

SECOND AVENUE SUBWAY

PROJECT NAME:
Second Avenue Subway

LOCATION:
New York City, N.Y.

AGENCY/OWNER:
Metropolitan Transportation Authority

COMPLETION:
Jan. 1, 2017 (first phase)

WEBSITE:
web.mta.info/capital/sas_alt.html



Photo: web.mta.info/capital/sas_alt.html

TWO NEW SUBWAY TUNNELS

were dug 33 city blocks long, including space to accommodate the new stations and miles of water, sewer, electrical, and utility lines, and traffic signal wiring connections. The new 86th Street Station alone called for the excavation of 450,000 tons of rock underneath a densely populated neighborhood. The tunnel boring process had to accommodate the remove of hard rock and messier material filled with water and soil. The team used a freezing process to make the former handle more like the later.

PROJECT FEATURES:

- NYC's biggest subway expansion in 50 years.
- Nearly 2-mile segment first phase adds four new stations.
- When complete, the 8.5-mile line will provide service on Manhattan's East Side, from 125th Street in Harlem to Hanover Square in Lower Manhattan
- Easy transfers to other subway lines and commuter rail lines.

IRONTON-RUSSELL CABLE-STAYED BRIDGE

PROJECT NAME:
Ironton-Russell Cable-Stayed Bridge

LOCATION:
Across the Ohio River between Ironton, Ohio & Russell, Ky.

AGENCY/OWNER:
Ohio Department of Transportation

COMPLETION:
2016

WEBSITE:
www.dot.state.oh.us



Photo: Courtesy of Brayman Construction Corporation

THE DESIGN TEAM

introduced modifications to reduce overall costs. These included casting the back spans in place using specially designed falsework and the first known use in the USA of precast stay anchor blocks. Constructing the back spans on falsework simplified construction and minimized the amount and size of equipment required for the cable-stayed portion of the project.

PROJECT FEATURES:

- Falsework was designed as a modular system, allowing it to be used for both the Kentucky and Ohio approaches and reducing the number of travelers from two to one.
- First use of a precast stay anchor block system in the United States, which simplified and accelerated the construction schedule.

LANDSIDE ACCESS MODERNIZATION PROGRAM

PROJECT NAME:
Landside Access Modernization Program (LAMP)

LOCATION:
Los Angeles International Airport (LAX)

AGENCY/OWNER:
Los Angeles World Airports

COMPLETION:
Anticipated 2023

WEBSITE:
www.connectinglax.com



Photo: www.connectinglax.com

THE \$5 BILLION LAMP PROJECT

began in 2016 with environmental reviews and other public hearings. Construction could start by the end of 2017. The centerpiece of the project is the 2.25-mile, above-ground Automated People Mover system with six stations. LAX passengers will connect with airline terminals, centralized rental car facility, pickup and drop-off locations, parking, and the regional transit system.

PROJECT FEATURES:

- Project will increase transportation options to, from and within LAX.
- Includes roadway improvements with dedicated areas for passenger pick-up/drop-off, parking facilities with direct access to central terminal, car rentals in centralized location near the 405 freeway, and connections to the regional rail and bus transit system.

I-4/SELMON EXPRESSWAY CONNECTOR

PROJECT NAME:
I-4/Selmon Expressway Connector

LOCATION:
Tampa, Fla.

AGENCY/OWNER:
Florida Turnpike Authority

COMPLETION:
2014

WEBSITE:
www.mytbi.com/



Photo: www.mytbi.com

A PAIR OF MOTORIZED

erectors progressively placed segments in a balanced cantilever from the top of the bridge. This accelerated bridge construction (ABC) methodology allowed the team to efficiently erect segments over slopes, mechanically stabilizing earth walls, railroads, and roadways, which reduced impacts to the traveling public. The Connector is an all-electronic, no-cash toll road, so vehicles must use the Florida SunPass or be billed at a higher rate with Toll-By-Plate.

PROJECT FEATURES:

- Provides an elevated toll connection between Interstate 4 and the Lee Roy Selmon Expressway.
- Dedicated truck lanes for last-mile access to and from the Port of Tampa
- Removed heavy truck traffic from historic Ybor City neighborhood.