Category: 11 – Best Building Project – General Contractor ($76M)

Contractor: Brinkman Construction

Project Name: The Foundry

The Foundry is a 415,000 SF sweeping redevelopment of nearly three city blocks in downtown Loveland, Colorado. The name reflects how Loveland has risen as a showcase for art, especially sculpture, and celebrates the foundries who cast the many art pieces found in Colorado and around the world. Despite several unforeseen challenges over the course of the two-year project, the Brinkman Construction team successfully transformed three empty city blocks into a vibrant community space that is already drawing thousands of additional people to the historic downtown district.

Project Overview

The Foundry is a public/private partnership between Brinkman [Development], Colmena Group, Brue Baukol Capital Partners, and the City of Loveland. It includes a mixed-use community, public parking garage, Metrolux Dine-In Theatre, TownePlace Suites by Marriott, and community plaza. Brinkman Construction was the general contractor for all parts of the project except the theatre, completing five separate projects simultaneously with phased openings over the course of a year (1 – public infrastructure, 2 – parking garage, 3 – two mixed-use buildings, 4 – public plaza, 5 – hotel).

Patina Flats, the mixed-use portion of the project, is comprised of two wood-frame over podium five-story buildings with 155 apartment units, ground floor commercial space, and below-grade parking making up a total of 182,000 SF. Amenities include an outdoor fire pit, rooftop patio, fitness center, and lounge areas. The units feature open floor plans with wood-style flooring, patios, and mountain views.

Patina Flats overlooks the public plaza with a large, grassy area, LED splash pad, pedestrian walkways, and pavilion for community events. Adjacent to the plaza is a five-story, 460-stall public parking garage with public restrooms and police services facility. The south end cap of the

project is a 102-room TownePlace Suites by Marriott with a fitness facility, salt-water pool, meeting space, and outdoor patio.

Overcoming Challenges

During the first phase of the project, the construction team led extensive dewatering efforts to build the portion of the five-story parking garage dedicated to Patina Flats resident parking that was below-grade. This was followed by compulsory installation of permanent dewatering infrastructure. To accommodate the temporary construction dewatering, a large header pipe around the entire perimeter of the excavated site was needed until the permanent collection system could be installed. The team had to install ramps and sequence work to maneuver around the site while dewatering activities occurred. Groundwater had to be treated for turbidity and sampled at weekly intervals throughout the construction process before emptying into the storm drain.

Creating a solution for the permanent dewatering infrastructure required the construction team to serve in a design-assist capacity, working closely with public and private partners, to undergo several design changes of the collection system and sump pit mid-process. All parties collaborated to uncover innovative strategies that would ensure long-term filtering and removal of the surprisingly high volume of groundwater. Although construction had to be stalled to evaluate design alternatives, the parking garage was delivered in time to accommodate the opening of the mixed-use buildings.

In addition to the site dewatering, the team also encountered unforeseen dirt work issues during the construction of the project. Organic material was discovered in the soil during excavation requiring the construction team to over-excavate by five additional feet. In this process, the team uncovered a former basement, as well as underground fuel storage tanks that had to be inerted and removed from the site. The construction team coordinated closely with ownership, soil engineers, and technicians to mitigate issues and manage the logistics of removing hazardous material and backfilling the site. As these unforeseen conditions were evolving, several members of the team took the initiative to become trained and certified Monitoring Technicians to observe excavations and ensure the site was compliant with the Materials Management Plan (MMP). This ultimately helped the ownership group achieve their goal of receiving a No Action Determination (NAD) for the project site relating to environmental factors.

Once the team overcame these challenges on the site, the phased completion of each vertical structure required strategic coordination to ensure the individual projects were sequenced simultaneously. Through close management of trade partners and effective sequencing, the team kept construction activities moving. The construction team also accommodated hard hat tours to generate community excitement around the project, ultimately resulting in successful pre-leasing efforts for the client.

Commitment to Safety

The Foundry presented unique safety challenges for Brinkman Construction and our subcontractors in the process of disrupting three city blocks in the center of downtown Loveland and adjacent to a state highway on both the east and west sides of the project. Throughout most of the two years, there were several independent teams on one tight infill site requiring them to coordinate closely with each other on schedules and site logistics. All in all, the project logged over 640,000 construction worker hours and had up to 50 workers onsite on any given day. In addition to the baseline safety standards required of Brinkman Construction's employees and trade partners, which included extensive first day training, mandatory weekly meetings, and daily safety assessments, the team also focused on minimizing disruption to the surrounding businesses and residents throughout the project.

The safety of the surrounding community and onsite team was the biggest priority throughout construction. The team regularly coordinated with municipal partners and ownership stakeholders to ensure that work could be completed safely by shutting down lanes, sidewalks, and in some instances, entire roads while consistently providing emergency access throughout the site. Regular reviews of the site plan and phasing plans were necessary as conditions around the site constantly fluctuated. It was crucial to ensure that all onsite personnel were still providing access to all local businesses and allowing pedestrians to safely maneuver around the site without incident.

Crane coordination and site logistics for this project were unusually difficult due to the tightness of the site and the number of projects happening simultaneously. At several points throughout construction, multiple cranes were in the air in close proximity to each other. The cranes were so tall that they entered air space causing the need for six different FAA permits to be procured throughout construction. There were also more than seven boom lifts onsite at the same time.

Managing this equipment effectively on such a tight site required consistent mapping of their locations, weather vaning, and soil testing to ensure ample bearing.

Dedication to Innovation

The project team utilized a Total Station and Building Information Modeling (BIM) to check every construction activity in real-time and ensure a state-of-the-art product.

Using the Total Station, every penetration and hanger were coordinated with the model and located in the field. This innovative technique increased productivity while also significantly increasing accuracy. The field team utilized a 3D scanner to take millions of points of as-built data to prevent damage to tendons that could cause severe safety and constructability hazards. The Total Station layout also facilitated the placement of more than 1400 MEPF sleeves, an inordinately high number, to prevent any necessity of coring after the deck was poured.

Contribution to Community

The Foundry was an integral step toward helping the City of Loveland realize their vision of creating a vibrant downtown district. The project provided much-needed urban living options previously unavailable in the downtown vicinity. The community plaza shared between the buildings and the commercial space on the first floors create a truly unique space for residents to live, work, and play. The Foundry has thus far created 120 full-time jobs equaling $6.2 million in wages annually. As a new epicenter of entertainment in downtown Loveland, projections show the development will bring an additional 240,000 people into the downtown area each year.


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