

Category: 9 – Best Building Project – General Contractor (\$10-\$40 Million)

General Contractor: Nunn Construction, Inc.

Project Name: Colorado State University – Pueblo Occhiato Student Center

This complex, three phase, addition and renovation project was delivered with no down time, ahead of schedule and within budget. The project's success was achieved by integrating a collaborative team effort that led to the transformation of the Occhiato Student Center on the Colorado State University – Pueblo campus. Originally built in 1974, the Student Center had outlived its usefulness and capabilities of providing expanded services to the campus and local community. The \$30 million face-lift, funded primarily by student fees, converted the campus hub into an attractive and functional gathering place that supports student retention, attracts new students and invites the greater community to CSU-Pueblo.

The 25,000 sq.ft. addition features a major ballroom, pre-function lounge and a new kitchen for food services. The 109,000 sq.ft. renovation includes a new bookstore, student lounges, a wide variety of residential and retail dining options, student organization and administrative offices, conference rooms and two revamped entrances.

The Colorado State University- Pueblo students shaped the building through their fees and design input and in turn, the revitalization of the Occhiato Student Center will shape the future of the students and campus for decades to come.

Conquering Challenges Utilizing an Integrated Team Approach

Although most higher education construction projects face the obstacle of building on an occupied campus, Nunn Construction conquered an additional challenge requested by CSU-Pueblo: maintain full operation of food and auxiliary services, as well as the student bookstore, during construction. To overcome this challenge, the Design-Build delivery method was utilized. This approach allowed the contractor, architect and Owner to proactively plan the design and construction schedules to coincide with the University's complex scope and schedule requirements. Through proactive planning, we decreased re-design and re-work, and condensed

the overall construction schedule returning the savings on General Conditions back to the project through Owner added scope.

Nunn attended user group and design meetings, allowing early input on how to minimally affect campus services during construction. Working together during design, our team looked ahead three years to schedule owner occupancy turnovers during University breaks. Careful pre-planning led the team to segment the project into three phases utilizing bid packages. This allowed Nunn to break ground on the addition while the renovation portion of the project was still in the design phase.

Phasing Breakdown

Phase one consisted of a partial completion of the new addition. Simultaneously, Nunn remodeled multiple spaces elsewhere on campus temporarily relocating college departments prior to beginning the renovation portion. Upon partial completion of the addition, Nunn had just one week over Thanksgiving break to relocate the bookstore and dining facilities into the partially completed addition where they would remain during the renovation.

Phase two consisted of the renovation to all three levels in the existing student center. Upon completion of the renovation, the bookstore and dining facilities moved back into the student center. The substantial completion of the ballroom and food service addition finished out the final phase of the project. In the spring of 2018, the Occhiato Student Center returned to full operation for student and community use.

Excellence in Execution and Management Resulting in Owner Satisfaction

Maximizing the project scope by using an open-book process allowed the Owner full flexibility in construction spending. Over \$1.1 million in accepted alternates were added to the overall project scope through close coordination, quality control and communication of the construction budget.

A 44'L x 15'W x 8'H clerestory structure was added as a major add-alternate item to the project scope. The clerestory, which was extruded through the existing roof of the building, provides

much needed natural light into the main lobby of the Student Center. Two main entrances from the south and west converge on the first floor where the atrium opens up to the glass guardrails on the second floor, and further up to the 8' tall clerestory structure above. This area is directly adjacent to the main dining hall and serves as the primary congregating space for students and faculty on the CSU-Pueblo Campus.

“Handled successfully by the Nunn Design-Build team was the response to the Owner’s added scopes by way of accepted alternates, which became available largely through your outstandingly effective management of budget and schedule on this project.”

– John Barnosky, Director of Planning and Construction (recently retired)

Advancements in Construction Processes through Innovative Techniques

To the delight of CSU-P, Nunn turned over the Student Center for Owner occupancy during winter break instead of the initially scheduled spring break deadline by utilizing Lean construction techniques in collaboration with our Trade Partners, the Architect and Owner. Using the Last Planner Scheduling System throughout the duration of construction, the project schedule improved by engaging the foreman from each trade to plan weekly activities together, driving the accountability to deliver their work on time. It created synergies for critical path items, and increased the understanding amongst various trade activities and the daily commitment to perform. The ballroom was open three months ahead of schedule, allowing weddings and community events to be held during the high summer season without interruption. Additionally, the University was pleased to host the Annual Presidents Gala, held in May each year, in the new ballroom!

Beyond the Last Planner System, we utilized ProCore Project Management Software to eliminate wasted time by removing manual processes, manage communication channels, and ensure the latest most accurate construction drawings were located in one place. Our entire team, including the Owner, were able to communicate more efficiently resulting in increased productivity. Integrating technology on the jobsite, such as touch screen kiosks and Ipads, with the capabilities of accessing ProCore, also reduced errors and re-work during construction.

While Nunn was fast at work on the addition, and abatement of the existing building was underway, the mechanical systems and restroom wet walls were being prefabricated off-site. Prefabricating these systems improved the overall quality, accelerated the schedule, and reduced the amount of material deliveries on the active college campus.

During demolition, Nunn successfully recycled 100% of the concrete, asphalt, metal and wood, diverting 1,632 tons of waste from the landfill. Additionally, we adopted an IAQ Management Plan to protect the HVAC system during construction, control pollutant sources and interrupt pathways for contamination. In keeping with the University's commitment to sustainability, the project was constructed to a minimum of LEED Gold Standard (certification pending).

Safety is Success

We take safety on our projects very seriously. Safe projects are productive, clean, cost competitive, and the overall attitude on the project site is positive. Our field team implemented proven safety procedures to ensure every day was safe and productive. Our entire project team including Superintendent, Assistant Superintendent, Project Manager and Project Engineers were located onsite 100% of the time for the duration of the project. This presence on the job site held each trade partner accountable for their actions, created a team environment that fostered communication, and resulted in zero lost time and a zero OSHA recordable incident rate over 32,992 total worker hours on the job (not including subcontractor hours)!

Our team held weekly toolbox talks and safety meetings with the foreman of each trade. A third party inspector visited the jobsite regularly, providing the Owner with accountability and transparency regarding project safety. By requiring weekly composite and daily cleanings, the site was kept free and clear of any hazards that might cause injury. Additionally, through our proactive schedule management, we utilized just-in-time-deliveries to keep a minimal jobsite material stock pile. An unexpected OSHA inspection was conducted during construction. Due to our rigorous safety protocols and proactive jobsite management, the inspection resulted in zero citations!

Not only were we focused on the safety of our employees and trade partners, the safety of staff, students, and visitors on the active campus was a critical part of our safety approach. Appropriate signage, barricades and temporary fencing as well as clear communication with the University regarding large deliveries and service interruptions during construction played a key role in the campus renovation project.

Going Above and Beyond

As a proud supporter of the University, Nunn currently employs six CSU-P alumni. Three of those team members returned to their alma mater to revitalize the Occhiato Student Center. Throughout construction, our team members conducted several hard-hat tours for college students who are studying construction management and engineering. We provide scholarships to CSU-P students in the construction management program, and we've participated in the career fair for several years while building the Occhiato Student Center. We believe investing in the next generation of skilled trades and craftspeople is crucial to the future of our society and industry. Today's students will become tomorrow's decision-makers.

“Your attention and perseverance to attaining the goals of the University were extremely commendable, and without equal in my experience of over 30 years as an architect in the southern Colorado region... It has been an excellent benefit to the University and a pleasure... to work with such a highly skilled and motivated Design-Builder like Nunn Construction.”

– John Barnosky, Director of Planning and Construction (recently retired)



[AFTER]



[BEFORE]



[PREFABRICATED MECHANICAL ROOM]



[TEMPORARY BOOKSTORE IN THE PARTIALLY COMPLETE BALLROOM]





