

Center Ice

Region's First Major Sports Arena in Nearly 30 Years Nears Finish in Newark

by Jack Buehrer



A large entry plaza, and a pair of distinctive glass-and-steel barrels, will bring visitors into Newark's new arena, which city officials hope will help to spark a revival of the district and further development.

As Newark officials and developers plot out the future of the city's downtown, workers are putting the finishing touches on an 18,000-seat arena that is being heralded as the linchpin for further development in the city.

The 850,000-sq-ft Prudential Center, the future home of the New Jersey Devils franchise, is on schedule to open its doors in October, just in time for the 2007-2008 National Hockey League season. The team is leaving the Continental Airlines Arena at the Meadowlands Sports Complex in East Rutherford, N.J., where it has played since relocating from Denver in 1982.

And the move can't come soon enough for a city eager to escape its longtime rut.

"A lot of what happens in the future in Newark will depend on what happens with this arena," says Ted Domuracki, president of MAST Construction Services of Little Falls, N.J., which is owner's representative for the Newark Downtown Core Redevelopment Corporation on its \$700 million development program, which includes the \$375 million arena.

"A lot of what happens in the future in Newark will depend on what happens with this arena." Once Gilbane stepped in, the project hit its stride, Domuracki says.

The project culminates a long development road, which hit many potholes. When local officials struck a deal with the Devils to co-develop the arena in 2005, the city planned to pay its share from rent monies it received for Newark Liberty International Airport from the Port Authori-

ty of New York and New Jersey.

But even though work began on the arena in October 2005, a lawsuit from opponents seeking to halt the city's financing strategy held up progress until early 2006, when a state Superior Court judge finally ruled that the city could proceed. In the wake of the court decision, the city created the Newark Downtown Core Redevelopment Corporation, which provided \$210 million toward the project, while requiring the Devils to put in the rest.

The project soon stumbled again in a disagreement between the owners and the original contractor, a joint venture of New York's Bovis Lend Lease and Hunt Construction Group of Indianapolis, over the contract's guaranteed maximum price. The joint venture exited the project in June 2006, opening the door for Gilbane Building of Providence, R.I., to take over.

Once Gilbane stepped in, the project hit its stride, Domuracki says.

"There are more than 700 people on the job down there and everyone has been firing on all cylinders," he says.

When Gilbane started, the foundation was done but the steel was only 20% complete, says Mark Astheimer, project executive for the firm.

Perhaps the most complex task was erecting the roof, which has 10 steel truss-

es, each of which consists of three separate sections. The team set each section in place at the top of the 150-ft structure and then joined the three together.

In order to support the truss sections while connecting them, the team built temporary shoring towers, which required >>



Erecting the roof structure was a major task, requiring shoring towers that needed their own footings. Work progressed on the seating bowl, exterior, and other features while the roof was completed this year.

The end product will contain about 8 million lb of structural steel, 9 tons of additional steel, 25,000 cu yd of concrete, and nearly 3 mi of refrigeration piping for the ice sheets, each of which will sit atop a bed of concrete, insulation, and sand.

And the new facility isn't just for hockey. It will host college basketball for the Seton Hall Pirates of the NCAA's Big East Conference, and serve as a concert venue where Bon Jovi, a New Jersey-based rock star, is set to play in October. <<

footings to hold the weight. The team erected four shoring towers for each section, repeating the setup three times between September and April, when the roof work finished.

As of late spring, the team was gearing up to install the seating, central heating and cooling plant, and ice rink. The exterior construction was also progressing rapidly because of the design's use of panel sections, Astheimer says.

"What's nice about the whole brick and metal exterior is it's all panelized," he adds. "The installation went pretty quickly, so we were able to enclose most of the arena and work on the interior in the winter."

The project's biggest hurdle is the must-open date for this fall.

"The schedule was the biggest thing," Astheimer says. "Although we didn't have to hire new subcontractors, a lot of the work had not been coordinated."

The design is a collaborative effort between Morris Adjmi Architects of New York on the exterior and Kansas City-based HOK Sport on the interior.

The façade of the main structure combines red- and charcoal-brick exterior panels with giant glass panels that open up both the east and west ends of the arena to panoramic views. The exterior of the east

end will feature a 4,800-sq-ft LED video screen that will be visible from the nearby New Jersey Turnpike and Pulaski Skyway.

The defining visual feature on the exterior is a pair of 120-ft-high glass-and-steel "barrels" flanking the arena's eastern end. They will serve as entrances and house stairs and escalators.

"The barrels have to be the most appealing architectural feature of this building," says Michael Gilfillan, vice chairman of Devils Renaissance Development, the development arm of the Devils' franchise. "They're what everyone wants to talk about when they see the renderings."

Arriving fans will be greeted by an outdoor plaza around Market and Mulberry streets and Edison Place, all of which are dotted with dilapidated buildings that, as of late spring, were set for demolition.

The inside will offer hockey fans a 2,800-sq-ft Devils store; 150 concession stands; 78 luxury suites, including four bunker-style private rooms located below lower-tier seats; 750 television monitors in the concourses; a 350-person-capacity restaurant overlooking the playing surface; and a 1,000-person-capacity bar.

The complex also has 40,000 sq ft of office space for the Devils front office and a separate practice ice rink.

Key Players

Owner: Newark Downtown Core Redevelopment Corporation

Owner's Representative: MAST Construction Services, Little Falls, N.J.

Construction Manager: Gilbane Building, Providence, R.I.

Exterior Architect: Morris Adjmi Architects, New York

Arena Architect: HOK Sport, Kansas City

Mechanical Engineer: Binsky & Snyder, Piscataway, N.J.

Structural Engineer: Thornton Tomasetti, New York

HVAC: Bondland Industries, Wayne, N.J.