

Long Island Railroad - East Side Access

New York, NY

Project Description

The East Side Access project is one of the largest infrastructure projects ever undertaken in New York City. The tunnel begins at Sunnyside Yard in Queens and heads west, below the East River and through the 63rd Street Tunnel. It then curves South under Park Avenue and concludes underneath Grand Central Terminal. Two parallel tunnels were bored along this eight mile subterranean trek. The new LIRR terminal is located 14 stories below the streets of New York City and connects to the existing Grand Central Terminal through a network of 22 elevators and 47 escalators. The new LIRR station includes two parallel caverns (East and West); each housing four tracks. The initial contract was completed by Dragados USA and included the initial excavation of the project which used TBMs as well as drilling and blasting. The second major contract (CM007) was won by Tutor Perini to complete the fit out of the project. This contract essentially turns the excavations into a three-level terminal with operational rail tunnels.

Owner

Metropolitan Transportation Authority (MTA)

Contractor

Tutor Perini Corporation (Contract CM007)

Designer

GEC (Parsons, STV, Parsons Brinckerhoff JV)

Our Role

McNary Bergeron was hired by Tutor Perini to perform a redesign of the Smoke Exhaust Plenum located at the top of the Terminal Caverns. The Exhaust Plenum is the main ventilation system in the caverns and is designed to mitigate smoke in the event of a fire. This value engineering redesign helped expedite the construction schedule of the plenum and lowered construction costs. The scope included design of the plenum components as well as erection procedures and lifting/handling frames for the assembled precast members.

Total Contract Value

\$10.2 billion

Timeline

Total Project 2007 - 2023
CM007 Contract 2015 - 2023

Construction Method and Specifications

Modularized precast concrete components set with high capacity forklifts and specialized handling frames.

