

New High School Facility Rises Above

Student-athletes in Union City, N.J., will soon be playing football, baseball and soccer against the backdrop of the New York City skyline thanks to a new \$178 million high school that takes athletics to new heights with a rooftop playing field.

The 366,000-square-foot school, set to open this year, will replace two existing high schools and a 4-acre playing field as part of a citywide redevelopment program intended to revitalize the school district and surrounding area.

RSC Architects of Cliffside Parks, N.J., in association with the St. Louis office of HOK, designed the school, which is located at the site of the former Roosevelt Stadium. Epic Management of Piscataway, N.J., is the construction manager for the project, which started in fall 2006 and is expected to reach completion in time for the 2009-10 school year.

Union City's dense population and scarcity of available land presented a unique set of circumstances for the school, which requires program space for 1,700 students and athletic facilities that could replace the former 4-acre field contained within the now-demolished Roosevelt facility.

"The idea of putting the athletic field on top of the roof came from the fact that we would have had to displace about 1,400 families if we had put the stadium somewhere else," says John Capazzi, principal at RSC Architects. "And the cost was astronomical compared to the additional cost of putting a stadium on the roof."

To maximize space, architects chose a multilevel design that met needs for academic programs and indoor and outdoor sports within a contained footprint. The school's educational spaces are housed in a four-story, L-shaped classroom wing that frames part of the two-story building core.

Academic features include 66 classrooms, space for home economics and art and dance, technology labs and a media center. In the building's two-story core area, shared spaces include a cafeteria, an outdoor courtyard, a 21,000-square-foot gymnasium and a 900-seat performing arts auditorium and theater.

"The theater will provide the district with its first-ever, high school-level theater," Capazzi says.

"They're excited about having a theatrical program and a full auditorium."

Located 40 feet above grade, atop the auditorium and gymnasium, is a



HIGHLIGHTS

Union City High School, Union City, N.J.

- New \$178 million high school
- 110,000-square-foot rooftop playing field
- Synthetic playing field, bleacher seating for 2,000 fans
- 21,000-square-foot gymnasium



110,000-square-foot, regulation-sized playing field for football, baseball, soccer and lacrosse. Student-athletes, coaches and fans will have access to a grandstand area, a concession stand and bleacher seating for 2,000 spectators.

To support the weight of the field without sagging, the cast-in-place concrete building is designed for zero deflection. An upside-down roofing system with a fluid-applied hot membrane provides waterproofing protection for the gym and auditorium below.

"We have a membrane roofing system that is right on the concrete deck," Capazzi says. "Then we have an infill layer with the turf on top of it."

Due to the amount of insulation, the roof is well below the athletic playing surface, which prevents noise or sound vibrations from interrupting events in the auditorium and gym, Capazzi says.

In addition to classroom and recreational space, the school includes health screening and child-care centers and a stand-alone, seven-level parking garage with spaces for 200 cars.

The project was funded through the New Jersey School Development Agency as a public/private partnership between the Union City Redevelopment Agency, the Union City Board of Education, NJSDA and Summit Redevelopers LLC of Union City.



Photos by Epic Management and renderings by RSC Architects