

Design of Facility Improvements for Metro-North New Haven Rail Yard New Haven, CT

Project Description:

Location

New Haven, CT

Owner

ConnDOT

Duration

2005 – Present

Prime/Sub

Sub

Construction Cost

\$800 million

AI Engineers, Inc. is a primary subconsultant to Parsons Brinckerhoff and is providing civil, structural, mechanical, electrical, plumbing, fire protection and utility design services for this \$1.2 billion dollar project. The work includes thousands of feet of new track for storage and to move trains on and over the mainline and into the maintenance yard. A total of eight new buildings will be constructed and three buildings altered. An entire new roadway system, access system and security system will also be installed. As part of this major project, AI Engineers, working with various architects, provided mechanical, electrical, plumbing, fire protection and structural design services for three major building projects. Our design services included schematic, design development and final design documents and specifications, construction documents, cost estimates and contract administration services including submittal review. Some of the facility design projects include:

- **Electrical Multiple Unit Car Repair Shop**
- **Stores Building Improvements**
- **Rail Car Wash Facility**

In addition, AI has provided civil, electrical and mechanical utility design services including:

- Expand the electrical facility distribution for the entire yard at 13.8KV volts (except catenary traction power).
- Expand the existing water distribution system into a looped system by connecting to the water authority at three separate zones and add a separate looped fire main system.
- Expand the existing sanitary sewer system, including pump station relocation and the design of new pump stations, to support the project improvements.
- Expand the existing natural gas distribution system to all buildings.

Coordinate the relocation of a main overhead telephone and electric transmission line on railroad property.



Salient Features

- Sanitary Sewer, Drainage System & Water Main Design
- Utility Coordination
- Electrical Facility Distribution

