

HEALTHCARE FOCUS



O'CONNELL ROBERTSON



Faith Community Hospital exterior rendering

Faith Community Hospital Supports Patient-Focused Care

Since 1958, Faith Community Hospital (FCH) in Jaxsboro has been a place “where professional care meets local convenience” for the residents of Jack County. That level of care will be enhanced with the opening of a new replacement hospital, clinic, EMS facility and wellness center in the community. The facilities recently broke ground and will open in summer 2015.

O’Connell Robertson is providing comprehensive architectural and MEP engineering services for the 57,000 SF replacement hospital, which will include a 17-bed nursing unit, imaging, lab, emergency departments, four LDRPs, delivery suite, special procedure suite, a physical therapy suite, and a full kitchen and dining room. A 16,000 SF attached outpatient clinic will have six exam pods. A 4,500 SF EMS building and a free-standing 9,000 SF wellness center featuring a pool, fitness area, locker rooms and a multipurpose community room are also being built on the 15-acre site, providing a comprehensive hierarchy of wellness, clinical, outpatient and acute care services.

The new facility will enable the hospital to offer more services to the community, including obstetrics/delivery; minor surgical and screening procedures, including mammography; more primary and specialty care clinical services; and physical and cardiovascular therapy departments.

“Our community has been extremely supportive of our new hospital campus,” said Frank Beaman, Faith Community Hospital’s CEO. “They are excited about the additional services we will be able to offer and they understand the need for new facilities that can better support our healthcare delivery.”

The community support is evident in two recent awards from the Jaxsboro Chamber of Commerce: FCH was named the “Business of the Year” and Beaman was honored as the “Business Person of the Year.”

The awards were based on commitment to customer service and standards of excellence—values demonstrated in the design of the new



Lobby rendering

“The O’Connell Robertson team led our staff through a comprehensive process to truly understand how we would be using the spaces. They integrated all the input into the design, resulting in a facility that will be highly responsive to staff and community needs.”

Frank Beaman
CEO, Faith Community Hospital

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Commissioning Optimizes System Performance

Commissioning (Cx) is the testing and “tuning” of building systems to reach their optimum performance. Most individual HVAC equipment is standard but almost all systems are customized, which leads to performance issues no matter how well the installation is designed and constructed. Design engineers and contractors are not able to verify that every system is operating as intended in all seasonal and occupancy conditions. As a result, systems may not function as effectively and efficiently as designed, which can lead to higher energy bills and maintenance issues.

O’Connell Robertson recently worked with Seton Medical Center in Austin on a central plant project, adding a chiller, cooling tower, and condenser water heat exchanger and replacing all the central plant controls. The plant had multiple chillers of differing capacities, which complicated the staging of the chillers and pumps. The framework for the equipment staging could be identified during the design, but it was not until the systems were commissioned during multiple load conditions that the exact staging and setpoints could be identified and system performance optimized.

“The thorough testing and commissioning of Seton’s new controls system has resulted in a remarkably smooth rollout process for such a complex project,” said Dan Vickers, senior project manager at Seton Family of Hospitals. “O’Connell Robertson’s commissioning team helped us work through issues while the contractors were still onsite, giving our facilities group more confidence that our equipment is working properly. As a result, there were fewer call backs after project completion and a smoother transition to the operating and maintenance staff.



Pictured: Ted Davison, HFDP, LEED AP and Kyle Fisher, EIT, CPMP

“The Central Plant had essentially evolved from the early 1970s without any commissioning level exercises taking place,” he added. “The team at O’Connell Robertson commissioned our recent building additions and renovations while properly tying in the balance of the decades old central plant from an efficiency and logic standpoint.”

While commissioning adds costs to a project, those costs are often offset by increased occupant comfort, energy savings and decreased maintenance issues.

O’Connell Robertson’s commissioning team leader, Kyle Fisher, EIT, CPMP, has been certified by ASHRAE as a Commissioning Process Management Professional. For more information, please contact Kyle at 512.478.7286 or kfisher@oconnellrobertson.com.

Faith Community Hospital *continued from front*



facility. The focus on customer service begins before the patient even reaches the front door. The main entrance to the hospital and the entrance to the

clinic share a vehicular drop-off area. Parking is configured in a one-way pattern to minimize vehicle conflict and ease navigation.

Elements that maximize efficiency and convenience continue inside. The imaging department is easily accessible from both the clinic and the emergency department, minimizing crossover between ambulatory and ED patients. The ED was located in close proximity to the main inpatient nurse station, which allows the nursing staff to “flex” with the highly fluctuating volume of emergency patients while maintaining quality patient care. Similarly, the nurse station dedicated to the LDRPs and nursery is

located near the main nurse station to facilitate staffing and patient orientation.

Recognizing the importance of having loved ones nearby for faster healing, the site plan includes two RV docking areas for use by the families of patients hospitalized for longer stays.

“The O’Connell Robertson team led our staff through a comprehensive process to truly understand how we would be using the spaces,” stated Beaman. “They integrated all the input into the design, resulting in a facility that will be highly responsive to staff and community needs.”

Rollins Brook Hospital Wins National Excellence Awards



HealthStrong Award Winner
Overall Excellence,
Excellence in Outcomes,
Excellence in Patient Satisfaction

Rollins Brook Community Hospital

Small and rural hospitals are vital partners in their communities, providing needed healthcare services and ensuring their patients receive the best possible care. Critical Access Hospitals (CAHs) ensure residents in rural areas can obtain 24-hour emergency services and inpatient care without facing a long drive to an urban hospital.

“Our collaborative partnership with O’Connell Robertson during the design of the hospital expansion resulted in a highly effective facility that has withstood the test of time through ongoing changes in healthcare delivery.”

Carlyle Walton
Former Administrator, Rollins Brook Community Hospital

Rollins Brook Community Hospital in Lampasas is a CAH dedicated to providing its community with high quality, patient-centered care. The hospital’s efforts were recently recognized by iVantage Health Analytics as a HealthStrong Award winner for Overall Excellence, Excellence in Outcomes and Excellence in Patient Satisfaction,

reflecting top quartile performance in all three areas among all acute care hospitals in the country. The Hospital Strength Index ranks all of the more than 4,400 general acute care hospitals in the nation, including over 1,300 Critical Access Hospitals. In addition, the Rollins Brook emergency department was awarded top performer in patient experience for 2012-13 by Adventist Health System, the hospital’s parent company.

O’Connell Robertson began working with Rollins Brook Community Hospital in 1998 on a facility design concept for a phased expansion that would create one of the first CAHs in the State of Texas.

“Being in the forefront of the CAH program, it was critical to develop not only a highly efficient design but also to provide our client with the flexibility to evaluate the success of the solution and the financial commitment needed for subsequent phases,” stated Rick Burnight, AIA, ACHA, O’Connell Robertson’s president/CEO.

The first phase relocated all acute care functions out of the existing 60-year-old hospital facility into a new 15,000 SF, two-story building. The first floor featured the ED, radiology, lab, and

cardiopulmonary departments, along with the admissions area, concentrating outpatient services in one efficient, patient-friendly environment. The second floor included 12 medical/surgical beds. Phase 2, constructed five years later, incorporated a two-OR suite with pre-op and post-op beds on the first floor and an additional 13 in-patient beds on the second floor, completing the full-service acute care facility. The multi-story design was located immediately in front of the existing facility, taking advantage of a major topographic change on the site while projecting a more progressive image.

“Our collaborative partnership with O’Connell Robertson during the design of the hospital expansion resulted in a highly effective facility that has withstood the test of time through ongoing changes in healthcare delivery,” said Carlyle Walton, Metroplex Health System president/CEO and former Rollins Brook Hospital administrator. “The Firm understood our mission and commitment to the community, and incorporated the heritage of our existing building with a contemporary, state-of-the-art CAH that continues to efficiently support our operations.” 🏠

Copper Emerging as Top Antimicrobial Metal

While the wonders of silver ion technology and its antimicrobial properties have dominated the last decade, copper is now emerging as possibly the top antimicrobial metal. Known for centuries for its antimicrobial properties, it has recently been put to the test against its silver counterpart and has shown to kill bacteria quicker and at various temperatures and levels of humidity. Treated surfaces have shown to kill bacteria within two hours, including some of the most threatening superbugs.

Currently the only antimicrobial material to be registered with the EPA to legally make public health claims, antimicrobial copper is now available on a range of furnishings, products and surfaces. While not a replacement for routine hand washing and maintenance, antimicrobial treatments can benefit healthcare facilities.

For more information, contact Jennifer Hoskins, IIDA, LEED AP, at jhoskins@oconnellrobertson.com or 512.478.7286. ★

Upcoming Code Changes Impact MEP Design

The 2014 edition of the NFPA 70: National Electrical Code (NEC) and the 2012 edition of NFPA 99 (Health Care Facilities Code) have a number of changes in them that will affect future hospital electrical and HVAC designs.

One of the more notable changes in the 2014 NEC is the number of receptacles required at the patient bed location for general care areas, critical care areas and operating rooms. In some cases, the receptacle count has more than doubled from the 2011 edition, as shown in the table below.

Location	2011 NEC	2014 NEC
General care areas (517.18)	4 receptacles	8 receptacles
Critical care areas (517.19)		
(A) Patient rooms	6 receptacles	14 receptacles
(C) Operating rooms	N/A	36 receptacles

It is important to understand the NEC's definitions of "receptacles" and "outlets," which should not be used interchangeably. While the 2014 NEC has not yet been widely adopted, more jurisdictions are expected to do so by fall 2014.

The 2012 NFPA 99 no longer requires the automatic venting of smoke in windowless anesthetizing locations. However, the 2012 NFPA 99 has not been formally adopted by the Texas Department of State Health Services (TDSHS), and there



2014 NEC-required number of receptacles at patient bed location

are no plans for that to occur soon. Therefore, it is strongly recommended that any plans to omit automatic smoke removal be communicated to the TDSHS architectural review group during design. The HVAC system design and controls for surgical suites are complex and expensive to implement and maintain so it is important that plans are approved by TDSHS in advance.

For more information, please contact Ted Davison, HFDP, LEED AP, senior associate and healthcare mechanical designer at O'Connell Robertson, at 512.478.7286 or tdavison@oconnellrobertson.com.



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