

THE PAGODA AT INDIANAPOLIS MOTOR SPEEDWAY

SUBMISSION CATEGORY: 25-Year Award
PROJECT TYPE: Sports and Entertainment
ADDRESS: 4790 W 16th St, Indianapolis, IN 46222
DATE OF SUBSTANTIAL COMPLETION: May 2000



DESIGN NARRATIVE

On paper, the design brief could not be simpler; reconstruct the control tower at the Indianapolis Motor Speedway for the modern era. The reality of that challenge leveled by then President of the Speedway Tony George and his wife Laura, stops just short of impossible. From the outset of the project the new Pagoda needed to house the expanding functions of race control for an ever-evolving motorsport, respect the past century of track history, and stand alone as an architectural marvel. Simple. Pulling from that history, the design of the new Pagoda took a form inspired by the prior generations of control tower, both a simple glass box and intricate Asian-inspired tiered tower.

The design team also recognized a new challenge, and subsequent opportunity, in the rapid expansion of television coverage and access. This new Pagoda would be seen by millions around the world on race day, through the medium of their televisions. How do those TV cameras affect the design thinking? What does the tower look like to a fan in Europe watching on television? To a family in the turn 1 grandstands? To the racers coming around turn 4 at over 200 mph? Even to the Goodyear blimp flying overhead? The design team tackled these challenges with state-of-the-art (for the time) computer-generated imagery, visualizing the views of the design from every angle around the speedway and beyond to understand how the form should evolve.

Delicate wings of exposed structural steel fly from the central tower, where the glass itself seems to float in the front of the central mass. The translucent panel structure of the wings gives them a lightness. The marriage of these elements, tiered in the classic layered pagoda form, create a simple expression that reaches to the sky. When the formation of race cars accelerates 3-wide past the tower at over 200 mph under green flag, the building seems to moves with them, urging the racers on to turn 1 and victory. The building stands as the beating heart of the Racing Capital of the World, an icon of one of the State of Indiana's most important venues. The Pagoda is Indianapolis Motor Speedway and Indianapolis Motor Speedway is Indiana.









DESIGN CONSIDERATIONS

In 1913, after the first two iterations of the 500 mile race, a new control and timing tower rose above the dirt track raceway in Speedway, Indiana. It's shape was that of an Asian pagoda, tiered with each subsequent floor slightly smaller in footprint than the one above. Theories abound about the inspiration for this tower, ranging from purely functional - the form created better sightlines for the race officials - to an aspirational design called forth from private Japanese gardens on Meridian Street and the pavilions of the 1893 Columbia Exposition in Chicago. Whatever the true reason, the pagoda stood, iconic in shape, at the track in various forms from 1913 to 1957 when it was replaced by a glass and steel tower raised above the main straightaway grandstands. Centered on the yard of bricks at the start-finish line of the track, this new iteration of the control tower included a scrolling timing board, showing information on drivers, speeds, and race order to the spectators.

When Tony and Laura George commissioned the new control tower as part of a major track renovation and refurbishment leading up to the 2000

Indianapolis 500 mile race, the design team faced the challenge of legacy battling with the modern demands of race control and VIP hospitality. The new control tower needed to embrace the past while leading the Speedway into a new era of speed.

The current Pagoda echoes both eras of the past, embracing the forms and materiality of the prior buildings, twisting that vision to a new future. Viewed from the front and on angle from the west grandstands, the building is pure pagoda form, tiered layers stacked on each other, reaching out along the length of the main straightaway. From the side, as viewed from perspective of a race driver rounding Turn 4 or spectators walking through the famous Gasoline Alley behind the pit garages, the building is a pure steel, glass, and concrete tower, the wings reduced to a bold articulation of the building's floors. Every angle in-between reveals the dual nature of the building's enduring design. The form of the 1957 glass tower central to the building, seemingly hiding within the embrace of the pagoda's structural steel wings.



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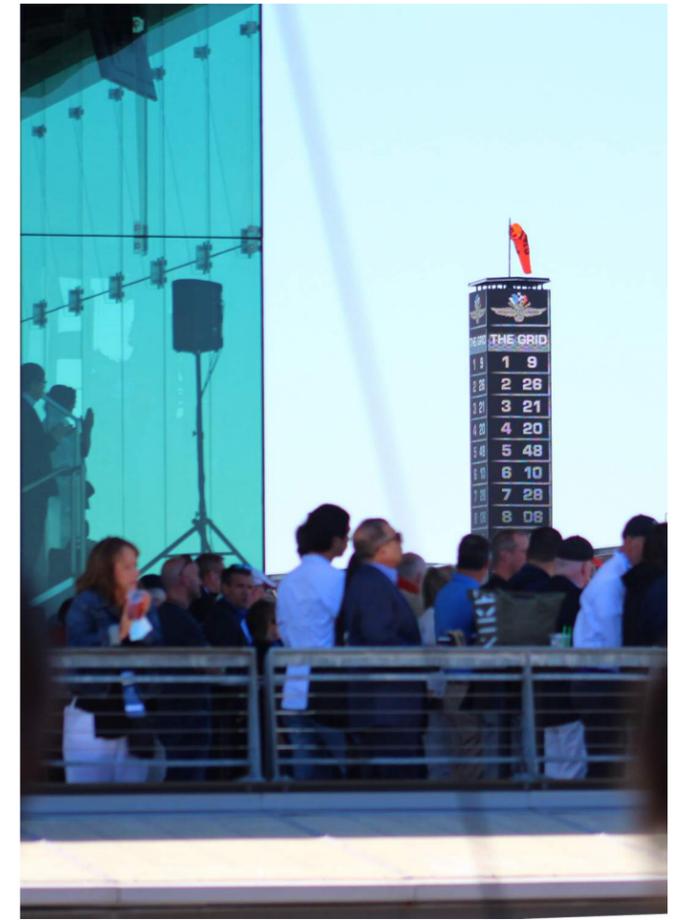


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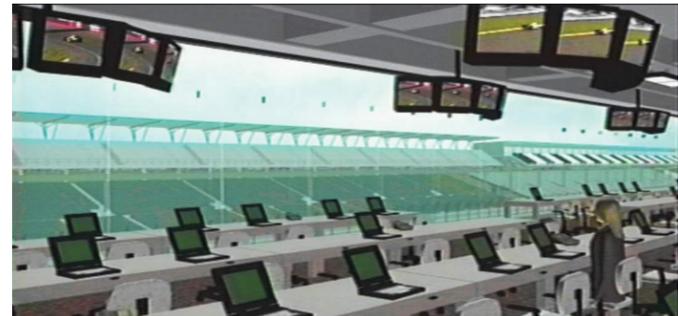
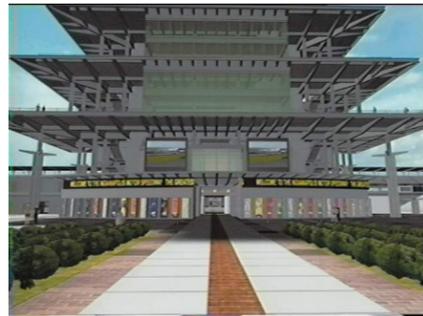
MATERIALS

How do you render an iconic building typology of a Asian pagoda in modern materials? The design team embraced this challenge marrying bold structural engineering with design inspiration to create the flying pagoda wings. The steel remains exposed, like the wood structure of true pagodas from centuries prior, and spans back to a raw concrete tower, again emphasizing the true structural nature of the building and drawing attention to the rectilinear tower at the heart of the Pagoda shape. Cladding these wings are translucent panels, allowing light to bleed through and adding to the feeling of lightness in the structure.

It was critical that the glass box at the heart of the tower not only expressed the echo of the 1957 control tower, but also needed to read well on television. A tinted glass was selected, adding a aquamarine hue to the glazing and giving the delicate butt-glazed system a presence along the main east and west facades. These glazing boxes extend out from the face of the concrete tower block, beyond the primary structural bearing line, appearing to be supported only by glass fins inside the box and minimal clips, letting spectators catch glimpses of the grandstands, iconic race scoring pylon, and through the glazing system.



INITIAL CONCEPT



COMPUTER GENERATED VISUALIZATIONS

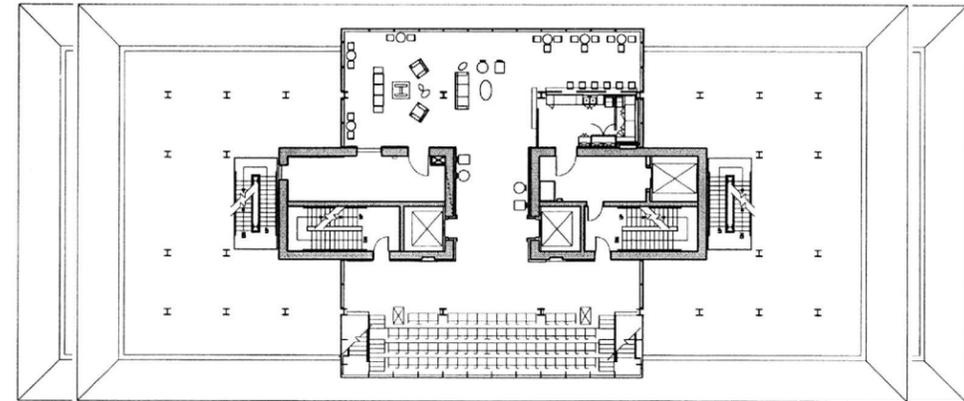
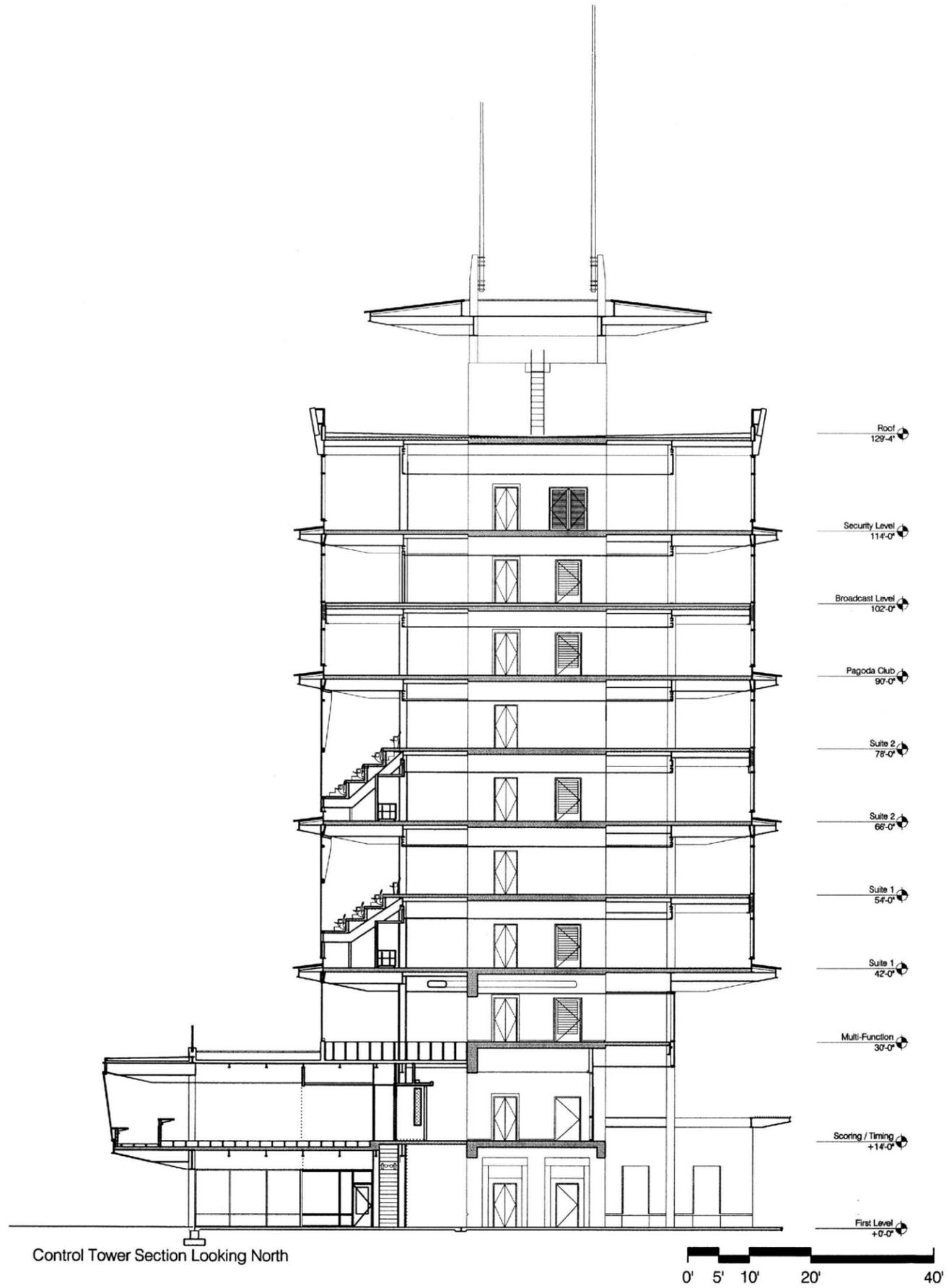


FINAL CONCEPT

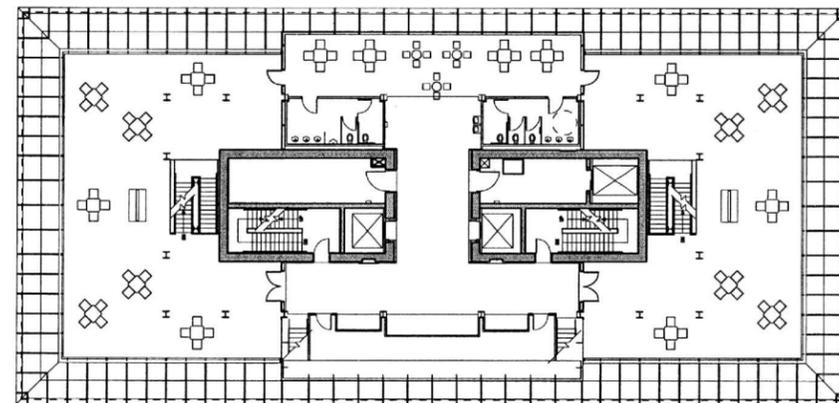
DESIGN VISION

The iconic tower of today almost never was. The process that led to the development of the Pagoda included several stops and starts, vision competing with financial restrictions and a sport in the middle of a generational evolution. Prior versions of the new control tower were more expansive, focused on hospitality and VIP suites with race control taking a small portion of a vertical tower. The form was sweeping and curved, a vast departure from the towers of prior eras. In the end, fate intervened. After a major halt that called into question the need for a new control tower, the Georges stepped in and pushed forward with their challenge to create a standalone architectural marvel. That marked a project restart, effectively a blank slate for the design team. The project scope was reduced and re-focused on race control with a smaller hospitality program component, leading to the iconic tower of today.

The design team also seized upon a new technology for the time, state-of-the-art computer generated image visualization. By using the computer to create 3D views, the project team was able to visualize the building from across the massive Speedway complex, and even from aerial views that may be seen on TV. Quaint by today's design processes and workflows, it was an incredible design tool for the time. More importantly, the varied 3D imagery helped show the client that their challenge had been answered.

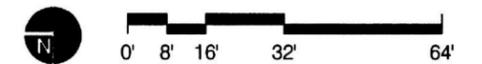


Upper Suite



Lower Suite

Control Tower





LEGACY

25 years after the 2000 Indianapolis 500 mile race when the Pagoda debuted to the world, the design stands the test of time. The Pagoda building is the ever-present backdrop to “The Greatest Spectacle in Racing,” seen by millions of people on those Sunday afternoons on Memorial Day weekend. Millions more tune in to watch testing, qualifications, and practices throughout the month of May in the lead up to the iconic race. Most race tracks are functionally identical, the architecture a product of function; grandstands, practical spotter platforms and control buildings, garages and pit facilities, all expressions of pure function. Some of the most iconic race tracks in the world are famous for their locale. In Monaco, the streets, casinos, and mega yachts paint a picture of opulence. In Spa, the lush rolling hills and forests speak to a rich history of racing, of triumph and tragedy. But those are locations, not the architecture of the racetrack. No one is mistaking Speedway, Indiana for the coastline of Monaco or Belgian forests, but in the Indianapolis Motor Speedway, the state of Indiana has something most other speedways can only dream of, an iconic building synonymous with not only the race track, but the entire sport of Indy Car Racing.



