



## **Henry Hudson Bridge**

### **Owner**

MTA-Bridges & Tunnels

### **Architect**

Jacobs Engineering

### **General Contractor**

Judlau Contracting

Judlau Contracting, Inc. is the General Contractor for this \$ 86 million project, which involved a partial reconstruction of the Henry Hudson Bridge over the Harlem River. The bridge is essentially defined by two distinct structures: a 1,530 ft. long main span steel structure and a 270 ft. long North Approach concrete structure. The overall scope of the project involved replacing the entire lower level four lane existing bridge deck with new prefabricated steel grid deck panels, and also making the necessary structural steel repairs to the steel arch superstructure.

Judlau replaced the entire lower level of the bridge deck. The existing bridge deck was a non-composite reinforced concrete deck. Removal was accomplished by panelizing the existing deck into 5'x10' panels, which were picked and removed from the site. The new bridge deck was installed using 10'x20' prefabricated steel grid deck panels with cast-in-place concrete infill and a 2" overfill riding surface. Approximately 77,000 sf of prefabricated bridge deck panels were installed. Judlau installed a 100,000 sf work platform / shield under the entire lower level to protect the following areas under this 1,500+ foot long bridge: (a) Two parks on the Manhattan and Bronx sides of the bridge; (b) Metro North Hudson Line; and (c) Palisades Avenue. Judlau replaced in excess of 430 tons of structural steel from the existing steel arch superstructure. The repairs included top and bottom flange repairs to existing stringers, fascia girders, and floor beams; stringer repair and / or replacement; seismic retrofits; stringer to floor beam reinforcements; tower steel truss member replacement; and new maintenance and inspection platform construction.