## Benjamin Russell Hospital for Children

## Replacement Hospital



The Benjamin Russell Hospital for Children is a new, 12-story, replacement hospital with a central energy plant. This project is the largest medical facility expansion in the history of the State of Alabama. It is located directly north of the current facility and is bridged to the existing facilities.

The new facility accommodates projected growth in patient volume, anticipated medical technology needs, planned consolidation of pediatric services, and features a family-centered design that enhances comfort for patients and families. The hospital houses 332 beds, plus 48 Neonatal Intensive Care Unit (NICU) bassinets. The new hospital includes larger rooms, a larger emergency department, and two additional general operating rooms. Additionally, two cardiac operating rooms dedicated to pediatric cardiovascular surgery have been relocated to this facility. The new hospital is expected to become LEED® certified, and will become Alabama's first LEED certified hospital building.

The design features stunning views, including two roofs with native plants. Facing due north, it makes the most of natural lighting, while ensuring the sun never hits the windows on the broad side of the building. Other green features include a coated roof that reduces heat gain from the sun and a central plant that collects 30,000 gallons of water daily from air conditioning vents for other uses, such as irrigation for green spaces.

SSOE served as the associate Mechanical, Electrical, and Plumbing (MEP) engineering firm for this project, provided peer design review, provided MEP construction-period services, and designed the fire alarm systems for the entire facility. Some of the MEP systems incorporated are the systems on the connector bridges to the four existing buildings adjacent to the new structure, as well as MEP systems for the new stair tower at the existing hospital.

size 760,000 SF

**location** Birmingham, Alabama

## highlights

Largest medical facility expansion in the state

Increase from 275 to 332 beds plus 48 NICU bassinets

Larger patient rooms, larger emergency department, and two additional general operating rooms

Slated to become Alabama's first LEED certified hospital building

