Arachnid Sports + Entertainment Complex Final Review Presentation

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ARCH 772 Design Thesis Revit – Rhino - Lumion – Adobe Illustrator and Photoshop – Google Earth - PowerPoint

General Info

What is my problem?

- How do we get local members of the community back to the Strip of Las Vegas?
- Metro area population of Las Vegas 2,839,000 (2022)

How did I pursue this problem? Why?

- Research, case studies, surveys, and experience.
- Sports enthusiast, Las Vegas/Nevada lover, and enjoy the entertainment side of Architecture.

What did I learn?

Lots of things! Mainly how difficult these projects are to complete.

How did my solutions inform the design?

 Through use of community/public spaces inside and out of the facility, safe and efficient arena design, local materials, site factors, and aesthetic structure systems.



Las Vegas Sign - https://www.adadarters.com/palacestation-updated-airport-shuttle-schedule/png-transparentwelcome-to-fabulous-las-vegas-sign-las-vegas-strip-lasvegas-text-photography-logo/

Past Sports Success

Within the past five years, the Las Vegas area has incorporated the Golden Knights (NHL), the Raiders (NFL), and within this coming year, the Athletics (MLB). On top of the already successful franchise, the Aces (WNBA), that already called Las Vegas its home. Some other notable events includes hosting of this past years Super Bowl, and the NBA's new In-Season Tournament.



Las Vegas Golden Knights Stanley Cup - https://www.npr.org/2023/06/14/1182071288/las-vegas-golden-knights-win-stanley-cup



The Sphere Advertising the In-Season Tournament - https://www.nba.com/news/2023-in-season-tournament-debut-official-release



Las Vegas Aces Championship -https://www.vibe.com/news/sports/las-vegas-aces-win-wnba-finals-back-to-back-champions-1234803931/



Las Vegas Athletics New Stadium Render https://www.reviewjournal.com/sports/athletics/as-vegas-ballparkcapacity-could-be-more-than-30k-2877735/



Super Bowl at Allegiant Stadium - https://www.bloomberg.com/news/features/2024-02-07/in-super-bowl-lviii-las-vegas-unveils-its-latest-guise-sports-town

Site Information



Map of Nevada - https://www.nationsonline.org/oneworld/map/USA/nevada map.htm



Las Vegas has become a sport energized metropolis. The city not only offers shows, restaurants, and gambling, but now also a successful professional sports market. At the cost of more infrastructure, Vegas has also lost some of its connection to its local community. The Strip can be categorized as a tourist attraction that has also become a money leech, ultimately reducing the interactions from locals across the Nevada area.

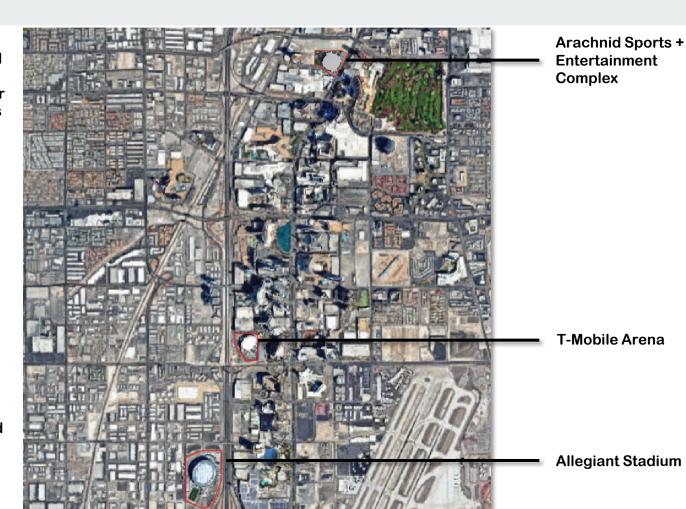
Site Information

What was important when deciding on where my site would be located, I wanted to give some space in between the other sports facilities. Not only did this give me flexibility to host more events, but it also gave less traffic coming off Las Vegas Blvd. With the other two facilities, Allegiant Stadium and T-Mobile arena, closer to the more South-central area of The Strip, this gave me an opportunity to really turn this space into a more community orientated piece of land.

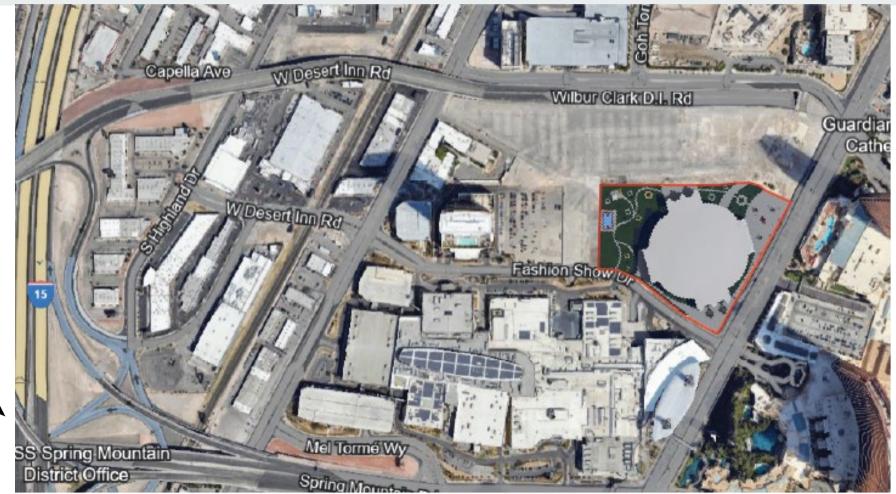
T-Mobile to my site = 2 Miles

Allegiant Stadium to my site = 3 Miles

Across the street from Wynn and Encore Resorts, Trump Hotel, Fashion Show Mall, Resorts World, and the Las Vegas Convention Center Hall



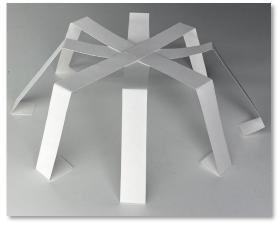
Site Plan



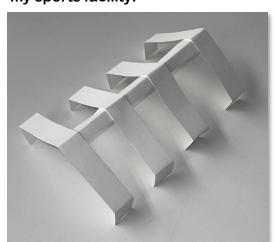


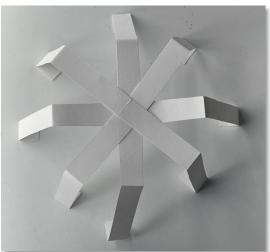
Design Process

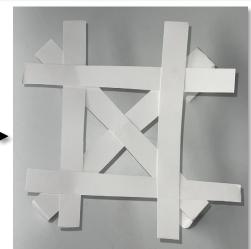
What started as a simple system grew to a much more complex concept. I grew interested in an overlapping sequence, that resembled symmetry and had supports going along each edge creating an octagon shape. This led me to a "tic tac toe" concept that ultimately led the way for my project. With a few adjustments, I created the elements of the structural system incorporated in my sports facility.



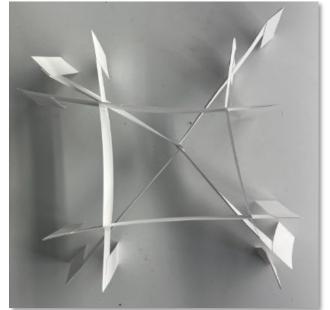




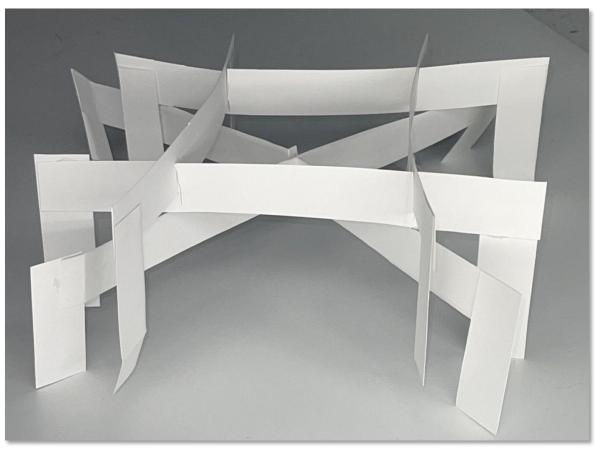




Design Process

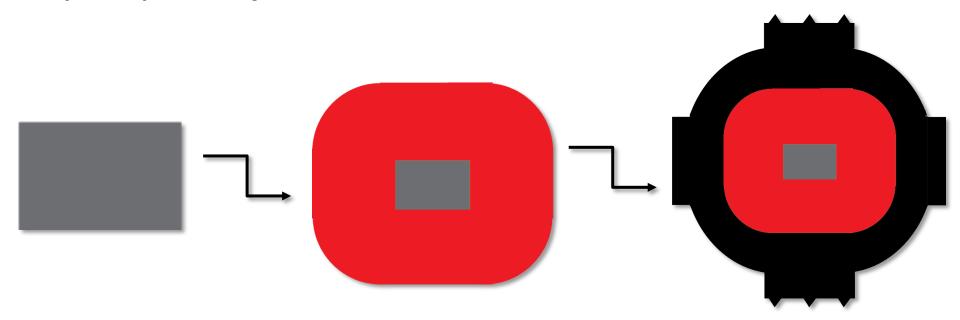




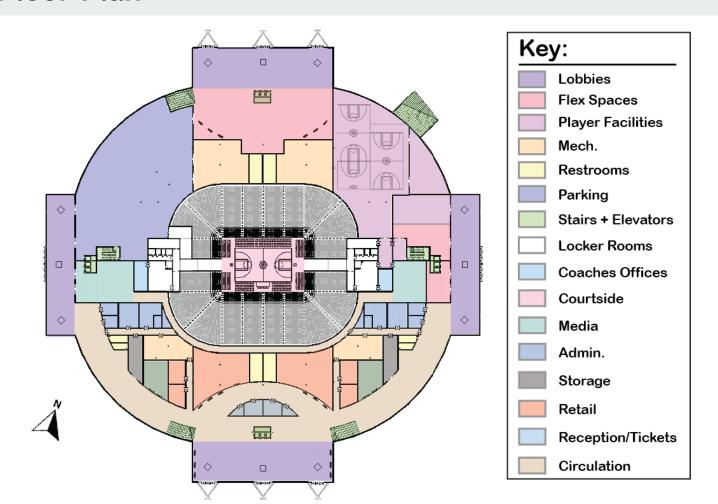


Design Process

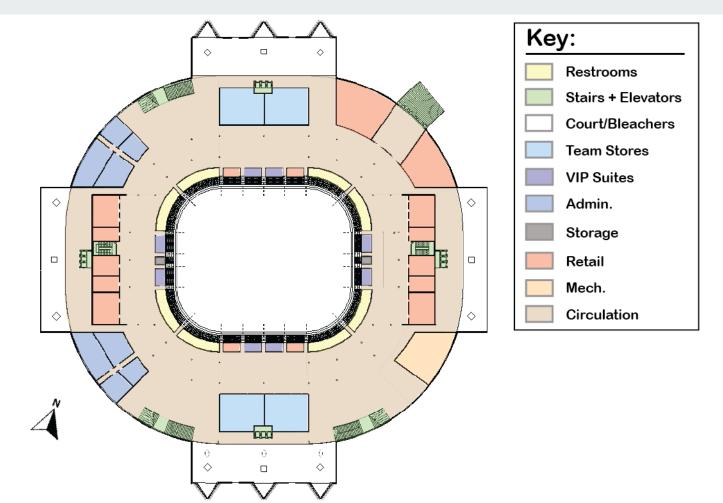
The process was simple. I started with the main basketball court and centered that on my site where I thought gave me the most space to expand outwards. From there I went about adding my general seating, as well as the locker rooms, and my entrances from the concourses. After working with slopes and figuring out the best way of providing optimal site views for fans to enhance my seating obstacle, I was able to work more on my main concourses, or general circulation. This gave me the opportunity to shape my exterior boundary. Once this was obtained, laying out the rest of my rooms/spaces came naturally. I laid out my stairs and elevators, my major spaces such as VIP suites, concessions, team store, and bathrooms, of course, which ultimately filled up the rest of my areas. Although the shapes are generic, I was happy to see my program fit into these spaces and provide an efficient facility that safely welcomes its guests and events.



Level 1 Floor Plan



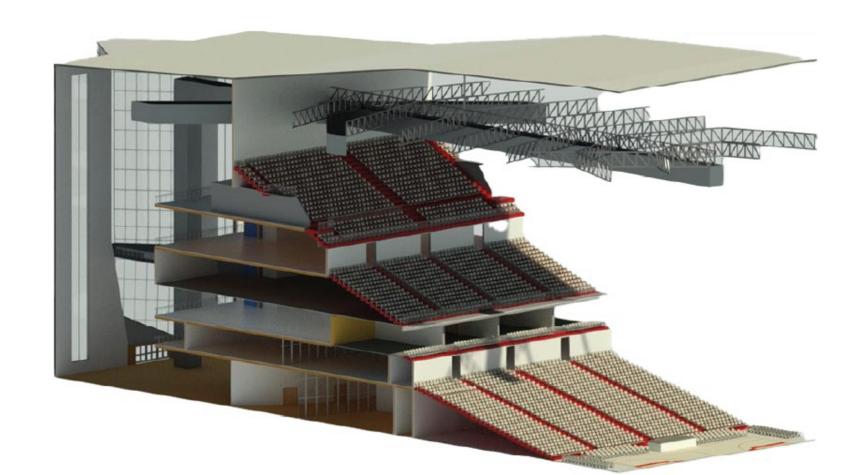
Main Concourse Floor Plan



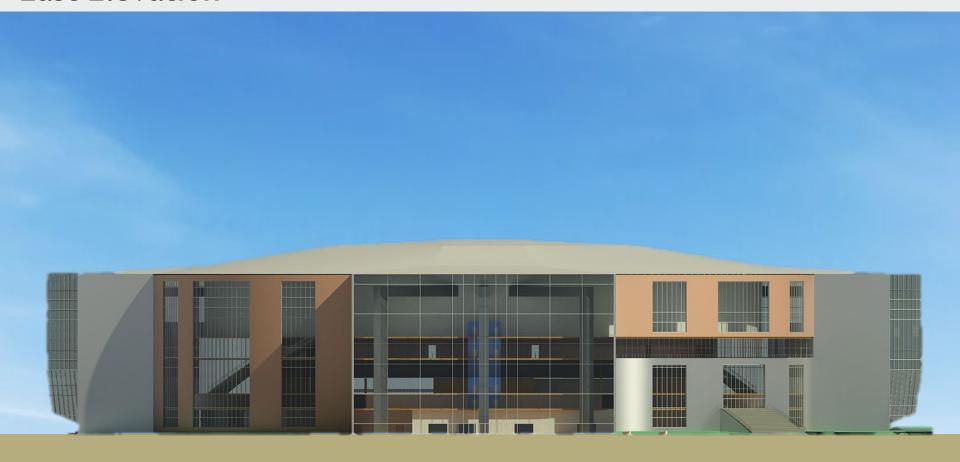
Northeast Section Cut



3D Isometric



East Elevation











Birds Eye View



Throughout my thesis journey, I can firmly say it wasn't an easy challenge. Although interested in the entertainment side of architecture, I pushed to collaborate entertainment with a more local approach to focus in on the idea of bringing community members back to the area. There is something to be said about how sports make people feel, and the way massive buildings like this affect cities. They offer happiness, memories, and thrills you can't capture anywhere else. I have achieved a design that offers Las Vegas a new adventure, gives access to a safer more community orientated facility, diversifies the areas portfolio, while creating an experience every sports fan dream of.

The End - Thank You!

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