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## DeFoe Takes Charge on Port Authority Job



DeFoe crews ready to pour the concrete deck.

By Dave Chartock

CEG CORRESPONDENT

DeFoe Corp. is quietly making good progress on a \$46-million bus ramps and triple bridges rehabilitation project for the Port Authority of New York and New Jersey.

Launched March 7, 2002, the project, under the auspices of Mount Vernon, NY-based general contractor, DeFoe Corp., included the removal of an existing concrete bridge deck and replacing it with precast concrete slabs in 11 spans, according to DeFoe's Project Manager, Dave Amato.

This work had to be done at night and on weekends to maintain access to Manhattan's Port Authority Bus Terminal," he explained.

He said the project's scope of work also included the removal of asbestos insulation and replacing it with new, non-asbestos insulation; removal of lead-based paint and then repainting the existing structure; and removal and replacement of electrical conduits, wiring and lighting systems.

Project plans also called for providing architectural enhancements to the bridges over Ninth Avenue on Manhattan's West Side and for providing architectural enhancements for the Port Authority Bus Terminal's facade on Ninth Avenue.

The project team faced numerous challenges during the course of the project. Among them was compliance with strict noise restrictions due to the project's proximity to residential apartment buildings.

"This was accomplished by enveloping the structure with noise attenuating fabric, restructuring the work hours, the size, type and quantity of equipment and manpower used



Taking a moment for a photo are Kevin Hayden (L), Defoe project superintendent, and Defoe Corp. Project Manager Dave Amato.

in proximity to these locations," Amato said.

"In order for the ramps to remain open for commuter traffic, attention to every detail had to be made," he added. "This required an extensive survey of the existing field conditions and endless hours interpreting the field survey and detailing the precast concrete slabs so that they would fit when they were lifted into position. The precast concrete slabs had to be detailed to fit on the existing steel. They also had to match the super elevation of the ramps as well as the connections to the snow melting system. To accomplish this, DeFoe project team members worked closely with the project's design engineer, Hardesty and Hanover of Manhattan and with the project's precast supplier, Jersey Precast Corp.

Amato said scheduling also proved



DeFoe workers use one of two leased Liebberr cranes on the project.

challenging. It required the coordination of up to 100 men starting their work shifts at different times on week-

Amato also noted that the erection of the precast concrete slabs in Manhattan created many problems, which were solved using a 500-ton (454 t) Liebherr TM 1400 crane and a 600-ton (544 t) Liebherr TM 1500 crane with superlift capability. These cranes were leased from Bay Crane of Long Island City, NY.

In addition to the leased cranes, additional heavy construction equipment used on the project, all of which is owned by DeFoe Corp., included Ingersoll Rand 1600 cfm compressors, Grove RT 735 rough-terrain crane, Caterpillar 936 payloaders and Caterpillar 214B excavators.

The project also called for the embedding of stainless steel snow melting coils in the precast concrete.

"These were fabricated under the strictest of tolerances by Jersey Precast Corp. with the quality assurance provided by project team members from the Port Authority of New York and New Jersey," said Amato.

The project employed the use of design-build for required architectural modifications because "architectural details on the Ninth Avenue facade of the Port Authority Bus Terminal building were constantly changing," said Amato

The project is scheduled to be completed June 30, 2006. CEG



A piece of precast concrete is lowered into place.



Workers prep one of 11 concrete slab replacements.



A concrete deck piece is lifted for placement.



Police keep watch in a roped-off area as DeFoe project team members work on the Port Authority of New York and New Jersey's \$46-million bus ramps and three bridges rehabilitation project on Manhattan's