be left between the top of the fill and the back (roof) of the adit at the entrance of the adit. In certain situations, a tamping device or fabricated ram may be required to place the necessary fill.

Wherever practicable or as directed by the Project Manager, the entire length of backfill shall consist of rocks to reduce the chances of erosion of the material and discourage anyone from digging through the fill.

Where the opening to an adit is recessed into a hill slope, the trench in front of the adit shall be partially backfilled as shown on the Drawings and with no abrupt changes in the slope between the backfilled entry and the surrounding ground.

III. Shaft, Pit and Open Stope Backfilling

Shafts, pits, stopes, declines, trenches and subsidence features shall be backfilled completely from the bottom of the feature to the specified minimum distance above or below the surface.

In shafts and stopes with intact or partially intact cribbing or lining to remain, the maximum size of backfill material shall have no dimension exceeding twelve inches. Care shall be taken during backfilling to reduce damage to the cribbing or lining to prevent bridging of fill materials on collapsed timbers and to minimize potential for collapse of the collar.

Where judged to be feasible by the Project Manager, the Contractor may break collapsed timbers deeper than can practicably be removed by other methods by dropping heavy rock, boulders, or broken concrete during the initial stages of backfill.

Wherever practicable, at least 80 percent by weight of fill material shall be larger than ¾ inch. In shafts, stopes and declines, the coarsest available backfill material shall be used from the bottom of each drift level to a minimum height of five times the diameter or diagonal dimension of the shaft above the drift floor level.

IV. Slow Backfill

Slow backfill is designated for closure of some features; the purpose is to create enough loud noise, vibration and dust to expel bats and birds that may be in the underground mine workings. Hand backfilling is by definition slow backfill and will not require special procedures unless directed otherwise by the Project Manager.

When using equipment, the following procedure shall be followed. The first one-quarter cubic yard of fill material placed to backfill the shaft or stope shall be slowly placed into the mine opening. Fill operations shall then cease for two minutes to allow time for bats and birds to escape. After three repetitions of quarter-yard fill increments interspersed with waiting periods of two minutes, this procedure shall be repeated using one-half cubic yard increments, again with
two-minute pauses between fill operations. To the extent practicable, fill material for the slow backfill process shall be gravel-sized and not larger than 1½ inches.

The Project Manager may require the Contractor to vary this procedure. Variations may be made depending on the size and depth of the mine opening, the complexity of the underground workings, the availability of properly sized material at the fill site and his judgment of the effect of the operation on bats and birds in the openings.

After this initial slow placement of backfill material and with the concurrence of the Project Manager, the Contractor may proceed with normal backfilling operations.

V. Final Layer of Fill

Wherever practicable, the final eight- to twelve-inch layer of the fill at mine openings shall be soil of comparable quality to the undisturbed soil surrounding the backfilled feature. Note the topdressing requirements of Section 02921.

02224 - BORROW

Except where otherwise specified or indicated, fill shall come from the areas immediately at and surrounding the mine features or from nearby mine waste piles as the Project Manager directs. Preferentially, mine waste material shall be used. Material may come from other approved areas as required and as directed by the Project Manager.

For indicated mine openings and as required, fill material shall be taken from designated borrow areas as indicated in the drawings. Any other non-designated borrow sources shall be approved before use by the Project Manager in consultation with AML cultural resource staff and, for borrow sites on nearby BLM lands, by the Bureau of Land Management. Topdressing at onsite borrow areas shall be stripped and stockpiled before borrow operations. Haul routes for borrow material shall be approved by the Project Manager before commencement of hauling.

Except as otherwise noted or allowed by the Project Manager, the Contractor shall not use any mine waste material from within avoidance areas, shall avoid undermining the cultural features within avoidance areas during borrow operations, and shall not leave disturbed slopes in the mine waste steeper than two horizontal to one vertical (2h:1v) outside avoidance areas.

02229 - COMPACtion

Material used for fill shall be compacted whenever possible using multiple passes with available heavy equipment. The fill shall obtain a compaction density not less than what the equipment can reasonably obtain to the satisfaction of the Project Manager.

Where vibratory compaction equipment is used, it shall be the Contractor's responsibility to insure that vibrations do not damage nearby structures or underground mine voids.
02600 - PIPED UTILITY MATERIALS

The following sections describe piped utility materials to be installed under this Contract.

02613 - CORRUGATED METAL PIPE

Corrugated metal pipe and connectors shall be manufactured and inspected in conformance with the requirements of AASHTO M36 and as hereinafter specified. The size and gauge of the pipe to be furnished shall be as shown in the drawing or specified herein. Nominal diameter or dimensions as referred to in AASHTO M36 shall be defined as the minimum inside dimension of the pipe.

Materials for corrugated metal pipe, pipe arches, and appurtenances shall be as specified in AASHTO M36. Pipe in which the seams indicate slippage or unraveling will be rejected. The butt-welding joint at sheet ends will be acceptable if a good weld is performed and damaged spelter coating is satisfactorily repaired. Sawed ends on pipes will be permitted provided all burrs are removed. Spelter coating damaged by welding or fabrication shall be repaired and recoated in accordance with AASHTO M36. Corrugated steel pipe shall be 16-gage minimum.

Bands for connecting helically corrugated pipe with re-rolled ends or corrugated metal pipe shall conform to the requirements of AASHTO M36. Flange bands will not be permitted. The bottom of the installed pipe shall be in contact with the shaped bedding throughout its full length. Pipe shall be inspected before any backfill is placed. Any pipe found out of alignment, unduly settled, or damaged shall be taken up and re-laid or replaced.

Exposed visible surfaces of the corrugated metal pipe shall be painted or stained to help camouflage their location. The paint or stain manufacturer shall make written assurance in the product’s technical specifications that it is acceptable to apply directly to galvanized metal. Acceptable products include “Natina Steel” by Natina Products or an approved equivalent.

02800 - SITE IMPROVEMENTS

Cattle guards, curbs, fences, gates, gutters, sidewalks, and other road or street improvements destroyed, removed, or damaged during construction shall be replaced with the same type and dimensions of units removed and shall be equal to and consistent with the undisturbed portions of the improvements existing before the project.

02890 - SURVEY CAPS

The Contractor shall install a survey cap, provided by the Project Manager, into the footer of all bate gates requiring concrete footers and into the grouted annular of the bat gate constructed inside a CSP. The survey cap shall be installed in a location provided by the Project
Manager. Otherwise, a new six-foot long nominal 3½-inch inside diameter galvanized steel pipe (4.0" O.D., minimum 9.11 lbs./ft.) shall be installed in front of backfilled and safeguarded mine features as indicated in Table II. The lower two feet of pipe shall be set in concrete a minimum of one foot in diameter and the upper twelve inches of pipe shall extend above grade. The Contractor shall grout a survey cap, provided by the Project Manager, into the pipe using a non-shrink grout, such as Moly Parabound, Pour Rock, or Quikrete. Alternately, where the Project Manager concurs, the Contractor may drill and grout a cap in undisturbed, competent rock or concrete immediately next to each specified feature.

02900 - LANDSCAPING

The following sections describe revegetation to be performed under this contract.

02920 - SOIL PREPARATION / EXTREME SURFACE ROUGHENING

Prior to seedbed preparation, the Contractor shall grade all disturbed areas as described, decompact those areas specified above, and apply extreme roughening as specified below. Disturbed areas include the mine backfill borrow areas, depressions and mounds at safeguarded shafts, filled areas at adits, temporary access and haul routes, closed access roads, areas stripped of native vegetation and any other surface disturbed areas except as otherwise specified.

On slopes up to 1.5h:1v, the soil surface in areas to be seeded shall be prepared to be continuously rough and hummocky. This shall be accomplished by using an excavator bucket, or other acceptable methods that produce similar results, to create pockets and furrows to trap water and create favorable microclimates for plant growth. Basins shall be 18 to 24-inches deep and the width of the bucket (up to four-feet wide).

The most common construction method is to dig a bucket load of soil and then drop it from two to three feet above the soil surface. The process shall be repeated in a random, continuous and overlapping pattern. Finished roughened soils shall be difficult to walk over. On fine silty and clayey soils, the pocks shall be as large as practicable, resembling moguls on a ski slope. No work shall be done when the moisture content of the soil is unfavorable (too wet or extremely dry) or the ground is in a nontillable condition.

The specified topsoil and fertilizer shall be spread just before and incorporated during the extreme surface roughening procedure. After roughening, seed shall be broadcast or hydroseeded as specified below. In areas with extremely dry and loose soil, the Project Manager may require the Contractor to wait until the soil has settled before seeding.

Large and small boulders may be left exposed on site prior to seeding, either singly or in groupings that blend with the natural surroundings, as directed by the Project Manager. The Project Manager may require that additional boulders be placed on site to enhance visual variation and provide wildlife habitat.
Unless the soil is severely compacted or as otherwise noted, soil preparation will not be required for discontinuous, isolated areas of disturbance less than 0.05 acres (approximately 2,500 square feet or 50 feet by 50 feet), such as areas around mine portal closures.

The extent of seedbed preparation shall not exceed the area on which the entire seeding operation can be applied to such prepared seedbed before any surfaces crusting or loss of seed and fertilizer due to erosion. If erosion or crusting occurs, the entire area affected shall be reworked beginning with seedbed preparation.

02921 - TOPDRESSING

As specified, on construction sites, mined areas, and other critical areas where the existing surface material is either chemically or physically unsuited to support adequate vegetation, the best available soil material shall be evenly spread on the surface in sufficient depths to maintain plant growth. Available topdressing in all areas to be disturbed shall be set aside prior to deeper soil disturbance for excavation, mine feature backfilling and access road blading.

Topdressing shall be applied generally along the contour, but if hazardous conditions arise, the application may be in another direction. In all cases, placement shall be such that erosion is kept to a minimum. All topdressed slopes shall be prepared by extreme roughening before planting to reduce erosion.

02930 - GRASSES

The following section describes the seeding to be conducted under this contract.

02933 - SEEDING

Following completion of seedbed preparation, the Contractor shall seed areas according to the Specifications and as follows:

Seeding Time

Seeding shall be accomplished between June 15 and August 31 of each year, unless specific permission in writing is issued by the Project Engineer to allow seeding before or after these dates. Seeding shall not be done when the soil is too wet, too dry, or otherwise untillable.

Seed Species and Mixtures

To assure AML that the seed purchased shall exhibit the characteristics associated with the given variety, and that it is genetically pure, the Contractor shall provide certified seed of named varieties. For the unnamed varieties, the seed shall be obtained by the Contractor from a source adapted to the climate and soil in which it is being planted; that is, a similar land resource
area which is not more than approximately three hundred miles south or about two hundred miles east, north, or west. The percentage of each species comprising seed mixtures for application is outlined below. The mixture is to be used for revegetation of areas defined above in Section 02920. Seed species and varieties, which are well adapted to the soil, climate, and topography of the disturbed areas, shall be used in revegetation and are discussed below.

**Seeding Methods**

**A. Broadcasting/Hydroseeding**

The seed shall be broadcast or hydrosedeed. When broadcast seeding, passes shall be made over the site to be seeded such that an even distribution of seed is obtained. Broadcast seeding shall take place immediately following the completion of final soil preparation. Broadcast seeding shall not be conducted when wind velocities would prohibit an even seed distribution. Broadcast seeding shall be followed by hand raking, manual use of a drag chain, or sweeping with sturdy tree or shrub branches to cover seed. This shall be done over the entire seeded area but shall not be so extreme as to reduce the extent of soil relief.

Broadcast seeding of large areas shall be done using hand-operated “cyclone-type” mechanical seeders. All seeding equipment used shall be equipped with a metering device and set to the appropriate seeding rate.

Broadcast seeding of small areas of disturbance, less than 0.05 acres (approximately 2500 square feet or 50 feet by 50 feet) may be done by hand scattering. Raking of small areas is not necessary if there is sufficient surface roughness to ensure that seeds will fall in crevices and other micro-topographic depressions such that weather and gravity will cause them to be covered and stay in place.

After completion of the broadcast seeding and seed covering, organic debris such as logs, tree stumps and grubbed vegetation shall be randomly redistributed across the sites. This shall be done at the Project Manager’s direction for the purpose of creating visual variation, ground shading, and production of wildlife habitat. Care shall be taken to avoid leveling the soil surface.

**B. Completion**

If the Contractor is scheduled to close the project outside the specified seeding time when seeding is the only incomplete item, the Contractor shall complete only seed bed preparation and 75 percent of the lump sum bid price for seeding will be retained. Then the job shall be held open for seeding during the next seeding season with the remainder of the bid price being paid upon completion and acceptance of seeding. Application of a final layer of mulch, at the rates described below, shall then be carried out after seeding.

If all of the work required by the contract, except seeding, is completed before seeding is accomplished because of seasonal limitations, partial acceptance of the work will be made with final acceptance delayed until seeding has been accomplished in accordance with these...
specifications. Liquidated damages will not be assessed against the Contractor during the interim period between the dates of partial acceptance and final acceptance if such delay is the result of seasonal limitations.

C. Seeding Rates

Seeding rates are given in Table I. Pure Live Seed (PLS) expresses seed quality. PLS is a percentage of pure, viable seed in a particular lot of seed. PLS is calculated by multiplying the percent total germination by the percent purity and dividing by one hundred (100):

\[
\text{Percent PLS} = \frac{\text{Purity} \times \text{Germination}}{100}
\]

<table>
<thead>
<tr>
<th>No.</th>
<th>Species</th>
<th>Scientific Name</th>
<th>Bulk Seed/lb.</th>
<th>Percent of total mix</th>
<th>Application Rate lbs. seed /Ac.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Bush muhly (Hachita)</td>
<td><em>Muhlenbergia porteri</em></td>
<td>2,400,000</td>
<td>_%</td>
<td>0.9</td>
</tr>
<tr>
<td>2.</td>
<td>Sand dropseed</td>
<td><em>Sporobolus cryptandrus</em></td>
<td>5,600,000</td>
<td>_%</td>
<td>0.1</td>
</tr>
<tr>
<td>3.</td>
<td>Sideoats grama</td>
<td><em>Bouteloua curtipendula (var. Vaughn)</em></td>
<td>159,200</td>
<td>_%</td>
<td>12.2</td>
</tr>
<tr>
<td>4.</td>
<td>Blue grama</td>
<td><em>Bouteloua gracilis (var. Alma)</em></td>
<td>135,000</td>
<td>_%</td>
<td>0.8</td>
</tr>
<tr>
<td></td>
<td><strong>Totals</strong></td>
<td></td>
<td></td>
<td><strong>100%</strong></td>
<td><strong>14.0 lb/ac</strong></td>
</tr>
</tbody>
</table>

All seed shall comply NMSA 1978, Sections 76-10-11 through -22 and 21.18.4.NMAC, Seed Standards and Classifications. Invoices or bag labels showing purity and germination for all seed shall be provided to the Project Manager before seeding.

The Contractor shall protect and care for seeded areas until final acceptance of the work, and shall repair all damage to seeded areas caused by pedestrian or vehicular traffic at no additional cost to EMNRD.

02940 – Mulching

The Contractor shall apply mulch to specific seedbed areas located on state or private...
The mulch type shall be WoodStraw ®ECM made by Forest Concepts, or approved equivalent. Materials shall be wind resistant and shall be an engineered all-wood, long-strand soil erosion control mulch that is a blend of geometrically regular wood elements that have a straw-like form and function. The materials shall be inherently free of noxious weed seed and other additives detrimental to plant life. The mulch strands shall have the following characteristics:

- “L” Length: 6.3 inch
- “S” Length: 2.5 inch
- Width: 3/16 inch
- Thickness: 1/10 – 1/8 inch
- Ratio of L:S 50:50 by area (mass)

The mulch shall be spread uniformly over the prepared area by hand. Mulch shall be applied by the Contractor to all seeded areas immediately after seeds are planted to provide suitable surface litter for improvement of moisture conditions and to reduce the potential for damaging erosion or soil blowing which might occur before or during plant establishment.

The rate of application of mulch shall be 7,800 pounds per acre (covering approximately 50% of the surface).

Fabricated wood mulch shall be stored in a dry location until application. When properly applied, WoodStraw brand fabricated wood mulch does not require any tacking. Application methods and calibration of application rates shall be approved by the Project Manager prior to application.

**02955 – Salvage of Native Plants**

Before any area is disturbed for access, borrow, fill or other construction activities, the Contractor shall thoroughly scout the area for native plant species. All significant plants shall be avoided wherever practicable. Of those that need to be disturbed, the Contractor shall salvage those that can be replanted, as the Project Manager directs and as specified below. Species that shall be salvaged include prickly pears (*Opuntia spp.*) and other cactus species, including pincushion types.

Plants to be salvaged shall be dug from the soil before earthmoving operations, preserving as many roots and as much of the soil around the roots as practicable. The south side of the plant and the soil line shall be marked with paint or marking crayons. When transplanted the plant shall be placed in the same orientation it was exposed to before harvesting.

The top half of prickly pear pads shall be cut from the mother plant. Before replanting, cactus roots on the mother plant and the cut prickly pear pads shall be allowed to dry in a shaded, ventilated location for at least two weeks but no more than six weeks. Cactus of other species...
and other salvaged plants shall be planted as soon as possible but no more than one week after harvest.

Salvaged plants shall be placed into well-drained soil, preferably in areas that have been disturbed by construction activities and along closed access roads. The soil in the planting areas shall be tested before planting by filling a planting hole with water. If the water drains within four hours, the site is suitable.

The cactus plants shall be placed into the planting hole at their original orientation and planting height to avoid sunburn and stem decay. The bottom one-third of the cut prickly pear pads shall be covered with soil, with the pads oriented so that their broad sides face east and west. The planting holes shall be backfilled with native, unamended soil and the air in the soil worked out by gently moving the soil with a rod or pole. The plants shall be watered in at the time of planting; no further watering is required. Larger specimens shall be staked as necessary as determined by the Project Manager.

02990 SUBMITTALS

Complete data and specifications for the corrugated metal pipe, seed, and wood mulch (if use of other than the products specified is proposed) and accessories shall be submitted in accordance with the procedure set forth in Section 01340.
Table I
PROJECT SUMMARY INCLUDING APPROXIMATE MINE OPENING DIMENSIONS AND MINE FILL VOLUME ESTIMATES

The approximate mine opening dimensions and mine fill volume estimates are provided only for the information of the potential Bidder. The Abandoned Mine Land Program makes absolutely no guarantee of their accuracy or precision. Volume estimates are of the material that may be required to fill the mine cavities and adjacent areas as indicated, including an allowance for shrinkage, irregularities and known underground mine voids. All mine features are irregular in shape. Estimates of mine fill volumes are generally not indicated at structural closures; excavation, fill and other earthmoving activities there are considered incidental to the work. Mine fill volume estimates may be indicated at those structural closures with significant volumes of earthwork required.

For bat and owl protection, construction at some mine openings is limited to certain periods of the year. At sites with construction time restrictions, allowable work periods are italicized below. Work outside the specified periods shall take place only with the written permission of the Project Engineer.

<table>
<thead>
<tr>
<th>AML NUMBER</th>
<th>MINE OPENING</th>
<th>DIMENSIONS (FEET, LxWxD)</th>
<th>VOLUME (C.Y.)</th>
<th>WORK REQUIRED/COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>shaft</td>
<td>9’x9’x65’</td>
<td>NA</td>
<td>Construct Horizontal Bat Gate; install survey cap; September 1 – October 31 and March 1- April 30</td>
</tr>
<tr>
<td>10</td>
<td>pit</td>
<td>12’x10’x11’</td>
<td>50</td>
<td>Backfill to -3’; Anytime</td>
</tr>
<tr>
<td>11</td>
<td>shaft</td>
<td>7’x4’x9’</td>
<td>10</td>
<td>Hand Backfill to -4’; Anytime</td>
</tr>
<tr>
<td>14</td>
<td>shaft</td>
<td>7’x5’x35’</td>
<td>45</td>
<td>Backfill to -2’; Anytime</td>
</tr>
<tr>
<td>15</td>
<td>shaft</td>
<td>8’x5’x70’</td>
<td>NA</td>
<td>Construct Horizontal Bat Gate; install survey cap; September 1 – October 31 and March 1- April 30 (Owls reside in shaft)</td>
</tr>
<tr>
<td>15.01</td>
<td>shaft</td>
<td>6’x6’x25’</td>
<td>NA</td>
<td>Construct Horizontal Bat Gate; September 1 – October 31 and March 1- April 30</td>
</tr>
<tr>
<td>26</td>
<td>shaft</td>
<td>7’x5’x21’</td>
<td>NA</td>
<td>Construct Horizontal Bat Gate; install survey cap; September 1 – October 31 and March 1- April 30</td>
</tr>
<tr>
<td>36</td>
<td>shaft</td>
<td>5’x4’x15’</td>
<td>11</td>
<td>Hand Backfill to -4’; Anytime</td>
</tr>
<tr>
<td>AML NUMBER</td>
<td>MINE OPENING</td>
<td>DIMENSIONS (FEET, LxWxD)</td>
<td>VOLUME (C.Y.)</td>
<td>WORK REQUIRED/COMMENTS</td>
</tr>
<tr>
<td>------------</td>
<td>--------------</td>
<td>--------------------------</td>
<td>--------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>37</td>
<td>shaft</td>
<td>7'x5’x12’</td>
<td>15</td>
<td>Hand Backfill to -4’;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Anytime</td>
</tr>
<tr>
<td>55</td>
<td>adit</td>
<td>5’x5’x300’</td>
<td>NA</td>
<td>Construct Culvert with Bat Gate; install survey cap; September 1 – October 31 and March 1-April 30</td>
</tr>
<tr>
<td>56</td>
<td>shaft</td>
<td>11’x10’</td>
<td>NA</td>
<td>Construct Horizontal Bat Gate; install survey cap; September 1 – October 31 and March 1-April 30</td>
</tr>
<tr>
<td>68</td>
<td>shaft</td>
<td>5’x5’x45’</td>
<td>NA</td>
<td>Construct Horizontal Bat Gate; install survey cap; September 1 – October 31 and March 1-April 30</td>
</tr>
<tr>
<td>71</td>
<td>shaft</td>
<td>8’x4½’x44’</td>
<td>NA</td>
<td>Construct Horizontal Bat Gate; install survey cap; September 1 – October 31 and March 1-April 30</td>
</tr>
<tr>
<td>73</td>
<td>shaft</td>
<td>9’x6’x7’</td>
<td>NA</td>
<td>Construct Horizontal Bat Gate; install survey cap; September 1 – October 31 and March 1-April 30</td>
</tr>
<tr>
<td>75</td>
<td>shaft</td>
<td>18’x4½’x48’</td>
<td>NA</td>
<td>Construct Horizontal Bat Gate; install survey cap; September 1 – October 31 and March 1-April 30</td>
</tr>
<tr>
<td>77</td>
<td>adit</td>
<td>5’x3’x300’</td>
<td>4</td>
<td>Construct Culvert with Bat Gate; install survey cap; muck out two cubic yards of material from inner adit opening; September 1 – October 31 and March 1-April 30</td>
</tr>
<tr>
<td>77.01</td>
<td>stope opening</td>
<td>9’x6’x15’</td>
<td>NA</td>
<td>Construct Horizontal Bat Gate; install survey cap Anytime</td>
</tr>
<tr>
<td>77.02</td>
<td>stope opening</td>
<td>6’x5’x15’</td>
<td>NA</td>
<td>Construct Horizontal Bat Gate; install survey cap Anytime</td>
</tr>
<tr>
<td>78</td>
<td>shaft</td>
<td>4’x3’x20’</td>
<td>NA</td>
<td>Construct Horizontal Bat Gate; install survey cap; September 1 – October 31 and March 1-April 30</td>
</tr>
<tr>
<td>79</td>
<td>shaft</td>
<td>8’x5’</td>
<td>NA</td>
<td>Construct Horizontal Bat Gate; install survey cap; September 1 – October 31 and March 1-April 30</td>
</tr>
<tr>
<td>83</td>
<td>shaft</td>
<td>6’x5’x17’</td>
<td>20</td>
<td>Backfill to -2’; Anytime</td>
</tr>
<tr>
<td>AML NUMBER</td>
<td>MINE OPENING</td>
<td>DIMENSIONS (FEET, LxWxD)</td>
<td>VOLUME (C.Y.)</td>
<td>WORK REQUIRED/COMMENTS</td>
</tr>
<tr>
<td>------------</td>
<td>--------------</td>
<td>---------------------------</td>
<td>---------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>84</td>
<td>shaft</td>
<td>7’x5’x15’</td>
<td>20</td>
<td>Backfill to -2’;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Anytime</td>
</tr>
<tr>
<td>86</td>
<td>stope opening</td>
<td>2’x1’x15’</td>
<td>NA</td>
<td>Construct Horizontal Bat Gate; install survey cap; September 1 – October 31 and March 1-April 30</td>
</tr>
<tr>
<td>88</td>
<td>shaft</td>
<td>8’x7’x38’</td>
<td>NA</td>
<td>Construct Horizontal Bat Gate; install survey cap; September 1 – October 31 and March 1-April 30</td>
</tr>
<tr>
<td>95</td>
<td>shaft</td>
<td>7’x5’x8’</td>
<td>8</td>
<td>Backfill to -2’;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Anytime</td>
</tr>
<tr>
<td>97</td>
<td>shaft</td>
<td>7’x4’</td>
<td>NA</td>
<td>Construct Horizontal Bat Gate; install survey cap; September 1 – October 31 and March 1-April 30</td>
</tr>
<tr>
<td>100</td>
<td>shaft</td>
<td>8’x6’</td>
<td>NA</td>
<td>Construct Horizontal Bat Gate; install survey cap; September 1 – October 31 and March 1-April 30</td>
</tr>
<tr>
<td>101</td>
<td>adit</td>
<td>7’x7’x8’</td>
<td>18</td>
<td>Backfill to surface; Anytime</td>
</tr>
<tr>
<td>102</td>
<td>shaft</td>
<td>15’x4’</td>
<td>NA</td>
<td>Construct Horizontal Bat Gate; install survey cap; Keep opening unobstructed at night; September 1 – October 31 and March 1-April 30</td>
</tr>
<tr>
<td>104</td>
<td>shaft</td>
<td>6’x5’x39’</td>
<td>NA</td>
<td>Construct Horizontal Bat Gate; install survey cap; September 1 – October 31 and March 1-April 30</td>
</tr>
<tr>
<td>105</td>
<td>shaft</td>
<td>7’x6’x16’</td>
<td>25</td>
<td>Hand Backfill to -2’;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Anytime</td>
</tr>
<tr>
<td>109</td>
<td>shaft</td>
<td>7’x5’x8’</td>
<td>10</td>
<td>Hand Backfill to -4’;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Anytime</td>
</tr>
<tr>
<td>110</td>
<td>shaft</td>
<td>7’x5’x12’</td>
<td>13</td>
<td>Hand Backfill to -4’;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Anytime</td>
</tr>
<tr>
<td>114</td>
<td>shaft</td>
<td>6’x5’x20’</td>
<td>22</td>
<td>Hand Backfill to -4’;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Anytime</td>
</tr>
<tr>
<td>115</td>
<td>shaft</td>
<td>4’x 2½’</td>
<td>NA</td>
<td>Construct Horizontal Bat Gate; install survey cap; Keep opening unobstructed at night; September 1 – October 31 and March 1-April 30</td>
</tr>
</tbody>
</table>

EMNRD-MMD-2016-02 2-15 6/1/2016
<table>
<thead>
<tr>
<th>AML NUMBER</th>
<th>MINE OPENING</th>
<th>DIMENSIONS (FEET, LxWxD)</th>
<th>VOLUME (C.Y.)</th>
<th>WORK REQUIRED/COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>116</td>
<td>shaft</td>
<td>5’x5’x_’</td>
<td>NA</td>
<td>Construct Horizontal Bat Gate; install survey cap; September 1 – October 31 and March 1-April 30</td>
</tr>
<tr>
<td>117</td>
<td>shaft</td>
<td>6’x5’x17’</td>
<td>20</td>
<td>Backfill to -2’; September 1 – October 31 and March 1-April 30</td>
</tr>
<tr>
<td>118</td>
<td>shaft</td>
<td>7’x4’x14’</td>
<td>15</td>
<td>Backfill to -2’; September 1 – October 31 and March 1-April 30</td>
</tr>
<tr>
<td>119</td>
<td>shaft</td>
<td>6’x4’x22’</td>
<td>20</td>
<td>Backfill to -2’; September 1 – October 31 and March 1-April 30</td>
</tr>
<tr>
<td>120</td>
<td>adit</td>
<td>10’x6’x18’</td>
<td>40</td>
<td>Backfill to -2’; September 1 – October 31 and March 1-April 30</td>
</tr>
<tr>
<td>121</td>
<td>shaft</td>
<td>8’x5’x18’</td>
<td>25</td>
<td>Backfill to -2’; September 1 – October 31 and March 1-April 30</td>
</tr>
<tr>
<td>122</td>
<td>shaft</td>
<td>8’x5’x25’</td>
<td>40</td>
<td>Backfill to -2’; September 1 – October 31 and March 1-April 30</td>
</tr>
<tr>
<td>123</td>
<td>shaft</td>
<td>5’x5’x18’</td>
<td>20</td>
<td>Backfill to -2’; Anytime</td>
</tr>
<tr>
<td>127</td>
<td>shaft</td>
<td>5’x4’x15’</td>
<td>NA</td>
<td>Construct Horizontal Bat Gate; install survey cap; September 1 – October 31 and March 1-April 30</td>
</tr>
<tr>
<td>129</td>
<td>shaft</td>
<td>8’x5’x49’</td>
<td>5 (waste pile excavation)</td>
<td>Construct Horizontal Bat Gate; install survey cap; September 1 – October 31 and March 1-April 30</td>
</tr>
<tr>
<td>130</td>
<td>shaft</td>
<td>6’x4’x18’</td>
<td>5 (waste pile excavation)</td>
<td>Construct Horizontal Bat Gate; install survey cap; September 1 – October 31 and March 1-April 30</td>
</tr>
<tr>
<td>137</td>
<td>shaft</td>
<td>5’x4’x20’</td>
<td>NA</td>
<td>Construct Horizontal Bat Gate; install survey cap; September 1 – October 31 and March 1-April 30</td>
</tr>
<tr>
<td>145</td>
<td>shaft</td>
<td>7’x5’x34’</td>
<td>NA</td>
<td>Construct Horizontal Bat Gate; install survey cap; September 1 – October 31 and March 1-April 30</td>
</tr>
<tr>
<td>146</td>
<td>shaft</td>
<td>8’x5’x33’</td>
<td>NA</td>
<td>Construct Horizontal Bat Gate; install survey cap; September 1 – October 31 and March 1-April 30</td>
</tr>
<tr>
<td>AML NUMBER</td>
<td>MINE OPENING</td>
<td>DIMENSIONS (FEET, LxWxD)</td>
<td>VOLUME (C.Y.)</td>
<td>WORK REQUIRED/COMMENTS</td>
</tr>
<tr>
<td>------------</td>
<td>--------------</td>
<td>--------------------------</td>
<td>--------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>147</td>
<td>shaft</td>
<td>8’x5’x19’</td>
<td>NA</td>
<td>Construct Horizontal Bat Gate; install survey cap; September 1 – October 31 and March 1-April 30</td>
</tr>
<tr>
<td>150</td>
<td>shaft</td>
<td>4’x3’x25’</td>
<td>NA</td>
<td>Construct Horizontal Bat Gate; install survey cap; September 1 – October 31 and March 1-April 30</td>
</tr>
<tr>
<td>154</td>
<td>decline</td>
<td>6’x5’x15’</td>
<td>17</td>
<td>Backfill to -2’; Anytime</td>
</tr>
<tr>
<td>162</td>
<td>shaft</td>
<td>4’x4’x15’</td>
<td>15</td>
<td>Backfill to -2’; Anytime</td>
</tr>
<tr>
<td>162.01</td>
<td>pit</td>
<td>30’x40’x15’</td>
<td>700</td>
<td>Backfill to -2’; Anytime</td>
</tr>
<tr>
<td>275</td>
<td>shaft</td>
<td>7’x5’x15’</td>
<td>18</td>
<td>Backfill to -4’; Anytime</td>
</tr>
<tr>
<td>276</td>
<td>shaft</td>
<td>11’x5’x20’</td>
<td>NA</td>
<td>Construct Horizontal Bat Gate; install survey cap; September 1 – October 31 and March 1-April 30</td>
</tr>
<tr>
<td>280</td>
<td>shaft</td>
<td>10’x8’x13’</td>
<td>40</td>
<td>Backfill to -2’; Anytime</td>
</tr>
<tr>
<td>281</td>
<td>shaft</td>
<td>7’x6’x40’</td>
<td>NA</td>
<td>Construct Horizontal Bat Gate; install survey cap; September 1 – October 31 and March 1-April 30</td>
</tr>
</tbody>
</table>

TOTAL 1,250 cubic yards

END OF DIVISION 2
DIVISION 3 – CONCRETE

This work shall consist of furnishing and placing Portland cement concrete to construct cast-in-place concrete caps over vertical and near vertical mine openings and footings, in substantial compliance with the specifications and the lines, grades, and dimensions shown on the plans or established by the Project Manager. This work includes excavation of footings, furnishing and installation of forms, reinforcing steel, and concrete.

This work shall consist of grouting as indicated on the drawings. Unless otherwise specified all grouting shall be done with non-shrink grout.

03001 – GENERAL REQUIREMENTS

All cast-in-place concrete shall be accurately formed, properly placed, and finished as indicated on the drawings and as specified in this section.

At least twenty-four (24) hours in advance, the Contractor shall inform the Project Engineer and Project Manager of the times and places at which he intends to place concrete. No concrete shall be placed without prior examination of the foundation conditions, formwork, and steel reinforcing by the Project Engineer or Project Manager.

All concrete work shall conform to all requirements of ACI 301, Specifications for Structural Concrete for Buildings, except as modified by the requirements below.

03010 - CONCRETE MATERIALS

I. Materials

A. Cement

All cement used in concrete shall be Portland cement conforming to all requirements of ASTM C150, Type II, low alkali. High-early-strength Type III Portland cement may be used in concrete at the Contractor's option. When Portland cement is delivered in packages, the name and brand of the manufacturer and the type shall be plainly identified thereon. When cement is delivered in bulk, the same information shall be contained in the shipping invoices accompanying the shipment. A bag shall contain 94 pounds net weight and will be considered equal to one cubic foot. A barrel shall consist of 376 pounds net weight and will be considered equal to four cubic feet. The Contractor shall obtain from the manufacturer and furnish a certificate of compliance stating that the cement delivered to the work complies with the requirements herein provided. To prevent deterioration after delivery, cement and aggregates shall be stored as to prevent intrusion of foreign matter. Any material that has deteriorated or has been contaminated shall not be used for concrete.
B. Admixtures

Admixtures shall conform to ASTM C494. Sugar, calcium chloride or admixtures containing chloride from other than impurities from admixture ingredients will not be permitted. Air entraining admixtures shall be required and shall conform to ASTM C260. Water reducing admixtures may be used and shall conform to ASTM C494 or ASTM C1017.

C. Curing Compounds

Liquid membrane-forming compounds for curing concrete shall conform to the requirements of ASTM C309.

D. Water

Water for concrete shall be clean and free from harmful amounts of acids, alkalis, oils, organic materials, salts, sand, sewage, or other deleterious substances and shall be furnished by the Contractor. Water shall be potable and shall have a pH value of not less than 4.5 nor more than 8.5 as determined by AASHTO T26 before its use. The sulfate content as SO₄ shall not exceed one thousand parts per million (1,000 ppm).

E. Fine Aggregate

1. General Characteristics. Fine aggregate shall consist of natural sand, manufactured sand, or a combination thereof, or other accepted inert materials composed of clean, durable, hard, uncoated, well-rounded grains.

2. Grading. Fine aggregate shall be well graded and, when tested by standard laboratory sieves, shall conform to the following:

<table>
<thead>
<tr>
<th>Sieve (ASTM E11)</th>
<th>Percent Passing by Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/8-in.</td>
<td>100</td>
</tr>
<tr>
<td>No. 4</td>
<td>95 to 100</td>
</tr>
</tbody>
</table>

The fine aggregate shall have not more than 45 percent passing any sieve and retained on the next consecutive sieve of those shown above, and its fineness modulus shall be not less than 2.3 nor more than 3.1.

3. Deleterious Substances. The maximum percentage of deleterious substances shall not exceed the following limits:

<table>
<thead>
<tr>
<th>Clay lumps</th>
<th>3.0% by weight</th>
</tr>
</thead>
</table>

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Material finer than No. 200 sieve 3.0% by weight  
Coal and lignite 1.0% by weight  
Other deleterious substances 1.0% by weight  

All fine aggregate shall be free from harmful amounts of alkali and organic impurities.

4. **Soundness.** Fine aggregate shall conform to the requirements of magnesium sulfate soundness of ASTM C33. The maximum loss in five (5) cycles shall not exceed 12 percent by weight.

**F. Coarse Aggregate**

1. **General Characteristics.** Coarse aggregate shall consist of natural gravel, crushed gravel, crushed stone, or crushed hydraulic-cement concrete, or a combination thereof, or other accepted inert materials having clean durable, hard, strong pieces; free from adherent coatings; and conforming to the requirements of these Specifications. Fifty percent by weight of the minus ¾ inch sieve size particles shall have a minimum of two fractured faces.

2. **Grading.** Coarse aggregate shall be well graded between the limits specified and shall conform to the following requirements:

<table>
<thead>
<tr>
<th>Sieve</th>
<th>Percent Passing by Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-in.</td>
<td>100</td>
</tr>
<tr>
<td>¾-in.</td>
<td>95 to 100</td>
</tr>
</tbody>
</table>

3. **Deleterious Substances.** The maximum allowable percentage of deleterious substances and physical properties shall not exceed the following limits:

- Soft fragments 2.0% by weight
- Clay lumps 0.25% by weight
- Material finer than No. 200 sieve 1.0% by weight
- Coal and lignite 0.25% by weight

4. **Sampling and Testing.** Methods of sampling and testing the coarse and fine aggregate shall be in accordance with ASTM C33.

**II. Concrete Mix Design**

Structural concrete for concrete footings and collars for steel bat cupolas and for other shaft bat compatible and airflow closures shall be made with aggregates and cement conforming to a minimum compressive strength of 3,500 pounds per square inch (psi) after 28
days. The concrete shall contain a minimum of 611 pounds of cement (6.5 bags) per cubic yard and a maximum water/cement ratio of 0.49. Fine aggregate shall be not less than 38 percent or more than 42 percent by weight of the mix.

All other concrete, including concrete for unreinforced cast-in-place plugs and hollow core plugs, shall conform to a minimum of 3,000 psi after 28 days.

All concrete shall have an entrained air content between 4 percent and 8 percent by volume when determined with the requirements of ASTM C231.

A. Mixing Concrete

If the concrete is mixed on the site, equipment and mixing procedures shall conform to ACI 301. All concrete shall be thoroughly mixed in a batch mixer of an accepted type and capacity for not less than two minutes after all the materials including water have been placed in the drum. During mixing, the drum shall be operated at the speed specified by the manufacturer of the equipment. The entire contents of the mixer shall be discharged before being recharged, and the mixer shall be cleaned frequently. The concrete shall be mixed only in such quantities as are required for immediate use. No retempering of concrete will be permitted. Hand mixed concrete will not be permitted except by special acceptance of the Project Engineer.

B. Ready-Mixed Concrete

At the option of the Contractor, ready-mixed concrete may be used instead of concrete mixed at the job site. Ready-mixed concrete shall conform to all requirements of ASTM C94 and these Specifications as to grading of aggregates, strengths, consistency, and so on. The Project Manager shall have free access to the mixing plant at all times. Ready-mixed concrete shall be continuously mixed from the time the water is added until the time of use. Concrete shall be delivered to the site of the work, and discharged from the truck mixer or truck agitator shall be completed within one hour after the cement contacts the mixing water or with aggregates that are surface wet. The organization supplying ready-mixed concrete shall have sufficient plant and transportation facilities to assure continuous delivery of concrete at the required rate.

C. Proportioning

The proper proportioning of aggregates and cement will be determined by an acceptable independent testing laboratory at the expense of the Contractor. The proportioning of aggregates will be the most suitable combination of aggregates that will give the necessary workability and desired consistency when mixed with water and cement as specified. The ratio of cement to dry, fine aggregate shall be that necessary to provide the maximum amount of density of the mixture when used with the minimum amount of water required to produce the specified slump in the resulting concrete. This determination of the proper ratio shall be made by testing laboratory, at the expense of the Contractor, using representative samples of the aggregates which will be used,
and before use shall be reviewed by the Project Engineer. The batch proportions used shall be such that full bags of cement are used in each batch.

D. Consistency

The consistency for concrete shall be kept uniform for each class of work and shall be checked by means of slump tests. The slump for concrete shall be not less than two inches and not more than four inches. The consistency of the concrete shall be varied as directed by the Project Engineer or Project Manager. If through accident, intention, or error in mixing, any concrete is too wet, such concrete shall not be incorporated in the work, but shall be discarded as waste material at an accepted disposal area.

E. Placing Concrete

Where indicated, mine openings to be closed with a cast-in-place footings and steel structures and cast-in-place concrete caps shall be excavated to competent bedrock or founded on clean, durable existing concrete. The Contractor is responsible for site inspections, testing or exploration necessary to insure that the bid adequately reflects excavation conditions including hand trimming and leveling required.

The surface of hardened concrete upon which fresh concrete is to be placed shall be rough, clean, sound, and damp. The hardened surface shall be cleaned of all laitance, foreign substances (including curing compound), washed with clean water, and wetted thoroughly preceding placement of fresh concrete.

Concrete shall be handled from the mixer to the place of final deposit as rapidly as possible by methods that prevent separation or loss of ingredients. It shall be deposited as nearly as practicable in its final position to avoid rehandling. It shall be deposited in continuous layers, the thickness of which generally shall not exceed 12 inches.

The rate of depositing concrete in forms shall be controlled to prevent deflection of the form panels. The concrete shall be thoroughly compacted by means of a suitable mechanical vibrator. Vibrating shall be supplemented with hand spading the concrete around the reinforcing steel.

The Contractor is cautioned that cold weather protection for concrete may be required should concrete be placed in the winter months. If cold weather concreting is done, it shall conform to the requirements of ACI 306R. No concrete shall be placed or be allowed to cure without protection in any weather where the temperature falls below forty degrees Fahrenheit (40°F) at any time during the daily 24-hour period. The period of time such protection shall be maintained shall be not less than seven days. If hot weather concreting is done, it shall conform to the requirements of ACI 305R.
Concrete shall have a temperature of at least 50°F and not more than 80°F at the time of placing. At no time during placement or curing shall the concrete surface temperature be allowed to fall below 40°F. Concrete shall not be placed on frozen ground. Frozen aggregate shall not be used in concrete.

Finishes of concrete work shall be as specified in ACI 301.

F. Concrete Equipment

All concrete equipment used shall be of a type, capacity, and mechanical condition suitable for accomplishing all requirements of this work and all applicable local, state, and federal codes and regulations, both safety and otherwise. Equipment shall be maintained in first class operating condition at all times. Concrete equipment may include a mixer equipped with a mechanically operated paddle type agitator or equivalent. This may be accomplished by using a single or multiple batch bin system. A water meter shall be installed by the Contractor on water lines to permit accurate measurement of the quantity of water used in making the various mixes. The Contractor shall supply certificates of calibration for all gauges and meters used on this work. Water supply lines for mixing shall be routed for maximum protection and minimum traffic interruption. Facilities shall be provided by the Contractor to measure the proportion of aggregate, cement, sand, water and admixtures required in the design mix. In addition, the Contractor shall devise a system to accurately measure the volume of concrete delivered from the mixing plant or transportation vehicle per unit of time.

G. Tests

For each 10 cubic yards of concrete or portion thereof placed, one sampling for compressive strength, consisting of a minimum of three cylinders shall be taken and paid for by the Contractor. Bagged concrete mix pre-approved by the project engineer is excluded from this requirement. All sample cylinders shall be taken at the same time: one cylinder to be used for a seven-day test and two for a 28-day test following standard lab curing. The Project Manager may require additional random samples, which will be done at EMNRD's expense.

An independent testing laboratory accepted by the Project Engineer shall make all tests of aggregates, cement, and concrete. Samples of concrete for specimens shall be taken at the mixer, or in the case of ready-mixed concrete, from the transportation vehicle during discharge in accordance with ASTM C172. Test cylinders shall be made and cured in accordance with ASTM C31. The test specimens shall be molded immediately after the sample is taken and then placed in a protected spot and kept under curing conditions similar to the conditions under which the concrete they represent is being cured. They shall be removed to the testing laboratory not sooner than six days after casting.

The testing of cylinders shall be in accordance with ASTM C39. A slump test shall be made of each 25 cubic yards or fraction thereof, of concrete placed, or at the direction of the
Project Manager. Slump tests shall be in accordance with ASTM C143 and shall be paid for by the Contractor.

03100 - CONCRETE FORMWORK

Concrete structures shall be cast in place with proper formwork. The Contractor shall be fully responsible for reinstallation of concrete structures should forming materials and methods fail to adequately support the concrete. All cast-in-place concrete structures shall meet the tolerances for formed surfaces specified in ACI 301.

03200 - CONCRETE REINFORCEMENT

03210 - REINFORCING STEEL

I. Bars

Reinforcing steel bars shall be new billet steel conforming to ASTM A615, Grade 60.

II. Placing Reinforcing Steel

Reinforcing steel, before being placed, shall be thoroughly cleaned of heavy rust, scale or other coatings that will destroy or reduce the bond. A slight coating of rust will not be considered objectionable. Reinforcement shall be carefully formed to the dimensions indicated. It shall not be bent or straightened in a manner that will injure the material, including heating by a torch. Bars with kinks or bends not shown shall not be used. Reinforcing steel shall be accurately placed and secured against displacement by using annealed iron wire of not less than No. 18 gauge or suitable clips. The reinforcing steel shall be supported using bar supports to support the steel the proper distance above the bottom of the footings.

03250 - CONCRETE ACCESSORIES

Bar supports shall meet the requirements of CRSI Class C, plastic protected, or Class E, stainless steel protected.

A survey marker supplied by the Project Manager shall be set in each exposed cast-in-place footing, cap, or structure. At the location indicated by the Project Manager, the survey marker shall be cast in the structure or grouted by drilling a hole and grouting the cap in place using a non-shrink grout such as Moly Parabond, Quikrete, or Pour Rock, or approved equal. Alternately the survey marker may be fixed in the concrete structure using epoxy grout. For caps that are backfilled, a pipe monument as specified in Section 02890 and as shown on the drawings.
03300 - CAST-IN-PLACE CONCRETE

03310 - INTEGRALLY COLORED CAST-IN-PLACE CONCRETE

The Contractor shall submit product data and manufacturer’s instructions for pigments and curing compounds to be used at integrally colored cast-in-place concrete. With the submittal shall be included the pigment manufacturer’s color chart for color selection by the Project Engineer, indicating pigment number and required dosage rate. Submittals are for general color selection and may vary somewhat from concrete finished in the field according to Specifications.

Delivery, storage and handling of pigments shall comply with manufacturer’s instructions. Pigments shall be delivered to the job site or batch plant in original, unopened packaging and shall be stored in dry conditions.

Pigments shall comply with ASTM C979 and shall be Davis Colors manufactured by Davis Colors, or approved equivalent. Dosage rate shall be based on the weight of Portland cement, fly ash, lime and other cementitious materials but not aggregate or sand, and shall not exceed 10 percent of the weight of the cementitious materials content. The pigments shall be mixed in accordance with manufacturer’s instructions, until pigments are uniformly dispersed throughout the mixture and disintegrating bags, if used, have disintegrated.

Curing compound for colored concrete shall comply with ASTM C309 and be approved by the pigment manufacturer for use with colored concrete. Curing compound shall be “Color Seal II” tinted to match colored concrete and manufactured by Davis Colors, or approved equivalent.

Formwork for integrally colored concrete shall be as specified above.

Minor variations in the final appearance of colored concrete, which are similar to natural variations in color and appearance of unpigmented concrete, are acceptable.

All efflorescence shall be removed with mild detergent or milt acid cleaners formulated to remove efflorescence, following initial testing on a small area to ensure that the surface will not be etched or discolored. Appropriate skin and eye protection shall be used.

03370 - CONCRETE CURING

All concrete, regardless of temperature, weather, or season, shall be allowed to cure (kept moist) for a period of not less than seven days after the concrete is poured. Curing will not be
required longer than 72 hours only if high-early-strength concrete (Type III) is used.

The concrete in structures shall reach a minimum compressive strength of 3,000 psi before attachment of the steel structures or backfilling can occur, except for backfilling shallow edges of concrete caps. Backfill material shall be placed in maximum two-foot lifts and shall be placed in a manner which will prevent damage to the structures and which will allow these structures to assume the load from the fill gradually and uniformly. The material shall be compacted to a density of no less than what the backfill equipment is reasonably capable of obtaining to the satisfaction of the Project Manager.

Note that uneven curing of integrally colored concrete will lead to uneven color. Requirements for curing compounds used at colored concrete are specified above. Discolored concrete cured with plastic membrane sheets or non-approved compounds will be rejected. Concrete temperatures for colored concrete shall be maintained between 65 and 85°F for the first three days after placing.

**03600 - GROUTS**

This section specifies grouting as indicated on the drawings.

**03610 - GROUT MATERIALS**

Nonshrinking grout  
L&M Construction Chemicals “Crystex” or “Premier” or “Duragrun”, Master Builders "Masterflow 713 Plus” or “Masterflow 928” or “Set Grout”, Euclid “Hi-Flow Grout” or “N-S Grout”, "Five Star Grout", or approved equivalent¹⁵, meeting the requirements of ASTM C1107, Grade C

Water  
Clean and free from deleterious substances

**03620 - NONSHRINKING GROUT**

Nonshrinking grout shall be furnished factory premixed so only water is added at the job site. Grout shall be mixed in a mechanical mixer. No more water shall be used than is necessary to produce a flowable grout. The grout shall meet strength requirements of $f'c = 5,000$ psi.

Concrete foundations to receive nonshrinking grout shall be saturated with water for 24 hours prior to grouting.

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¹⁵ Use of brand names is for the purpose of describing the standard of quality, performance and characteristics desired and is not intended to limit or restrict competition.
Grout shall be placed in strict accordance with the directions of the manufacturer so all spaces and cavities are filled without voids. Forms shall be provided where structural components will not confine the grout. The grout shall be finished smooth in all locations where the edge of the grout will be exposed to view after it has reached its initial set.

Nonshrinking grout shall be protected against rapid loss of moisture by covering with wet rags or polyethylene sheets. After edge finishing is completed, the grout shall be wet cured for at least seven days.

03990 - SUBMITTALS

Each proposed concrete mix shall be submitted in accordance with the procedure set forth in Section 01340, which submittal shall include the following information:

1. Slump on which design is based;
2. Total gallons of water per cubic yard;
3. Brand, type, composition and quantity of cement;
4. Specific gravity, source and gradation of each aggregate;
5. Ratio of fine to total aggregate;
6. Surface dry weight of each aggregate per cubic yard;
7. Brand, type, ASTM designation, active chemical ingredients, and quantity of each admixture; and
8. Compressive strength base on seven-day and 28-day compression tests.

Other submittals shall be made as required by ACI 301.

The Contractor shall submit manufacturer's data or catalog information, including placing and finishing recommendations, for the grout materials, curing compounds and coloring pigment furnished. Submittals shall be made in accordance with the procedure set forth in Section 01340.

END OF DIVISION 3
DIVISION 5 - METALS

The following section specifies all items fabricated from metal shapes, plates, sheets, rods, bars, or castings, and all other wrought or cast metal items. Fabricated metal items that are detailed in the contract documents but not mentioned specifically herein shall be fabricated in accordance with the applicable requirements of this section.

05010 – METAL MATERIALS

All materials shall be new and undamaged and shall conform to pertinent ASTM or other industry standard specifications including the following:

I. Steel

Shapes, Plates, and Bars  
(including concrete imbedded items other than reinforcing steel)  
ASTM A588 or ASTM A242 (weathering)

Structural Tubing  
ASTM A847 or ASTM A606, Type 4 (weathering)

Grating  
A606, Type 4 (weathering) or AISI 304/316 (stainless steel)

Bolts and Nuts  
ASTM F593 and F594, (stainless steel grade 18.8 or 316) or ASTM A325, Type 3 (weathering) and A563, grade C3 or DH3 (weathering)

Flat Washers  
ANSI B27.2, of the same material as bolts and nuts

Round Bar for Swinging Hatch  
ASTM A128, Manganese content 12-14%, Carbon 1.00-1.25%

Bat closures shall be fabricated from high strength (Fy=50,000 psi), self-weathering, low alloy, atmospheric corrosion resistant steel as specified above.

05030 - Metal Finishes

Specified hereunder are shop-applied coatings. It is the intent of these specifications to use atmospheric corrosion resistant structural steel, grating and appurtenances to the fullest extent practicable. This section specifies the required shop coatings for metal services where it is not practicable to use a corrosion resistant material.

In addition to the shop-applied coatings, a coating on exposed corrugated metal pipe is necessary. Exposed visible surfaces of the corrugated metal pipe shall be painted or stained to
help camouflage their location. The paint or stain manufacturer shall make written assurance in the product’s technical specifications that it is acceptable to apply directly to galvanized metal. Acceptable products include “Natina Steel” by Natina Products or an approved equivalent.

05031- Shop Coating

I. Materials

Unless otherwise authorized, shop applied prime coatings shall be:

Zinc-rich Urethane Primer Tnemec "90-97 Tneme-Zinc" or DuPont "Imron 62 ZF", or approved equal\(^\text{16}\)

For repair of hot-dip galvanized surfaces and to rustproof welds, field applied coatings shall be:

Cold Galvanizing Compound Z.R.C. Cold Galvanizing Compound, or approved equal\(^\text{17}\)

II. Cleaning

Surfaces shall be dry and of a proper temperature when coated, and free of grease, oil, dirt, dust, grit, rust, loose mill scale, weld flux, slag, weld spatter, or other objectionable substances. Articles to be galvanized shall be pickled before galvanizing. All other ferrous metal surfaces shall be cleaned by high power wire brushing or blasting. Welds shall be scraped, chipped, and brushed as necessary to remove all weld spatter.

III. Galvanizing

All galvanizing shall be done after fabrication by the hot-dip process in conformity with requirements of ASTM A123, A153 and A385.

IV. Steel

Unless otherwise specified and if such an occasion shall occur, all ungalvanized structural and miscellaneous steel shall be given an anticorrosion prime coat in the shop after fabrication. Steel surfaces shall be prime coated as soon as practicable after cleaning. All painting shall be done in a heated structure if the outside air temperature is below 50 degrees Fahrenheit. Steel shall not be moved or handled until the shop coat is dry and hard.

\(^\text{16}\) Use of brand names is for the purpose of describing the standard of quality, performance and characteristics desired and is not intended to limit or restrict competition.

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Plates, shapes, and bars of weathering steel shall not be shop or field primed or painted, except as noted.

V. **Aluminum**

All surfaces of aluminum that will be in contact with concrete, mortar, or dissimilar metals shall be given a heavy coat of coal tar paint.

VI. **Other Surfaces**

No shop coating will be required for zinc-coated steel, stainless steel, or bronze surfaces.

VII. **Film Thickness**

The dry film thickness of the shop coating shall be at least 2.5 mils for the zinc-rich urethane primer.

**05500 – METAL FABRICATIONS**

Structural steel members shall be fabricated in accordance with drawings that are a part of the contract documents. The Contractor shall verify all dimensions prior to fabrication. All bolt holes shall be drilled.

Non-corrosion resistant structural steel members shall be cleaned, prepared, and shop primed, unless otherwise specified. Surfaces to be field welded or in contact with concrete shall not be primed.

**05501 - Field Erection**

Structural steel and miscellaneous metals shall be erected in accordance with drawings that are a part of the contract documents.

Structural steel and miscellaneous metal shall be stored on blocking so that no metal touches the ground and water cannot collect thereon. The material shall be protected against bending under its own weight or superimposed loads. Care shall be taken in handling steel and miscellaneous metals to avoid unsightly gouges and scrapes.

The Contractor shall make adequate provisions for all erection loads and for sufficient temporary bracing to maintain the structure safe, plumb and in true alignment until completion of erection and installation of necessary permanent bracing.

Before assembly, surfaces to be in contact with each other shall be thoroughly cleaned. All parts shall be assembled accurately as shown on the drawings. Light drifting will be
permitted to draw parts together, but drifting to match unfair holes will not be permitted. Any enlargement of holes necessary to make connections in the field shall be done by reaming with twist drills. Enlarging holes by burning is absolutely prohibited.

After erection, all welds, abrasions, and surfaces not shop primed, except surfaces to be in contact with concrete, shall be primed, unless the steel is weathering steel. The primer shall be consistent with the shop prime coat.

Weathering steel shall be kept as clean and free as possible from mud, grease, oil, paint, concrete or mortar splatter, and other foreign substances to minimize on-the-job cleaning. Paint or crayon identification marks shall be made in locations not visible on the finished structure; otherwise, these marks must be removed from the visible surfaces during the final cleaning operation. Objectionable substances on weathering steel, especially on highly visible exterior surfaces and including mill scale on the surfaces visible from the mine opening, shall be removed by solvents, high-speed power brushing, scraping, sand or grit blast cleaning, or other suitable methods. Surfaces of welds shall be given special treatment by scraping and wire brushing as necessary to remove all slag and weld spatter. Tools that produce excessive roughness shall not be used.

Welders certified in accordance with AWS specifications for the intended work shall do all field welding. A copy of certifications shall be furnished to the Project Manager. All welding shall be consistent with the requirements of AWS D1.1, "Structural Welding Code," including adequate edge preparation and preheating and the selection of proper flux (when applicable).

For weathering steel, the use of properly dried, low-hydrogen electrodes and fluxes are specified by the AWS and shall be used. The capping runs of multi-run fillet and butt welds shall have strength, corrosion resistance, and weathered appearance similar to that of the base metal by use of appropriate alloy electrodes for the final two exposed top layers with the weld composition for weathering steel matching the base metal. Conventional electrodes may be used for the body of such welds. Conventional electrodes may also be used for butt welds with a single run each side and for single run fillet welds of up to 5/16-inch leg length.

All joints shall be welded unless otherwise indicated. Weathering steel fabrications shall be welded to eliminate surfaces on which moisture accumulation can occur and joints shall be tight to so that moisture cannot enter between plies of material. All joints in weathering steel, including fillet welds, shall be continuously welded to avoid moisture and corrosion traps such as crevices.

An oxygen meter shall be used to test air before and during field erection and welding of metal fabrications or any other work inside mine openings. The oxygen meter shall be a National Mine Service (NMS) OX231 oxygen meter or equivalent. The oxygen meter shall continuously monitor oxygen levels and have an audible warning. If the oxygen level falls below 19 percent, all personnel shall withdraw from the working area in the mine until the
oxygen content increases to safe levels.

    Any remedy for increasing oxygen content of the working area or providing ventilation from the surface shall be determined in consultation with the Project Manager.

05990 – SUBMITTALS

    Complete data, detailed drawings, and setting or erection drawings covering all structural and miscellaneous metal items, including bolts and nuts, shall be submitted in accordance with the procedure set forth in Section 01340.

END OF DIVISION 5
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