Scope of Work
13 Left Utility BH - Access Road and Site Pad

Background

Twentymile Coal, LLC (TC) is soliciting bids for the construction and installation of one utility borehole for its Western Mining District (WMD). As part of this project, a service road will be extended from the existing access road that currently leads to the 6MN shaft site, approximately 2,550 feet to the proposed borehole drilling site pad. Refer to the attached drawings of the access road and proposed borehole site pad labeled Exhibit 46DD-F1. The contractor will be responsible for clearing the site of and stockpiling brush and topsoil, constructing the new 24' wide (top width) access road and for constructing an approximately 40,000 ft^2 (0.9 acres) borehole drilling pad.

TCC will provide all necessary construction surveying.

The proposal shall be emailed or faxed to:

Sadie Herndon
Buyer, Peabody Investment Corporation
Twentymile Coal, LLC
W: 970-870-2732
F: 970-870-8769
sherndon@peabodyenergy.com

Primary Site Contact:

Michael Berdine
Manager – Technical Resources
W: 970-870-2782
C: 970-846-9686
mberdine@peabodyenergy.com

Location:

The TCC mine site is located approximately 9 miles north of Oak Creek, Colorado, on Routt County Road #27.

The main access road to the borehole site is located off Routt County Road #33, approximately 0.5 miles east of the intersection of Routt County Road #27 and #33. From this point, an existing access dirt road will lead to the proposed access road. The road and pad to be constructed will be accessed from this point. Refer to the attached Figure 1 – Location Map for the borehole site location.

Scope of Work
13 Left Utility BH - Access Road and Site Pad

Project Timing:

1. TCC to submit scope of work to Contractors	12/14/15
2. Return bid to Peabody Purchasing Group	12/18/15
3. Award project to Contractor	12/24/15
4. Commence Project	Week of 12/28/15
5. Complete Project	By ASAP

6. A detailed construction schedule shall be submitted with the contractor's proposal that accurately defines the contractor's plan of construction and the required timing to complete each phase of the project. The contractor shall identify any potential problems that may interfere with the contractor's ability to mobilize immediately after receiving the written notice from Twentymile that the site is ready for mobilization.

Construction Order:

Construction of the access road borehole pad site shall be as per the following sequence:

1. Establishment of temporary drainage and sediment control measures:
    a. Wattles on the downhill side of the drill pad - ~200 total wattle feet.
    b. Wattles on the downhill side of the road and pad area topsoil stock piles - ~650 total wattle feet.
2. Access Road - Removal of 2,550' of access road brush and topsoil and placement in a temporary stockpile:
    a. 2,550' x **40' wide disturbed area** x 8" average depth of removal = ~2520 YD^3.
3. Drill Pad - Removal of 225' x 225' (1.2 acres) of borehole pad brush and topsoil material and placement in a temporary stockpile:
    a. 225' x 225' x 8" average depth of removal = ~1,250 YD^3.
4. Construction of a 24' wide by 2,550' long access road.
5. Construction of a 200' x 200' finished drill pad.
6. Construction of a 450' long perimeter ditch with two rock check dams on the north, west and south sides of borehole pad.

Specifications - Road

1. In the 2,550' access road area, the contractor shall blade all brush and topsoil (and other organic materials) to an average depth of approximately 8" for a **maximum width** of 40 feet (20 feet each side of centerline) for the length shown on the attached Exhibit 46DD-F1. The brush and topsoil shall be pushed into two large stock piles along the north side of the road. Once topsoil piles are established, contractor shall make an effort to avoid contact with the topsoil. The centerline of the proposed access road shall be staked just prior to brush removal. **The top finished width of road is to be 24'.**

The brush and topsoil piles shall be seeded with a stockpile stabilization seed mixture. Refer to the attached Table 53 for the seed mixture specifics.

Cut and fill excavation yardage for the 40' wide base of the access road is estimated as follows:

- Cut – 5,515 cubic yards.
- Fill – 5,515 cubic yards.
- Refer to the attached access road pad report dated 11/04/15.
- TCC surveyors will complete an as-built survey of the access road to determine actual yardage moved in the cut and fill areas.
- There are no borrowing sites available.
- Topsoil replacement of the access road cut and fill areas is not required.
- Seeding of the access road cut and fills is required.

Weather permitting, the finished sub-grade shall be proof rolled with a heavy piece of equipment after being compacted, and prior to placing the sub base gravels. Areas which deform or pump under the wheel loads of the construction equipment shall be removed and/or stabilized prior to placement of the sub base gravels.

Contractor shall then construct the 24' wide access road with a gravel section consisting of 8" (compacted height) of sub base (pit run) gravels and 3" (compacted height) of base course gravels. The sub base and base course gravels shall be measured to verify that the required gravel sections have been constructed.

In all areas, the access road shall be constructed with a minimum crown or super elevation of 2 percent to promote effective drainage.

2. Contractor shall replace an existing 18" diameter road culvert with a 100' long 24" diameter CMP pipe located as shown on Exhibit 46DD-F1.

3. Contractor shall be responsible for the loading and haulage of all gravel materials from Twentymile's Mesa Pit. Approximate quantities are provided in the bid table below and are based on 1.3 swell factors, 8 inches of pit run (compacted), and 3 inches of base course (compacted). These gravels can be loaded at the Mesa Pit using a Twentymile loader. The material shall be hauled by a contractor vehicle.

Specifications – Site Pad

1. Contractor shall be responsible for preparation of the site pad and performing a balanced cut and fill of approximately 1400 yd^3 of material. The top of pad elevation is at approximately 6744'. Cut and fill slopes are calculated at a slope ratio of 2:1. TCC surveyors will complete an as-built survey of the pad to determine actual yardage moved in the cut and fill areas. Refer to the attached pad report dated 10/16/15.

Scope of Work
13 Left Utility BH - Access Road and Site Pad

In this pad area, the contractor shall strip brush and topsoil off the proposed pad surface for a maximum area of 225' x 225' (1.2 acres) as shown on the attached Figure 46DD-F1. The pad area shall be staked just prior to brush and topsoil removal.

The contractor shall remove brush, topsoil and other organic materials to an average topsoil depth of approximately 8". The site pad brush and topsoil materials shall be evenly stockpiled to the north of the pad for future reclamation use as shown on Figure 46DD-F1. The stockpiled brush and topsoil shall be seeded with a stockpile stabilization seed mixture. Refer to the attached Table 53 for the seed mixture specifics.

Weather permitting, the finished sub-grade shall be proof rolled with a heavy piece of equipment after being compacted, and prior to placing the sub base gravels. Areas, which deform or pump under the wheel loads of the construction equipment shall be removed and/or stabilized prior to placement of the sub base gravels.

There shall be a minimum drainage slope of 0.7% (note that pad was designed at slope of 1.0% as indicated on the pad report dated 10/16/15 towards the south end of the site pad. Drainage direction is to be field verified by contractor with TCC representative.

Contractor shall then construct the pad with a gravel section consisting of 8" (compacted height) of sub base (pit run) gravels and 3" (compacted height) of ¾" screened rock with minimal fines for the top base course. The sub base and base course gravels shall be measured to verify the required gravel sections have been constructed.

Contractor shall be responsible for the loading and haulage of all gravel materials from Twentymile's Mesa Pit. Approximate quantities are provided in the bid table below and are based on 1.3 swell factors, 8 inches of pit run (compacted), and 3 inches (compacted height) of ¾" screened rock. These gravels can be loaded at the Mesa Pit using a Twentymile loader. The material shall be hauled by a contractor vehicle.

Site Pad Drainage Structures

1. Surface drainage at the site will be handled by a 450' long down-gradient drainage ditch on the north, east and south sides of the pad, gravel surfacing, and a rock check dam. Refer to Figure 46DD-F1 for the location of these structures.

2. Contractor shall construct one down-gradient drainage ditch. The pad Drainage Ditch is approximately 450' long and shall be of a "V" design, with a 2.5' depth, 15' top width, and 3H: 1V side slopes.

Scope of Work
13 Left Utility BH - Access Road and Site Pad

Twentymile Coal Responsibilities

1. Obtain all required state and county environmental permits and approvals.

2. Provide on-site hazard training necessary for contract personnel to operate on the surface areas.

Contractor's Responsibilities

1. Provide all materials, equipment, tools, services, insurance, engineering design, labor, and supervision throughout the construction process. Contractor shall furnish a list of equipment available and anticipated to be used throughout the project. Contractor shall also furnish a list of supervisory, technical, and management personnel to be associated with the project.

2. All Contractors that plan to work on an existing Peabody Energy site must comply with the following as a minimum:
    a. Peabody Corporate Safety Standards & Cardinal Rules
    b. The attached Twentymile Coal Safety& Health Management Plans.
    c. Provide copies of current insurance and workers compensation certificates
    d. The Contractor must provide a copy of their completed Safe Work Method Statement/s (SWMS).
    e. The Contractor is required to familiarize themselves with these requirements:
        i. All Contractors' and subcontractors' personnel must complete training on the Peabody's Cardinal Rules.
        ii. All Contractors' personnel accessing the site must successfully complete a full site induction.
        iii. All Contractors' and Subcontractors' personnel must provide current evidence of training complete with current competencies, including current MSHA annual training.
        iv. Copies all pertinent records will be retained by both the contractor and the Project Safety Manager as required by legislation.
        v. All Contractor and Sub Contractor personnel must complete TC's on-site hazard training prior to beginning of any work on the site.

3. Contractor shall be responsible for the safety on and around the construction site. Contractor shall be solely responsible to effectively secure the construction site to restrict and prohibit access to the immediate construction area for the safety of all persons that may enter the construction area. Contractor shall post signs around the construction site giving warnings of any and all dangers that may potentially exist.

4. Contractor shall comply with all applicable federal, state, and local laws, regulations, codes, and ordinances. Refer to the general Peabody Safety guidelines below.

5. The Contractor is responsible for Environmental Compliance of all demolished and disposed material.

6. Contractor shall provide MSDS information for all products brought onto the job site.
7. Oils and lubricants may not be disposed of on the site pad and must be handled properly for disposal.
8. Contractor shall be responsible for the disposal of all unused or waste products brought onto the site. Contractor may not use TC sites for disposal. A local landfill is located a few miles northwest of the mine's property in Milner.
9. Contractor shall secure all required permits for hauling or traveling across any roads as required. The costs of any permits shall be included in the Contractor's proposal.
10. Contractor shall be responsible for all management of construction materials; this includes but is not limited to receiving materials on site, unloading materials at the site and transportation of materials around the site.
11. Provide for all compressed air needs (if applicable).
12. Contractor shall provide a crane for loading and unloading equipment and supplies used during the project.
13. Contractor shall warrant that all work to be performed, and all materials and equipment to be furnished for the construction work and related activities are free from defects for a period of one year from the date of final acceptance of the work. Contractor shall repair or replace any defective materials and workmanship that may occur within the warrantee period at their expense.
14. The Contractor shall visit the proposed project site prior to the submittal of the proposal and make any necessary observations and/or measurement, and note any conditions under which work is to be performed. Extra compensation will not be allowed for failure to do so.
15. Provide a detailed mobilization schedule, including the required lay down area for the equipment to be used in the project.
16. Contractor shall be responsible for final clean-up of site and materials used after demobilization of equipment.
17. The Contractor shall include an additional $1,000 in their total bid to be setup in Peabody's Contractor compliance database managed by Browz. If the Contractor is already setup in the database, this $1,000 fee can be omitted in the bid.

18. The Contractor and his key project representatives are required, at their expense, to attend schedule reviews prior to the commencement of work. This (these) review(s) are done to optimize the work and the timing efficiencies of the project.

19. **Contractor shall abide by all site and company's safety policies. Refer to the attached for additional Corporate Safety Policies.**

Peabody Safety Guidelines

1. **SAFETY**

The "Master Performance Agreement ~ General Conditions" states that the Contractor shall comply with all laws, ordinances, rules, and regulations applicable to the Work. It is the Owner's desire to call the Contractor's attention particularly to the rules and regulations of the "Occupational Safety and Health Act of 1970 (OSHA)" (PL-91596), "Federal Construction Projects ~ Health and Safety Standards" (PL-9154), the "Federal Coal Mine Health and Safety Act of 1969," and with all applicable regulations set forth in the FEDERAL REGISTER, Volume 36, Number 75, dated April 12, 1971, titled, "Department of Labor, Bureau of Labor Standards, Safety and Health Regulations for Construction," and additions or amendments to these laws, rules, or regulations as promulgated.

2. **SAFETY INSTRUCTIONS FOR CONTRACTORS PERFORMING WORK AT THE OWNER'S CONSTRUCTION PROJECTS**

   A. All Contractor employees shall have a current hazard-training certificate before commencing Work on the Owner's property. It shall be the Contractor's responsibility to see that his employees receive the necessary hazard training as prescribed by law.

   B. The Contractor shall comply with all federal and state safety and health standards.

   C. The Contractor shall have a written safety program and it will be made available to the Owner.

   D. The Contractor shall supply his employees with a copy of the Contractor's safety rules and regulations.

   E. The Contractor shall assign a qualified person, on site, to coordinate the Contractor's safety activities.

   F. The Contractor shall be responsible for the actions of the Contractor's employees in regard to compliance with all safety rules and regulations.

   G. The Contractor shall establish and enforce a program to discipline employees for willful or repeated violations of safety regulations.

H. The Contractor shall report fatalities and injuries occurring to Contractor's employees to the proper agencies as required by Federal and State Regulations within the period of time prescribed by law.

I. The Contractor shall obtain and maintain record keeping forms as required by the Mine Safety and Health Administration (MSHA) and applicable State Agencies.

J. The Contractor shall keep the Owner promptly informed of all injuries to the Contractor's employees that require medical treatment.

K. The Contractor shall keep the Owner informed of all federal and state safety inspections, citations, and penalties.

L. The Contractor shall make safety inspections to insure that compliance with safety standards is being carried out by the Contractor's employees.

M. The Contractor shall investigate all accidents that occur in the Contractor's phase of the Work to determine the causes of the accidents and take the appropriate measures to eliminate said causes.

N. The Contractor shall conduct and document safety meetings to instruct the Contractor's employees in the recognition and avoidance of construction hazards.

O. The Contractor shall be willing to participate in labor-management safety committees to enforce safety regulations and eliminate potential safety hazards.

P. The Contractor shall have a documented emergency evacuation program and coordinate this program with the Owner.

Q. The Contractor shall be responsible for keeping the Work areas free of debris and trash on a daily basis.

R. The Contractor shall provide adequate fire protection for the Contractor's construction shops, change rooms, and equipment.

S. The Contractor shall obtain necessary permits from the Owner as required by the Owner, e.g., parking, excavation, entry to confined spaces, use of Owner's equipment and tools, etc.

T. The Contractor shall comply with all project rules and security rules as issued by the Owner.

U. The Contractor shall comply with the Owner's "Clearance System" covering the tagging-out and locking-out of equipment and electrical systems.

V. On Projects where wrap-up insurance is in force, the Contractor shall cooperate in participating in supervisory safety training programs provided by the insurance carrier.

W. The Contractor shall keep the Owner informed of all hazardous materials that will be used on the project site; e.g., asbestos, toxic chemicals, radio-active material, etc.

X. **The Contractor shall comply with all Peabody Energy safety rules. All construction personnel shall wear hard hats, reflective vests, required metatarsal-type safety shoes or boots as specified in the State and Federal regulations, leg bands, and safety glasses.**

Y. **Hearing protection and fall protection is required where applicable.**

Z. Contractor's personnel who operate or are passengers in motor vehicles shall wear safety belts when on the Owner's property.

Scope of Work
13 Left Utility BH - Access Road and Site Pad

Bid Form

1. Contractor shall complete the attached bid form and return to Peabody Purchasing by December 25, 2015.

Access Road:

	Unit	# Units	$/Unit	Total $
Purchase and placement of 500' of wattles on the downhill side of the two access road topsoil piles	FEET	500		
Strip brush and topsoil and place in two stockpiles along road – 2,550' length x 40' wide x 8" = 2520 yd^3	YD3	2520		
Seed brush & topsoil piles	LOT	1		
Balanced Cut (~5515 yd^3) and Fill (~5515 yd^3) Excavation	YD3	5515		
Access road sub grade preparation	LOT	1		
Purchase and install a 100' long, 24" CMP culvert	FEET	100		
Purchase and placement of sub-base pit run for a 2,550' x 24' wide x 8" depth section x 1.3 swell factor (~1970 yd^3)	YD3	1970		
Purchase and placement of base course materials for a 2,550' x 24' wide x 3" section x 1.3 swell factor (~ 740 yd^3)	YD3	740		
Conversion Factor (Yards to Tons)	1.5	MASA PIT		
Additional Fill Materials (Unit prices)				
Total				

Scope of Work
13 Left Utility BH - Access Road and Site Pad

Site Pad and Drainage Structures:

	Unit	# Units	$/Unit	Total $
Purchase and placement of 200' of wattles on the downhill side of the pad	FEET	200		
Purchase and placement of 150' of wattles around the pad topsoil pile	FEET	150		
Strip brush and topsoil and place in one stockpile north of the pad – 225' x 225' wide x 8" = 1250 yd^3	YD3	1250		
Seed brush & topsoil piles	LOT	1		
Balanced Cut (~1400 yd^3) and Fill (~1400 yd^3) Excavation	YD3	1400		
Site pad sub-grade preparation	LOT	1		
Purchase and placement of sub-base pit run for a 200' x 200' wide x 8" depth section x 1.3 swell factor (~1290 yd^3)	YD3	1290		
Purchase and placement of ¾" screened rock materials for a 200' x 200' wide x 3" section x 1.3 swell factor (~ 490 yd^3)	YD3	490		
Down-gradient diversion "V" ditch #1, 15' top width, 2.5' deep x 450' long	FEET	450		
Placement of two rock check dams, each ~20' x 10' x 3', 8-12" fractured rock = 45 YD3	YD3	45		
Conversion Factor (Yards to Tons)	1.5	MASA PIT		
Additional Fill Materials (Unit prices)				
Total				