



## CASE STUDY

# Churchill Downs Oak Grove Premier Racing, Gaming & Hotel

### Fast-Paced MEP/FP Redevelopment for Premier Entertainment

Concord Engineering Group, an expert in the high-end gaming industry, was the Engineer of Record and provided MEP/FP services for a fast-paced, large redevelopment project by Churchill Downs, Inc. This project transformed a 100-acre site, including a 100,000 SF main facility with gaming areas, 128-room hotel, and restaurants into a regional destination center. The infrastructure includes a  $\frac{1}{2}$  mile horse track, an Equestrian center with 13 barns, and an outdoor music amphitheater.

#### THE CONCORD DIFFERENCE

- Real-time design allowed construction and design to overlap, meeting the aggressive 18-month schedule.
- Frequent direct communication with sub-contractors and vendors to expedite decision-making and real-time problem-solving.
- Sustainable design enabled smooth facility operations and qualified it for energy incentives.
- Extensive experience in gaming and high-end interiors.

#### CONCORD ENGINEERING SOLUTION

- Facility completed on time
- Design of intuitive & user-friendly MEP/FP systems allows the facility operations' team to learn the new systems quickly.
- Close work relationship with design & construction teams to solve problems in real-time.
- Hotel HVAC utilizes water-cooled VRF systems in guest rooms for increased energy efficiency.
- The mechanical systems design includes:
  - Advanced HVAC technologies
  - High-performance rooftop equipment with energy recovery ventilation
  - Free-cooling economizers
  - Variable air volume controls
  - High-performance data room cooling.
- The temperature control system is web-based with a graphics interface, allowing for real-time data retrieval.

#### LOCATION

Oak Grove, KY

#### SERVICES

Commercial Engineering  
MEP/FP Design  
Engineer of Record  
Teledata System Design

#### PARTNERS

Churchill Downs  
R2 Architects, LLC  
R2Interiors

#### TAGS

Hospitality Engineering  
Gaming Engineering  
High-End Entertainment  
High-Performance MEP

#### GET IN TOUCH

**Commercial Engineering**  
[concord-engineering.com](http://concord-engineering.com)  
 (856) 427-0200