

Category: 5 – Best Building Project – Specialty Contractor (\$2 - \$6M)

Specialty Contractor: Weifield Group Contracting

Project Name: Emily Griffith Campus Project

Helping Denver Public Schools (DPS) transform a 52-year-old vacant high rise into a state-of-the-art educational campus by consolidating four entities—the DPS administration offices, a new 400-student downtown elementary school, an 8,500-student Emily Griffith Technical College, and the Emily Griffith High School—was what Weifield achieved with the completion of our Emily Griffith Campus design-build project. Because the building’s electrical systems were decades old, Weifield’s main challenge for this Guaranteed Maximum Price (GMP) project was to update the outdated electrical systems (unknown at the start of the project) and install new electrical within the building, without exceeding the GMP budget. DPS spent over \$38M in construction costs for the new 14-story building which houses the first elementary school located in downtown’s central business district in 100 years and, ironically, was the home to Weifield’s first office, in 2002. This was a challenging project in which Weifield applied our expert management and agility to exceed client expectations.

Solutions of Special Projects: Continual Adaptation around Changing Requirements

Most of the overall project team had worked on design-build projects in the past, but not to this magnitude. The benefit of Weifield to DPS was our input during the in-depth discovery phase.

“Weifield helped guide us to the ultimate cost solution and solutions to building challenges,” said Katheryn Zeeb, Architect/Project Manager for DPS. “It was very helpful to have Weifield there during the design process to provide input; we were always able to come to a joint consensus.”

The sheer scope of the project and the fact that it was a mixed-use building required Weifield to adapt to continuously changing requirements and develop special solutions to circumvent them. There were challenges with the size of the electrical service coming into the building and within the school areas, themselves, as the design took shape—which prompted DPS to make changes.

“Weifield did a good job of thinking on their feet,” said Katheryn. “They never once presented a problem without a solution. Also, there was always a Weifield owner at the table. You could tell there was a vested interested from the company’s leadership.”

“There were things that Weifield could and would do without needing a lot of fanfare, and they didn't nickel-and-dime us,” said Allen Balczarek, of the DPS Operations Implementation Support Team. “We appreciated that.”

Weifield performed all electrical work within the building and developed voluminous drawing packages that included a different plan set for each tenant, for a total of three (3) 600-page plan sets. These plans changed nearly 50 times and Weifield built around these changes while maintaining the schedule. Another challenge was the requirement for three separate entrances into the building’s lobby for each user group and how access and security would be controlled. A stairway entrance was created for one group that takes them immediately up to the second floor, so all entrances were not on the main level. Additionally, the DPS Project Manager changed early on in the project which required the team to adapt around this unforeseen change.

The owners had a phased occupancy strategy; the Downtown Denver Expeditionary School (DDES) was to move in, first, at the end of December. Due to environmental discoveries, DDES ended up moving in the spring which led to early occupancy by the DPS IT team to get things up and running. The project then phased in, floor-by-floor, over the next six months.

“Phasing ensured that power could be off where work was being done while still providing power to other occupants in the building—that coordination was handled very well,” said Katheryn. “Weifield’s ability to be flexible and help us work out what type of power we should have in specific areas was invaluable. They were leaders in coming up with the solutions for the end user groups and truly took to heart the design-build team approach.”

Project Execution and Management Excellence through Highly Effective Communication and Change Management

Weifield became a driving force behind the project, leading twice-weekly meetings across the entire project team to ensure schedule adherence. These meetings became more frequent toward the end of the project phases.

“Weifield led the meetings with the right subs/trades involved,” said Katheryn. “It was excellent team approach – they made sure the right people were at the table.”

There was an open scope of work so Weifield developed the best electrical solution we could, incorporating the existing systems. All major components were able to be reused—including the existing transformers, generators, panel boards and feeders. There were a few budgetary struggles; for example, we had to build onto the existing bus duct system using whatever we had. Through testing, we validated that the all existing systems were safe.

To meet the GMP budget, Weifield couldn't use a higher-end architectural or cosmetic fixture package—yet it had to be acceptable to DPS requirements. We were able to arrive at a “best fit” lighting package that produced a balance of functional lighting with focused placement of decorative fixtures.

“The way Weifield worked with entire team to ensure everything fit into PCL's budget for all of the areas was not easy,” said Katheryn. “Designers suggested fixtures that were upscale – Weifield provided alternatives that gave us the look at a cost-effective price, yet still met lighting and energy-efficient requirements we had. Weifield was integral to the design of the building. The energy efficiencies implemented for the project resulted in the District receiving a rebate from Xcel Energy in the amount of \$283K. In a 1963 building that had minimal building envelope improvements, this is amazing.”

Construction Innovations/State-of-the-Art Advancement through Leading Technologies and a Truly Custom Electrical Solution

At the height of the project, Weifield had staffed up to a 44-man team. Due to changing project requirements, we focused on agility to proactively tackle issues before they became major problems.

With respect to innovation, DPS wanted to add more room for the interior space of the building and achieve better aesthetics, so their solution was to “blow out the bottom” or move the building’s inner walls out, to gain more space inside and utilize previously exterior space out to the property line. Weifield adjusted our electrical design around this new strategy.

Weifield utilized Trimble Total Station and Trimble's Point Creator Pro for the project which enabled us to execute a productive and accurate jobsite layout. Weifield’s infrared color thermography also helped to differentiate our design-build team and win the job. Using infrared, we captured images of energy escaping the building’s windows in order to improve the team's energy model.

Weifield designed a truly custom electrical solution from every angle. We became intimately familiar with the building envelope, fielded all one-offs, and designed the power infrastructure and specifications to meet custom requirements.

Environmental/Safety: Incorporating Energy Efficiency and Ensuring Safety and Code Compliance

Weifield completed 49,000 man hours but had no safety incidents or lost hours for the project. We brought numerous items up to code within the high-rise; for example, we did extensive testing with the existing generators and made sure all life safety tied into existing systems.

"Weifield examined every piece of equipment that came over from Emily Griffith, for example, some of which would not meet code anymore—and brought them up to code so we could achieve a certificate of occupancy," said Katheryn.

Weifield also incorporated daylighting lighting controls into the design where possible as well as energy-efficient control lighting systems and controlled loads to meet owner expectations.

Excellence in Client Service and/or Contribution to the Community: The First DPS Downtown Elementary School and a Beautiful New Technical College!

The results of this project speak for themselves. DPS Superintendent Tom Boasberg and Mayor Michael Hancock described this project as a major boost to the vitality of the city that could save the district between \$5 and \$15 million over the next five years through increased efficiencies.

“It serves as a tangible reminder of the power of bringing people together, in the heart of Denver, to work, to collaborate and to be a thriving part of the social and economic fabric of our community,” said Mr. Boasberg.

“For DPS, maintaining our presence in downtown was very important. Now, we’re closer to the central business district than we were before, and there is mass transit accessibility for parents and students in all three schools. Many people ride their bikes to school with their kids,” said Katheryn.

Added Allen, “This project speaks to the vibrancy for demand for downtown Denver schools. By consolidating these separate buildings into one new downtown location, we’ve achieved a cost savings of \$10M of operations/maintenance costs over the next 10 years. It was a financial gain to Denver taxpayers.”

Other awards the Emily Griffith Campus project has recently achieved include: 1) The 2015 54th Annual Downtown Denver Partnership Awards – May, 2015; 2) The 2015 Denver Business Journal “Real Estate Champions” Award (in the Socially Responsible category) – July, 2015; and 3) The 2015 ENR Best Projects Merit Award – K-12 Category for Colorado/Wyoming & Plains States Region – August, 2015.

(Photos courtesy of Brad Nichol Photography)



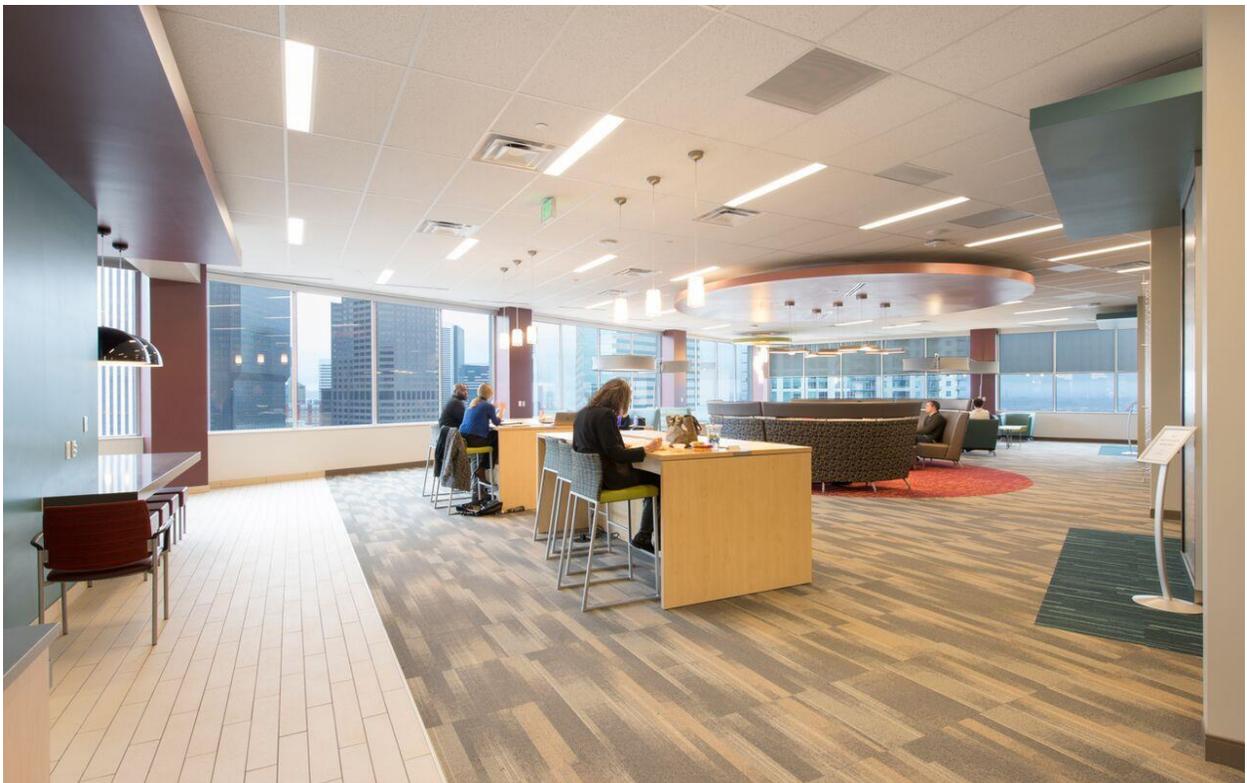
01 – 14th Professional Development Floor Meeting Area



02 – Denver Expeditionary School Classroom



03 – Denver Expeditionary School Multi-Purpose Room Doubling as Board Room



04 – DPS Administration Professional Development Floor #3



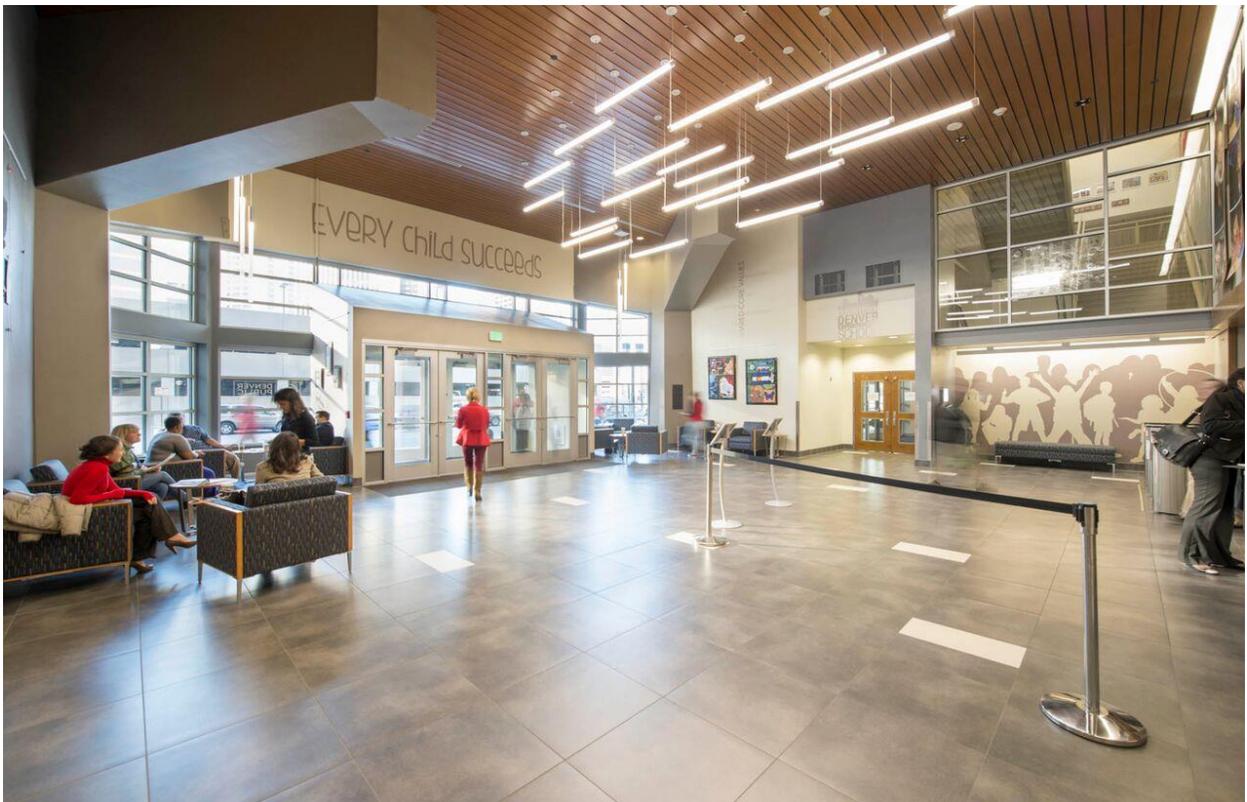
05 – DPS Administration Professional Development Floor #5



06 – DPS Administrative Office Floor



07 – Emily Griffith Technical College Dental School



08 – Emily Griffith Campus – Denver Expeditionary School Lobby



09 – Student-Run Emily's Café



10 – Emily Griffith Campus Ribbon-Cutting with Mayor Michael Hancock