Thrill Island: Designing Adventure on the Icon of the Seas

Onboard Royal Caribbean's *Icon of the Seas*, *Thrill Island* stands as a testament to the power of computational design to bring bold visions to life. Conceptualized as a storm-ravaged tropical retreat, this immersive entertainment hub combines a dramatic narrative with cutting-edge design techniques. Spearheaded by Shihab Naeem and the Robert Soldo Design team, the project reflects the cruise line's ambitious vision for redefining guest experiences.

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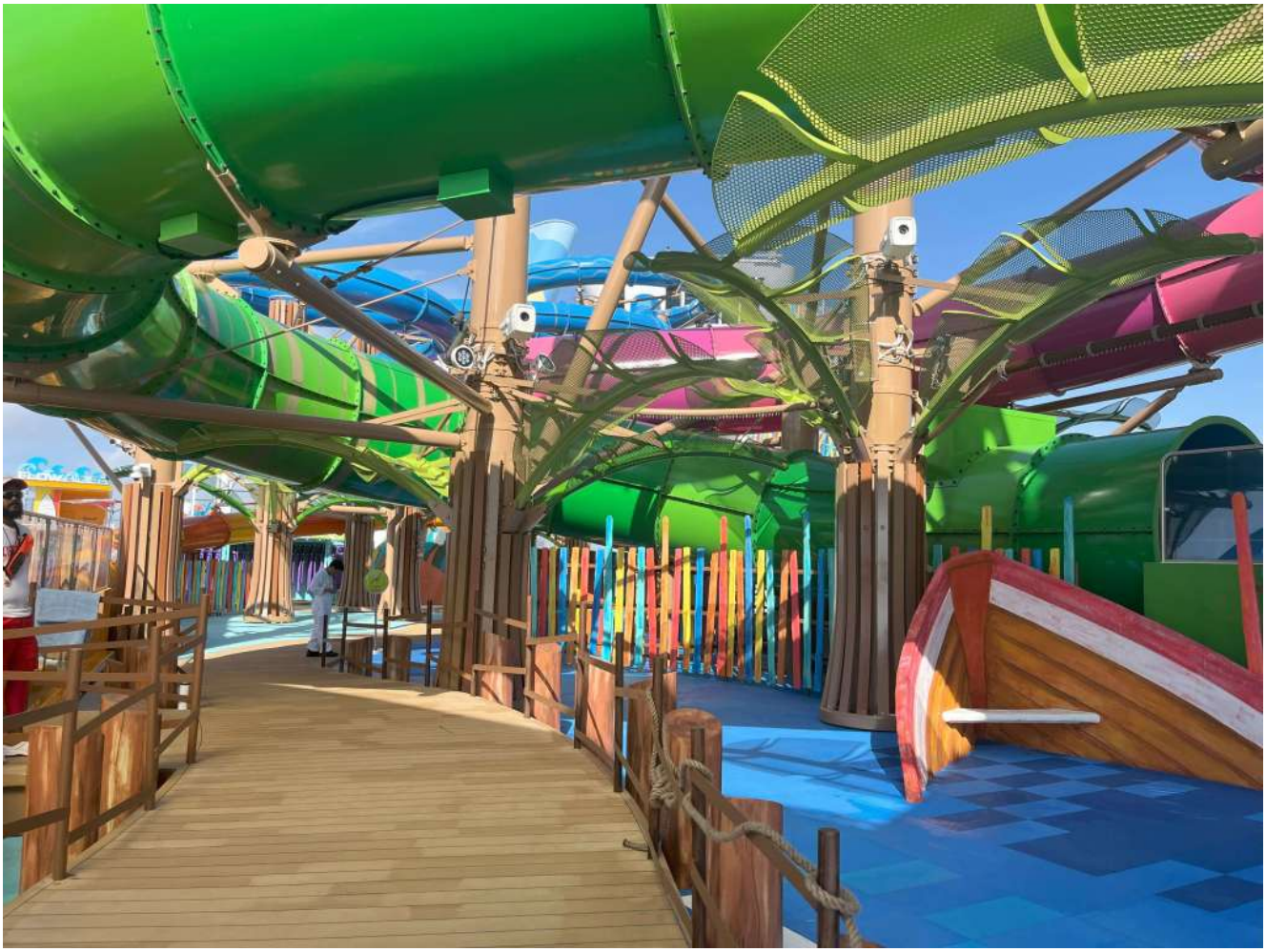
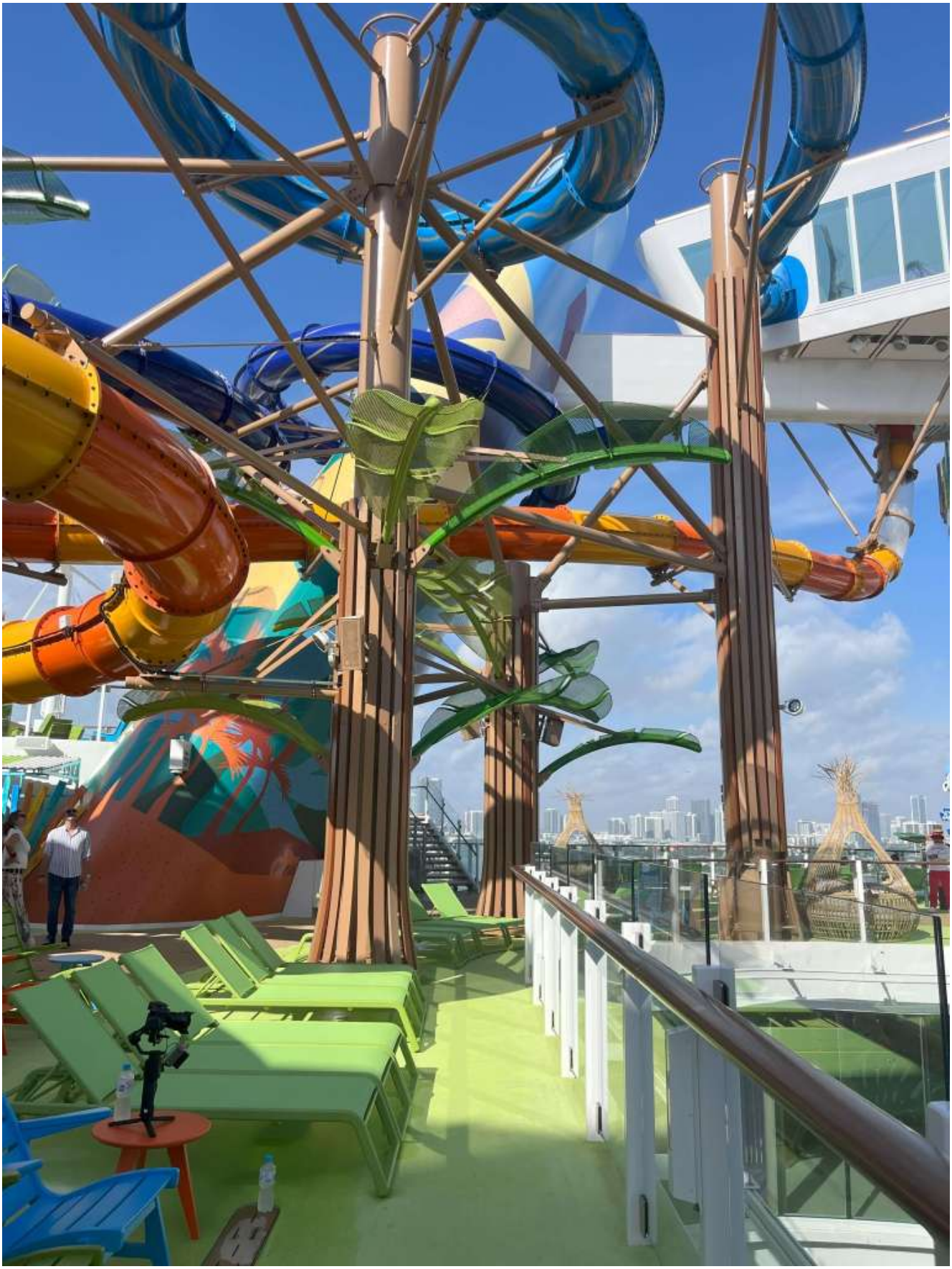




A MULTI-LAYERED IMMERSIVE EXPERIENCE

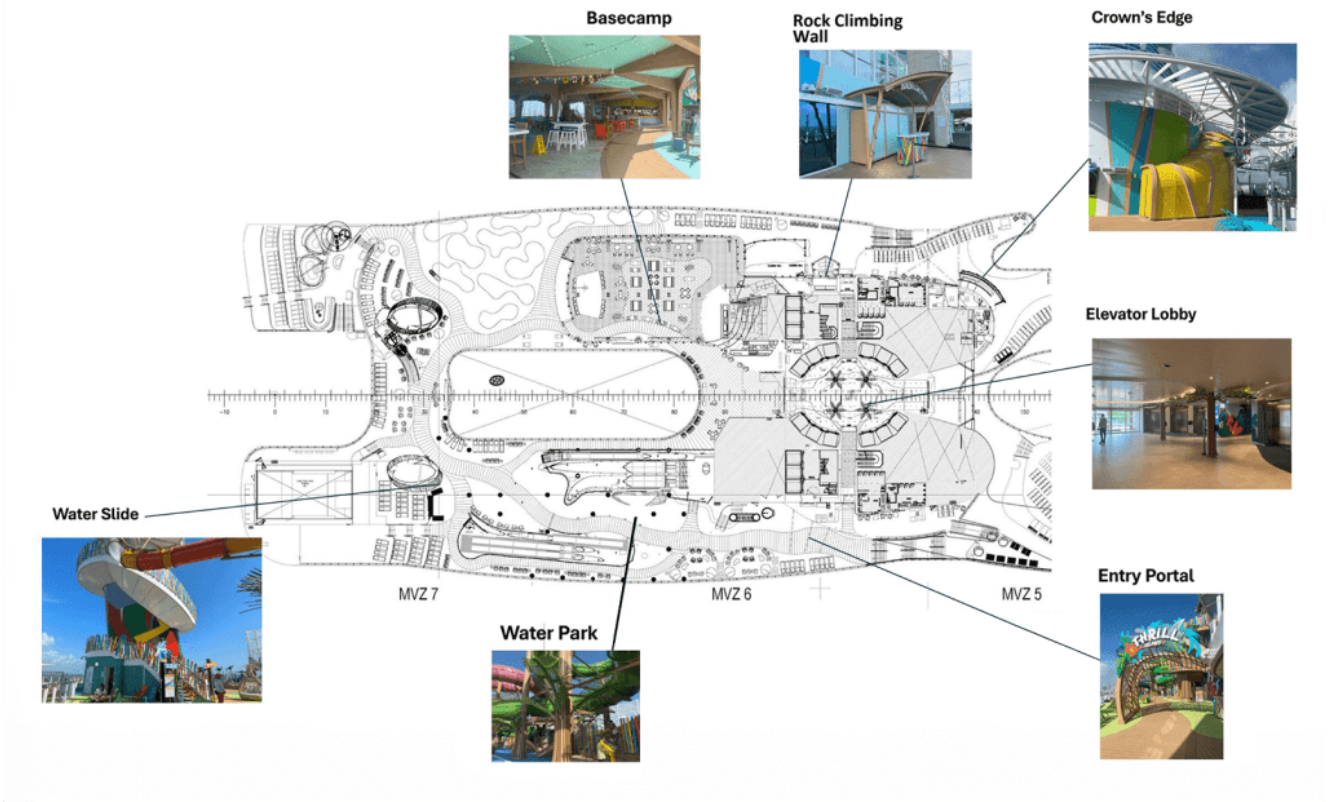
Located at the aft of the ship, *Thrill Island* offers a variety of attractions, each designed to captivate and entertain:

- **Waterpark:** With towering slides and vibrant geometries, the waterpark is a dynamic centerpiece inspired by natural forms and post-storm textures.

- **Crown’s Edge:** A daring adventure where guests traverse the ship’s edge, navigate a suspended path, and finish with a dramatic aerial descent back onto the deck.

- **Basecamp Dining Area:** A space designed to resemble storm-damaged wooden structures, reflecting the aftermath of the storm narrative.

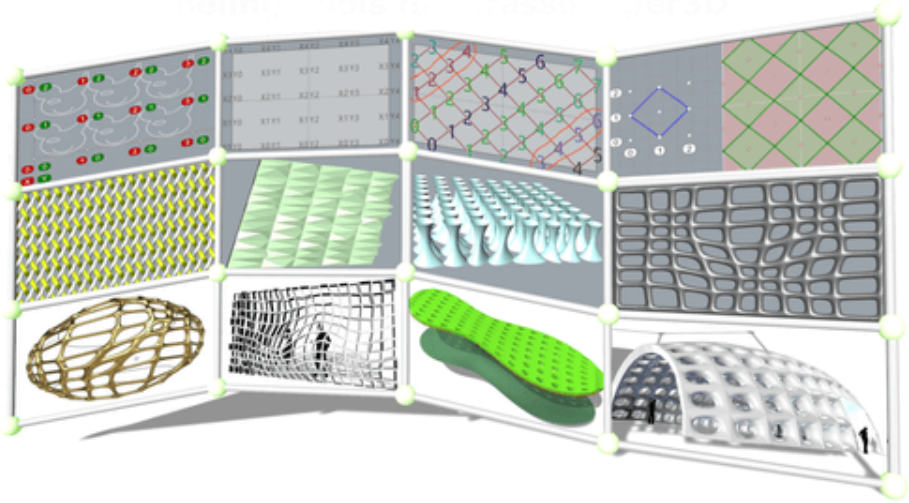
- **Additional Activities:** Guests can enjoy a rock climbing wall, pickleball court, and mini-golf course, each element contributing to the island’s layered story.



FROM CONCEPT TO REALITY: THE DESIGN PROCESS

Royal Caribbean provided initial conceptual sketches in collaboration with an imagineer, presenting the idea of a tropical rainforest battered by a storm. Shihab Naeem and his team then transformed these sketches into detailed architectural designs, focusing on practical solutions that could be fabricated and installed.

One of the defining elements of the process was the use of computational design tools to develop intricate geometries. For example, the waterpark required custom definitions to create organic column structures inspired by trees. These columns incorporated slats and fragmented wood textures to reinforce the post-storm aesthetic. Similarly, the entry portal to *Thrill Island* was designed as an arching structure with broken wooden patterns, evoking the debris left behind by the imagined storm.



See Also

PANELING TOOLS FOR GRASSHOPPER

ADDRESSING PRODUCTION CHALLENGES

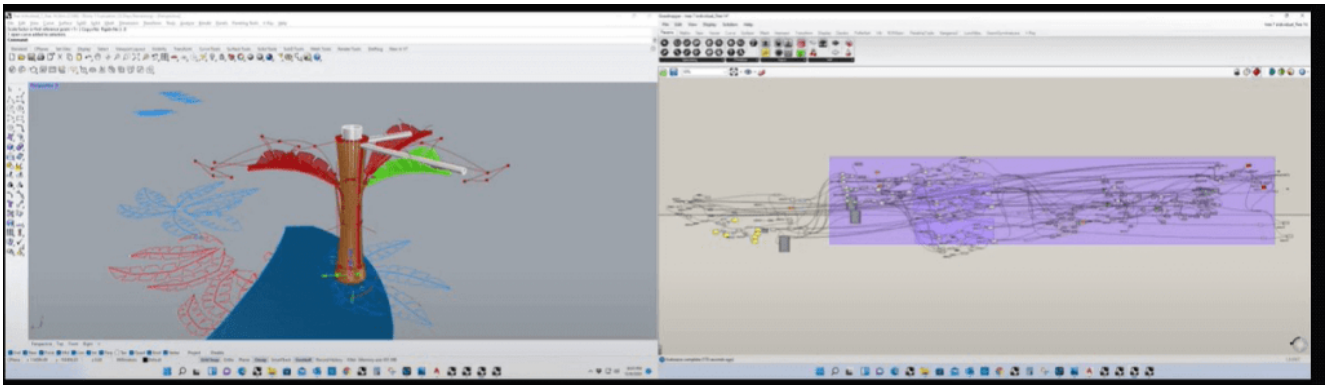
The design process was far from straightforward. With *Icon of the Seas* being constructed for the first time, frequent layout changes in the ship required constant updates to the *Thrill Island* designs. This iterative process involved numerous design reviews with Royal Caribbean's executives, where Naeem and his team presented detailed schemes and renderings.

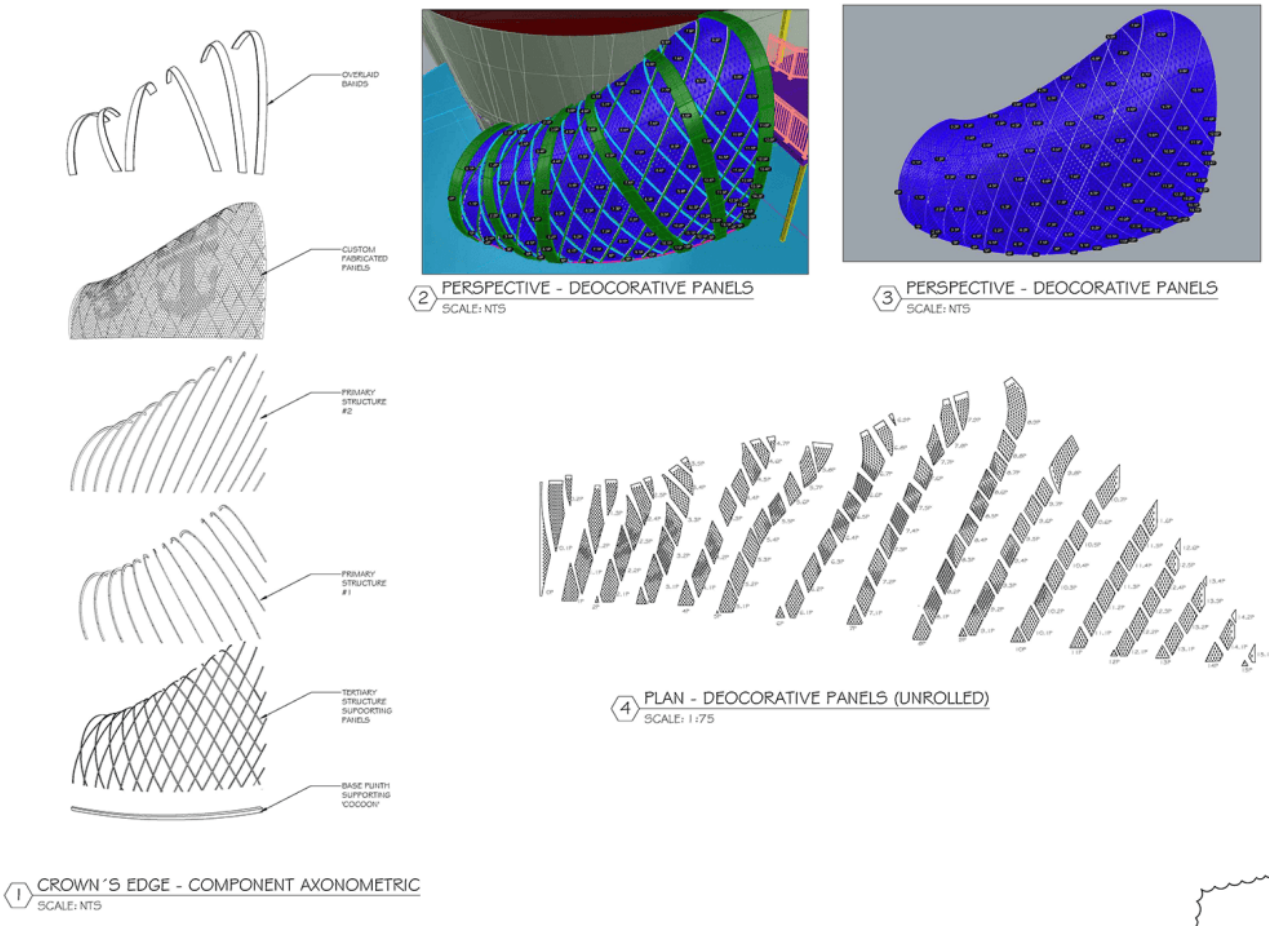
For *Crown's Edge*, the team navigated complex technical requirements to ensure guest safety while maintaining the immersive experience. The design evolved through multiple iterations to meet engineering constraints, such as ensuring proper clearances and load capacities.

TOOLS & TECHNIQUES

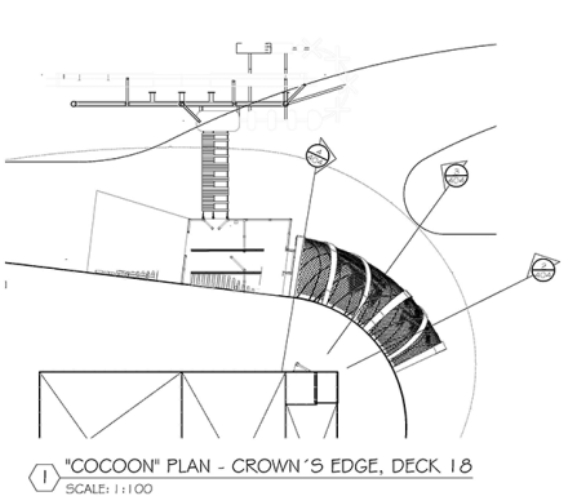
Naeem's team relied heavily on Rhino and Grasshopper to address these challenges. Grasshopper enabled the creation of flexible parametric models that could adapt to the changing requirements, making it possible to refine geometries without starting from scratch.

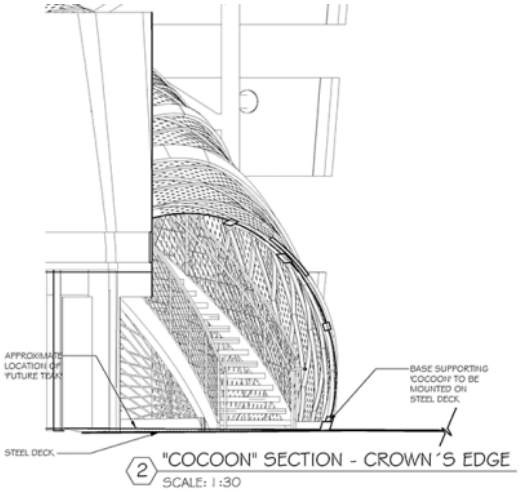
The waterpark’s organic tree-like columns, for instance, were developed using Grasshopper definitions, while C# scripting was applied for image sampling techniques. Crown’s Edge used a panelization system that expresses Royal Caribbean’s crown and anchor logo.

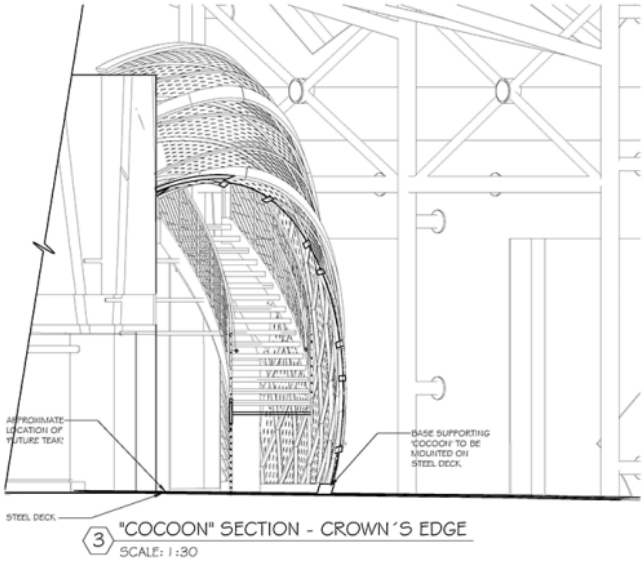


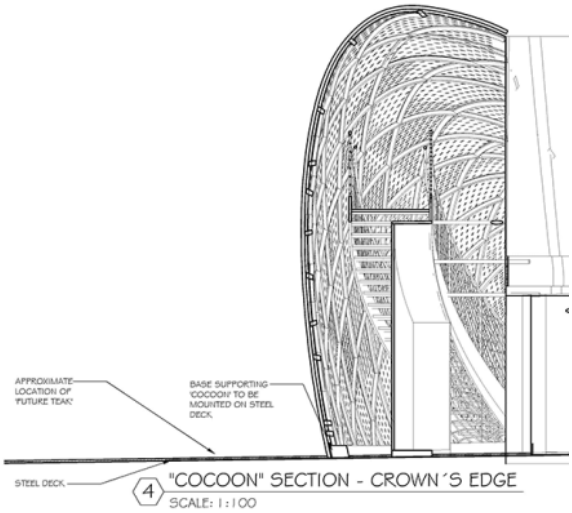


Beyond design, Grasshopper also streamlined the production phase. The shipyard’s reliance on Rhino models ensured smoother collaboration, reducing potential issues that often arise from file compatibility. Tools like SectionTools plug-in aided in creating accurate working drawings, which were crucial for fabrication and assembly.







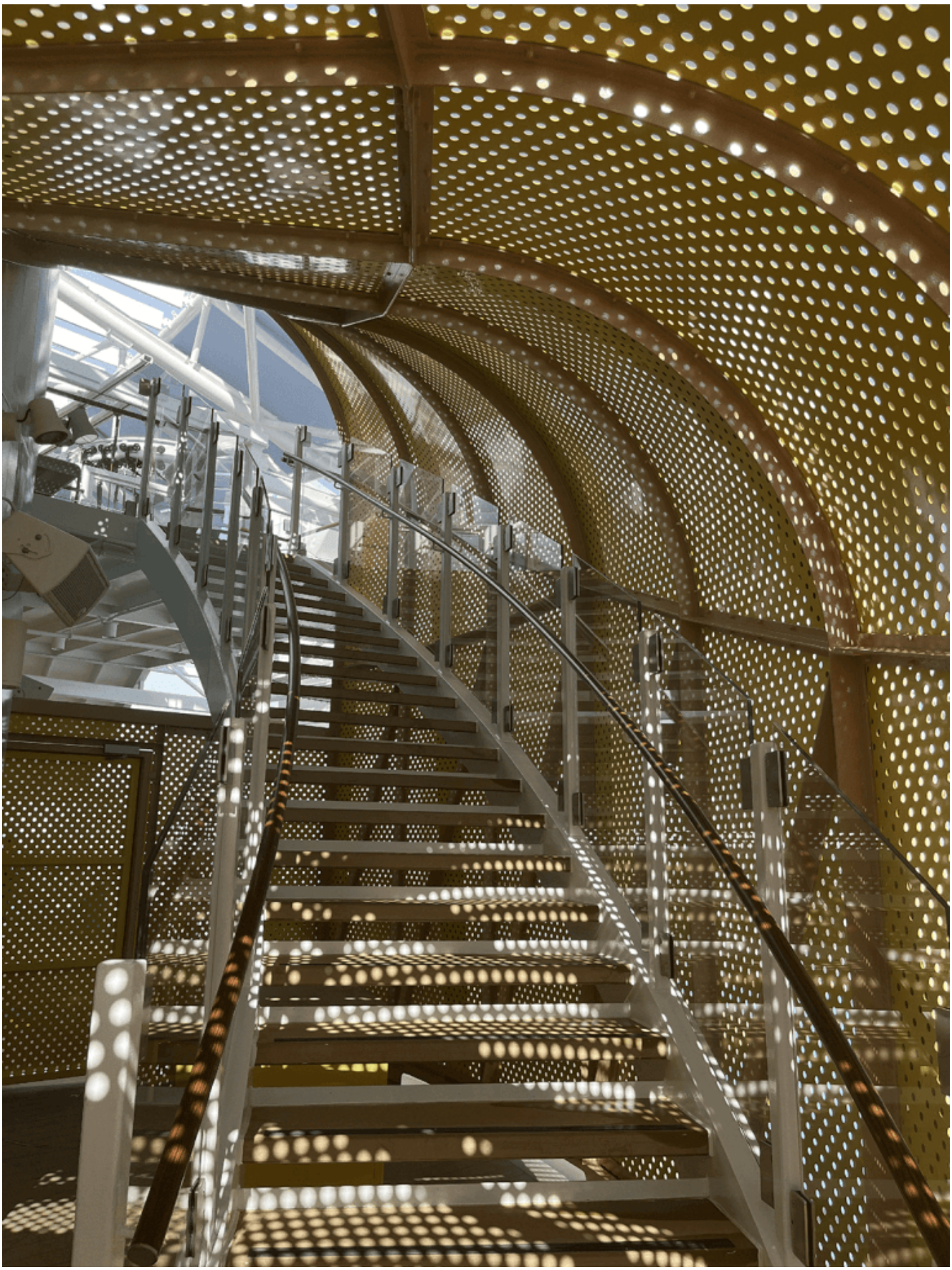


THE BALANCE OF SPEED & PRECISION

One of the most significant challenges was meeting tight deadlines without sacrificing design quality. With limited time for external render production, Naeem personally developed many of the presentation renderings using V-Ray. These visualizations were critical for design reviews and helped refine elements early in the process.

A PROUD ACHIEVEMENT

Looking back, Naeem reflects on the creativity and adaptability required to bring *Thrill Island* to life. “The ability to think like nature and produce intricate geometries quickly was key,” he shares. By leveraging computational design tools, his team delivered an unforgettable experience that embodies the adventurous spirit of *Icon of the Seas*.



ADVENTURE
AWAITS

With contributions from Meyer Turku Shipyard, outfitting partners Merima and Trident, and technical collaborators like Wilson Butler Architects, *Thrill Island* exemplifies how teamwork and technology can

redefine entertainment spaces.

CREDITS

Design Firm: Robert Soldo Design
Shipyard: Meyer Turku
Client: Royal Caribbean Group
Outfitter: Merima and Trident
Technical and Planning: Wilson Butler Architects
Graphic Design: Gensler