



## **NYSDOT VAN WYCK EXPRESSWAY EXPANSION - CONTRACT 2**

### **DESIGN-BUILD WITH HALMAR INTERNATIONAL ENGINEERING SUPPORT SERVICES**

NYSDOT's Van Wyck Expressway Contract 2 project prepares adjacent structures and utilities to accommodate a future widening to the Van Wyck Expressway (VWE). The project replaces existing retaining walls which frame the VWE, replaces and retrofits existing LIRR bridges and a road bridge which cross the VWE, and relocates and replaces utilities on both the VWE and its service roads. GMA Engineering provided Engineering Support Services to the Design-Builder for the project's Retaining Walls, and for the LIRR bridges' steel walkways and utility supports. GMA Engineering also provided Engineering Services During Construction.

The retaining walls were designed as cast-in-place cantilevered structures, with heights varying from 17' to 25' above the tops of footings. The retaining walls provide elevation separation between the VWE and its service roads. The structures have stepped continuous footings and were designed and detailed in accordance with NYSDOT and AASHTO requirements, including Strength, Service, Seismic, and Vehicular Collision loading combinations.

The steel walkways provide walking grating surfaces, continuously supported utility troughs beneath the walkways and utility trees along the fascia to accommodate future LIRR utility installations. The framing of the walkways are cantilevered from the fascia girders of the LIRR bridges. The design was performed in accordance with AREMA and to meet NYSDOT and LIRR project requirements.

Phone: (917) 765-8187  
Email: [info@gma-eng.com](mailto:info@gma-eng.com)  
Website: [www.gma-eng.com](http://www.gma-eng.com)

