Located at 5000 North Marine Drive, The Aquitania Building is a 15-story concrete framed structure built in the mid-1920s.  The exterior facade of the building is clad in architectural terra cotta, brick, and limestone masonry.  The Aquitania Building is designated as an Illinois Historic Landmark.

BTC was retained to evaluate the exterior facade on all elevations of the building.  BTC's review of the exterior walls indicated significant deterioration of the parapet walls due to corrosion of support steel within the terra cotta cornice, severe corrosion of most shelf angles, many locations of bulged and loose brick, cracked and loose terra cotta, and some limestone deterioration.

The subsequent repair project included removal and replacement of 300 feet of parapet wall.  The new parapet wall was designed with a drainage cavity to maximize durability.  The terra cotta cornice was dismantled and rebuilt over its entire length in order to remove and replace the severely corroded cornice support steel.  Approximately 1,300 feet of the steel shelf angles were replaced; over 4,000 feet of deteriorated window perimeter sealant was replaced; 200 new units of terra cotta were fabricated and installed; and several ornamental limestone units were repaired and replaced.

The project was performed in 2 phases to accommodate the long lead time for terra cotta fabrication.  Phase 1 included demolition of the parapet walls, dismantling of the terra cotta cornice, and removal of all terra cotta units necessary to produce molds and models for new units.  The repair design was required to be approved by the Illinois Historic Preservation Agency due to its landmark status.