

Biennial Inspection of East River Bridges New York, NY

Project Description:

Since 1999 to present, AI Engineers, Inc., as a subconsultant to other firms, has provided 1-2 team leaders and assistant team leaders to perform biennial inspection of some of New York City's world famous and historical bridges that span the East River. These are all very complex bridges and the list includes:

- Manhattan Bridge, a suspension bridge (2000, 2004, 2006). This bridge carries 6 roadways and two tracks across the East River with a main span of 147 ft. The four main cables span a total length of 3,994 ft. each. Performed inspection on main spans, anchorage towers, cable anchorages, eye bars, and approach span. Framing for the rail track was also inspected.
- Williamsburg Bridge, a suspension bridge with a 1,600 ft. main span (2002, 2004, 2006). This cable suspended bridge has a main span of 1,600 ft and is flanked by 2 side spans, including the approach span on the Brooklyn and Manhattan sides having a total structure length of 7,308 ft. AI Engineers, Inc. teams inspected the main spans, cable anchorages spans and most of approach spans for the bridge. Including bearing towers and trusses for the main and side spans.
- Brooklyn Bridge, a two level suspension bridge with a 1,595 ft, main span (2002-2006). The main span is 1,595 ft long. The length of each of the four main cables is 3,578 ft. The bridge carries 4 lanes of traffic. The work performed included



Salient Features

- Perform NBIS Inspection
- 135 ft reach man lifts
- Free Climbing and Rigging
- BIPPI Inspection Reports
- Structure Inventory and Appraisal

Biennial Inspection of East River Bridges (Continued)

New York, NY

Project Description:

inspection of main and approach spans, main cables, cable suspenders and framing, anchorages, top of deck and a pedestrian walkway.

- Queensboro Bridge, a multi-level truss over a mile long (2004). This is a multi-lane, multi-level structure over one mile long with over 100,000 ADT. New York State Department of Transportation Rating System using computer software BIPPI.

The inspection results are reported in NYSDOT's BIPPI database system.

