STATE OF OHIO
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF MINERAL RESOURCES MANAGEMENT

GAITHER HIGHWALL PROJECT
MAHONING COUNTY, OHIO
PROJECT NUMBER: MH-Bv-14

PROJECT DESCRIPTION

The Gaither Highwall Project is a pre-law coal mining operation site. The project site is located approximately 1.4 miles east of North Lima, Ohio on the southeast corner of the intersection of State Route 165 (Woodworth Rd.) and East South Range Road. The existing highwall and impoundment are approximately 1,000 feet south of, and run mostly parallel to, East South Range Road and approximately 1,000 feet east of State Route 165 (Woodworth Rd.) in Springfield Township, Mahoning County, Ohio.

The Gaither Highwall Project site contains an existing highwall that is approximately 2,200 feet long and has an average height of about 50 feet. The depression area and impoundment were formed as a result of the previous mining activities. The surface area of the impounded water is approximately 3.9 acres. The water within the impoundment was sounded to establish a maximum depth of ±26 feet.

The intent of this project is to eliminate the highwall and impounded water by backfilling the site with existing spoil. In addition, positive drainage will be provided for all areas within the project site. Stormwater runoff from within the site shall be directed into a newly constructed vegetated channel, which will provide overland flow to a sediment basin.

An access road shall be constructed along the northwest work limits of the project to provide ingress/egress from East South Range Road. This road will provide accessibility to the project site (spoil area). A 15-inch diameter HDPE culvert, for the new access road, shall be installed within the existing road ditch. A staging area shall be incorporated into the access road during construction. At the end of the project, a 16-foot pipe gate shall be installed across the access road.

Upon completion of the access road, clearing and grubbing of the project site shall commence. Brush piles shall be located along the perimeter of the project as shown in the Construction Plan drawings, as directed by the Chief's representative and as described within the Detailed Specifications. Clearing and grubbing shall be completed prior to the beginning of earthwork operations within a particular area.

The sediment basin shall be constructed using a designed principal spillway (catch basin) riser and barrel to regulate the discharge. A rock lined spillway channel will also be constructed for the sediment basin. Both the principal spillway barrel and the rock lined spillway channel shall discharge into the existing roadside drainage ditch along East South Range Road. Rip rap erosion control shall be constructed at the intersection of the rock lined channel and the existing road ditch.

Dewatering of the impoundment shall be accomplished by pumping or other approved methods. The volume of impoundment water to be removed is approximately 18 million gallons. A proposed dewatering plan shall be submitted to the Chief's representative for approval prior to the removal of any impounded water as described within the Detailed Specifications. The impounded water shall be directed into the settlement basin or other approved settlement-settling structure within the work limits.

Once the impoundment is dewatered, and all debris and tires removed, backfilling of the highwall shall proceed utilizing the existing spoil. As work progresses along the western work limits of the project a french drain shall be installed as shown in the Construction Plan drawings and details. Both during and after construction, the proposed earthwork activities shall result in positive drainage being directed toward the newly constructed vegetated channel, which will provide overland flow to the sediment basin.

Construction will be substantially complete once the project site has been limed, fertilized, seeded and mulched. However, during the maintenance period of the project, the Contractor will be responsible for the removal of all temporary sediment control structures, mowing, and the application of maintenance fertilizer.

The scope of work for the project includes: mobilization, culvert installation, access road construction, installation of silt fence, clearing and grubbing, construction of sediment basin with principal spillway riser and barrel, construction of grass-lined emergency spillway, construction of temporary sediment control structure, construction of rock lined spillway channel, impoundment dewatering, debris and tire removal and disposal, construction of the french drain, earthwork/backfilling of highwall, construction of grass-lined drainage channel, installation of straw bale dikes, application of lime, standard site revegetation, pipe gate installation, removal of temporary sediment control structures, mowing and the application of maintenance fertilizer.

The Contractor shall furnish all labor, materials, and equipment necessary to perform the work shown on the Construction Plans and the requirements of these specifications.

Major work items include:

1. Mobilization.

2. Installation of approximately 30 linear feet of 15-inch diameter HDPE corrugated smooth inner surface dual wall culvert pipe for access road utilizing approximately 3 ton of No. 57 stone bedding.

3. Access road construction utilizing approximately 650 square yards of ODOT Type ‘D’ woven geotextile fabric, 32 tons of No. 2 stone and 142 tons of No. 4 stone.

4. Clearing and grubbing of approximately 29 acres.

5. Installation of approximately 3,930 linear feet of ODOT Type ‘C’ silt fence.

6. Impoundment dewatering of approximately 18,000,000 gallons.

7. Debris removal and disposal of approximately 20 tons.

8. Tire removal and disposal of approximately 2 tons.

9. Approximately 525,000 cubic yards of earthwork to backfill the highwall and construct stormwater runoff structures (i.e. settlement basin, vegetated channels, etc.).

10. Installation of approximately 103 linear feet of 12-inch diameter HDPE corrugated smooth inner surface dual wall pipe for the principal spillway barrel. Installation of the sediment basin principal spillway (catch basin) riser structure utilizing approximately 2 ton of No. 57 stone as compacted structural bedding. Compaction of soil backfill around principal spillway barrel and riser structure.

11. Construction of the temporary sediment control structure at the sediment basin riser. Installation of approximately 20 tons of No. 1 and No. 2 stone for sediment control around the sediment basin riser.

12. Construction of the rock lined channel utilizing approximately 48 tons of No. 57 stone bedding and 175 tons of Type ‘D’ rip rap.

13. Construction of the french drain utilizing approximately 850 square yards of ODOT Type ‘A’ non-woven geotextile fabric and 835 tons of No. 1 and No. 2 stone.

14. Installation of approximately 70 linear feet of straw bale dikes.

15. Application of approximately 165 tons of lime.

16. Revegetation of approximately 33 acres.

17. Top-dressing of access road utilizing approximately 11 tons of No. 4 stone.

18. Installation of pipe gate.

19. Mowing and maintenance fertilizer shall be performed on approximately 33 acres.

The following ODNR-DMRM staff, from the Salem Office, is involved with this project and may be contacted with any questions or concerns.

Project Officer:	Todd Gleydura	330-222-1527
Project Engineer:	Murat Tukel	330-222-1527
Design Engineer:	John T. Kulifay	330-222-1527