



## KALAMAZOO RADISSON PARKING STRUCTURE

Kalamazoo, Michigan

The Kalamazoo Radisson Parking Structure is an eight-story parking garage constructed in the 1970s. The structure was expanded in the late 1970s to its full height and added an Annex from Levels 3-8. The three-bay structure consists of a slab-on-grade level and seven supported levels of cast-in-place, monostrand, and button-headed post-tensioned concrete slabs supported by cast-in-place, post-tensioned beams, and columns. The Annex portion of the structure consists of precast concrete double-tees being supported by precast concrete beams and columns. The functional layout of the structure forms a double-threaded helix with central crossovers at every level.

The structure went several years without structural maintenance repairs. In 2019, WGI conducted a survey of the structure recommending concrete and waterproofing repairs as well as some electrical updates. The first phase of these repairs was completed in 2021, focusing on Levels 6-8 and the southern two stair towers. The post-tension anchorages at the central pour strip of Level 6 controlled the majority of the costs of the project with several needing to be replaced and multiple splice repairs being required along the lengths of the tendons.

### PROJECT HIGHLIGHTS

- Monostrand Post-Tensioning
- Cast-in-Place and Precast Concrete Slab, Beam, and Column Repairs
- Cast-in-Place Concrete Stair Repairs
- Deck Coating Installation
- Penetrating Silane Sealer
- Miscellaneous Painting

#### CLIENT:

Greenleaf Hospitality Group

#### PROJECT DATES:

Design: February 2021 - May 2021  
Construction: May 2021 - May 2022

#### SERVICES PROVIDED:

Restoration  
Structural Engineering

#### TOTAL COST:

Design Fees: \$49.9K Construction:  
\$ 1.1M

#### PROJECT MANAGER:

Trey Just, PE

#### KEY STAFF:

Mark Sampson

