

East Side Access Project



The East Side Access program intends to improve access to Manhattan’s East Side for commuters in the Long Island Transportation Corridor, which includes Manhattan, Brooklyn, Queens, Nassau, and Suffolk counties. The project makes use of the lower level of the existing 63rd Street tunnel under the East River connecting the LIRR to a “terminal within a terminal” at Grand Central. It will have connections to LIRR’s Main Line and Port Washington branch and will include a new commuter rail station in Sunnyside (Queens). Garg was responsible for systems engineering services for LIRR’s track, DC traction power system including substations, and signal and communications systems from Sunnyside Yard (Queens) to Grand Central Terminal (Manhattan) and AC traction and catenary system design modifications to the AMTRAK system in Sunnyside Yard and Harold Interlockings.



Garg led Task Order services for the design of temporary structural supports to underpin 16 columns of an existing 22 story building at 415 Madison Avenue, serving as an entrance structure for the new subway. The underpinning included jacking on structural steel framing, supported on concrete pile caps, supported on composite minipiles, and drilled into bedrock with rock sockets. Garg was also entrusted with construction support services including the review of shop drawings and submittals for structural work including, reinforcing steel for concrete and CMU structures, as well as other structural work elements for the East Side Access Package CM014B – GCT Concourse and Facilities Fit-Out.

The major project tasks include the following:

- System-wide planning and Final design of LIRR’s track, power, signal, and communication.
- Improvements to LIRR’s Harold Interlocking and design of new interlocking facilities.
- Design of a new LIRR station within Grand Central Terminal.
- Design of support facilities at Sunnyside Yard.
- Modifications to the MTA NYCT Lexington Avenue Station.
- AC traction and catenary systems design modifications for the AMTRAK system.
- Operational improvements.
- On-going Construction Support Services for Traction Substations, and other System Elements.
- Condition inspection of structural members on the platforms, mezzanines, and stairs.
- Report preparation for each station.
- Complete design drawings for all “State of Good Repair” (SGR) items.
- Design performed in accordance with the latest NYCT design guides and New York State Building Codes.

Organization Name	Location	Project Duration			Dollar Amount	Prime/Sub-Consultant
		Contract Date	Start Year	Completion Year		
MTA-LIRR	New York City, NY	1999	1999	2018	\$4.3 Billion	Sub-Consultant