

Project

We support cleaner air and less traffic with Bronx highway foundation design

Summary

- To improve access to Hunts Point Produce Market and ease pollution from truck traffic, NYSDOT planned to widen Interstate 278.
- Haley & Aldrich brought experience with urban subsurface explorations and a long history with NYSDOT.
- We designed a foundation that delivered stability in variable subsurface conditions while minimizing disruptions to locals.

Client challenge

The Hunts Point Produce Market estimates that it supplies 60 percent of New York City's fresh fruits and vegetables. This food hub draws nearly 80,000 vehicles to its South Bronx neighborhood every day — which means large trucks clogging small streets and polluting local air.

To provide better access to the market and ease impacts on the community, the New York State Department of Transportation (NYSDOT) planned to widen part of Interstate 278, locally known as the Bruckner Expressway, and add

new exit and entrance ramps. This plan was part of the second phase of a three-phase interchange realignment project.

As a crucial transportation corridor, the highway had to remain open during construction, as did local streets. Project teams had to work in busy city streets next to two railroad lines, avoiding services disruptions and coordinating with multiple agencies. And engineers had to contend with highly variable geologic conditions, from shallow rock to filled land liable to settlement.

A construction joint venture team convened to tackle the geotechnical challenges of this design-build project. The contracting and design team, along with Haley & Aldrich, won the contract through our no-frills approach to design and construction, which was also highly collaborative and adaptable enough to incorporate the joint venture's preferred construction methods.

Our approach

With a team that built careers on New York infrastructure projects, we also brought extensive experience performing subsurface explorations in city streets and a long history with NYSDOT. We developed the foundation design concept and shepherded it through execution and also conducted subsurface explorations and monitored construction.

Our design incorporated a range of foundation solutions to address the varied subsurface, including drilled rock-socketed micro piles, driven end-bearing piles on rock, and driven friction piles where firm bedrock was very deep.

Value delivered

- Delivered the stability the project required while minimizing disruptions to locals
- Supported improved highway access, as well as two new parks and safer pedestrian routes
- Safeguarded transportation infrastructure

> *"The Hunts Point Access Improvement Project is a game changer for the South Bronx […] the people of the South Bronx will see fewer trucks on local roads and less congestion, which will help improve air quality, and they will also have wonderful new recreational opportunities."*
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> NYSDOT Commissioner Marie Therese Dominguez, quoted in a 2023 *New York YIMBY* article

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