

Category: 1 – Contribution to the Community
Subcontractor: Weifield Group Contracting
Project Name: Colorado Convention Center COVID-19 Field Hospital Facility

When the COVID-19 pandemic was first emerging, little was known about how quickly and how severely it would impact Coloradans or the world, at large. The World Health Organization first declared a global public health emergency on January 30th, 2020, and by the end of March, the U.S. led the world in confirmed cases.

Cases topped one million in the U.S. by April 2nd and millions lost their jobs. It was then that The Colorado Department of Personnel & Administration sent a letter of intent to Denver Mayor Michael Hancock to lease the 2.2 million square foot Convention Center facility in downtown Denver for the purpose of converting it, with the assistance of the U.S. Army Corps of Engineers, into a Tier-3 COVID-19 overflow field hospital. The 2,000-bed facility was designed as the state readied for the potential surge of COVID-19 hospitalizations in coming weeks; it would house patients who no longer required ICU beds in order to ease congestion at local hospitals. The state was also securing similar facilities across Colorado for this purpose and expected these facilities to be ready by April 18, 2020.

Weifield’s general contracting partner, Hensel Phelps (HP), was contracting under the primary contractor, ECC, in a preexisting contract that ECC was part of for rapid deployment response in Colorado. Having recently teamed up on another Convention Center pursuit with us, HP selected Weifield as the electrical partner before contract award.

“One of the most unique aspects of the project was how quickly it started – it was awarded on Sunday night, April 5th, with no design – by Monday morning, the team walked the facility with the owner, and work began on Wednesday,” said Cheryl Hoffman, HP Project Manager.

Turning a large ‘expo’ facility into a medical facility was a complex process; the facility needed to be equipped with all of the infrastructure needed to support its maximum capacity of 2,000 beds as well as operate well as an ambulatory facility and meet ADA/NFPA requirements.

Weifield's scope included 1,800 lighting fixtures, electricity and tubing for externally piped in oxygen, 3,000 equipment receptacles, enhanced fire alarm/smoke control systems, nurse call alarm systems, sinks and plumbing in each pod, emergency backup power and generator Tier IV backup power/ATS, medical gas capability, 80 water heaters and ejector pumps, and more.

The beds were to be located in six of the Convention Center's exhibit halls, each within a 10' x 10' hospital pod made of steel frame. With completion expected in under two weeks, the team planned for the worst while hoping for the best; Weifield's employees from across our projects volunteered to help with overtime work as needed to meet the compressed schedule.

"Given the speed and the nature of this project, we had to have partners that could execute the work," said Greg Gidez, HP Director of Design Services. "Weifield was that partner."

Excellence in Project Execution and Management

When Weifield arrived on the scene that Wednesday, framing was already going up and we immediately began work on electrical rough-in—while design and permitting caught up.

"It was chaos one minute and panic the next, when the virus hit," said James Selecky, Weifield Founder & Construction Executive. "We utilized common sense and focused on tuning out the outside noise."

Weifield's manpower reached 101 at the peak of the project—we were working side-by-side with the other trades including 200 framers, 25 HVAC/plumbing techs, as well as the HP and Army Corps of Engineer staffs.

"Everything was designed on the fly – we all had rough ideas about what we had to do, but worked together to share ideas and knock out issues," said Brigg Lichfield, HP Project Superintendent.

With what we thought would be over 2,000 rooms to complete in a phased turnover within two weeks – with the first 250 needed in a week – Weifield mobilized our Prefabrication team on-site

with 35 workers who prefabbed the assemblies while our crews installed the wall rough-in. Weifield's on-site prefabrication and planning accelerated our production to its highest degree – as the team completed 175+ rooms per day and worked to install 18 prefabbed 42-circuit panels and other assemblies.

Weifield's crew members worked 12-hour days and management, 14+-hours days, to keep pace – two crews worked different shifts each day to ensure full 6 a.m. to 12 midnight coverage.

“What was most impressive about Weifield was the fact that they were not only keeping up with the best drywallers and framers in the region, in many cases, they were pushing them,” said Lichfield.

Weifield was agile in handling an unexpected phase that arose requiring upgrades to the fire alarm and smoke control systems throughout the entire facility—a task that added many hours but could not expand the defined project schedule.

Overcoming Challenges [Poetry in Motion]

When Weifield began the project, the only thing that was designed was a partial mockup of rooms and nurse systems.

“As the pods were framed and mocked in, we had to do changes on the fly – as new drawings came in continuously,” said Brian Miller, Weifield Project Manager. “The entire team was proactive in working through these design issues.”

According to Hoffman, one of the project's big challenges involved getting long-lead materials – as well as the fire alarm beam detectors which were difficult to obtain.

“Weifield was hyper-focused on making sure we got them on time; they were delayed on the Canada-U.S. Border,” she said.

As the cases began to decline sharply in April, the state issued Stop Work orders at this facility, decreasing the number of beds needed to 600 and extending the opening date to June – while planning to keep the facility ready in the event of a fall coronavirus surge.

“It was like taking a train going 100 MPH and telling it to go to 20 MPH,” said Hoffman. “Weifield was very up-front with communication so we could work through that together.”

To facilitate a smooth project, Weifield focused on communication. Every day, the first shift would update the second shift on the current statuses of engineering, drawings, and tasks – and Weifield’s leaders participated in a daily site meeting with all teams.

Said Selecky: “We’d call some of our office staff in at 10 PM and they were down at the job site within two hours – this happened throughout the project and included our teammates at Hensel Phelps, U.S. Engineering, and the Army Corps, as well.”

This was an extremely fast, collaborative effort to bring the inspecting agencies (City and County of Denver, the Denver Fire Department, and the Colorado Department of Public Health and Safety) up-to-speed on the fire alarm phase to align with their required procedures.

“The leadership teams from all companies stepped up to tackle this project,” Gidez said. “The crafts and rank & file came right up behind them and executed, following leadership’s guidance and performing admirably. It was poetry in motion.”

Safety Performance

Safety was a top priority across all crews—masks and the appropriate safety gear were worn at all times, and workers had temperatures taken and signed health certifications when they started and left their shift.

Weifield did not experience any incidents, accidents or near misses on this project – which, considering the project scope– is significant. For required interruptions to systems, Weifield developed comprehensive Methods of Procedure which required signoff from all partners within

tight timeframes; Weifield also needed to add additional fire alarm panels to make this system operable for the amount of beds that were installed.

“It was challenging to implement this level of health and safety into the facility on a short timeline, but we were successful,” said Miller.

Safeguarding Our Community

At the time of the Stop Work notice on April 16th (eight days before the original completion date), Denver had 1,784 positive cases of COVID-19 and 75 people had died, according to the Colorado Department of Public Health and Environment. The city was successfully keeping up with demand and 80% of the city’s hospital beds, one-third of intensive care unit beds and two-thirds of the city’s ventilators remained available.

Four of the six halls had been built out fully – and Weifield had worked ahead to the point where we had already finished rough-in for 80% of the project. The remainder of the infrastructure was left in place to accommodate a future full buildout, later.

As of now, the Federal Government has leased the Convention Center facility for one year; although it has not been utilized as of yet, the State is currently using it for nurse trainings and similar purposes.

Every team went above and beyond to achieve the civic nature of the project – and outperformed themselves, in every regard.

“It was a beautiful thing to watch, the collaboration and cohesiveness – everyone stepped up from a corporate and individual perspective to make it happen which was exceptional,” said Gidez.

“In the end, knowing that we were building a potentially life-saving facility for those who may need it – that was our focus; we were tremendously proud to be a part of that,” said Selecky.









