Milan Army Ammunition Plant Bank Stabilization Milan, Tennessee



PROJECT EXPERIENCE

Fisher Arnold was contracted to design and develop erosion protection and bank stabilization plans for several sites on the 22,357 acre plant site. The three sites involved in this worked were located at three bridge locations crossing a major creek that traversed the entire plant site. Each location was experiencing major erosion failures of the bank that was causing the bridge abutments and piers to be undermined. We developed several design alternatives and opinion of probable cost for the Plant Manager to choose from, in order to protect these sites from further degradation. After a design was selected, in partnership with our subconsultants, we began the process of developing final design documents for a driven sheet pile wall and concrete slope paving to protect the banks. Due to the stream, this project was designed in a way that would allow the contractor to complete all of his work from the "top-down" and not alter or enter the natural creek.

Our team also worked with the Tennessee Department of Environment and Conservation (TDEC) to ensure that all state and federal regulations were followed for the project. As a part of this work, we performed the following design elements: survey, preliminary design alternatives, opinion of probable cost, bridge protection plans, sheet pile retaining wall design, concrete slope paving design, rip-rap slope paving design, hydraulic analysis (pre and post), Aquatic Resource Alteration Permit (ARAP) permitting, pre-bid services, and final contractor selection.

