

Adolfson & Peterson Construction

South Wing of the St. Vrain Community Hub

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

Wellness, whether financial, emotional, physical or environmental, is the focus of Boulder County's Housing and Human Services. Thanks to the new South Wing of the St. Vrain Community Hub, these services are offered in a facility reflecting that vision.

The 75,000-sf addition to the Health and Human Services building is on track to receive a LEED Platinum Certification. Featuring an open design and natural light, it is extremely energy efficient, generating much of its own power using solar energy and advanced technology to conserve energy and water use.

The facility is the Longmont home for the Boulder County Departments of Housing and Human Services and Community Services, Boulder County Public Health, Workforce Boulder County and independent nonprofit Mental Health Partners.

A wide range of services are available, including health coverage, food assistance, immunizations, job training, employment assistance and more. The building also includes a resource center/computer lab for clients to use to build a career network and access an array of educational and family support tools.

Solutions of Special Problems

Owner with a history of self-performing work. Traditionally, Boulder County has performed construction projects in house. This was the first building Boulder County did not build themselves. At the onset, there was skepticism about whether hiring an outside contractor was necessary, and the County looked to save money by keeping some work in-house. After negotiations, the County self-performed the low voltage wiring (data, security, AV, fire alarm) and the utility relocations. Coordinating this work became a challenge, as the utility relocation went slower than planned.

Because the utility relocation was required before demolition could start, the start date was pushed by two months without extending the end date. The Adolfson & Peterson Construction (AP) team and electrician worked closely with the County's team to coordinate exact rough-in

locations. We also used BIM to facilitate preplanning and reduce rework of the above ceiling coordination.

Resequencing Construction. Despite the delayed start, our team was able to bring the project back on schedule. However, three months prior to completion, the County requested the building be turned over a month early due to issues with their current lease. The original sequencing plan involved completing the space from the top (third floor) down. To meet the County's deadline, AP re-sequenced work to allow the team to complete the building early and all at once. After working long days to meet this new goal, the County told the construction team they only needed to move furniture in and they wanted the first floor ready first. AP, again, re-sequenced to deliver the ground level first and then every couple weeks delivered the subsequent floors. This created a challenge in keeping the below floors clean as workers continued work above. In the end, the AP team met all occupancy dates.

Excellence in project execution and management/team approach

The project's aggressive sustainability goals required team focus on:

Establishing Goals Upfront: By focusing on sustainability early, it became part of design rather than added later. About 50% of the LEED plans were developed before design, allowing the team to focus on which credits to pursue. Site selection was a major consideration. The building is located downtown, a block from the main bus terminal and central to businesses. Cycling amenities such as maintenance stations, lockers and showers and covered bike racks are included. The product includes interior lightwells with skylights, solar tubes and open office along perimeter walls, allowing access to natural light.

Managing LEED during Construction: The construction team closely managed activities to ensure all construction points were accomplished. For example, waste management required training and holding subcontractors accountable for sorting materials. Keeping recycling containers uncontaminated was a daily task. The team worked diligently to ensure subcontractors were using correct paints, adhesives, etc. that met low VOC protocol. All installed lumber that was Forest Stewardship Council (FSC) certified required the team to ensure suppliers carried the Chain of Custody certification for achieving that credit. Other tasks included ensuring the mechanical contractor kept ducts protected from dust before and after install, the drywallers kept

drywall and insulation elevated and protected from moisture, stormwater plan were kept current and best management practices (BMPs) were in good condition.

Leveraging Team Experience: By leveraging team experience with sustainable buildings, we were able to manage the schedule implications and keep the cost of documenting LEED down. Throughout the process, OZ, who provided an in-house sustainability manager, and AP used ongoing communication and collaboration to ensure the project was meeting the intent of the LEED points, avoiding unnecessary rework.

Construction innovations/state-of-the-art advancement

The building will be the first LEED Platinum building in Longmont, as well as for the client, Boulder County. To achieve this high rating, Boulder County is pursuing credits in all areas of sustainability: energy savings, water efficiency, CO2 emissions reduction, improved indoor environmental quality, stewardship of resources and sensitivity to their impacts. Compared to a standard ASHRAE 90.1 2007 compliant building, the design of the South Wing building will result in 48% energy use savings and 43% energy cost savings. It features a roof-top 91.5 kW PV system.

The County purchased and demoed a local church, but prior to demolition, the team identified which materials could be reused, contributing to the re-use LEED credit. Repurposed materials included wood paneling, stone and stained glass. The wood from the glu-lam beams in the church were milled down to make the accent paneling. Stone from the church's façade was used for the columns at the new patio space and the beautiful stained glass was reused throughout the building.

Also contributing to the recycled content credit for LEED was the 100% use of recycled paint for the interior of the building. No new paint was made for the interior portion of the project as all paint was made from all old stored paint cans and mixed to exact colors.

Environmental/Safety

Construction Safety Challenge: Congested Area

With approximately 232,000 manhours worked, the team's intense focus on safety resulted in 0 OSHA recordable incidents and 0 lost time accidents. Built in downtown Longmont, the site was

surrounded with busy streets on three sides. This led to busy and congested areas where deliveries and parking required safety coordination and planning. With a construction site filled with numerous working personnel, vehicles and equipment, tight and congested spaces become a safety and logistical concern.

Unique Safety Program

AP strives to make safety engrained in our workers, practices and culture, and this project was no exception. The “Why I Work Safe” program, designed to encourage employees to focus on the personal reasons they continue to be safe, was used on this job, as was Incident and Injury Free (IIF) safety training. As an additional motivation for all workers, AP’s superintendent held monthly all-site safety meetings to discuss a monthly safety topic, as well as held drawings and prizes for those who continued to follow AP’s safe work policies.

Sustainability

The building has unique features designed to support Boulder County’s vision, values and culture. It brings to life Boulder County’s vision of a one-stop center for health and human services that will improve the client experience, allowing them to receive integrated services from Community Services, Public Health, Housing and Human Services and Mental Health Partners from one central location, ultimately leading to a healthier, more stable community.

The building will result in 48% energy use savings and 43% energy cost savings, making the project a model for future municipalities. Other unique features include salvaged wood from a local church, a recycling/composting program, a regional demonstration garden and a comprehensive transportation program that includes a bike maintenance area and electric vehicle charging stations.

Excellence in client service and/or contribution to community

“From the beginning, Boulder County wanted this project to be an example of a functional, sustainable building” – James Butler, Project Manager from Boulder County

Reflecting this success, it has already been dubbed Colorado’s Greenest Building of 2015 by the USGBC.

- This project addresses social equity issues by providing a beautiful building with the highest level of sustainability to a disadvantaged population. The look, feel and layout of the building have been purposefully designed to be welcoming to clients to help reduce feelings of anxiety and help eliminate stigma around accessing County services.
- Boulder County is leading by example, primed to bring the first LEED Platinum building to Longmont.
- To ensure easy access for clients and staff who walk, travel by bus, bike or use other methods of transportation, a strong emphasis was put on strategies that support alternative transportation programs.
- Boulder County's Net Zero Waste initiative pushes the limits of sustainability in their projects – providing commingled recycling and composting in all areas of the building (including composting in restrooms), a recycling station for hard to recycle items such as electronics, plastic bags and Styrofoam. This philosophy flowed into project construction by reducing materials, utilizing salvaged materials and recycling of construction waste.









