

Design-Build Delivers for Charlotte's Vets

BY GEOFFREY COREY

esign-build offers both speed and flexibility, which helps control costs in healthcare facility construction, while ensuring the planning takes into account the latest medical technology and equipment. One of the best ways to use this delivery method for good, then, must be to provide the highest quality healthcare and health facilities to our nation's veterans. We reached out to the Department of Veterans' Affairs (VA) and found more than a few professionals willing to discuss the VA's use of design-build, especially on a particularly successful lease project in Charlotte, North Carolina.

Until recently, the nearest VA medical center in the Charlotte region was out in Salisbury, N.C. – almost an hour drive outside of the city. But this past April, the VA opened a new Charlotte VA Healthcare Center (Charlotte HCC) offering outpatient services, some of which – such as dialysis, physical therapy and MRI testing – have not been available in the area before and were in high demand by the area's veterans. The new facility is one of the nation's largest VA healthcare centers, and the project delivery went smoothly, in part, because of design-build.

According to Stella Fiotes, Executive Director for Construction and Facilities Management at the VA, "this project is a prime example of how close collaboration and teamwork with a common goal of providing state-of-the-art facilities for veterans allowed the department and its partners to complete this amazing building below budget and ahead of schedule. With the use of innovative technologies, lean processes and BIM, the project team was able to stay nimble and responsive to demanding and changing requirements."

Collaboration and Communication

Childress Klein of Charlotte and Cambridge Development Group of Virginia teamed up on the project, forming Childress Klein-Cambridge (CKC) Healthcare Solutions to design, build and provide facility management. VA has a 20-year lease contract on the facility from CKC, which hired both the A/E, RPA Design, and the general contractor, JE Dunn. "VA and the prime and subcontractors all participated in design meetings to ensure the contract requirements were well thought-out from a planning perspective and executed as intended," explained Maritza Guevara, Senior Resident Engineer (SRE) for the VA.

Project Manager Sam Perminter said, "The overall project, including design, construction and the partnership between VA and the developer, went very well. Managed by the lessor, his general contractor (GC) and their designer, there was VA staff on site led by an SRE to ensure VA received what we contracted for, which contributed to a successful collaborative environment."

This project was completed under budget and delivered two months ahead of schedule. VA faced challenges procuring medical equipment in a timely manner, but to mitigate any delays. VA and the developer created flexible design rough-ins so infrastructure requirements could be finalized as soon as site-specific drawings were available.

"Extensive partnering was held between the VA, lessor and GC at the start of the project, after award and several times throughout the design." Guevara says. "Reaffirming the mission with partnering sessions throughout the process maintained a sense of unity, contributing greatly to the overall success of the project."

Senior Project Executive for CKC Healthcare Solutions Mark Hefferin, who established the partnership approach through Ventura Consulting, added his thoughts stating, "Every successful project starts with the end in mind, and having a great client like the VA who fully supports the partnering process and the integrated communications required between all partners was key."

Solving Problems Together

VA utilized DocuNet as a share point for specification and documents and the JE Dunn Dashboard for the most up-to-date construction drawing sets. This project was also a pilot program for the City of Charlotte to utilize the BIM model for submitting construction drawing reviews.

"Due to the size of the project, we had several partnering meetings with the entire design/construction team and raised any issues that were most pressing at that point in time," Perminter said. "We believe that the success of this project was ultimately due to the commitment of the entire team to work through any hurdles in order to ultimately deliver high-quality healthcare to our veterans."

The changing need of the veteran patient population is a challenge on any VA health-care project. In this project, for example, the team had to add 17 treatment bays for dialysis service immediately following contract award. Several meetings needed to take place with leadership, dialysis staff and dialysis equipment vendors to ensure that the additional work could be managed without a significant impact to the overall design schedule. The team worked closely with VA Medical Center users to determine





which areas could be reduced to allow the addition. The A/E assisted with presenting pros and cons with the location and layout. The entire team worked together to ensure a plan was put forth that resulted in the most efficient and effective layout for dialysis treatment, with minimum impact to other services," Guevara said. "Ultimately the team was able to facilitate the inclusion of this additional requirement with minimum negative impacts to project delivery."

Hefferin says the team worked hard to manage changes smoothly throughout the design-build process. 'Coupled with a very challenging schedule for design, permitting and construction, we can only credit our dedicated design and construction partners – RPA, Caveo Engineers, JE Dunn and many others – who were able to keep the project budget and schedule aligned with our Partnering Charter," he said. "The VA likewise held up their commitments to expedite key and critical decisions necessary through on-site Senior Resident Engineer Maritza Guevara and the many VA members she worked with to manage critical information and still maintain goals of the team."

The Design-Build Difference

Design-build played a key role in the project's successful delivery. 'As opposed to what would have happened with design-bid-build, design-build allowed for a faster pace with a much higher degree of collaboration needed to ensure success.' Guevara explained. 'Additionally.

SNAPSHOT

Childress Klein-Cambridge Healthcare Solutions and Charlotte-based RPA Design, the architect of record, designed the project to achieve LEED* Silver certification. JE Dunn is the contractor.

- 20 year lease contract awarded in August 2013. Building opened April 2016.
- ▶ \$104 million construction budget
- ▶ 295,000 square feet for clinical use
- ▶ 1,930 surface parking spaces
- ▶ 17 kidney dialysis chairs

▶ 2 MRI machines