

Metro-North New Haven Rail Yard Improvements New Haven, CT

Project Description:

Location

New Haven, CT

Owner

ConnDOT

Duration

2005 - Present

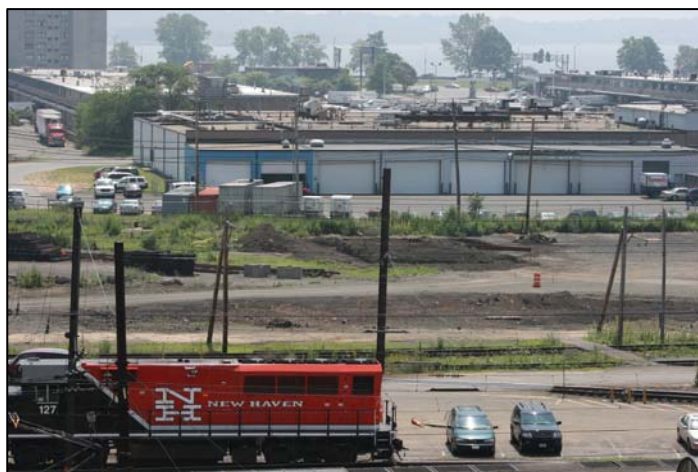
Construction Cost

\$800 million

AI Engineers is providing utility design for electrical, water, sewer and gas main distribution for the entire site of this \$800 million 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 maintainence yard. A total of eight new buildings will be constructed and three buildingd altered. An entire new roadway system, access and security systems are installed. AI coordinated the utility infrastructure with the new track and roadway system.

The utility design includes:

- Electrical facility distribution for the entire yard at 13.8kV with two loops (one loop for AC and one for DC) (except traction power – catenaries). Step-down transformers are provided for each building. Substation design is included for the additional power requirements.



Metro-North New Haven Rail Yard Improvements (Cont.)

New Haven, CT

Project Description:

- Design a new water distribution system that is looped by connecting to the water authority at three separate zones. Preserve as much of the existing system as possible. A separate fire main is also provided using a separate looped line. The water authority system is protected from contamination using double check valve back flow preventers. Water mains under railroad tracks will be sleeved.
- Modify and expand the existing sanitary sewer system including pump station relocation and new pump stations will be required. Force mains under railroad tracks will be sleeved.
- Modify and expand the existing gas mains as all existing and new buildings will use natural gas for heating. Gas mains under railroad tracks will be sleeved.
- Coordinate the relocation of a main overhead telephone and electric transmission line on railroad property.
- Establish the test pit locations, prepare a bid package for utility designating and locating program, obtain bids, oversee/inspect the program and provide field survey to acquire the data and tie into the project design survey.

AI provided the code analysis and the complete structural, mechanical, electrical, plumbing and fire protection for the proposed new Rail Car Wash Facility. For the Storage Building, AI provided code analysis and renovation design for structural, mechanical, electrical, plumbing and fire protection of these buildings.

We are also providing the schematic through final design, construction documents, specification, cost estimate and CPM construction schedule for the new building and to modify the two existing buildings to meet current codes and proposed use.
