Columbus Phase 16 AML Project Summary

North Dakota Public Service Commission, Abandoned Mine Lands Division

December 2017

Project Definition

The project consisted of filling of three surface mine final pits with spoil materials on site.

Project Location

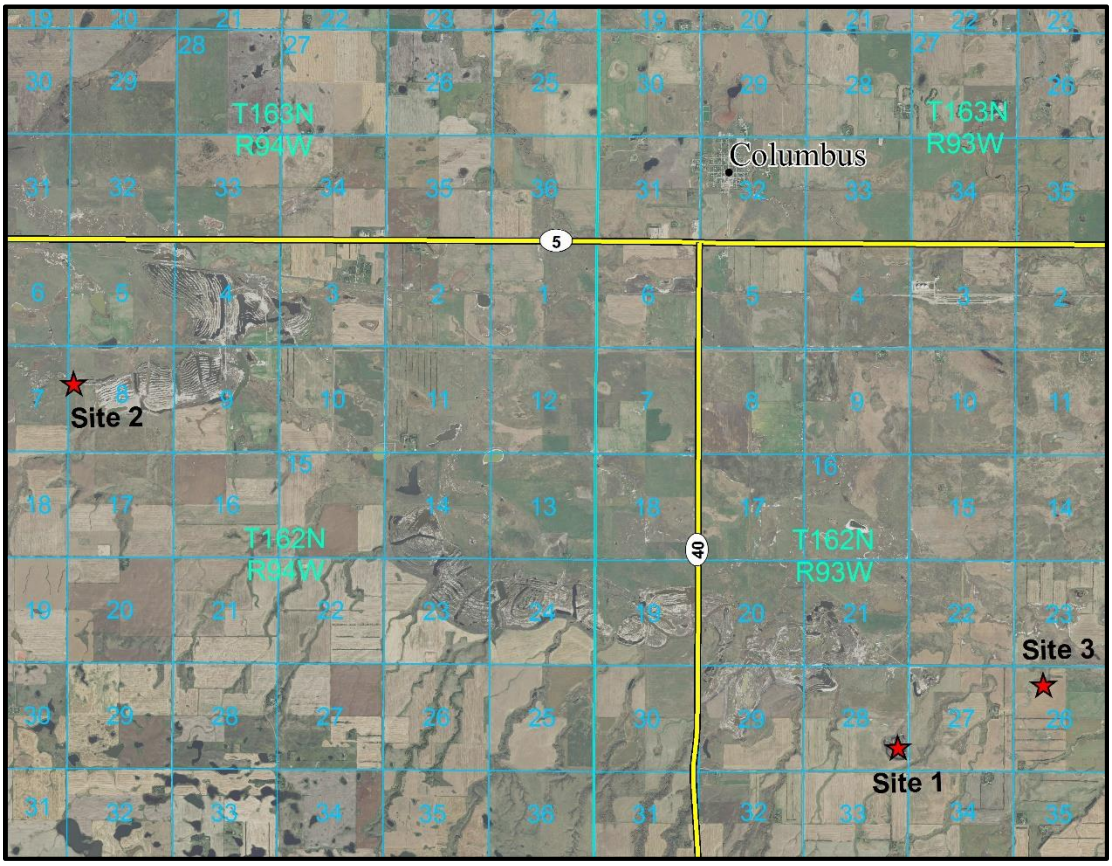
The project sites are located 5 miles south and 1 mile east, 2 miles south and 6 miles west, and 5 miles south and 3 miles east of Columbus, ND.

Contractor

The work on all sites was completed by Hanson's Excavating, Inc. of Des Lacs, ND.

Project Cost

The reclamation was completed at a final cost of $359,070.



Preconstruction Photos

Site 1

Site 2

Site 3

North Dakota Public Service Commission and Abandoned Mine Lands Division

The Public Service Commission administers the Abandoned Mine Lands (AML) Program on behalf of the State of North Dakota. Our program began when the North Dakota Legislature approved an Abandoned Mine Lands Program in 1981. North Dakota currently has records for 1,700 abandoned coal mines which are generally located in the western half of the state. Of these, North Dakota has records of 580 final pit highwalls created by surface mining. These walls are generally very steep, and range in height throughout the state from 15 to 70 feet. The AML program is charged with eliminating existing and potential public hazards resulting from abandoned surface and underground coal mines.

The Surface Mining Control and Reclamation Act (SMCRA), passed in 1977, set up a federal fund with fees collected on active coal mines for the reclamation of abandoned mines. The rate of fee on the active coal mines is 8¢ per ton of lignite. Of the national share, North Dakota currently receives approximately $3 million per year through federal grants. Federal fee collection will be continued through 2021 unless the program is reauthorized by the United States Congress.

The Columbus project series began in 1988. In 16 phases of this project over the past 30 years, 57,000 feet of dangerous highwalls have been reclaimed at a cost of $7.9 million.

Project Summary

The Columbus Phase 16 AML site is located approximately six miles south of Columbus, North Dakota. The project includes three individual sites. Site 1 is located in Section 28, T162N, R93W, Site 2 is located in Section 8, T162N, R94W, Site 3 is located in Section 26, T162N, R93W. All three sites are located in Burke County. This project eliminated approximately 5,000 feet of dangerous highwalls on a total of 45 acres.

The Invitation for Bids was posted on North Dakota State Procurement Online on March 7, 2017. A mandatory on site meeting for all contractors to attend was held on April 4, 2017. The engineer's estimate for this project was $410,800. Eight bids were received, ranging from $338,105 to $441,950. The lowest bid received was submitted by Hanson's Excavating, Inc. of Des Lacs, North Dakota. A Notice of Intent to Award was published by the North Dakota Public Service Commission on April 19, 2017, and a contract with Hanson's Excavating, Inc. was executed on May 31, 2017. The contract allowed 90 consecutive days to complete construction, beginning June 19, 2017 and ending September 17, 2017. The contract expires on December 31, 2017.

Equipment used for the Columbus Phase 16 AML Project included 2 Caterpillar D6 bulldozers, 2 Caterpillar 627 scrapers, a Komatsu 155AX bulldozer, a John Deere 2106 Excavator, and a John Deere 872D motor grader.

Construction began on June 19, 2017 with the installation of silt fence on all sites and the beginning on topsoil salvage of Site 1. The crew then worked on topsoil removal, the discharge of water on site, and then general earthwork to fill the final pit. The pump began to run on June 27. The water was completely discharged and the pump was moved off site on August 30. All work on site was completed on October 22. This included reaching the approved subgrade, topsoil respread, and fertilizing, seeding, and mulching.

Work on Site 2 began on August 14. On August 22, Site 2 was requested to be approved for topsoil respread. Upon inspection, it was determined that there was inert waste to be buried and the construction area needed to be extended to reclaim the entire highwall. Final inspection was conducted and approval was given on September 5.

Work began on Site 3 on September 6. During the month of September, the sites received a large amount of rain. Because of this, all work was shut down from September 20-22. Work resumed on September 25 at Site 3. Site 3 was completed and grade was approved on October 4.

Site 3 owner Delwin Bonsness asked if work could be conducted on an additional area on his property. This addition work was authorized by a contract change order. The work began by moving some junk vehicles offsite, stripping the topsoil and backsloping the highwall. All earthwork was completed on October 5, and the site was fertilized, seeded, and mulched October 20-22.

The final survey was conducted on all 3 sites on October 23 and 24. The final inspection of all sites was completed on October 31.

The final contract cost of the project was $359,070, which was $20,965 or 6 percent more than the original contract amount. The extra cost for the project was mostly due to the additional work area. The contract was closed on December 20, 2017.

The following photos show all three sites during the reclamation process.

Photos

Site 1 Topsoil Salvage

Site 3 Topsoil Salvage

Site 1 During Construction

Site 2 During Construction

Site 1 Final Grade

Site 2 Final Grade

Site 3 Final Grade