North Shore School Projects Go Online Archbishop Hannan High School & Lakeshore High School

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Unblinking cameras record every move at two high school construction sites The McDonnel Group is building on the North Shore of Lake Pontchartrain. Worksite webcams provide a steady stream of photographs for those who log on to see.

One school project is the St. Tammany Parish High School. "This is the first time we have used real-time photos, and it is very popular with the owner and architects," said The McDonnel Group's Project Manager John Manion. "And, since the school project is a publicly funded project, school board members and constituents are able to go on the Internet and see the progress. You will literally be able to watch the building come up out of the ground."

The McDonnel Group is running on a fast track to complete this school, commissioned by the St. Tammany School Board, and to construct the new Archbishop Hannan High School for the Roman Catholic Church Archdiocese of New Orleans.

Fauntleroy & Latham Architects is the architect of record for the St. Tammany project. Construction began on the \$39 million high school in February 2007. The projected completion date is June 2009 to enable students to begin attending the 158,000-square-foot school by August of that year.

The construction is moving along rapidly. "We have the steel up on six buildings of the high school," Manion said. "And construction is complete on the road infrastructure going in and out of the site and the site parking. The site utilities are now in place."

The high school will have 40 classrooms, six science labs, six computer and business labs, a millwork shop, and an automotive shop. The cafeteria will have three service lines and seat more than 300 students. There will be 216 faculty parking spaces, 590 spaces for student vehicles, and additional spaces for administrative and visitor use.

"It is a huge project from the infrastructure on up, because we started on a wooded lot with no utility service," Manion said. "The school now has its own water supply through a well system, as well as an onsite sewer purification system. There are four stand-alone structures, a gymnasium to accommodate more than 1,000 people in the stands, an agriculture-science building, and a band-choral building. The main building complex is designed in the classic high school configuration with a mall-type concourse connecting the administration offices, science lab, library, cafeteria, and four classroom wings."

Manion said his team has faced challenges with the high school project, including labor shortages because of heavy construction in the metro area. "It has definitely been to our benefit to be proactive in lining up subcontractors," he said.

"The biggest task is coordinating each of the subcontractor's multiple crews. Each building has different crews for the foundation, masonry, and mechanical and electrical work, so that has been one of the most challenging aspects of this project."

Gary McCann is The McDonnel Group's Onsite Supervisor for St. Tammany Parish High School. He said that upon completion, St. Tammany will be the largest high school in Louisiana, with 11 buildings occupying several acres. "We are constructing multiple buildings at the same time," he said.

When construction started, the area was so wet that The McDonnel Group had to use structural fill for the excavation and foundation. "Two types of structural fill had to be brought in from Slidell about 30 miles away — a red, sandy clay and a white sand," McCann said. "We used both types of fill and found the white sand to be more suitable when you are working on the foundation areas and excavating."

Because Louisiana's soil is soft and wet, it requires burying pilings before construction can begin. For this project, The McDonnel Group used more than 1,750 pilings, drilled into the ground at least 30 feet deep. Crews used a pile-driving rig and drillbit similar to those used in oil fields.

In August 2007, The McDonnel Group began building the Archbishop Hannan High School on the North Shore. The original high school was in Chalmette,





Louisiana, close to the Ninth Ward, one of the areas among those hit hardest by Hurricane Katrina in 2005. Plans are to complete the school in October 2008 – an aggressive schedule according to The McDonnel Group's Project Manager Bryan Brogan.

Brogan said the construction is based on a typical high school design. "The gymnasium has a mixed structure with the center portion a pre-engineered metal building and perimeter areas built of metal joists and decking supported by masonry," he said. "The gymnasium will be 21,500 square feet. The kitchen and dining area is about 10,000 square feet, and the cafeteria has an outdoor dining area of around 3,000 square feet."

Construction site webcams show the structural foundations and slab-on-grade that were completed at the gymnasium. The red iron is up at the pre-engineered metal building portion, where the perimeter masonry walls are well under construction. The foundation and slabon-grade are complete for the administration/library and chapel building, and the foundation and slab-on-grade for the adjoining classroom building also are complete. In addition, the foundation is complete for the cafeteria building, where the slab-on-grade construction was completed in early December.

Underground water, sewer, and site drainage all are installed. Most of the underground electrical and plumbing work is complete. With all the subgrade work complete, site paving work began in December. The cafeteria metal building is on site, which allows the erector a smooth transition from the gym to the cafeteria. The foundation for a third pre-engineered metal building, a small maintenance structure, is under construction.

"Trying to get the submittals and the approvals, along with getting it all coordinated in time to get the materials on site for the actual construction part, has been challenging because of the fast track we're taking," Brogan said. "However, everything is coming together."

The school design includes a two-story, structural steel administration/library and chapel building, which is connected to a two-story classroom building via a short bridging corridor. The structural steel arrived on site in early January. Archbishop Hannan High School is expected to open in time for the second half of the 2008-2009 school year.



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