



Motorola's corporate headquarters is a mid-rise structure clad in large granite panels. On the ground level, there is a plaza area that surrounds the entire perimeter of the building. This plaza area is located over an indoor parking garage at the basement level of the building. The plaza had been originally constructed on a cast-in-place concrete slab, a bituminous waterproofing system, and mortar-set granite pavers that served as a wearing course.

BTC was originally retained to evaluate several water leakage issues into the garage below the plaza. Our investigation revealed many deficiencies that necessitated a complete rehabilitation of the plaza deck waterproofing system.

Concurrent with our services, the building was undergoing a capital project including major rehabilitation to the lobby and plaza area architectural features. BTC worked with the client's architect to ensure the desired aesthetics and functionality.

The repair design had to address several challenges. These included a lack of proper drainage slope, lack of sufficient flashing height, and granite-clad columns that extended down to the waterproofing. BTC's design included an innovative repair scheme to address waterproofing base flashing at the granite-clad columns without the need to remove the full-height cladding panels. Our design also included a fully-bonded tapered cementitious topping to improve subsurface drainage, and an area of intensive green roofing. The original plaza granite panels were modified to act as pedestal-supported pavers to eliminate the disadvantages of a mortar-set system.

BTC also provided bidding phase and construction phase services during implementation of the repairs.

Project Name:
*Plaza Rehabilitation
 Motorola Headquarters*

Project Location:
Schaumburg, Illinois

Client:
*Jones Lang LaSalle
 1301 East Algonquin Road, Room 0202
 Schaumburg, Illinois 60196*

Approximate Construction Cost:
\$1,000,000

Year Completed:
2005

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

