GENERAL PROVISIONS

1. SCOPE

These specifications are written to the CONTRACTOR. The sentences which direct the CONTRACTOR to perform work are written in the active voice-imperative mood. These directions to the CONTRACTOR are written as commands. In the imperative mood, the subject "the CONTRACTOR" is understood. All other requirements to be performed by others have been written in the active voice. Sentences written in the active voice identify the party responsible for performing the action. Certain requirements of the CONTRACTOR may also be written in active voice, rather than active voice-imperative mood. Sentences that define terms, describe a product or desired result, or describe a condition that may exist are not written in either the active voice or the imperative mood. These types of sentences that describe a condition use verbs requiring no action. **Each Technical Specification defines scope of work and certain aspects of that work. Any work discussed in a Technical Specification but not listed as a bid item shall be considered incidental to the Technical Specifications unless otherwise directed by the ENGINEER.**

When any Technical Specifications refers to a specification outside of these documents it shall mean the current edition unless stated otherwise in the Contract Documents.

2. GENERAL DEFINITIONS

The following definitions clarify, supplement and/or amend those provided in APPENDIX C- "FINANCE and ADMINISTRATION CABINET GENERAL CONDITIONS."

2.1. **Kentucky Division of Abandoned Mine Lands**: may also be referred to in these Technical Specifications as "DAML" or "AML" and all refer to the same entity.

2.2. **Design Drawings, Drawings, Standard Details and Plans**: Are synonymous and all refer to the set of design drawings or standard details as published by AML.

2.3. **ENGINEER**: Shall mean a DAML representative who is a Professional Engineer licensed in the Commonwealth of Kentucky and has administrative and engineering oversight authority for the project. This individual shall be identified at the Pre-Construction Conference. If the ENGINEER delegates authority to other personnel this will be stated in writing and provided to the Technician, Supervisor, Resident Inspector and Contractor.

2.4. **TECHNICIAN**: Shall mean the DAML representative who gives technical advice for the project to which they are assigned.

2.5. **SUPERVISOR** or **FIELD OFFICE SUPERVISOR**: Shall mean the DAML representative who is the direct supervisor of the Resident Inspector.

2.6 **RESIDENT INSPECTOR** or **INSPECTOR**: Shall mean the DAML representative who is assigned to monitor the daily construction activities for the project to which they are assigned.

2.7 **CONTRACTOR**: Shall refer to the prime contractor who has obtained the contract and is responsible for the execution of the contract.

2.8. **SUBCONTRACTOR**: Shall refer to a subcontractor reporting to the CONTRACTOR.

2.9. **CONTRACT PERIOD**: Shall be defined as that time required for completion of this reclamation project in accordance with the existing Drawings and Specifications including any extensions approved by official change orders. This definition augments but does NOT amend the General Conditions in Appendix C.

2.10. **BMP**: Shall refer to the Division of Abandoned Mine Lands Erosion and Sediment Control Best Management Practices (BMP) Plan in Appendix B.

3. QUANTITY UNIT DEFINITONS

3.1. **Lump Sum (LS)**: When this term is used as an item of payment, it shall be inferred that the complete structure, structural unit, or element of work is specified as the unit measurement. As such, it will be construed to include all necessary fittings and accessories, labor, equipment, and other incidentals required for installation. No final measurement will be made.

3.2. **Each**: The definition shall be the same as for Lump Sum with the exception that more than one of the referenced item may be used and that final measurement will be the actual number of the item that is installed and accepted by the ENGINEER.

3.3. **Plan (or Design) Quantity (PQ)**: When the "**Plan Quantity**" for a specific portion of the Project is designated as the method of payment in the Contract Documents, it shall be the quantity for which payment will be made. An exception will be made in the event of significant computational error or if dimensions shown in the Drawings are revised by the ENGINEER.

3.4. **Unit Price (UP)**: When "**Unit Price**" quantities for a specific portion of the Project are designated in the Contract Documents as the pay quantity, actual quantities for such specified portion will serve as the basis for payment. Actual quantities shall be determined by the differences between measurements taken before and after construction.

3.5 **Actual Cost Units (ACU)**: When "**Actual Cost Units**" are designated as the method of payment, it shall be only for those documented costs directly associated with the completion of the specific work item that has been designated for this type of payment method. The CONTRACTOR shall supply the ENGINEER with all of the necessary documents supporting costs incurred by the CONTRACTOR in order to qualify for payment. Actual Cost will be paid for and measured in "**Actual Cost Units (ACU)"** and each unit shall equal the sum of $1.00.

4. MEASUREMENT DEFINITIONS

All work completed under this Contract will be and/or has been measured by the ENGINEER according to United States standard measure. The following terms apply:

4.1. Linear Feet (LF): All items measured by the linear foot, such as pipe, guardrail, drains, etc., will be measured along or parallel to the baseline and/or centerline upon which such items are placed or constructed, unless specified otherwise on the Drawings or in subsequent sections of the Technical Specifications. No allowances will be made on installed items for fittings or laps at connections. (When used, the term **"station**" will be 100 linear feet measured horizontally.)

4.2. Areas and Volumes: Determination of Areas and Volumes shall utilize standard surveying techniques. The planimeter shall be considered an instrument of sufficient precision adapted to the measurement of areas. Areas may also be determined by using aerial photography and computer programs such as AutoCAD or ARC GIS. Field measurements may also be used if stated in the Bid Item Description. In computing volumes of excavation and embankments, the average-end-area method will be used.

4.3 Surface Area: Surface area, when used in these specifications, shall mean the actual area of expanded surface taking into account the configuration and slope of the item of work being measured, i.e., slope distances.

4.4. Horizontal Plane Area: Horizontal plane area, when used in these specifications, shall mean the area of projection of the surface area on a horizontal plane.

4.5. Weight: When weight is used as the measurement standard, certified tickets, invoices, or tags for such items must be furnished to the ENGINEER. (When used, the term "ton" will mean 2,000 pounds avoirdupois.)

5. CONTRACT DOCUMENTS ORDER OF PRIORITY

In the event of conflicts between the various elements of these Contract Documents, the order of precedence shall be as follows:

1. Addendum
2. AML Contractual Obligations & Requirements (includes Bid Item Description)
3. AML Special Conditions/Notes
4. AML Design Drawings/Plans
5. AML Technical Specifications
6. AML Standard Details
7. Bid Schedule

6. SUBCONTRACTING

The division of the Technical Specifications is done for convenience of reference and is not intended to control the CONTRACTOR in dividing work among SUBCONTRACTORs or to limit the scope or type of work performed by any trade. If the CONTRACTOR intends to subcontract portions of the work, this intent shall be indicated and the areas identified in the space provided in the Form of Proposal.

After the Award of Contract, do not modify and/or add additional subcontracting without prior written approval of the ENGINEER. Subcontracting of the work or assignment of the contract shall not release the CONTRACTOR of his liability under the contract and bond. Provide and maintain the proper facilities, clerical personnel and field superintendents for proper management and coordination of SUBCONTRACTORS and the CONTRACTOR'S own forces, as well as for providing and maintaining direct lines of communication between the CONTRACTOR and the ENGINEER. The ENGINEER shall not be required to deal directly with SUBCONTRACTORS. Failure to provide adequate qualified field management services will be cause for termination of the contract.

7. FUND AUTHORIZATION

Funds for this Project have been authorized by the U.S. Department for Interior, Office of Surface Mining, under the provisions of Title IV of Public Law 95-87. Funds are secured by a U.S. Treasury Letter of Credit. On the basis of an approved invoice amount, the DAML will coordinate the release of federal funds and the payment to the CONTRACTOR by the COMMONWEALTH. All payments shall be issued by the Kentucky State Treasurer.

8. SUBSURFACE INFORMATION

Site-specific geotechnical information is generally limited. Without regard to the materials encountered, all excavation shall be unclassified. It shall be strictly understood that any reference to rock, soil, or any other material in the Drawings or in the Technical Specifications, whether in numbers, words, letters, or lines, is solely the COMMONWEALTH'S information and is not to be taken as an indication of classified excavation or the quantity of rock, soil, or any other material involved.

9. EXISTING CONDITIONS & REPAIR OF DAMAGE

DAML will document pre-project condition of the property(s) within the project area using video and photography, however, the CONTRACTOR should document any existing damage themselves. Any damage that is not documented prior to the work may be considered as caused by the CONTRACTOR and may require correction.

Any damage done to structures, fills, roadways, or other property(s) not directed as part of the project by the ENGINEER or caused by neglect on the CONTRACTOR'S part shall be repaired at the CONTRACTOR'S expense before final payment is made. In the event such damage

occurs at the direction of the ENGINEER, payment will be made at the bid unit price for such item or in a lump sum as agreed to by both parties.

10. PROPERTY OWNER CONSIDERATION (Revised 7-2013)

Authority to enter and reclaim private property is obtained by written consent of the owner and is pursuant to Title IV of the Surface Mining Control and Reclamation Act of 1977, 30 U.S.C. 1231, and KRS 350.150. The COMMONWEALTH, in complying with these provisions, does not obtain title or rights to any property within the project area. All rights to property and existing materials within the project area will therefore remain the property of the owner.

Materials having a salvage value (coal, oil, gas, precious metals, timber, topsoil, etc.) shall remain the property of the owner. Salvageable material (excluding coal, refuse, & other mineral resources) rejected by the owner shall become the responsibility of the CONTRACTOR to dispose of in a proper manner subject to the approval of the ENGINEER.

During the construction process it may happen that property monuments or property fence may be disturbed. Prior to disturbance, the CONTRACTOR shall give DAML at least 2-week notice to allow DAML to reference said monument(s). If the CONTRACTOR disturbs the monument(s) without providing a 2-week notice to DAML, then the CONTRACTOR shall be responsible for having the monuments reestablished by a Professional Land Surveyor licensed/registered in the Commonwealth of Kentucky at the CONTRACTOR's expense. DAML referenced monuments will be reestablished after construction; however, DAML will not certify the monuments as an official property corner.

11. ALTERNATIVE / EQUIVALENT PRODUCTS & MATERIALS

The use of alternative/equivalent products, materials, and systems shall be approved in writing by the DAML design engineer in conjunction with the DAML construction oversight engineer prior to ordering or using the product/materials. The CONTRACTOR must submit a written request to use alternative/equivalent products, materials, and systems along with all certifications, testing results, specifications, and any other information required by DAML. The ENGINNER may require additional testing. Such testing shall be paid for by the CONTRACTOR. In certain instances the ENGINEER may require the CONTRACTOR to guarantee the product for a period of time to be stated in writing and incorporated into the contract. DAML will provide written approval or disapproval.

The use of alternative products, materials, systems may require alterations to the design plans by a professional engineer (licensed & registered in Kentucky) employed by the product supplier or CONTRACTOR. These revised plans shall be reviewed and approved by the ENGINEER.

12. BLASTING RESTRICTIONS

No blasting shall be permitted without prior approval. In the event blasting is proposed the CONTRACTOR shall prepare documentation outlining the blasting plan and requesting approval. The request must be made and approved prior to any blasting.

13. COAL REMOVAL

No coal, refuse, or other mineral resources shall be removed from either the project area or from the construction & waste areas in conjunction with this contract.

14. PRE-BID CONFERENCE

A Pre-Bid Conference will be held as specified by the bid documents. The Pre-Bid Conference should be attended by representatives of the COMMONWEALTH (i.e. representatives of AML) and Contractors interested in bidding on the Project. **No individual site visits by the Contractor(s) or representatives of the COMMONWEALTH shall be held.**

15. METHOD OF BIDDING

The Bidder must use the bidding documents furnished by the COMMONWEALTH. All data and other information requested must be supplied. The bidder must submit unit price bids on all items contained on the Bid Schedule, regardless of whether the individual items of work are to be let by "Unit Price", "Lump Sum", “Actual Cost”, or "Plan Quantities”.

The submission of a bid will be construed as evidence that a site visit and examination have been made, that the bidder is thoroughly familiar with, understands, and agrees to all terms and intents of the Contract Documents, and that any conflicts within the documents or between the documents and other written instructions or verbal statements have been resolved to the satisfaction of the bidder. Claims for labor, equipment, materials, or other costs required due to difficulties which could have been foreseen had an adequate examination of the site been made, the Contract Documents read thoroughly and clarification sought will not be recognized.

16. AWARD OF CONTRACT

Award of Contract will be made as determined by the Finance and Administration Cabinet. The unit prices will control the extensions and totals. Any obvious case of unbalanced bidding will be considered sufficient grounds for rejection of the entire bid. The COMMONWEALTH reserves the right to reject any and all bids if it is deemed to be in the best interest of the COMMONWEALTH.

17. PRE-CONSTRUCTION CONFERENCE

Following the signing of the Contract Documents and prior to the actual beginning of the construction, a pre-construction conference will be held. Representatives of the DAML, the CONTRACTOR, including any SUBCONTRACTORs, the Finance and Administration Cabinet, as well as other interested agencies and parties may be present to discuss the time and sequence for construction, methods and plans of operations, payment and other relevant questions. The time and locations of this meeting will be the responsibility of the DAML in consultation with the other parties.

18. WORKING HOURS & EXCUSED WORK DAYS

Critical working hours on this project shall be from 8:00 a.m. to 4:30 p.m., Monday through Friday, for the duration of the construction project. Critical work items, as determined in writing by the ENGINEER, will be scheduled for work during these times. The ENGINEER may approve Critical Work, at his sole discretion, at other times when the performance of such work is in the best interest of the COMMONWEALTH. If the CONTRACTOR performs Critical Work outside working hours or without prior approval of the ENGINEER, the ENGINEER is under no obligation to accept or pay for such work.

Emergency work, such as necessary pumping, fire quenching, smoke/fume control, or utility repair shall be completed as required, but the CONTRACTOR shall provide the ENGINEER as much notice as is practicable.

Non-critical work, as determined by the ENGINEER may be completed between the hours of 7:00 a.m. - 7:00 p.m., Monday through Saturday, if requested by the CONTRACTOR and approved by the ENGINEER.

The ENGINEER will provide a Resident Inspector during critical working hours. The Resident Inspector will keep a record and determine working or not working days. These will be recorded as excused/non-excused work days. Holiday's recognized by the COMMONWEALTH, weekends, and official temporary shutdowns are not included in the excused/non-excused critical work day totals. At the end of the project the net excused days will be calculated by subtracting the non-excused days from the excused days that **may** be added to the contract by the ENGINEER. The ENGINEER is under no obligation to extend the contract due to weather related/excused days.

19. TEMPORARY SHUTDOWNS

The CONTRACTOR may request, in writing, for an extended construction "shutdown" due to circumstances beyond the CONTRACTOR'S control. **Prior to the ENGINEER approving the request the CONTRACTOR shall be required to dress all disturbed areas to a reasonable smooth configuration, protect disturbed areas with temporary mulch and cover crop, install temporary diversion ditches, and additional erosion and sediment control measures.** During an approved shutdown the CONTRACTOR shall still maintain sediment control structures. The COMMONWEALTH shall incur no additional costs for such work, or for the expense of demobilization or remobilization.

20. PROJECT INSPECTION/CONTROL OF WORK

Inspection of all construction features (i.e. quality control) shall be performed by;

Division of Abandoned Mine Lands
2521 Lawrenceburg Road,
Frankfort, Kentucky 40601

The ENGINEER and his representatives shall at all times have ready access to the project area. The control of work shall be as follows:

20.1. Authority of the ENGINEER: The ENGINEER will decide all questions regarding the quality and acceptability of materials furnished, work performed, and the rate of progress of the work; all interpretation of the Plans and Specifications; the acceptable fulfillment of the Contract and all changes to the documents including approval of all change orders in accordance with acceptable policies now in place. The ENGINEER will, in writing, suspend the work, wholly or in part when the CONTRACTOR fails to correct conditions unsafe for the workmen or the general public; for failure to carry out Contract provisions; for failure to carry out orders; for periods of unsuitable weather; for conditions unsuitable for the prosecution of the work; or for any other condition or reason determined to be in the public interest. To prevent misunderstanding, the ENGINEER, within a reasonable time, will decide any and all questions concerning the quality and acceptability of materials furnished, work performed, and as to the manner of performance and rate of progress of the work.

The ENGINEER will decide all questions concerning the interpretation of the Contract relating to the work, and all questions concerning the acceptable fulfillment of the work performed by the CONTRACTOR. The ENGINEER will determine the quantity and quality of the several kinds of work performed and materials furnished that the COMMONWEALTH will pay for under the Contract, and such decision and estimate will be final and conclusive. In case any question arises, the Engineer's estimate will be a condition precedent to the right of the CONTRACTOR to receive any money due under the Contract.

The ENGINEER will answer any questions as to the meaning of the Contract, or any obscurity as to the wording of the Contract and give all directions and explanations necessary to make definite any of the provisions of the Contract, or necessary to complete or give them due effect. The CONTRACTOR may request and the ENGINEER will provide written instructions concerning any significant item.

20.2. Authority of Supervisor: Supervisors shall make sure that the contract documents are being enforced. However, **supervisors may not make any changes to the contract documents without written approval from the ENGINEER** but can recommend changes to the ENGINEER. The supervisor will be responsible for the inspector's work and conduct. The supervisor shall check all work/documentation generated by the inspector and certify the work/documentation. Supervisors shall certify but not approve pay vouchers submitted by the CONTRACTOR.

20.3. Authority of the Technicians: Technicians are responsible to check jobs to insure contract documents are being enforced. However, **Technicians cannot make changes to the contract documents without written approval of the ENGINEER**, but can recommend changes to the ENGINEER. Technician's will not be responsible for the inspector's conduct but may notify the ENGINEER and Supervisor of any actions by the Resident Inspector that may not be in accordance with the contract, outside the scope of work, or detrimental to the COMMONWEALTH. The Technician will provide technical assistance to the inspector to clarify the contract documents when appropriate.

20.4. Authority of Resident Inspectors: Resident Inspectors employed by the COMMONWEALTH are authorized to inspect all work performed and materials furnished. Such inspection may extend to all or any part of the work and to the preparation, fabrication, or manufacture of the materials furnished. The resident inspector shall advise the ENGINEER, Supervisor, or Technician if any part of the work does not meet the contract documents and shall document any deficiencies. The Resident Inspector is not authorized to alter or waive provisions of the Contract. The Resident Inspector is not authorized to issue instructions contrary to the Contract, or to act as foreman for the CONTRACTOR. However, the Resident Inspector has the authority to reject work or materials until any questions are referred to and decided by the ENGINEER. Resident inspectors are required to document each day's work (inspection forms, pictures etc.) as approved by or directed by the ENGINEER to ensure the contract documents have been met. Resident inspectors shall certify but not approve pay vouchers submitted by the CONTRACTOR.

21. PROJECT EXTENT (Revised 7-2015)

The CONTRACTOR shall be responsible for satisfying himself as to the construction limits for the Project. The CONTRACTOR shall not establish work, storage, or staging areas outside the project limits, unless otherwise directed or approved by the ENGINEER.

22. STAKING AND MARKING

22.1. General: Prior to the beginning of construction, the ENGINEER will stake the plan baselines and provide the CONTRACTOR with information regarding reference points for reestablishment of lines and bench marks as necessary; and will mark the construction limits. Maintain all lines, points, and bench marks in an undisturbed state. Use the baselines and cross-sections set by ENGINEER or his representative and as shown on the Drawings for all volume estimates. No consideration will be given to any quantities derived from other baselines or cross-section configuration. Truck counts shall not be used as a method to measure volumes but may be used for estimating purposes.

22.2. Grade Staking: Grade staking shall be the responsibility of the CONTRACTOR. Grade staking includes staking of all earthwork areas prior to and during performance of the required work. Staking is to be performed as necessary to assure the lines and grades specified on the Drawings are achieved. As a minimum, staking is to be updated monthly as the work progresses. The ENGINEER may direct more frequent updating as may be necessary to keep lines, grades, cut and fill designations current throughout construction. The CONTRACTOR shall be required to stake design grade lines a maximum of 100 feet apart.

Construction staking as specified is required to adequately delineate earthwork areas (both excavation and embankment); to provide horizontal and vertical control necessary to monitor the progress of the work, and to accurately define the alignment of appurtenances; to maintain plan baselines; to permit field adjustments where necessary; and to facilitate timely verification of progress estimates.

22.3. Pre-Excavation and Backfilling Requirements: Prior to any excavation or the placement of fill, the **CONTRACTOR IS REQUIRED** to contact "Kentucky 811" or 1-800-752-6007 two (2) business days prior to any excavation / excavation activities and file a utility location request. If there are utilities in the work areas that are not members of "Kentucky 811," each utility has to be contacted directly to have their facilities marked. It shall be the CONTRACTOR's responsibility to locate all utilities, make appropriate arrangements regarding relocation, either temporary or permanent, maintain the utility service throughout the construction period, and make final relocation at the completion of the work. Such work is to be performed under the direction of the ENGINEER and to the satisfaction of the owner(s) of any utility encountered. The CONTRACTOR shall be solely responsible for protecting all utilities on the project site and for making necessary relocations. All such relocations shall be presented to and approved by the Engineer prior to undertaking such work. The CONTRACTOR is advised to exercise EXTREME CAUTION in operations where gas lines, electrical facilities, or other lines carrying hazardous materials exist. Depiction of the utilities on the plans is approximate and may not include all existing utilities. **No excavation or backfilling work of any type shall begin until the ENGINEER has given approval.**

22.4. Cross-Sectioning: The ENGINEER shall be responsible for cross-sectioning earthwork areas to determine "Actual Quantities", if required. Volumes shall be determined by before and after cross-sections conducted by DAML or its representative. Initial sections will be taken following site preparation and before earthwork is started.

23. PROTECTION AND SECURITY

Exercise care in all phases of construction to prevent damage and/or injury to the life and property of others. In addition to other provisions of these Contract Documents, the CONTRACTOR shall be responsible for providing adequate security for his work areas, storage areas, office, equipment, and any other items or areas that he is using. Neither the COMMONWEALTH nor the property owners will be responsible for any damages attributable to insufficient site security, carelessness, or failure to comply with the provisions and intent of these Contract Documents.

Ensure that site access is controlled through appropriate safety devises including plastic safety fences. Installation of temporary safety fences is required around any open trench or pit during construction and is incidental to the overall project work.

24. CONTRACTOR'S FACILITIES

Temporary facilities for the proper completion of the work, as necessary and as specified shall be provided by the CONTRACTOR.

24.1. Sanitary Facilities: Provide and maintain a portable toilet and all other necessary sanitary facilities at the site, in accordance with all applicable regulations, and properly remove same at completion of the Project.

24.2. **Utilities**: The obtaining of all utilities which may be required for the construction shall be the responsibility of the CONTRACTOR.

25. PROGRESS MEETINGS AND ESTIMATES

At the ENGINEER's request, the CONTRACTOR will make available a representative who shall have authority to make binding decisions on behalf of the CONTRACTOR for progress meetings. These meetings may cover pay estimates for work performed, any construction problems which may have developed, review the scope of work proposed, and evaluate current progress versus the CONTRACTOR'S schedule of construction.

The CONTRACTOR shall be allowed to submit one (1) invoice for completed work every thirty (30) calendar days. The contractor must submit at least one (1) invoice every 60 calendar days during the contract period for the work performed or completed since the previous invoice.

26. SCOPE OF PAYMENT

The contract prices (whether based on Each, Lump Sum, Plan Quantity, Actual Cost, or Unit Price) for the various bid items of the Contract Documents, shall be considered full compensation for all labor, material, equipment, and incidentals required for the complete incorporation of the item into the Project.

27. COMPENSATION FOR CHANGED QUANTITIES

The ENGINEER reserves the right to increase or decrease the actual quantities as site conditions warrant. When revised dimensions result in an increase or decrease in the quantities of such work, the final quantities for payment will be the amount represented by the authorized changes multiplied by the unit prices bid for such items **and covered by an approved change order.**

The quantities shown on the Bid Schedule and elsewhere in the Contract Documents represent the ENGINEER'S estimate of the amount required to accomplish the design intent. Reasonable care in computing and verifying such numbers has been used, particularly in the case of payment items for which Plan Quantities or Lump Sum is stated as the method of payment. In the event errors beyond those normally expected for the computational base are discovered, fair and reasonable adjustments may be made by the COMMONWEALTH based on the unit prices bid and the revised quantities. In such instances, tolerances provided in the Technical Specifications for particular work items may also require adjustment.

The use of Plan Quantities and Lump Sum methods of payment for selected work elements is intended to be in the best interest of the COMMONWEALTH, the ENGINEER, and the CONTRACTOR. The practice is not intended to be a mechanism by which risks associated with engineering computations is transferred to the CONTRACTOR.

28. EXTRA WORK

The CONTRACTOR shall perform extra work for which there is no quantity or price in the Bid Schedule only when directed to do so in writing by the COMMONWEALTH. Such work will be paid for at a lump sum price or at unit prices stipulated in a Change Order. No work shall commence until the CONTRACTOR is notified that the change order has been approved.

29. INVOICING

Contact the appropriate AML Field Office to notify the Administrative Specialist of the intention to invoice and schedule an appointment. The AML Administrative Specialist will generate the electronic invoice for review by the residential inspector and supervisor before the contractor arrives.

During the appointment, the CONTRACTOR will be given a workstation to review the invoice. If any questions are raised about quantities or monies, then AML personnel will use the Resident Inspector's daily inspection reports and any other applicable AML reports and/or databases for verification of this information. If any information appears incorrect, the invoice will be reviewed again by the Resident Inspector and Supervisor.

Once the CONTRACTOR, Residential Inspector, and Supervisor are in complete agreement, then the CONTRACTOR will electronically sign the invoice and save the file. The Administrative Specialist will verify the saved file and make certain that it is signed and readable, and then initiate the invoice through the approval process.

30. CLEAN UP

After all construction work is complete and prior to final inspection, all exposed areas shall be cleaned and left in good condition. All unused materials, including but not limited to, channel lining larger than 6" and tree limbs and roots larger than 2" in diameter shall be removed and disposed of properly. Any disturbed areas shall be seeded in accordance with the applicable specification. The cleanup shall also include the removal of any trash and debris currently deposited within the project work limits or deposited during the contract period. The trash and debris shall be transported to an approved landfill in accordance with the Technical Specifications.

Clean out behind all silt structures, i.e. silt checks, silt fence, silt basins, rock checks or any other place where sediment has been allowed to accumulate.

31. FINAL INSPECTION

Once the project is considered complete a Final Inspection will be held on site for all interested parties to review the Project and make sure that the intent of the Project has been met and that the Project has complied with the Contract Documents. Any deficiencies shall be noted at this time and a time table set to correct those deficiencies. Another site visit will not be required once the deficiencies are corrected but all interested parties will be notified that the deficiencies have been corrected and the Project deemed complete.

The Final Invoice for the project will not be processed until the Final Inspection is complete and all deficiencies are corrected.

32. ACTUAL DAMAGES

Actual Damages, not a penalty, shall be levied for each work day beyond the Contract Period required to complete the project. The damages shall be the exact administrative cost incurred by the DAML, calculated using labor and travel expenses of the Engineer, Resident Inspector, Field Office Supervisor, and Technician for every day worked that exceeds the Contract Period.

33. GUARANTEE

The CONTRACTOR shall assume responsibility for all workmanship and materials for a period of one year from final payment. Any work found to be defective due to failure to comply with the provisions and intent of the Contract Documents shall be replaced at the CONTRACTOR'S expense.

34. PROOF OF COMPLIANCE

Whenever the Contract Documents require that a product be in accordance with Federal Specifications, ASTM designations, ANSI specifications, or other association standards, the CONTRACTOR shall present a certification from the manufacturer that the product complies therewith. When specified, submit supporting test data to substantiate compliance.

Provide a copy of certifications to the Resident Inspector and maintain the documents on the job site. Once the job is complete all certifications shall be placed in the project file. Materials required to have proper certification(s) shall not be paid for until the proper certifications are produced.

35. TESTING

During the construction process there are certain sections of these Technical Specifications that require testing to insure that the Technical specifications are being adhered to. The Resident Inspector, CONTRACTOR and ENGINEER shall be familiar with those tests as required and insure they are performed in accordance with these Technical Specifications. The ENGINEER at any time may require that additional tests be done to insure that the Technical Specifications are adhered to.

35.1. Codes and Standards: Testing, when required, will be in accordance with all pertinent codes and regulations and with selected standards of the American Society for Testing and Materials (ASTM) and the Kentucky Transportation Cabinet's Kentucky Methods. All testing shall be done by certified personnel.

35.2. Payment for Testing Services

35.2.1. Initial Services: The COMMONWEALTH will either pay or provide for all initial testing services which are required by the ENGINEER.

35.2.2. Retesting Services: When initial tests indicate non-compliance with the required specifications, all subsequent retesting made necessary by the non-compliance shall be paid by the CONTRACTOR.

35.2.3. Contractor's Convenience Testing: Inspection of testing performed exclusively for the CONTRACTOR'S convenience shall be the sole responsibility of the CONTRACTOR.

35.2.4. Cooperation with the Testing Laboratory: Representatives of the testing laboratory shall have ready access to the work at all times. The CONTRACTOR shall provide facilities for such access in order that the laboratory may properly perform its functions.

36. ROADS

36.1. General: The contractor will be responsible for keeping all roads clear of debris, mud, and loose gravel at all times during the project. For work within a public road right-of-way (Federal, State, and Municipal) all materials must be from approved sources on the KY Transportation Cabinet's Approved Materials list.

36.2. State/Federally Maintained Roadways: Damage to state and/or federally maintained roadways caused by accessing the job site shall be repaired at the CONTRACTOR's expense unless work (i.e., culvert installation, roadway ditch, etc.) has been designated on the Drawings. All repairs must meet KY Transportation Cabinet requirements. The CONTRACTOR shall be responsible for adhering to all state and federal regulations that govern the roadway(s) he travels to access the job site.

36.3. Public and/or Private Roadways: Damage to public and/or private roadways caused by the CONTRACTOR (within the project limits) during the contract period in order to mobilize equipment and supply materials to the site, shall be paid for under the Contract Documents. Use of a public and/or private route and/or roadway shall be submitted to the ENGINEER for approval.

36.4. Haul Roads: The CONTRACTOR, when required to use existing haul roads, shall upgrade the road to allow for proper surface drainage and a suitable roadway base as necessary to accommodate the required construction during all weather conditions. Upgrading of the haul road shall be paid for under the Contract Documents. A plan to upgrade haul roads, unless already provided for in the plans, shall be submitted to the ENGINEER for approval.

36.5. On-Site Construction Roads: Roads constructed between work areas and/or waste areas for the convenience of the CONTRACTOR as shown on the Drawings, shall be reclaimed following use to a stable, free draining configuration and vegetated in accordance with these

Technical Specifications. Appropriate barricades shall be placed across said road to prevent ingress to the areas at no expense to the COMMONWEALTH.

37. MAINTAINING STREAM FLOW

The ENGINEER shall pre-approve in writing any temporary blockage streams within the project limits unless shown on the Drawings. Consideration of downstream property owners must be made prior to blocking or releasing flow of the stream.

Should any existing culverts become inoperable or damaged because of work required under this Contract, the CONTRACTOR will immediately restore it to an operable condition. Existing culverts designated for cleaned with the approval of the ENGINEER without any additional interference to flow.

Maintenance of stream flow shall be considered incidental to the overall accomplishment of the project.

When in-stream work is unavoidable, perform it in a manner and duration to minimize re-suspension of sediments and disturbance to substrates and bank or riparian vegetation. To the maximum extent practical, perform all work during low flow conditions. Take appropriate measures to maintain normal downstream flows and minimize flooding to the maximum extent practicable. Investigate for water in-takes or other activities immediately downstream affected by increased turbidity resulting from the work. Before beginning any work in the stream, give sufficient notice to allow the downstream water users to prepare for any temporary change in water quality.

Place all permanent structures in the stream to allow fish movement through the site. When specified in the Plans, construct artificial riffle structures, flow deflectors, boulders, or other types of structures to replace in stream aquatic habitat.

38. DUST CONTROL

Minimize the generation of dust outside of the project limits. Maintain all excavations, embankments, stockpiles, haul roads, permanent access roads, plant sites, waste areas, and all other work areas within or without the project boundaries free from dust which would cause a hazard or nuisance to others. Approved temporary methods of stabilization consisting of sprinkling, chemical treatment, light bituminous treatment or similar methods will be permitted to control dust. Perform dust control as the work proceeds and whenever a dust nuisance or hazard occurs.

39. SEDIMENT CONTROL

Minimize the deposition of materials in downstream areas and to contain sediment to within the project limits. Minimize the amount of exposed erodible ground by revegetating each area as soon as practical. In addition, all silt control measures, as shown on the Drawings or as added by

the ENGINEER, shall be installed **prior to construction activities** in accordance with these Technical Specifications.

40. PERMITS

The CONTRACTOR shall obtain all applicable permits from local, state and federal agencies not provided by the ENGINEER. **All permits or copies of permits obtained for the specified project shall be maintained at the site by both the RESIDENT INSPECTOR and CONTRACTOR and shall be available upon request.**

41. CONTROL MEASURES

41.1. **Solid Materials**: No solid materials shall be discharged to waters of the U.S., except as authorized by a Section 404 permit and directed by the plans or ENGINEER. This includes rock and/or soil materials.

41.2 **Waste Materials**: All waste materials that may leach pollutants (paint and paint containers, caulk tubes, oil/grease containers, liquids of any kind, soluble materials, etc.) will be collected and stored in appropriate covered waste containers. Waste containers shall be removed from the project site and disposed of in accordance with appropriate regulations on a sufficiently frequent basis as to not allow wastes to become a source of pollution. All personnel will be instructed regarding the correct procedure for waste disposal.

41.3 **Hazardous Waste**: All hazardous waste materials will be managed and disposed of in the manner specified by local or state regulation. Notify the Resident Inspector if there are any hazardous wastes being generated, and provide a plan for the management and disposal of such materials. Instruct site personnel with regard to proper storage and handling of hazardous wastes when required. These practices will be used to reduce the risks associated with all hazardous materials. Keep products will be kept in original containers unless they are not re-sealable with the original labels and material safety data sheets (MSDS) will be reviewed and retained.

41.4 **Spill Prevention**: Use good housekeeping and material management practices will be used to reduce the risk of spills or other exposure of materials and substances to the weather and/or runoff. Manufacturers' recommended methods for spill cleanup will be maintained on site and readily available upon request. All personnel will be made aware of procedures and the location of the information and cleanup supplies. Equipment and materials will include as appropriate, brooms, dust pans, mops, rags, gloves, oil absorbents, sand, sawdust, and plastic and metal trash containers.

Clean up all spills immediately after discovery. The spill area will be kept well ventilated and personnel will wear appropriate protective clothing to prevent injury from contract with a hazardous substance. Spills of toxic or hazardous material will be reported to the appropriate state/local agency as required by KRS 224 and applicable federal law. Wastes from spill clean-up will be disposed of in accordance with appropriate regulations.

The spill prevention plan will be adjusted, as needed, to prevent spills from reoccurring and improve spill response and cleanup.

41.5 Petroleum Products: Vehicles and equipment that are fueled and maintained on site will be monitored for leaks, and receive regular preventative maintenance to reduce the chance of leakage. Petroleum products onsite will be stored in tightly sealed containers, which are clearly labeled and will be protected from exposure to weather. The CONTRACTOR shall not have a total of over 1,300 gallons of petroleum products on site at any given time.

41.6 Fertilizers: Store fertilizers in a covered area away from water. Transfer the contents of any partially used bag of fertilizer to a sealable plastic bin to avoid spills. Once applied, work into the soil and apply mulch to limit exposure to storm water.

41.7 Concrete Truck Washout: Concrete truck mixers and chutes will not be washed on pavement, near storm drain inlets, or within 75 feet of any ditch, stream, wetland, lake, or sinkhole. Where possible, excess concrete and wash water will be discharged to areas prepared for pouring new concrete, flat areas to be paved that are away from ditches or drainage system features, or other locations that will not drain off site. Where this approach is not possible, a shallow earthen washbasin will be excavated away from ditches to receive the wash water.