

Bridgestone Projects on Track with Expert Plan Review Assistance

Best known for horse training and racing, Aiken County, South Carolina, also is making a name for itself in tires. In 2011, Bridgestone Americas Tire Operations, a business unit of Bridgestone Americas, put forth plans to build a 1.5 million-square-foot radial tire plant and expand its existing light truck tire plant by 740,000 square feet. The total \$1.2 billion plan is the single largest capital investment in South Carolina history.

Now it is up to the Aiken County Building Codes Department, part of the Planning and Development Department, to keep the project on track by reviewing



The project team was able to move forward on schedule with the mixing facility construction at the new Bridgestone plant, thanks to a streamlined workflow for plan reviews.

and issuing permits for both projects as efficiently as possible.

"We're a pretty small community of about 150,000," said Rick Hallman, Building Official for Aiken County. "When the Bridgestone projects were announced, I



Aiken County Building Codes Department depended on ICC Plan Review Services to review design packages for Bridgestone's new 1.5 million-square-foot radial tire plant.

knew we were not equipped to handle plan reviews that would be required in the timeline that our customer needed for projects of this scale and scope."

On average, Aiken County issues about 1,800 permits a year with a staff of four residential inspectors, one commercial inspector and three administrative permit technicians. About 600 permits are for new residential buildings, another 400 for commercial buildings and the rest for small, miscellaneous projects.

In November 2011, Hallman called ICC Plan Review Services for help. "The complexity and magnitude of these two projects and the fast-track design development of drawings would make it a monumental task for any department," said Doug Connell, a team leader for

ICC Plan Review Services. "We're here to help, to act as an extension of a jurisdiction's building department."

Radial Expansion

The new \$900 million Bridgestone Off-Road Radial (ORR) tire plant, set to produce large and ultra-large tires, will be constructed on a 545-acre green-field site in the Sage Mill Industrial Park. The first phase of the new plant is scheduled for completion in the first

quarter of 2013. Equipment will be installed starting in the fourth quarter of 2012. The company plans to seek LEED Silver Certification on the plant when completed.

The first phase of the 474,000-square-foot Graniteville tire manufacturing facility expansion will allow production of an additional 4,750 passenger and light truck tires per day by 2013. Interestingly, one of the International Code Council's legacy code groups provided the review on the original plant in 1998. Site preparation

and construction on the expansion began in December 2011, with manufacturing equipment scheduled to be installed by third-quarter 2012. The second phase of the expansion will begin soon after. The entire expansion effort will increase the plant's dimensions to 2.74 million square feet and deliver a rated production capacity of 37,750 tires per day, or about 13.4 million tires annually. The Aiken County Building Codes Department requested that ICC plan reviewers evaluate design packages for both the new plant and the expansion for building (structural and non-structural), mechanical, plumbing, electrical and accessibility code compliance per the 2006 *International Codes*. Every plan review includes a review of construction plans for all applicable code disciplines, identification of areas of non-compliance and a detailed checklist of compliance with and violations of the code, as well as a free follow-up consultation.

Streamlined Workflow

The plan review process is straightforward, with the architect/developer working directly with ICC Plan Review Services staff in Birmingham, Alabama.

"In the past, we've had developers and architects submit plans to us, and then we forward [them] to ICC," Hallman said. "In the interest of efficiency, we cut

out the intermediary for the Bridgestone design packages and have the developer/architect send them to ICC. I [correspond] with ICC regularly through email or on the phone, but I know if ICC plan reviewers give the okay on plans, then I can issue the permit with complete confidence.”

Both Bridgestone projects will be permitted in several phases and require a good line of communication between the design team and the plan reviewers at ICC to manage the quantity of documentation. As an example, the Early Release Foundation and Steel Packages for the ORR plant were first issued in December 2011. Four months later, the project design team had issued 36 subsequent packages and 345 of the anticipated 1,100 drawings sheets. The expansion plant design drawings also were first issued in December 2011 and contained 484 sheets.

The ICC Plan Review Services team works with the Bridgestone project team to ensure that the phased approval workflow meets the demanding schedule to facilitate the process.

Initially, the architect might send the foundation drawings and site work for review, follow with the superstructure package, then the architectural design package and finally MEP drawings. Should any of the design plans not meet the code provisions, the ICC identifies the areas of non-compliance and then reviews the designer’s responses. As with any plan review, the final authority on all permitting questions lies with Aiken County.

A Fast-Track Foundation

“This is my first experience with ICC Plan Review Services,” said William L. Wood, NCARB, Project Manager and lead architect for the Bridgestone ORR project with Gresham, Smith and Partners. “And, thus far, things have moved along well. Our project is on a fast-track schedule, and we have issued numerous packages in order to

stay on schedule. The subsequent plan review/approval has been completed with efficiency, keeping construction on track.”

“So far, so good,” Hallman added. “We rely on engineering knowledge and background of the ICC team, while our staff handles the daily inspections. It’s a great advantage to have that kind of expertise readily available.” **bsj**

ICC Plan Review Services is a fee-based service with offices in Birmingham, Alabama, Chicago and Los Angeles available to all state and local governments, as well as design professionals.