

Category 12..... Best Building Project – General Contractor (\$40 – \$70M)
Contractor Pinkard Construction
Project Name Vida at Sloan’s Lake

Not your typical ground-up project, Vida at Sloan’s Lake was filled with challenges, both known and unforeseen. Yet Pinkard’s highly effective and focused project team marshalled a collaborative CM/GC effort to bring in Vida at Sloan’s Lake ahead of schedule and under budget while providing exceptional quality, fit and finish.

Overview

Vida is a seven-story, 176-unit ground-up affordable senior/disabled housing project for Denver Housing Authority (DHA). The structure is site-cast concrete with a post-tensioned podium slab above the first floor, with an underground parking garage and load-bearing metal studs on floors two through seven. The ground-level space houses 1) medical services; 2) DHA administrative space; and 3) a senior activity center.

Preconstruction

During design, Pinkard provided creative preconstruction services to help *increase unit density from a 64-unit, \$8 million project to 176 units and more than \$40 million with underground parking and medical services*. Pinkard also found savings in waterproofing systems and exterior skin. DHA enjoyed a very predictable budgeting phase *thanks to a 0% variance between Pinkard’s design development (DD) estimate and GMP*.

Xcel Energy

During the CD phase, Pinkard conducted due diligence and field verification, and immediately found a conflict between foundations design and electrical utilities. These utilities would have to be moved. Xcel Energy’s relocation process can take almost a year, but groundbreaking was set to commence in three weeks. Because DHA’s funding sources were year-dated, they had to spend it or lose it. This project was in danger of dying before ground-breaking.

Pinkard, DHA, and PSA mobilized a redesign and budgeting effort to change the building footprint avoid the utilities issue. What would typically take several months, was completed in 10 days.

Even principal Harsh Parikh was involved, running AutoCAD. Vida at Sloan's Lake could now start on time.

Creative Management

DHA boldly executed a complicated and creative first-in-the-US funding package that uniquely funded various portions of the building through a variety of lenders. While this funding was a boon to DHA and Vida, *Pinkard had to customize change requests, billing, lien wavers, etc. based upon which portion of the building was involved and who among the different lenders had financed it.* This complication added extra layers of administrative burden to Pinkard's young team of potential superstars, who were being mentored by Pinkard's on-site senior management staff.

Pinkard instituted various training regimens for assistant project managers and area superintendents, *training them in contract negotiations, buy-out, punch list walks, and the ins-and-outs of handling potentially explosive political conversations with owners, architects, and subcontractors..*

Environmental/Safety

The Vida project had 341,669 total manhours and zero OSHA recordables, restricted days, and lost-time accidents, thanks to proactive safety training and management. Safety program highlights included a site-specific safety plan; near-miss, *Good Catch*, and subcontractor safety monitoring and reporting; weekly (and sometimes) daily tool-box talks; and specialized training for swing stages, cranes, and traffic control. Vida was designed and built to meet Enterprise Green Communities criteria.

Dewatering Challenges

With the sub-standard soils, water rose into every hole, and would not flow horizontally into Pinkard's dewatering system. Spot-pumping the water out of the holes worked, but was too labor intensive. A quote from a third-party groundwater remediation service to manage the issue was \$1.3 million dollars. Instead, Pinkard assumed total responsibility for the dewatering system, bringing in a third-party stormwater/dewatering expert to train a crew in record-keeping and

reporting, and how to operate and maintain the system on a daily basis. *This creative and highly effective solution saved DHA more than \$1 million and kept the project on schedule.*

Panelization

During the planning stage, Pinkard's team virtually laid-out the installation sequence of all 500 wall panels. Each panel was assigned an installation number, which represented where and when it would be installed. The pre-fabricated panels were shipped to the jobsite and stacked in order of installation. To ensure efficient use of Pinkard's three cranes, we employed a scheduling app for all contractors to "get in line" for crane time. Thanks to meticulous QC at the fabricators and Pinkard's careful planning, the wall panel installation process allowed us to make up valuable time lost during the foundations and infrastructure phase

Innovative Sequencing

Instead of building-out floor by floor, Pinkard broke each floor into three "pods" (A, B, and C). Construction would start with the load-bearing-wall crew installing walls in Pod A. Decking crews would then take over Pod A while load bearing walls were installed in Pod B. Then Pod C got load bearing walls, with Pod B getting decking, and Pod A beginning demising wall layout and framing. This process continued from bottom to top until the entire building was complete. As the first pod was underway, manufacturers' reps, DHA personnel, and architect conducted quality inspections. This approach also allowed each pod to have its own supervisor and specialized quality control checklist.

Marvin Vanlingen, division manager with Midwest Drywall: "Pinkard's pod approach made it easier to manage, even with 60, 70, 80 people on a job. We assigned a qualified foreman for each pod, which allowed us to maintain production and communicate QC fixes easier and quicker."

This exceptional efficiency allowed Midwest Drywall to *provide level four drywall finish, which is common in Class A office buildings, but rare in affordable housing.*

First-of-Its-Kind Approach to Dry-In

With “normal” construction, a building has to be completely dried-in before MEP can begin. But Pinkard saw an opportunity to dry-in each floor individually by using the concrete decks above as the roof, hanging heavy concrete blankets on exterior walls, and funneling stormwater through the toilet sleeves. After a bit of haggling and persuasion, we got permission from the City and County with one stipulation: “If I find one teaspoon of water inside, I’m shutting you down!” *Pinkard’s plan worked perfectly: no water inside; MEP started weeks earlier, and Pinkard made huge gains in the schedule.*

Roofing Crisis

Two weeks before roofing was scheduled to begin, Pinkard’s roofing subcontractor closed their Denver office and would not be available for the job. *Replacing this subcontractor would mean a six-week delay.*

Instead of settling for the second-place, higher-priced, and longer-schedule roofer, Pinkard negotiated with the roofer’s national office. The situation rapidly progressed from “*Just sue me!*” to freeing-up crews from Idaho. As the Idaho crew prepared to mobilize, we got everything ready to go so they could commence immediately. We also found a creative way to expedite skin installation without having the roof in place.

Skin Installation Maximizes Quality

Swing stages (hanging scaffolding), which are typically anchored to the roof, were key components in exterior skin installation. Rather than waiting for the roof to complete, *Pinkard devised a unique anchor system on the fifth floor to allow Pinkard’s swing stages to operate completely independent of roof construction, finishing this task ahead of its projected end date. This innovative plan also allowed us to devote more attention to quality, and ultimately, better fit and finish.*

Old School Craftsmanship

PSA Principal Harsh Parikh: *“We designed Vida with nine different skin materials to create a visually interesting mosaic pattern across the building’s face. Aluminum cladding, Nichiha, a*

thin brick veneer, exposed concrete, full wood siding, Hardie panel, and more. Good quality of installation and interface among these disparate materials was critical to achieve the desired effect.” To meet this detailed expectation, Pinkard employed our best carpenters, precisely measuring and laying-out each skin panel. This custom, in-field fabrication process resulted in perfectly aligned skin panels across the entire building-face.

Vida finishes \$800,000 under budget and ahead of schedule

1. Coming in under budget allowed DHA to upgrade to numerous add-alternates;
2. Innovative sequencing allowed more time to scrutinize work, resulting in better fit-and-finish;
3. Pinkard’s approach to drying-in set a precedent with the City and County of Denver and provided huge gains in the schedule;

Closing

Harsh Parikh, principal, Parikh Stevens Architects:

“When you consider Vida’s complexity of construction: five-story on one side, eight-story on the other; separated by an alley that had to be vacated, lot-line to lot-line construction, groundwater, basement, roof deck, nine skin systems, steel over concrete; (Vida) hits all the notes – definitely one of our most successful and important projects.”

Chris Spelke, program development manager, DHA:

“Vida was a potentially career-making or career-breaking project for me personally and frankly, for all those involved. With a tremendous upside and a potentially devastating downside, Pinkard proved that DHA chose the best team for this four- year roller coaster that fully delivered on its promises. As our creative partners from pre-development through construction, Pinkard displayed remarkable ingenuity and innovation to overcome challenges not typically seen with a new ground-up mixed-use project. They had the foresight and directive to solve conflicts before they became larger issues, really managing the owner and architect to make effective decisions to make this project an overwhelming success!”

Vida at Sloan’s Lake was awarded Housing Colorado’s 2020 Eagle award.









