Pinnacle Engineering

EAW—Ronneby, Minnesota

Construction of a Granite Quarry

Nonmetallic Mineral/Aggregate Mining Company

Project Timeframe: August 2002—June 2006

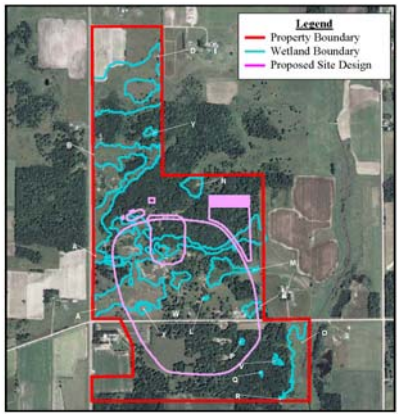
Project Description: Pinnacle was retained by an aggregate mining company to complete an Environmental Assessment worksheet (EAW) for the construction of a granite quarry located within Granite Ledge Township in Benton County, MN. The proposed quarry footprint will encompass approximately 135 acres of a 380-acre site. The quarry's current and recent land uses include agriculture fields, pasture, forests, and wetlands. A Wetland Delineation completed in 2000 identified nineteen separate wetland areas located throughout the site. When completed, the site will include a commercial and industrial process areas, office space, maintenance facility, product stockpiles, water retention basins, a gravel washing area, and extraction quarry. During operation, the site activities include excavation, blasting, crushing, screening, washing, stockpiling, hauling, and sale of product.

Work Scope: Pinnacle's scope of work for this project was the preparation of the EAW which included information compilation, evaluation, analysis, preparation of the EAW document, submittal of the EAW for public review and comment; meeting with public and/or government agencies; addressing comments; modification of all documentation to final form, and the distribution of final EAW documents. In addition, Pinnacle responded to governmental and private parties comments, alleviating Benton County concerns and assuring a negative decision on additional Environmental Impact Statement action.

Project Summary: In preparation of the Ronneby Quarry EAW, Pinnacle was instrumental in providing the client with a threatened and endangered species survey, a noise level analysis, a historical survey, an archeological survey, pavement analysis, and traffic survey. Through a Minnesota Department of Natural Resources (DNR)-Natural Heritage database search, the DNR determined that the site potentially contained threatened species and natural communities. Therefore, Pinnacle conducted a threatened and endangered species survey to identify, classify, and map DNR identified species and natural communities. Pinnacle provided an analysis of the County Road 6 pavement to determine if the additional traffic met the pavement requirements of Benton County. Pinnacle completed a Hydrogeologic study specific to the project including the research and compilation of records of water supply wells located within one mile of the proposed mine area to determine the likelihood of impact to the drinking water aquifer in the vicinity of the project site. Pinnacle also assisted the client's staff in incorporating this data into their Geographic Information Systems (GIS) data base for presentation at project meetings. The project proposes impacting 35 acres of wetlands due to resource extraction activities. A compensatory wetland replacement plan was proposed to comply with no net loss of wetlands in Minnesota. Pinnacle also developed a mitigation plan acceptable to the client and the regulators.

The following Government entities were consulted in securing various permits during the course of the project: *Benton County, U.S. Army Corps of Engineers, MN DNR, MN Ag, MPCA, EPA, Benton County, MnDOT, BWSR, Benton County SWCD, Granite Ledge Township*

Pinnacle obtained the following required permits: *Wetland Replacement Plan, Wetland Impact Permit, Water Appropriation Permit, Storm Water Pollution Prevention Plan, Work within the ROW Permit, Non-Metallic Mining Air Permit, NPDES Permit, Aboveground Storage Tank Notification, SPCC Plan, Conditional Use Permit, Operating Permit, and a Use of Explosives Permit*



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