

It's no secret that demand for in-town and near-town development is skyrocketing in many urban areas of the southeast. This has prompted developers to look at projects on sites that, just a few years ago, would have been deemed too small for large-scale multi-building projects.

One such

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project is Prescott at Park Place, a condominium project being developed in the Dunwoody area just outside of I-285, the Atlanta perimeter highway. The project includes 110 stick-built condominium units in three buildings, full amenities including a pool and an exercise room, and a five-story precast [concrete](#) parking [garage](#) — and it all had to fit on a site of just 2.365 acres.

Owner Newport Development named Atlanta-based Fortune-Johnson, Inc., as the general contractor on the job. Niles Bolton Associates was the architect for the project.

Fortune-Johnson, Inc., was founded in 1991 by Lee Johnson and Brett Fortune. Between them, the company's founders have more than 40 years of [construction](#) industry experience, and both come from families with backgrounds in construction. Their active interest in the industry extends beyond their own company, too; in fact, Brett Fortune has recently been named 2006–2007 chairman of the Associated Builders and Contractors of Georgia.

On the Prescott at Park Place project, Jim Fowler is Fortune-Johnson's project manager. Neil Wein is general superintendent, and Rob DeHaas is superintendent. Chad Ford is finish superintendent.

"It's a very small site," says Fowler, "and the more we built the smaller it became."

Plans called for traditional stick framing of the three condominium buildings, with precast concrete construction used to build the parking deck.

Construction began January 2005 with site preparation. Prior to construction the property had served as a parking lot, so only a small amount of clearing was required.

#### **Critical-Path Garage**

Early on, the team was turning its attention to the first structural work to be done on the project — construction of the parking garage, a structure to be built using precast concrete components.

"Because of the small site," DeHaas says, "it was necessary to get the garage done so we would have an area for storage and staging. Once the buildings were under way we knew we would have very little area from which to work, and it takes a lot of material storage space when you're stick framing."

The garage's concrete cap foundations were constructed atop augercast piles placed by Berkel & Company. Overall, some 189 augercast piles were placed to an average depth of about 32 feet.

The structure itself was constructed utilizing precast concrete components, with Atlanta Structural and Dollar Concrete Construction serving as key players during this phase of the work.

Meanwhile, work on the condo buildings' poured-in-place footings was getting under way. Concrete subfootings were constructed first; then turndown footings were formed and poured.

#### **A Challenging Wall**

One of the more challenging aspects of this project was construction of a 400-foot-long retaining wall along the site's northern perimeter. The wall was necessitated by a 6-foot to 10-foot deep cut along that edge of the site, with plans calling for a retaining wall of some sort to stabilize the cut. Ordinarily, construction of such a wall would be straightforward, starting with sloping of the area behind the wall to allow safe construction of the wall, followed by backfilling. However, because of the presence of an existing roadway and numerous buried utilities just a short distance from the back of the wall, sloping was not possible.

One solution discussed by the project team was to drive piles and install shoring, but there were concerns over the cost of such an approach. What was needed was an alternative approach — and that's exactly what general superintendent Wein came up with.

Wein's solution utilized a carefully planned sequence of excavation and footing construction — all to be carried out within the safe confines of trench boxes.

Work on each section of the wall began with cutting a bench to the bottom elevation of the wall's footing. The high wall, at that point, was by itself too high and too steep for safe construction adjacent to it — but Wein solved that problem by renting trench boxes from Trench Shoring to protect the work area.

After a section of excavation was complete, the construction team installed five 20-foot sections of trench box end to end, with 12-foot spreaders inside the boxes, so that the boxes straddled the area where the wall's footer was to be constructed. Fill material was then placed on the outside wall of the boxes to keep them securely in place in the event of a collapse of the hanging wall. Then, with the boxes securely in place, wall crews began construction of the wall footings. Working inside the trench boxes the whole time, crews formed and poured the wall footers. Then, once the footing concrete had cured, the first lift of wall — approximately 4 vertical feet — was formed and poured. Once the wall concrete had cured, the temporary fill was removed, the boxes were repositioned and restabilized to allow plenty of working room, and crews re-entered the boxes to form and pour the first sections of the cast-in-place retaining wall.

As wall sections were completed, waterproofing was applied to the back side of the wall. The trench boxes were then removed, the wall section was backfilled, and the trench boxes were repositioned to allow work on the next section.

This process was repeated along the entire length of the wall, allowing safe completion of the concrete retaining wall.

According to DeHaas, completing the wall was "a turning point on the job." Additionally, adds Wein, this approach saved significant construction costs compared to other possible approaches.

#### Framing And Logistics

While this work was going on, the team was also framing the three condo buildings. Jacaman Construction handled the framing, starting work in late June.

Lumber for the stick-built portion of the framing came from Great American Trading, Marietta, Ga. Also utilized during this stage of the project were prefabricated floor and [roof trusses](#) from Trussway, Inc., in Acworth, Ga. These trusses were 18 inches deep, with truss lengths ranged from 8 feet to about 30 feet.

"We gave Trussway a 30-day lead time," DeHaas says. "The trusses arrived at the site on semis the day before we needed them, and we would offload them with a forklift and set them under cover on the first level of the parking deck."

As expected, adds Wein, staging was the challenge throughout the framing phase of the project. Lumber and framing components were ordered for delivery as close to the needed-by date as possible.

"We literally ordered materials for a couple of days at a time," Wein says.

Once on the site, they were stored in the parking garage and staged from there.

To simplify logistics, framing components for each section of each structure were ordered and delivered as a packaged unit.

"The materials arrived as a unit, bundled together," DeHaas says. "Then we only had to transport that bundle of material."

Framing was completed in December 2005. The roof — a flat built-up roof with hot-mopped asphalt — was constructed by Tip Top [Roofers](#), allowing sheetrock work and other interior construction to begin.

Interior construction was moving along well by early 2006, though an unexpected complication came in the wake of Hurricane Katrina.

"Because so many utility crews are still tied up repairing hurricane damage, we experienced some delays in getting electrical service installed in parts of the project," Fowler says.

Exterior finishing was well under way at that point as well. Although a small amount of brick is used, most of the exterior finish utilizes Sto stucco finish material; Dixie Plastering handled the stucco work. This work was staged from what will become the pool area, the only outside staging area left for the construction team to use.

The pool area also provided a staging ground during placement of lightweight concrete for patios and breezeways, plus placement of gypcrete flooring underlayment within the residential units. Advanced Floor Systems placed the gypcrete flooring underlayment, which — along with Acoustimat installed under the gypcrete — helps to eliminate sound transfer between units. Further sound suppression was achieved by individually wrapping each PVC drain pipe and by utilizing rock wool and RC channel on the bottom of floor trusses.

Once this work is complete, the pool area will be cleaned up and construction of the pool itself will begin. The [subcontractor](#) for the gunite pool is Action Pools.

What's the biggest challenge on a project such as this one? Without a doubt, it's the matter of managing logistics and scheduling on such a tight and tiny site.

"Scheduling and coordinating of work and deliveries in such a small area is a huge challenge," affirms general superintendent Wein. But careful planning and innovative approaches to dealing with construction challenges turned what could have been a difficult project into a successful one for all concerned.

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