

CASE STUDY

WHITE RIVER

Knox County, Indiana
Submar Project 12650

SUBMAR®



BEFORE



AFTER

EXISTING CONDITIONS

A 30-inch diameter natural gas transmission pipeline crosses at the confluence of the White River and the East Fork of the White River. The White River had laterally migrated and the right, descending, high bank eroded to expose the pipeline. The 30-inch pipeline span grew to a length of over 80' and extended into the main river channel. Large trees and debris were common in the river channel due to upstream bank erosion. These trees and debris threatened to strike and entangling on the pipeline.

SOLUTION

A pipeline support was installed to stabilize the pipeline span prior to backfill operations. The backfilled area that extended into the main river channel was armored with a system of Submar articulating, concrete, revetment mats. A longitudinal peaked stone toe protection (LPSTP) system was installed from a stable point upriver along the right toe for an approximate length of 1,500 feet. LPSTP is used to protect the toe of the banks from erosive scour, arresting future lateral migration.

Multiple redirective structures, bendway weirs, were installed along the right, toe, extending from the LPSTP. The bendway weirs direct the flow and maintain the thalweg location away from the right bank. The right bank was then graded and live stakes were installed along with jute netting.

THE Exposed Pipeline Remediation Experts

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