



The 3950 North Lake Shore Drive Buildings consist of 3 concrete framed high-rise buildings, all connected at the ground floor by lobby and parking garage areas. The buildings were constructed in the mid-1950s and are all 23 stories tall. The facades of the buildings consist of brick masonry, aluminum framed windows, and metal covers over the window sills. The concrete roof slabs project past the face of the masonry walls at several locations on all three buildings.

An investigation of the complete building enclosure system, performed by BTC, indicated extensive delamination at the undersides of the concrete roof overhangs due to the expansion of corroded reinforcing steel. There were areas that were fully delaminated, creating imminently hazardous conditions. BTC designed steel shoring to immediately stabilize these locations. Significant cracking was detected at brick masonry spandrel panels. BTC determined that the cracks were due to deflection caused by creep at concrete support beams. Portions of masonry spandrel panels were deemed imminently hazardous and were immediately stabilized. Failed sealant joints were detected at the window assemblies throughout the facades.

The repair phases of this project were spread over a four-year period to allow the building owner to budget the work. BTC developed details and specifications for the complete rehabilitation of the building enclosure system. Repairs have included completely rebuilding concrete roof overhangs, installing vertical control joints at masonry spandrel panels to allow for deflection at concrete support beams, and replacing all sealant joints throughout the facades.

BTC also provided bidding assistance and performed field observation services during the construction phase of the project.

Project Name:
3950 North Lake Shore Drive
Exterior Facade Repairs

Project Location:
Chicago, Illinois

Client:
Wolin-Levin, Inc.
3950 North Lake Shore Drive
Chicago, Illinois 60613

Approximate Construction Cost:
\$2,225,000

Year Completed:
2012

Nature of Services:
Evaluation, Repair Design, Bidding Assistance, and Construction Phase Services

