



The 3520 North Lake Shore Drive Building is a 13-story concrete frame building constructed in 1924. The building includes 166 residential units. The west and south elevations consist of exposed concrete columns and beams with brick infill panels. The exterior walls on the north and east elevations consist of limestone cladding at the ground, 1<sup>st</sup>, and 2<sup>nd</sup> floors, and brick masonry above the 3<sup>rd</sup> floor. The 10<sup>th</sup> through 12<sup>th</sup> floors include terra cotta accent features with rounded outside corners. The east and north elevations were originally constructed with continuous lintels above windows and redundant shelf angles approximately 5 courses above.

During an up-close review of the facade in 2010, BTC identified significant deterioration of the rounded corners and various other facade components. Other deterioration included corroded steel shelf angles and lintels, open mortar joints, limestone and terra cotta cracks and spalls, and concrete delamination. BTC was retained again in 2013 to develop detailed cost estimates for various repair phasing options in order to complete previously recommended repairs. The Association selected a 2-phase option in which 100 percent of the facade would be reviewed, and significant deterioration would be addressed.

BTC developed detailed design documents for rebuilding the rounded corners and to address varying degrees of deteriorated brick masonry, terra cotta, limestone, and concrete. Where shelf angles or lintels were severely corroded, BTC's design included replacing the redundant lines of supporting steel with a single line of shelf angles, complete with through-wall flashing.

BTC also provided bidding assistance and construction contract administration during the construction phase.

**Project Name:**  
*Exterior Facade Repairs*

**Project Location:**  
*3520 North Lake Shore Drive  
Chicago, Illinois*

**Client:**  
*3520 Lake Shore Drive  
Condominium Association*

**Approximate Construction Cost:**  
*\$2,000,000*

**Year Completed:**  
*Phase 1 – 2014  
Phase 2 – 2015*

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

