

# Reconstruction of East 78th Street Bridge

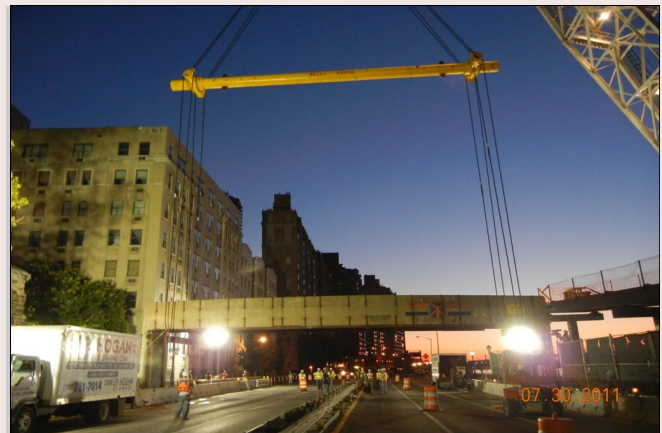
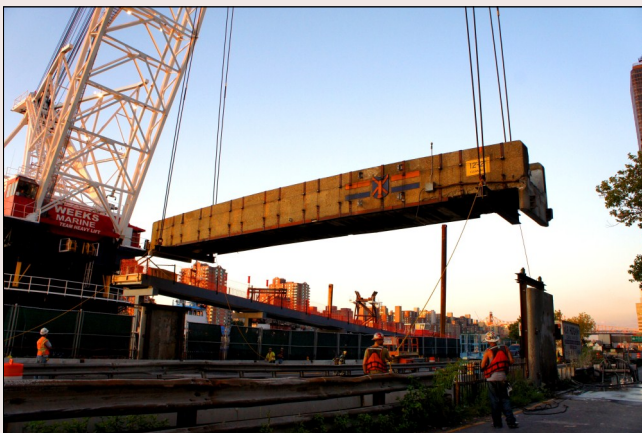
## Demolishing the pedestrian bridge

### Highlights of work:

- This entire project was completed in a five hour window of time
- Required shutting down FDR Drive to traffic
- The scale of the work required the use of a 500-ton crane
- In five hours, the older bridge was demolished and removed
- The next phase of this project will include replacing the pedestrian bridge with a newly fabricated bridge

On Sunday, July 31, 2011 at 2AM, Gandhi Engineering played a significant role in removing the pedestrian bridge on East 78th Street in Manhattan. This was part of an ongoing contract with the New York City Department of Transportation. The scope of this contract included total design and construction support services for five bridge projects situated around Manhattan.

This portion of the contract included demolishing the pedestrian bridge over FDR Drive on East 78th Street in Manhattan. This pedestrian bridge —



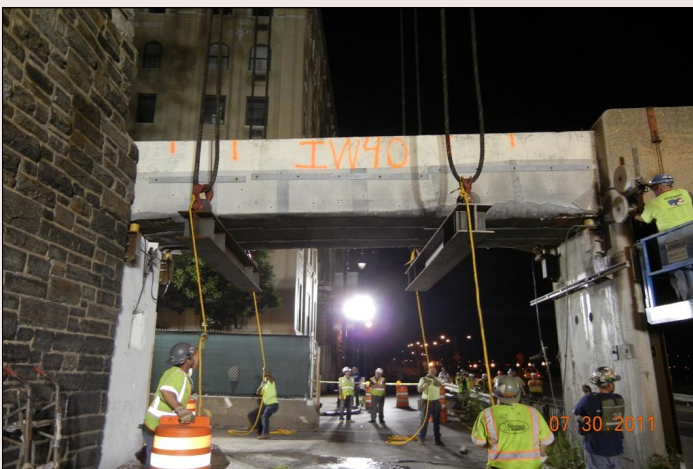
*Removing the main span of the bridge.*



*Cutting the pier and preparing to remove the main span.*



*Removing the side span of the bridge.*



situated over a steady stream of traffic below — required FDR Drive to be closed for five hours between 2AM and 7AM on Sunday morning. During this window of time, the previous pedestrian bridge and the piers supporting the structure were demolished and moved on to a barge on the East River.

Due to only having five hours to execute and complete this phase of the project, extensive planning was necessary to successfully demolish the bridge in very little time. To increase efficiency, a large portion of the work was done in advance of the demolition. Temporary support columns, brackets, and hydraulic jacks were all installed prior to beginning the work on July 31st. In addition, a reinforced concrete superstructure and pier walls were saw-cut to prepare for removing the bridge.

One of the biggest challenges of this project was removing large sections of the bridge. Both the service road (side) span and the main span of the bridge were removed using a 500 ton crane from Weeks Marine. After removing these bridge components, they were placed on a barge on the East River for

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easy disposal. Beyond removing sections of the bridge, the scope of the work also included disposing of three of the bridge piers which supported the structure. The first pier was detached and disposed of using a hoe ram. Both the second and the third piers were saw-cut and placed on the barge using the crane.

To complete this work, it was necessary to shut down a large portion of the FDR Drive running along the East Side of Manhattan.

North-bound traffic between East 61st

Street and East 96th Street was rerouted through Manhattan to allow the work to progress. South-bound traffic on the FDR was also diverted with cars driving south between 116th Street and 74th Street redirected through Manhattan.



*Preparing to remove the side span of the bridge.*

**Gandhi**

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