



# Parking Structure (Façade Only)

## 7001 BURNET ROAD

AUSTIN, TEXAS

## PROJECT TEAM

Owner: Colina West Real Estate, Austin, Tex.

**PCI-Certified Precast Concrete Producer:** GATE Precast, Hillsboro, Tex.

#### **Precast Concrete Specialty Engineer:** GATE Precast, Kissimmee, Fla.

Architect: Gomez Vazquez International, San Antonio, Tex.

Engineer of Record: MJ Structures, Austin, Tex.

General Contractor: Austin Commercial, Austin, Tex.

PCI-Certified Erector: C&A Erectors, West Monroe, La. Project Size: 175,415 ft<sup>2</sup> According to U.S. Census Bureau data, Austin, Texas, was the fastest-growing metropolitan area in the United States for more than a decade. And while that growth has cooled in recent years, the city remains an incredibly popular spot for families to establish their roots and for tourists to enjoy a short or extended stay. Just minutes north of Austin's downtown, 7001 Burnet Road is a modern, mixeduse development that includes three buildings: a five-story structure with offices and commercial space, a two-story pavilion that serves as a hub for offices and a restaurant, and a five-story parking structure with a contemporary design featuring nearly 10,000 ft<sup>2</sup> of large-format, perforated precast concrete panels manufactured by GATE Precast.

## **KEEPING AUSTIN PRECAST CONCRETE**

For the parking structure, the primary design goal was to establish an open-air feel. To accomplish this objective, architect Gomez Vazquez International (GVI) and GATE Precast collaborated on custom-designed architectural precast concrete panels with a pattern of triangular openings. This approach was selected in lieu of the original "breeze block" concept. In addition to offering a striking aesthetic, the precast concrete solution reduced the complexity of the construction and saved time when compared with the original façade option.





Photos: Dave Henz

"Our challenge was to engineer an architectural precast [concrete] solution that would not only fulfill GVI's vision but also ensure efficient, cost-effective construction," said Mike Ryan, vice president of operations for GATE Precast's Hillsboro, Tex., location.

The panels, which represent a unique solution for the parking garage's perforated skin, create some unexpected effects on the interior of the structure. Instead of typical uniform illumination, a cascade of light rays and shadows is projected onto the floors and walls of the parking garage, creating unusual and unexpected interactions with light for users. Precast concrete also offers an emblematic envelope that functions as an insignia for the project while simultaneously providing unmatched durability and resilience.

A primary challenge encountered by the project team was minimizing the number of molds needed to create an efficiently sized panel while also retaining the modern look of mesh specified in the design. GATE Precast used a CNC machine to fabricate the casting deck so the molds that created the openings could be placed in the same location for each cast. "By developing a typical panel that was repetitive, we were able to reduce the overall number of panels required," Ryan said. "This made both manufacturing and installation more efficient."

One of the most innovative aspects of the structure is that it was conceived with adaptive design in mind. While the structure is primarily intended to be used as a parking garage, the project team took a potential future conversion into apartments into consideration during design. As such, the structure is fully compatible with residential footprints, including generous ceiling heights and column layouts. By incorporating these features into the structure, the project team demonstrated a strong commitment to sustainability. The potential for adaptive reuse will minimize the structure's future environmental impact while offering the opportunity to create desirable living spaces in a convenient location.

Ultimately, precast concrete was the only solution that could achieve the design team's goals—including a signature, long-lasting façade—through the manufacture of just 69 panels.



### KEY PROJECT ATTRIBUTES

- Located in north Austin, Texas, just 5 minutes from downtown, the parking garage at 7001 Burnet Road features a unique façade constructed with architectural precast concrete panels.
- The parking garage is part of a three-building development that also features a five-story structure with offices and commercial space and a two-story pavilion that serves as a hub for offices and a restaurant.
- By leveraging adaptive reuse design, the structure could potentially be converted into a residential building in the future.

#### PROJECT AND PRECAST CONCRETE SCOPE

- Sixty-nine architectural precast concrete panels bring the open-air exterior of the parking garage at 7001 Burnet Road to life.
- GATE Precast used a CNC machine to fabricate the casting deck so the molds used for the openings could be placed in the same location for each cast, resulting in more efficient and cost-effective production.
- Installation of the precast concrete components was completed in just 12 days in July 2023.