The New Tappan Zee Bridge
Tarrytown to South Nyack, NY

Construction of the new Tappan Zee Bridge in the background

Originally built in 1955, the Tappan Zee Bridge was maintaining a daily traffic rate of 40,000+ vehicles per day upon its completion, which greatly increased with years to come. In 2010, the bridge had a daily traffic rate of 135,000 vehicles per day, reducing the life-span of the original design. Spanning over 3 miles at the Hudson River’s second widest point, the previous cantilever style bridge containing several lanes, is now being replaced by a dual-span cable-stayed twin bridge containing eight lanes. This redesign also required new foundations to be installed for which GRL Engineers services provided assistance and at a cost of $3.9 Billion, it was one of the largest projects in North America.

GRL’s services for Tappan Zee Constructors included completing a multitude of Wave Equation Analyses for hammer selection, Dynamic Pile Testing (PDA) on temporary and permanent 36 to 48-inch diameter open end pipe piles, performing Crosshole Sonic Logging (CSL) and Thermal Integrity Profiling (TIP) on 48 to 96-inch diameter drilled shafts. GRL also provided expert services on data interpretation and reviewing project specifications. Additionally, GRL Engineers provided driving criteria based on the Wave Equation Analyses, dynamic testing results and field observations.

TIP Analysis and reporting

The newly constructed West-bound lanes of the new Tappan Zee Bridge were opened in the fall of 2017, with the East-bound lanes planned to open in 2018.

For additional information, please contact:
info@grlengineers.com

www.GRLengineers.com