



The Astor Terrace parking garage is a 2-level garage serving a 14-story highrise condominium building constructed in 1972. The upper-level parking deck consisted of a 9-inch thick structural slab with a variable thickness cement concrete overlay and an asphalt concrete overlay.

BTC was initially retained to perform a peer review of repair drawings and specifications prepared to address deterioration of the parking garage. After several iterations of document reviews and revisions, BTC was requested to prepare the repair documents, provide bidding assistance, and perform construction contract administration.

Upon removal of the overlays, the structural slab was found to be in good condition and well-sloped. However, the slope of the overlays did not match that of the structural slab and the drains had been placed between 1-3/4 inches and 3-1/2 inches above the low point of the structural slab. After review of the structural slab configuration, BTC modified the initial repair design to relocate the drains to the low point of the structural slab. This eliminated the need to reinstall a topping slab sloped to the existing drain locations, and reduced the overall project cost by approximately \$50,000.

Other repair work performed during the project included repairs to spalled and delaminated concrete, replacement of severely deteriorated parapet walls/edge beams, crack repairs, installation of a trench drain at the base of the ramp to the lower level, and installation of a traffic bearing membrane.

Project Name:
*Parking Garage Repairs
 Astor Terrace Condominium Building*

Project Location:
*1450 North Astor Street
 Chicago, Illinois*

Client:
Astor Terrace Condominium Association

Approximate Construction Cost:
\$320,000

Year Completed:
2007

Nature of Services:
Peer Review, Repair Design, Bidding Assistance, Construction Contract Administration

