



The Groves of Palatine Condominiums include four 7-story buildings constructed between 2002 and 2005. Road access to the rear of the northernmost building was only via an asphalt-paved fire lane, which had eroded due to the steep slope of adjacent grade.

BTC was initially retained to study the feasibility of various roadway materials and retainage of adjacent soil to reconstruct the fire lane. Cast-in-place concrete slab and bituminous pavement options were studied. Retaining walls, consisting of reinforced concrete and segmental masonry were designed. Based on input from the homeowner's association, a slight relocation of the fire lane, and installation of rip rap along the roadway edge were chosen for the final design. The rip rap provides retainage for the fire lane along with performing as a medium for water drainage into a buried drain tile.

In conjunction with the association's landscaper, BTC revised a portion of the contours near the building. Included in the project, BTC designed new concrete stairs from the building to the fire lane, which meet current code requirements. Additionally, existing handrails were refurbished such that they could be reused.

BTC assisted the association with the bid phase to obtain competitive pricing, including issuing bid documents to 2 separate pools of contractors. BTC facilitated pre-bid meetings to make certain the scope of work was clear. Upon receipt of bids, BTC vetted the contractors to ensure they were capable of performing the work.

During construction, BTC reviewed material submittals for conformance with project requirements. BTC also performed periodic site visits to review work as it proceeded. During installation of roadway materials, BTC coordinated with the material testing agency to ensure proper procedures were followed. BTC was readily available to the contractor and association for timely responses to inquiries throughout the construction phase. Prior to completion of the project, BTC reviewed work with the association's representative, and prepared a punchlist for the contractor. Upon completion of the punchlist items, the fire lane passed the village's fire department inspection.

Project Name:
*Fire Lane Rehabilitation
Groves of Palatine Condominiums*

Project Location:
Palatine, Illinois

Client:
*Groves of Palatine Condominium
Association*

Approximate Construction Cost:
\$72,100

Year Completed:
2023

Nature of Services:
*Feasibility Study, Design, Bidding
Assistance, and Construction Phase
Services*

