

## PROJECT DESCRIPTION

### *Bullis Road Bridge Replacement*

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**Location:**  
Marilla, New York

**Client:**  
Watts Engineers for  
Erie County DPW

**Client Contact:**  
Mr. Phillip M. Galbo,  
P.E.  
(716) 836-1540

#### ***Test Boring in Progress***

McMahon & Mann Consulting Engineers, P.C. (MMCE) served as the geotechnical engineering consultant for the design and construction of the Bullis Road Bridge over Little Buffalo Creek Replacement project in Marilla, New York. The single span structure had deteriorated over time and was scheduled for replacement. The new bridge was designed as a single span with integral abutments.

MMCE explored the subsurface conditions with test borings to measure the elevation of competent rock and provided recommendations for designing the replacement bridge. We recommended using integral abutments supported by H-piles driven to rock. Integral abutment design recommendations followed guidelines published by the New York State Department of Transportation.

During construction, we reviewed the contractor's proposed pile driving equipment and used the Wave Equation Analysis of Piles program to estimate the suitability of the proposed equipment and develop preliminary driving criteria. We monitored the pile installation on both abutments and measured the capacity of selected piles using a Pile Driving Analyzer, which also confirmed the pile driving criteria being used.