

## Renaissance Las Vegas Hotel Las Vegas, NV

The concept of the Renaissance Las Vegas Hotel is to offer business travelers an upscale hotel with unlimited meeting capabilities and high-tech business options.

Renaissance is a full service high-end brand owned by Marriott International. The new Las Vegas Renaissance Hotel is the largest non-casino hotel in Nevada and the most expensive at \$100 million. Perini's construction contract was \$57 million.

The property is strategically located 300 feet from the Las Vegas Convention Center, making it the most accessible place to stay and conduct business for anyone attending a conference or trade show. Perini built a walkway connecting the two properties. The property is also within walking distance of the city's monorail system.

### Project Design and Construction

The Renaissance Las Vegas Hotel has over 32,000-square feet of function space, including nine meeting rooms with flexible floor plans. WiFi Internet access is included in all of the guestrooms and public spaces throughout the facility.

The 14-story facility has 548 rooms and 30 suites. Although the developer was sure there would be sufficient demand for more rooms, Jackson-Shaw limited the size to 548 rooms to meet the high service standards required by the Renaissance brand.

Other hotel amenities include ENVY Steakhouse (which seats 176 guests), a coffee shop, a 5,000 square-foot courtyard with a swimming pool and spa, and an attached 472-space parking garage. The interior design is a combination of stone, rare woods and intricate millwork. The Renaissance has its own laundry facility and handles all of its linens on site.

The hotel includes an 18,000 square-foot ballroom. The ballroom, in addition to the second floor meeting rooms, allows business travelers attending conventions at the Las Vegas Convention Center to conduct smaller, private meetings. The Renaissance is equipped to handle small conventions.

The interior of the Renaissance is upscale and very detailed. In the grand ballroom, the custom designed carpet was created to tie into 12, 2,000-bulb chandeliers. Artisans had to install each of the 12 chandeliers to line up with the intricate pattern of the carpet.

Other design elements of the hotel include custom-designed, solid millwork throughout the lobby including the registration desk. The boardrooms also feature custom millwork, marble countertops and large panoramic windows. A Renaissance standard is the marble flooring throughout the main lobby, lobby bar and lounge area. To ensure guest privacy, the pool is the focal point of the hotel's courtyard. The exterior is designed with stone and brick.

The most prominent feature of the hotel's exterior is the segmented glass curtainwall, which scales the entire height of the hotel. The hotel design is triangular. The two sides of the triangle intersect at the glass creating a dramatic focal point and the illusion of curved glass. This vertical glass section of the hotel is reserved for suites.

The hotel tower and garage are cast-in-place, post-tensioned structures and the ballroom is a steel structure. The tower sits on a four-foot thick mat foundation. The exterior is EIFS with punched windows and a segmented glass curtainwall.

#### Preconstruction Efforts

Perini Building Company completed the Renaissance Las Vegas Hotel in just 13 months, two months early and on-budget.

A major factor in Perini's ability to accelerate the construction schedule was due to the extensive preconstruction phase of the property. Perini, Jackson-Shaw and Dennis Hill Architects spent one year working out every detail of the design and construction. Key consultants and subcontractors were also involved during this critical stage of the project. Before Perini broke ground, the architectural drawings were complete, the owner had a budget, and subcontractors were scheduled and knew their scope of work and budget. Extensive preconstruction was crucial in Perini's ability to turn over the facility 60 days early.

## Construction Challenges

The largest challenge to overcome was lack of space. The site is less than three acres in size. The construction trailers for Perini and the subcontractors were located 1/4-mile down the road. To accommodate crews, Perini rented a vacant lot to provide parking for the construction workers.

Tight logistics made precision coordination essential. The property is between the Las Vegas Convention Center and a residential side street. The front of the property is on Paradise Road, and the back of the site butts up against a multi-level structure with no access. Maintaining vehicle access without choking traffic on three sides of the property was a constant challenge, especially at the peak of construction when over 400 workers were on site. To ensure traffic flow and allow for emergency vehicles access, all deliveries were coordinated to arrive on site as needed.

To maintain convention business as usual and not interfere with the construction of the monorail required constant communication with a number of different entities. Perini held monthly meetings with the Las Vegas Convention Center to coordinate lane closures and deliveries around its convention schedule.

Life and safety systems are important and challenging on any project. The Marriott met, and exceeded in some cases, all local building codes. A number of upgrades were installed to meet Marriott's more stringent requirements for smoke evacuation.

Perini had two tower cranes on site. One of the two tower cranes was located near the monorail. To ensure safety, the crane was equipped with computerized limiters to prevent the operator from accidentally swinging a load over the monorail. The crane was set to maintain a 15-foot distance from the monorail at all times.

To improve guests' views facing the Las Vegas Strip, Jackson-Shaw opted to bury all utility and power lines. Working closely with Clark County, all of the existing utilities were buried underground. To maintain the aggressive work schedule, while this operation was taking place, crews added an additional traffic lane to Paradise, which runs directly in front of the hotel. The lane was added in just five days.

Jackson-Shaw was a proactive client. Ted Carter, who oversaw construction for the company, has a construction background, which was an asset in Perini's ability to get answers resolved expeditiously.

## Collaboration

Coordination with the Las Vegas Convention Center was imperative to the success of this project. Perini worked closely with their management to coordinate construction activities around convention events.

The ability to add a traffic lane while burying and then reconnecting all of the underground utilities in just five days took a tremendous amount of coordination with Clark County and Las Vegas officials.

The subcontractors also made significant contributions to the project. Subcontractors who work in the Las Vegas market understand the meaning of "Las Vegas Time" and are willing to meet the accelerated construction timeframes.

Intense preconstruction services enabled Perini and its subcontractors to build a quality facility in record time while maintaining the budget.

In spite of the pace and the tight logistics, the jobsite was extremely safe. To promote safety, Perini had monthly contests to recognize safe subcontractors. Monthly prizes were given to subcontractors that had zero accidents, turned in all reports and attended safety meetings.

The proximity of the power crane in relation to the monorail posed a significant safety hazard. In addition to meeting OSHA's requirements, Perini has one of the toughest power crane safety procedures in the industry.

## In Conclusion

The entire project team was able to work together to complete the Renaissance Las Vegas Hotel in thirteen months two months ahead of schedule and on-budget. The business concept and the location of the hotel set it apart from other properties in Las Vegas.

The hotel opened on December 3, 2004, and had its grand opening celebration on January 13, 2005.