Michielli + Wyetzner Architects to begin $4 million cable facade renovation

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A nearly 40-year-old municipal parking garage is getting a cable facade as part of a $4 million renovation of the structure. Winner of a 2011 design award from the NYC Design Commission, the five-story, concrete Delancey and Essex Municipal Parking Garage is being completely rehabilitated in a project for the NYC Department of Transportation (DOT). The design, by Michielli + Wyetzner Architects, is part of Mayor Bloomberg's Design + Construction Excellence Program which has been led by the New York City Department of Design and Construction since 2004.

The three-dimensional open facade consists of two layers of 1 1/4" diameter cables, material more commonly seen in DOT road barriers, extended in a continuous weave-like pattern from the second to fifth floors. The front layer folds in and out from the flat-planed one behind, creating large-scale moirÃ© patterns that move across the building as the viewer walks or drives up the street. The cable faÃ§ade replaces a grill-like concrete covering that had begun to deteriorate.

"Unlike most building enclosures, parking garages are often naturally ventilated and open to the elements and that allowed for a wide range of possibilities for the facade," said Frank Michielli, AIA, a firm principal. "We combined that need for openness with the Lower East Side's history as the roots of the garment industry and a common road barrier material to develop a visually dynamic solution." In addition to creating patterns, the two diagonal layers of vertical cables angled in slightly different directions also suggests the threads on a loom. The folds extend as much as two feet in front of the building to add to the richness of the patterns and a three dimensional quality that relates to the historic neighboring structures.

The cable used for the faÃ§ade will be thicker than that used by the DOT, lighter in weight and of a different composition, with a composite fiberglass core and a woven stainless steel jacket covering it. Each cable will be fastened to stainless steel end-fittings with integral turnbuckles for adjustability. The outer folds will be held in place by o-rings at the ends of galvanized steel "combs," attached to the floor slab at each level. The comb's horizontal rods extend outwards to fix the outer layer of cables at the correct distance from the faÃ§ade. Michielli and his firm partner Michael Wyetzner, AIA, conducted numerous studies to assure that the moirÃ© pattern would be continually dynamic and the shifting patterns can appear two or three dimensional with just a small change in the viewer's position. The changing patterns suggest the aerodynamic flow of moving cars.

The mid-block, concrete building fronts and has entrances on two streets and both will have cable facades. However the wider, more prominent Essex St. entrance will receive a 17-foot-tall DOT supergraphic using rubberized paint to create a sleeve on the cables. The first floor, which is currently occupied by the NYC Traffic Police, will be covered in black ceramic glass panels while building spandrels will be painted in dark gray. A continuous edge of decorative lighting will run between the second and roof levels at the southern end of the faÃ§ade. The lighting will graze the

cable screen and accentuate the geometry of the faÃ§ade.

Other repairs and upgrades include adding spaces for 22 bicycles, putting a new protective coating on the concrete floors and restriping them, making roof repairs and replacements, and upgrading the elevator.

Construction is expected to start in the beginning of 2012 and be completed by the end of the year.