

Subsurface Constructors

Deep Foundation

Lenzburg bridge strengthening



Bridge strengthening with micropiles

When Peabody Energy needed to bring transformers to the Prairie State Energy Campus construction site, they faced a major obstacle. The transformers would have to cross over the Lenzburg Road East Bridge, but the bridge couldn't sustain the 1 million pound loads that would be applied during these special heavy load transports.

To solve this problem, Subsurface Constructors designed and installed 30 micropiles as part of the county bridge retrofit. The micropiles ranged in capacity from 35 tons to 60 tons with required rock embedments of 2 ft. and 7 ft., respectively. Due to restricted access and extremely sloppy conditions, Subsurface used a low-overhead Klemm rig to install the pile. Load tests were successfully performed on each pile type.

Project details:

Owner: Edwards Moving & Rigging

Geotechnical Engineer: Kaskaskia Engineering Group

General Contractor: Keeley & Sons

Structural Engineer: Kaskaskia Engineering Group

Services Provided: Deep Foundation, Micropile

Year: 2010

Location: Lenzburg, Illinois