

Thank you to my friends and family who have supported me throughout my journey into architecture. Thank you for encouraging me to choose this career and for having faith in me this whole time, even when it felt impossible. A special thank you to my parents, who have been trying to set me up for success my entire life. I could not be here today without your support.

I also want to thank the various faculty at Texas A&M who have helped me through final study. Some taught me years ago in class, some let me bother them during office hours, and some have given me guidance on this project. I appreciate all of you so much. Thank you for investing your time in me.

Abstract

This project addresses the problems caused for the historic cemeteries of Galveston, Texas, by the effects of climate change. Instead of physically protecting the cemetery from high winds and flooding, this project argues that another important method of heritage conservation is to ensure the survival of the cemetery's historic and data in an archive.

The proposed archive is designed in a what I call a "futurism revival" style, which was chosen for its positive associations with ideas of the future, technology, and exploration. The architecture of the 1960s is influential to this project for its volumetric compositions, specifically long boxes that terminate in semicircles.

To interact with the street, the exhibition gallery and cafe are on the first floor. Around the back of the building is a drop-off point for archival materials. On the second floor, staff offices and a presentation space are accessible to the public. The top floor, the largest of the three, comprises library stacks and a reading room that faces the cemetery. This building is configured so that floodwaters will not damage the stacks and archival materials.

COMMITTEE

Andrew Tripp ______ chair

Priya Jain _____ committee member

Rebecca Hankins _____ committee member

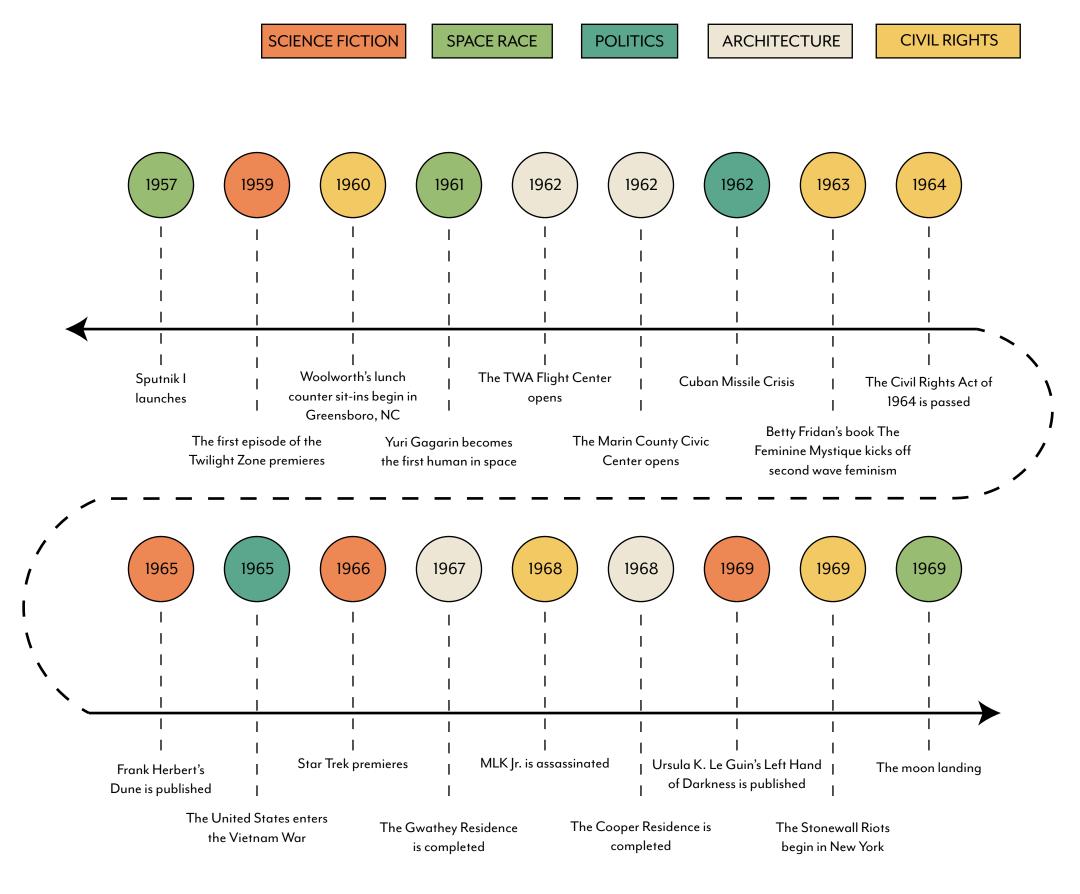
Brian Gibbs _____ studio professor

TABLE OF CONTENT

Futurism Revival	7
Site	27
Plans	41
Sections + Elevations	57
Street Views	69
References	76

1 FUTURISM REVIVAL

THEMATIC INLUENCES

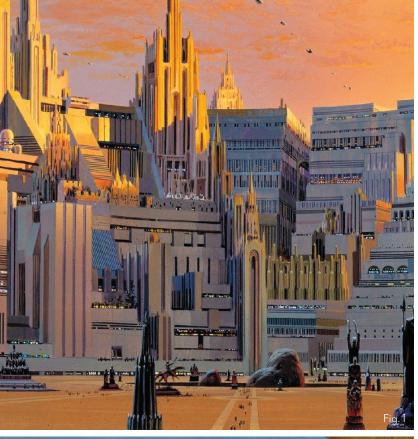


Introduction

I approched this final study project not just as a studio project, but as a thesis. What could I contribute to the body of architectural knowledge? The idea I eventually landed on, this archive dedicated to Galveston's historic cemeteries, was the result of choosing to combine loosely related ideas (climate change, science fiction, cemeteries, archives, futurism, and more) into a cohesive project that deals with these topics in a new way.

For better or for worse, my time in graduate school has been shaped by the pandemic. In March 2020, I didn't know if I would be admitted to graduate school, and as a career change student, I knew I wouldn't be able to work in architecture unless I earned an architecture degree. While I waited to hear back from Texas A&M University, I applied for all sorts of jobs like feral cat catcher, retail associate, urban planner, neighborhood tutor, and more. Everything was completely scrambled: My personal life, my career, the pandemic, the isolation, the uncertainty. As so many people did, I turned to stories. For me, they were science fiction. I don't know if it was my environment, the pandemic, or some other combination of factors, but the ideas and tones from those mid-'60s works spoke to me so clearly. They felt hopeful, and it helped to surround myself with stories of people succeeding in difficult and strange environments. Stories set in different times, whether about the past or future, say more about the culture that created them than the one they're trying to depict.

This project makes the statement that, while things may feel dire in the face of climate change, the future is optimistic. The histories of ordinary people are worth preserving. In using the design language of the Space Age, this archive seeks to elevate the study and preservation of history to the act of exploration.







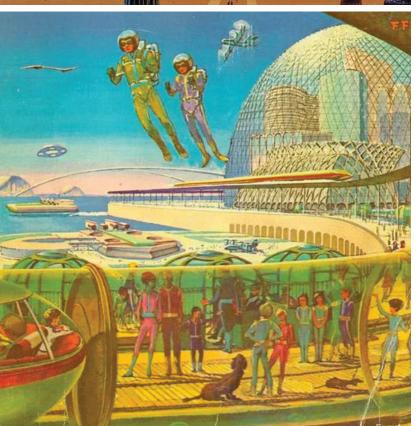






Fig. 1 - Ralph McQuarrie

Fig. 2 - Jon Hrubesch

Fig. 3 - Klaus Bürgle

Fig. 4 - Fred Freeman

Fig. 5 - Klaus Bürgle

Fig. 6 - Jim Powers

Retrofuturism (and Regular Futurism)

Science fiction is my favorite genre. Not because I love spaceships and aliens, but because it elevates themes in art. Science fiction lets authors take their central themes and physically make them a part of the world they're creating. Other genres certainly do this too, but science fiction takes it to the extreme. Another novel may use the setting of a cabin in the woods to depict isolation, but a sci-fi novel might use a spaceship on the edge of the galaxy or a submarine at the bottom of the ocean. When there is no default setting, the artist's choices carry more weight and allow the reader to assign more meaning to the art.

I find it extremely compelling that depictions of the future are frequently centered on the architecture. In any science fiction movie or television show, note the city and buildings. In Gattaca (1997), the Marin County Civic Center is the backdrop for a story about the future where everyone drives cars that would have been vintage even in 1997. The opening shots of Blade Runner (1982) immediately establish the dark, dystopian of Los Angeles in this version of the future. The cityscapes of Metropolis (1927) were surely visionary to viewers when it debuted. Notably, technology plays a comparatively small role in Dune (2021), and its low-tech brutalist architecture adds to the image of an inhospitable planet. Star Trek: The Original Series was my pandemic binge-watch show, and its alien landscapes and shapceship interiors effortlessly told the story of Gene Roddenberry's best hopes for humanity. If "a picture is worth a thousand words," architecture in visual mediums is a lightning-fast way to convey what type of future our story is set in.

The version of futurism that I am interested in reviving is the futurism of the 1960s in America. Italian futurism of the early 20th century deals more with themes of movement, industrialisation, and density. For the purposes of this project, I want to reference the themes of exploration, social equality, and optimism that I feel are more consistent with the 1960s.

In 2023, we are currently in the midst of nostalgia-driven media and consumerism. It feels like every movie in theaters is a remake or part of an existing creative property. Everyone is trying to capitalize on nostalgia these days, and retrofuturism is an older example of this type of advertising and art. Retrofuturism looks back to the excitement we felt about the future before it arrived. Sometimes this comes from advertisements trying to sell this vision of a better future, and sometimes it comes from artists trying to distill that feeling of anticipation.

Retrofuturist art, especially that of advertisements, must be viewed with a critical eye. They are products of their time, just as my building is a product of mine. The best takeaway from retrofuturist art and advertisements is the role we ascribe to architecture in our vision of the future.



Photograph by Joshua Wh



Photograph by Robert M. Craig



Hollyhock House Frank Lloyd Wright | Los Angeles, CA | 1921 Mayan Revival

Fox Theater

P. Thorton Marye, Richard W. Alger, Olivier J. Vinour | Atlanta, GA | 1929 Moorish Revival, Ancient Egyptian Revival

United States Supreme Court Cass Gilbert | Washington, D.C. | 1935 Neoclassical

(The Case for) Futurism Revival

Revival styles deal in the currency of references. Art historians and archaologists know that ancient Greek and Roman temples would have been painted in their period of significance, but we choose to keep government buildings unpainted because our associations are with the idea of ancient democracy, not the reality of it. References only have value when people understand them.

Architects learn from precedent, and sometimes that precedent is from a certain stylistic discipline. In the Hollyhock House, Frank Lloyd Wright took inspiration from the heavy, angled roofs of Mayan architecture. Decoration is present, but it is a more holistic reference to the past than we see in other forms of revivalism.

Sometimes, exoticism is the most important part of a revival style. The Fox Theater was chosen to represent revivalism through decoration. Different rooms at the Fox Theater are done in different styles that have very little to do with each other architecturally or aesthetically, but that works for this theater because the origin of that exoticism is irrelevant. This is common for theaters of the 1920s, which were frequently done in revival styles from cultures that were unfamiliar to Americans at the time.

The political reasons for choosing to build in a revival style are perhaps the most important to recognize. The United States Supreme Court Building was chosen to represent the ideological reasons for revivalism. Here. neo-classicism tries to establish a link between the origins of democracy, law, and the United States Supreme Court, therefore legitimizing the legal decisions made here. Neoclassicism is very commonly used throughout the US to imply power, and I would even argue that it has come to represent institutions as a whole.

For the purposes of my project, I propose the revival of 1960s futurist architecture. There are several parallels between the 1960s and the 2020s. In 2024, NASA's Artemis program will return men (and this time, women) to the moon. A new wave of civil rights protests, sparked by police brutality, has reignited momentum for social change and racial equality. In the 1960s, people were preoccupied with exploring new worlds and going off-planet. Now, though we are still engaging in space exploration, many people are increasingly focused on the condition of our own planet. Popular interest in technology is not just about the cosmos, but also about how we can improve life on Earth.

Bishop's Palace

Nicholas J. Clayton | Galveston, TX | 1892

First known as Gresham's Castle, this Galveston landmark was home to Josephine and Walter Gresham and their nine children until 1923. Being made of stone, it was one of the few buildings to survive the Storm of 1900. It is located on Avenue J, just a few streets down from my chosen site, and is one of the most prominent buildings on the island.

While this formal precedent is not from the 1960s, it is still relevant for its proximity to the site and its similarity to my other precedents. Although the level of detail and ornament is greater than the others, the formal composition is very similar. You can especially see this when comparing the floor plans of Bishop's Palace and the Gwathmey Residence, which is a pared-down execution of similar ideas.

I was also inspired by the volumes of this house, specifically the two cylindrical masses on the front. The spiral staircase is one of the home's most defining interior features. To me, it represents vertical movement in a way that the other towers at the front to do not. While they are segmented by floors, the staircase stays open and is a truer expression of verticality.



Fig. 10 - Historic photograph, Storm of 1900 aftermath

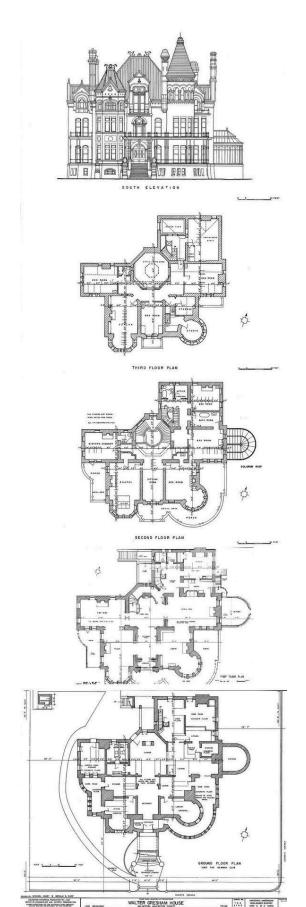
Fig. 11 - Bishop's Palace staircase

Fig. 12 - Bishop's Palace

Fig. 13 - Plans







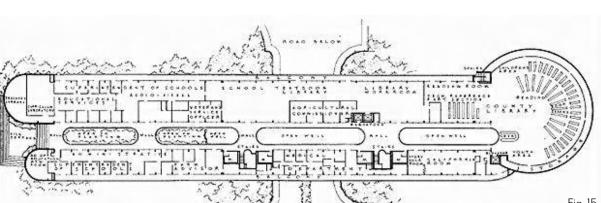
Marin County Civic Center

Frank Lloyd Wright | San Rafael, CA | 1960

The Marin County Civic Center is made of two main wings hinged at the center which are further subdivided into two legs. Those two smaller legs are long rectangles that end in a semicircle. Circles and semicircles are the most prominent design element throughout the building.

The Marin County Civic Center is also a landmark building in the development of architecture in science fiction. It was the filming location for THX-1138 (1971) and Gattaca (1997), and it also served as the inspiration for Naboo in Star Wars: Episode I The Phantom Menace (1999). I love that a civic center, a place where people go for jury duty, to read books from the library, and to send mail from the post office, looks like this. It is such a joy to make beautiful public buildings like this a part of daily life.







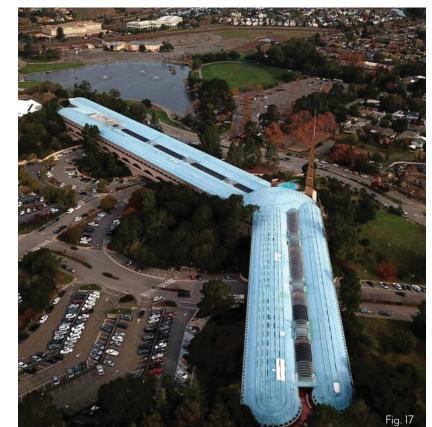




Fig. 15 - Floor plan, third floor

Fig. 16 - Atrium. Photographed by Marlena Sloss for the NYT

Fig. 17 - Aerial view

Fig. 18 - Courtroom in the Marin County Civic Center. Photographed by Andrew Pielage



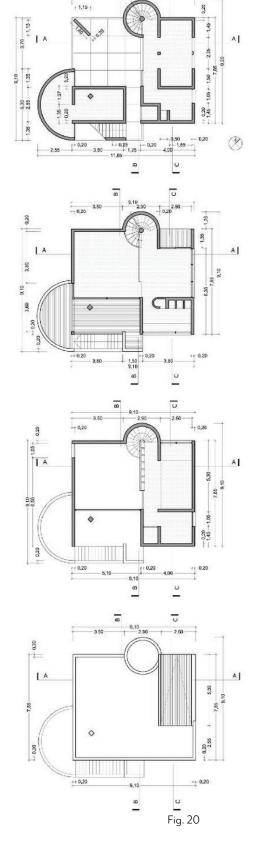
Gwathmey Residence

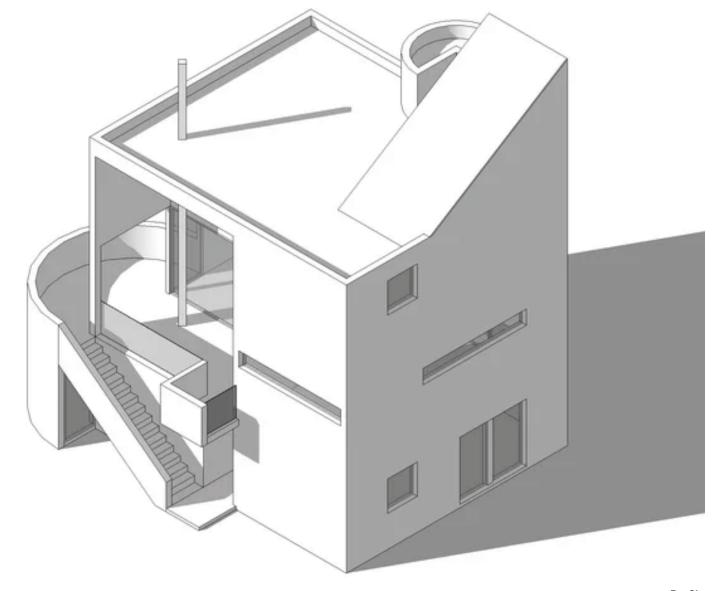
Charles Gwathmey | Amagansett, NY | 1967

This was Charles Gwathmey's first built project, done for his parents before he was officially licensed. I selected this project as an influence for its overall composition and clarity in plan. This was also the very first project I ever studied in an architectural studio, and I think about the lessons it imparted frequently. Its beauty lies in the form, not the detailing. The intersections of space are its defining characteristic.



Fig. 19 - Gwathmey Residence Fig. 20 - Plans Fig. 21 - Model by Guiliano C.





Cooper Residence

Gwathmey Siegel Kaufman Architects | Orleans, MA | 1968

The Cooper Residence builds on the ideas and design from the Gwathmey Residence. The floor plan and volumetric composition of this project was very influential to me, and I particularly love how clear the design "rules" are here. The geometry is clearly defined, and there is a system for determining which areas terminate in semicircles and which are part of the orthogonal massing.

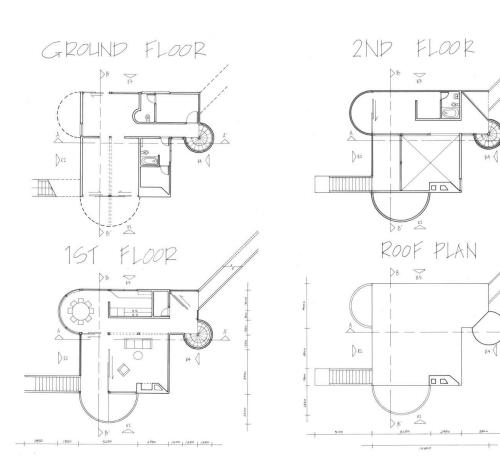


Fig. 22



Fig. 22 - Plans by Heng Rui Ying Fig. 23 - Cooper Residence

Fig. 24 - Cooper Residence





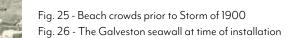


Fig. 27 - Posed group of workers during Storm of 1900 recovery

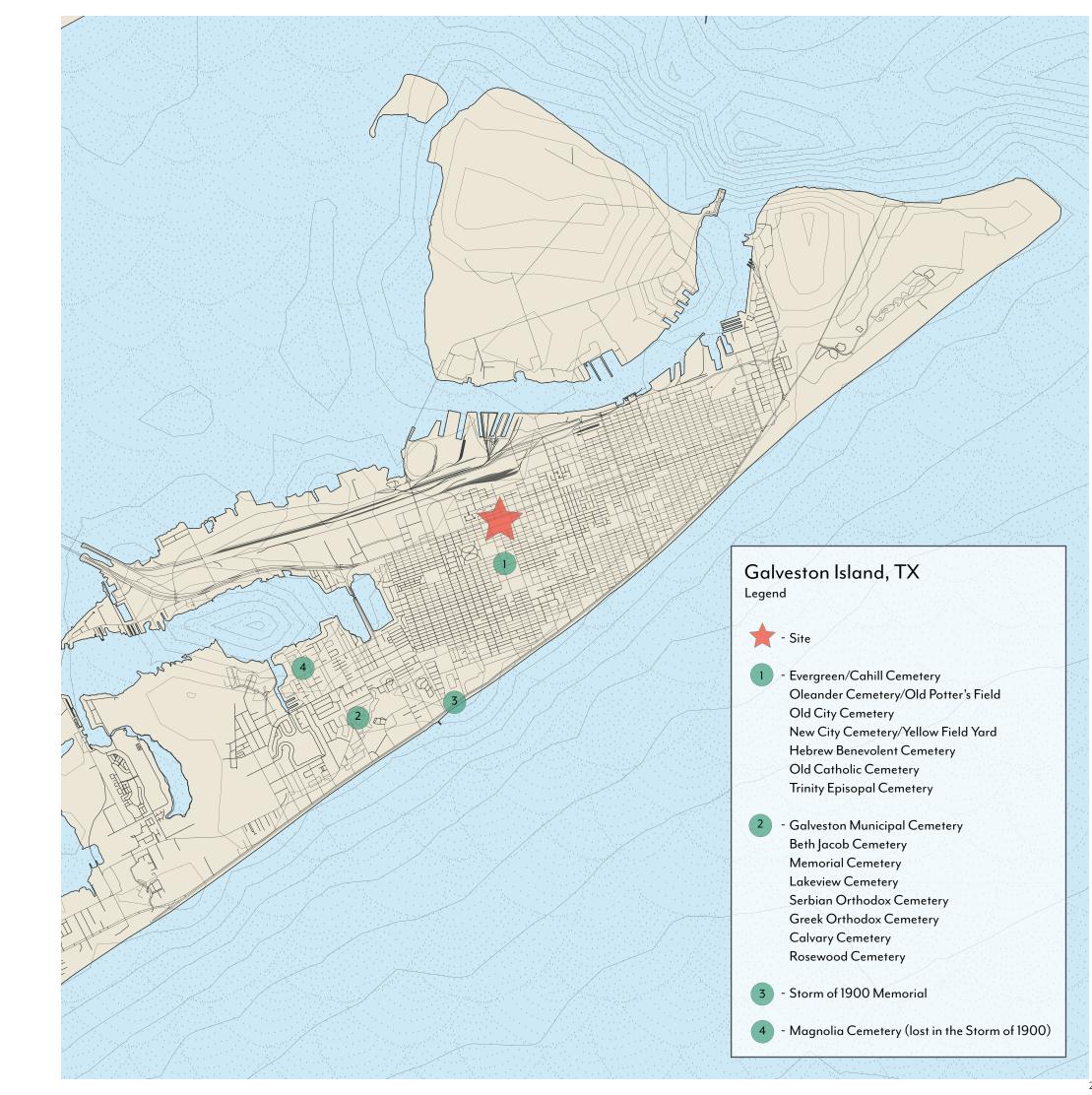
Program Selection

Although cemeteries may feel creepy or morbid to people today, they are important local cultural heritage sites. During my internship at a preservation-focused firm, I was surprised to discover how many times research brought me back to cemetery records. For ordinary people who lived decades or centuries ago, grave records are some of our best extant documentation. Cemeteries provide insight into settlement patterns, geneology, and demographic information about the people buried there.

Cemeteries are enmeshed with the landscape, which makes them an ideal candidate for conversations related to environmental concerns like climate change. Archives symbolize permanence, and this typology fit perfectly with the idea of preserving a threatened resource like these historic cemeteries.

As important as these cemeteries are, their restoration may not rank highly on the islanders' list of priorites as they rebuild after a disaster. One possible solution to this dilemma is to proactively conserve the information housed in the cemeteries so that homes and businesses can be prioritized during rebuilding efforts.

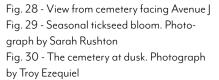
SITE





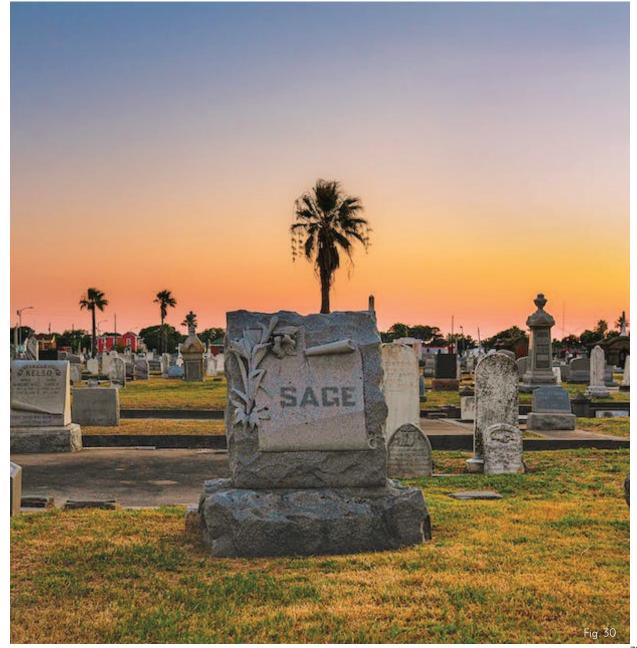
The site's location was chosen for its relationship to the existing cemetery. It is directly across the street and located on a symmetrical axis. One of Galveston's main thoroughfares runs between the cemetery and the archive, increasing visibility and looping people into their exchange.

It was also important to me that the selected site did not have anything currently built there. It felt antithetical to propose a preservation-minded project that required the demolition of another.

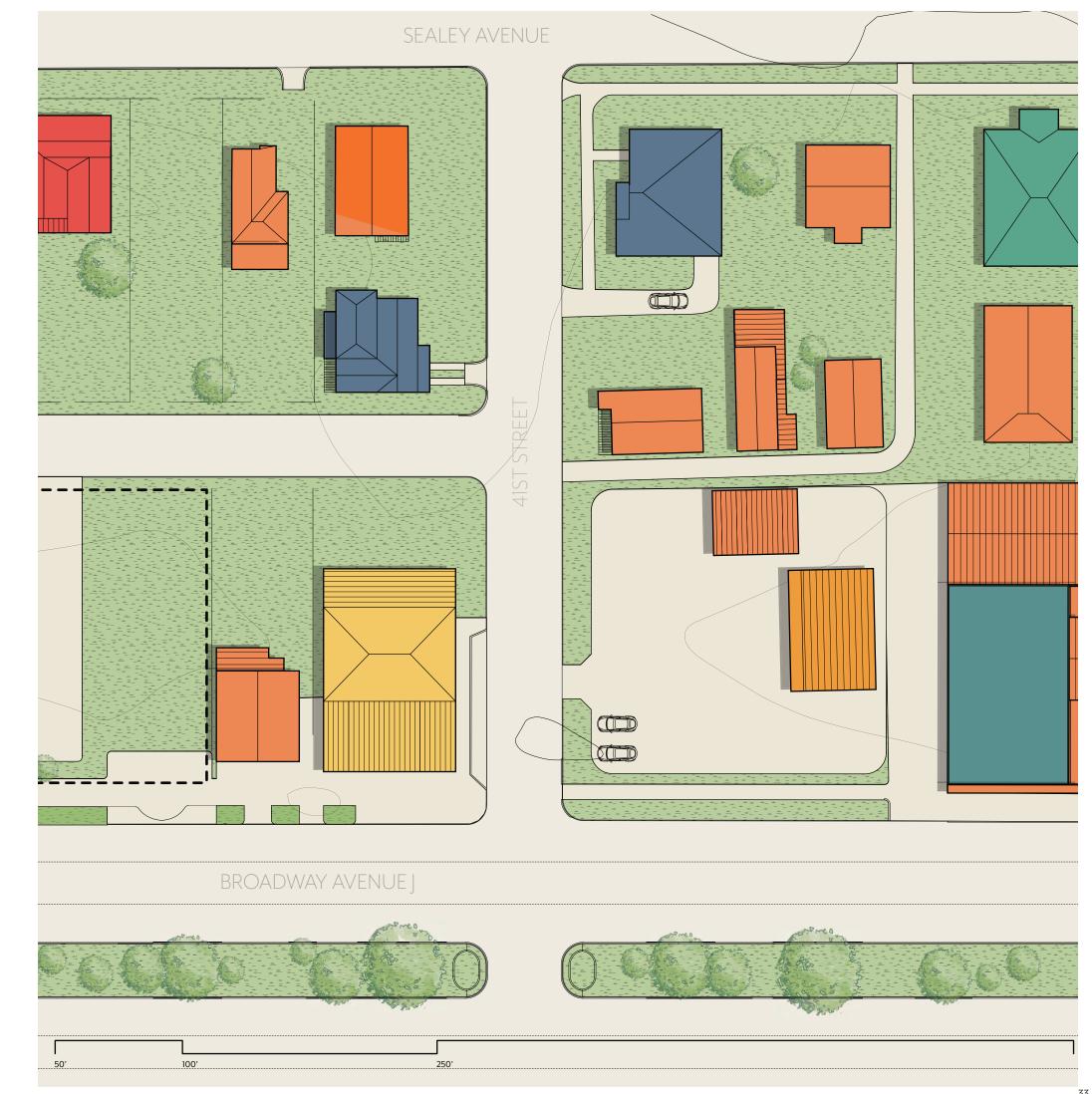


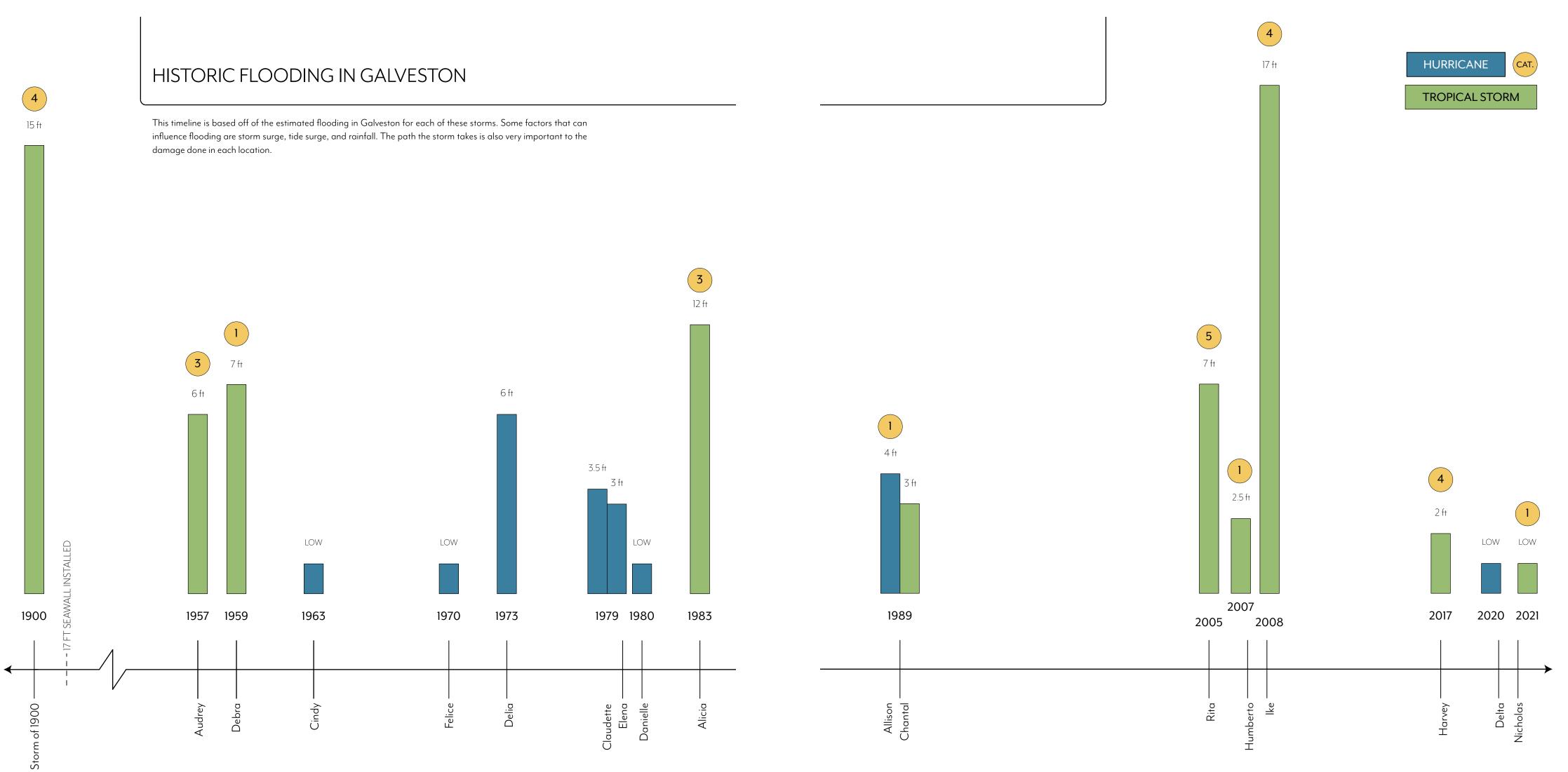














CATEGORY 1
EXPECTED FLOODING 0-1 FT

CATEGORY 2EXPECTED FLOODING 2-4 FT



CATEGORY 3
EXPECTED FLOODING 8-10 FT

CATEGORY 4EXPECTED FLOODING 13-15 FT

EXPECTED STORM SURGE



CATEGORY 5
EXPECTED FLOODING 18-20 FT

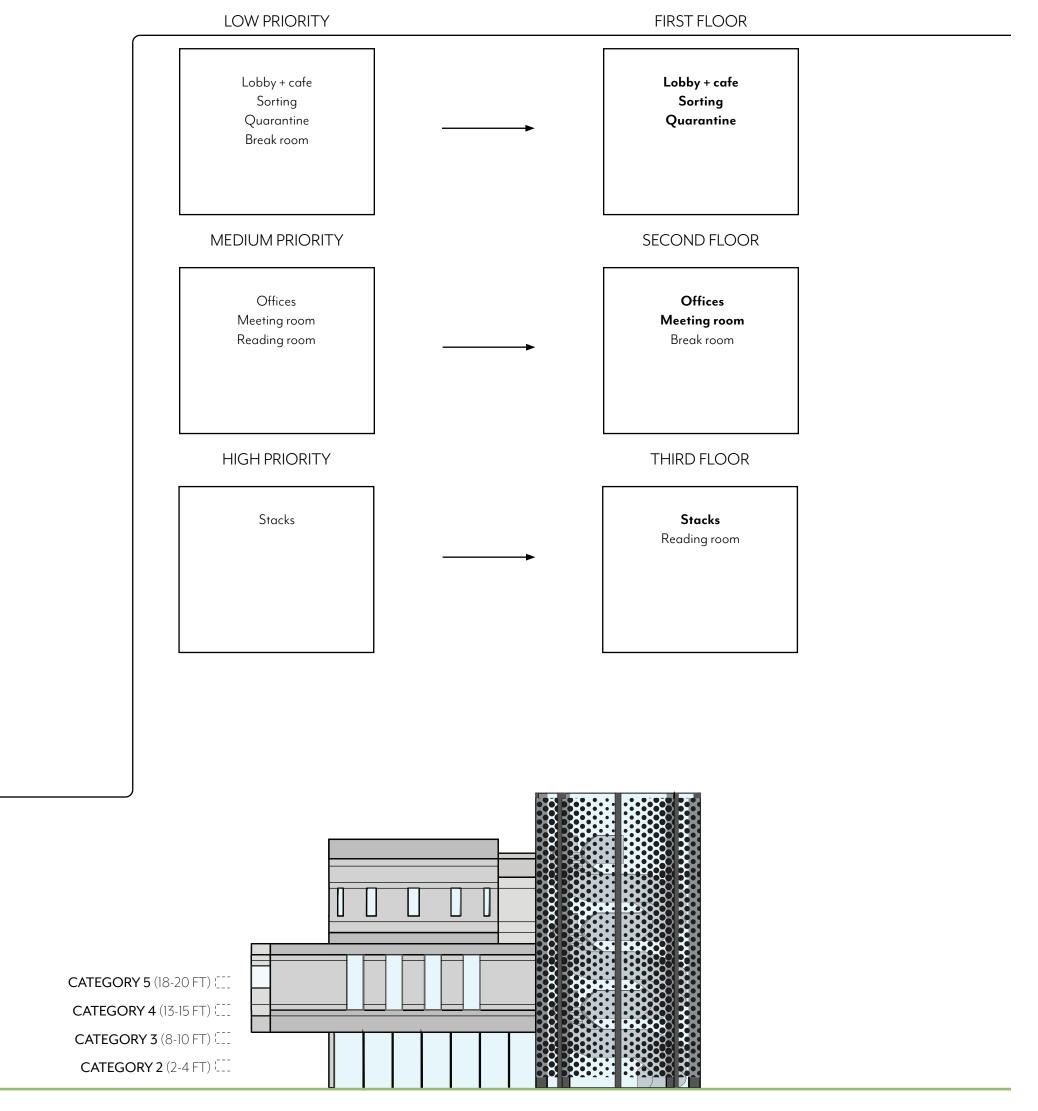


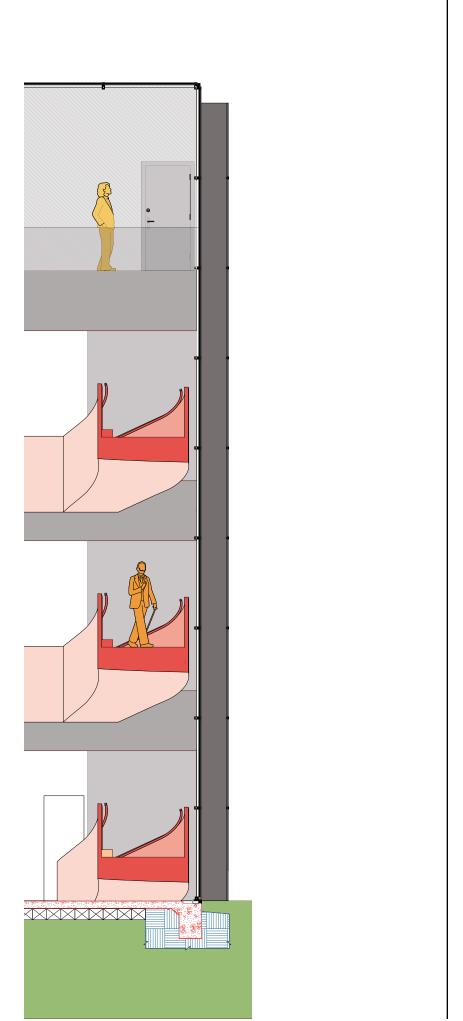
Storm surge data obtained from NOAA

Parcel data obtained from the Galveston Central Appraisal District

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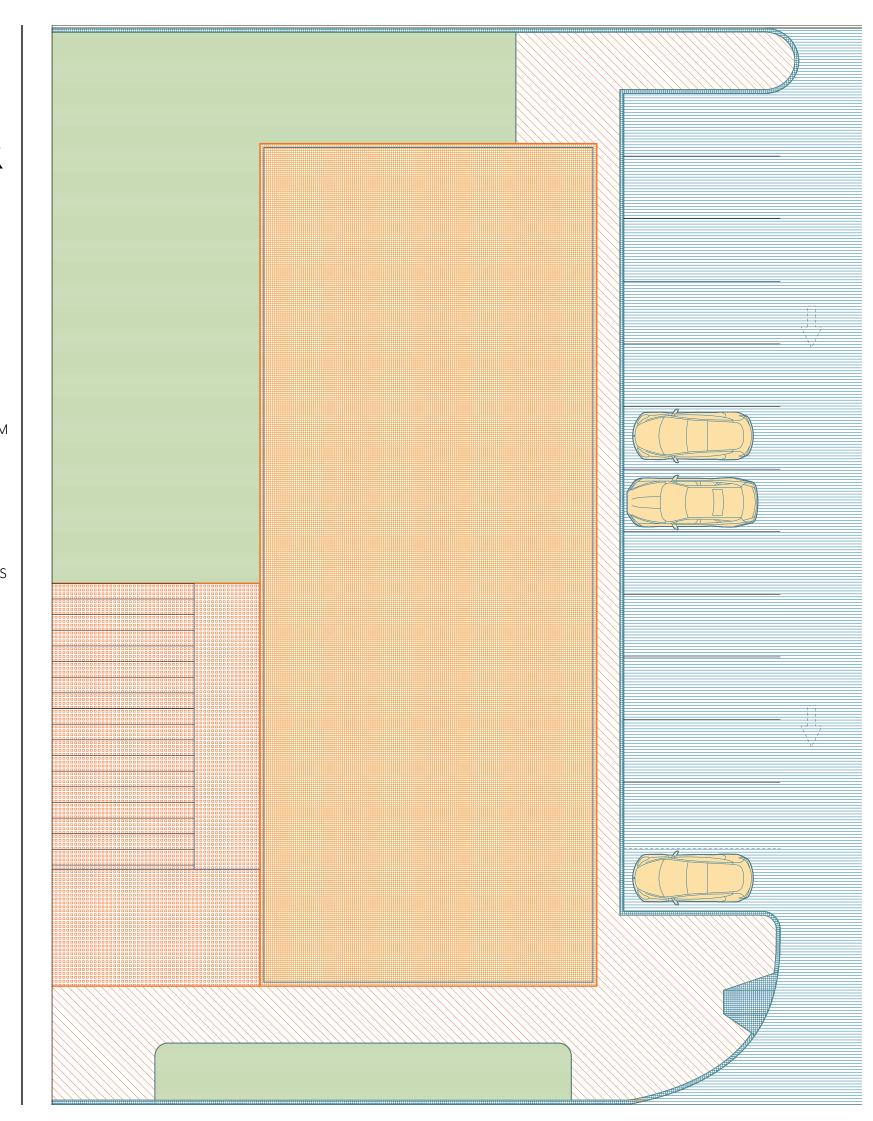




PLANS

FIRST FLOOR

- GALLERY
- 2 SORTING
- 3 BATHROOMS
- 4 ELEVATORS
- 5 CAFE
- 6 PRESENTATION ROOM
- 7 CHAIR STORAGE
- 8 OFFICES
- 9 STAFF BREAK ROOM
- 10 MECHANICAL ROOMS
- 11 STACKS
- 12 READING ROOM
- 13 DIGITIZING



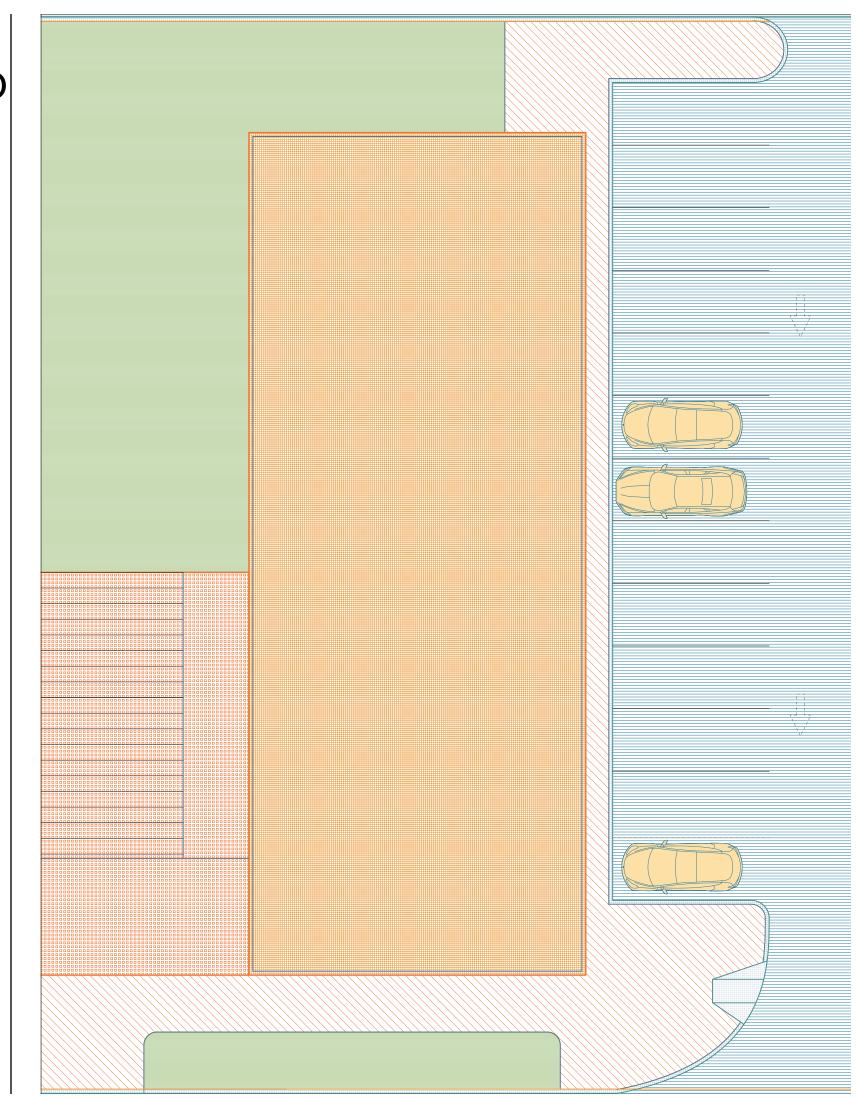






SECOND FLOOR

- I GALLERY
- 2 SORTING
- 3 BATHROOMS
- 4 ELEVATORS
- 5 CAFE
- 6 PRESENTATION ROOM
- 7 CHAIR STORAGE
- 8 OFFICES
- 9 STAFF BREAK ROOM
- 10 MECHANICAL ROOMS
- II STACKS
- 12 READING ROOM
- 13 DIGITIZING



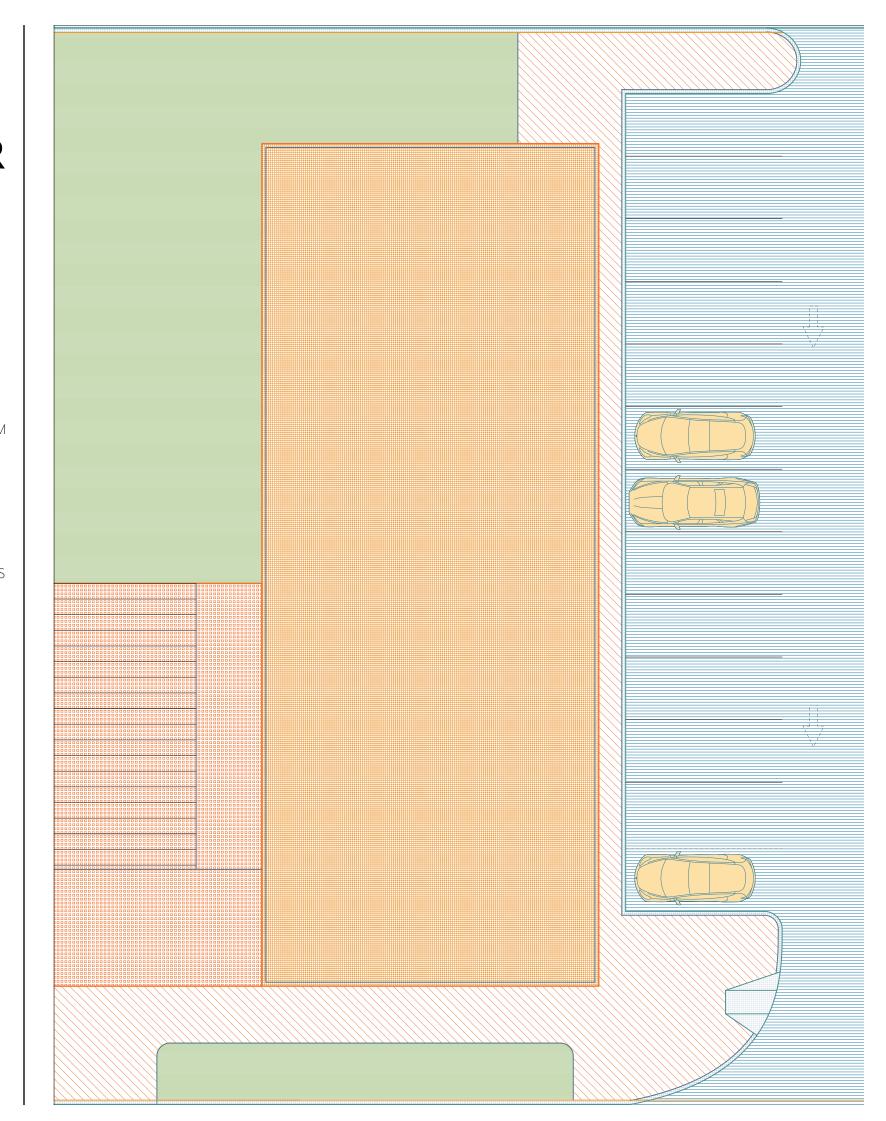


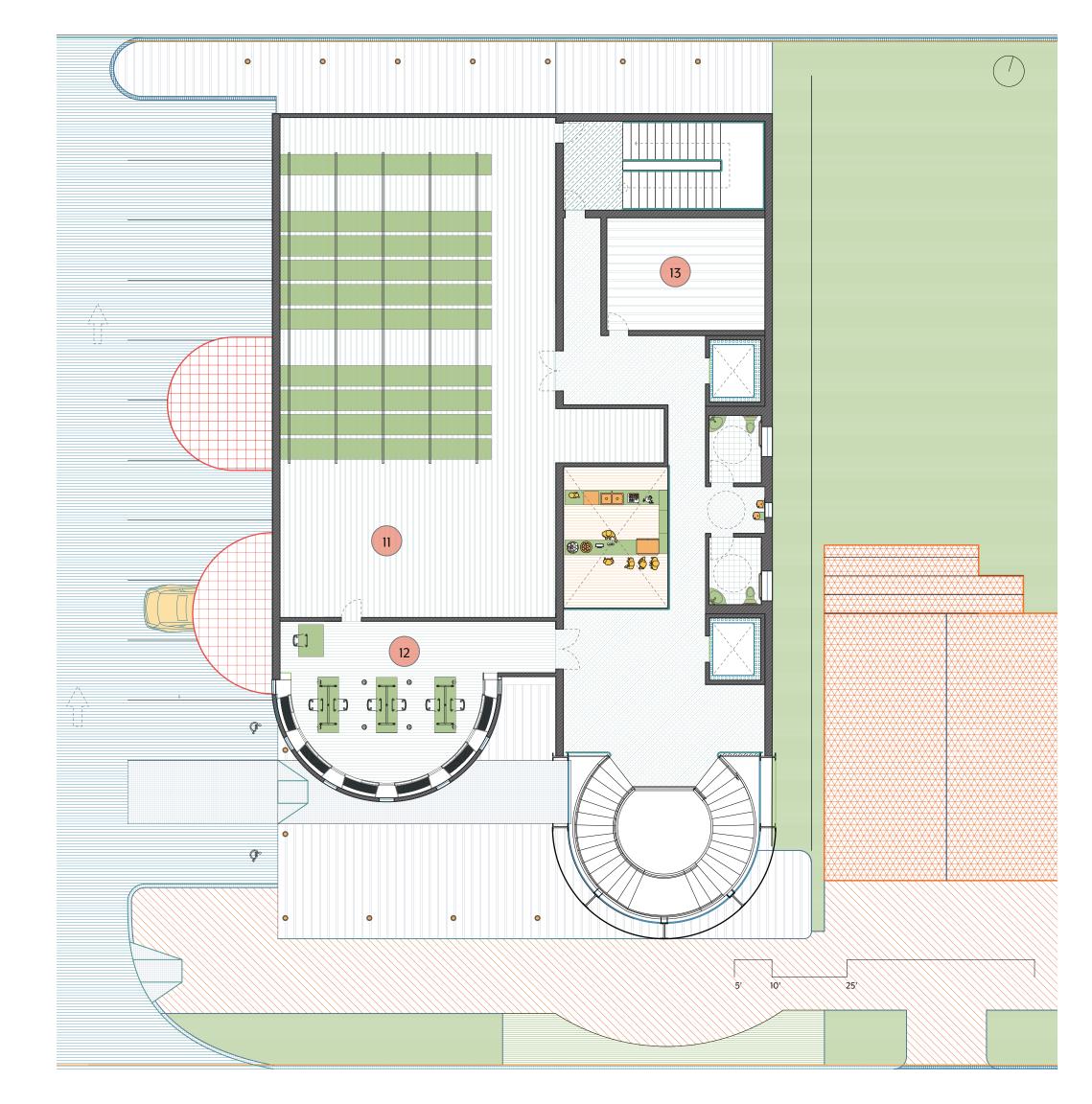




THIRD FLOOR

- GALLERY
- 2 SORTING
- 3 BATHROOMS
- 4 ELEVATORS
- 5 CAFE
- 6 PRESENTATION ROOM
- 7 CHAIR STORAGE
- 8 OFFICES
- 9 STAFF BREAK ROOM
- MECHANICAL ROOMS
- 11 STACKS
- 12 READING ROOM
- 13 DIGITIZING

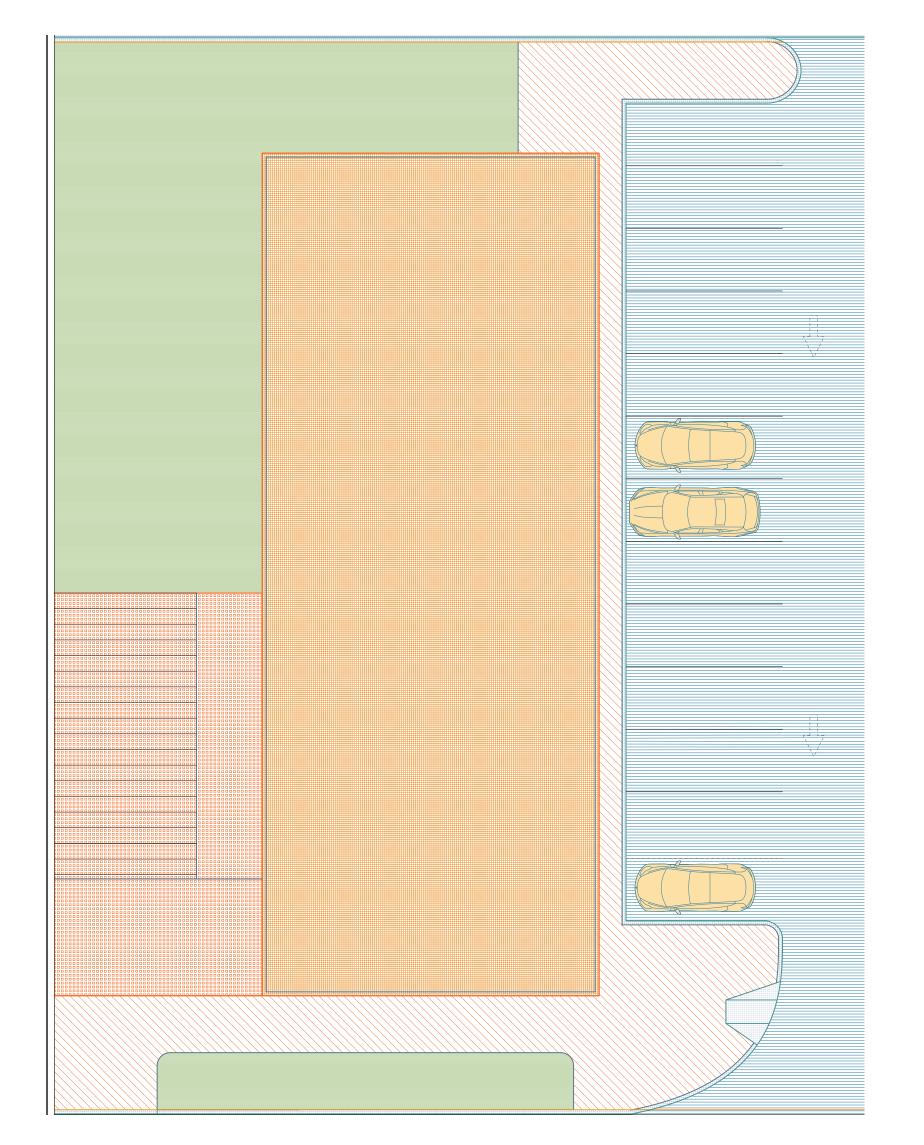


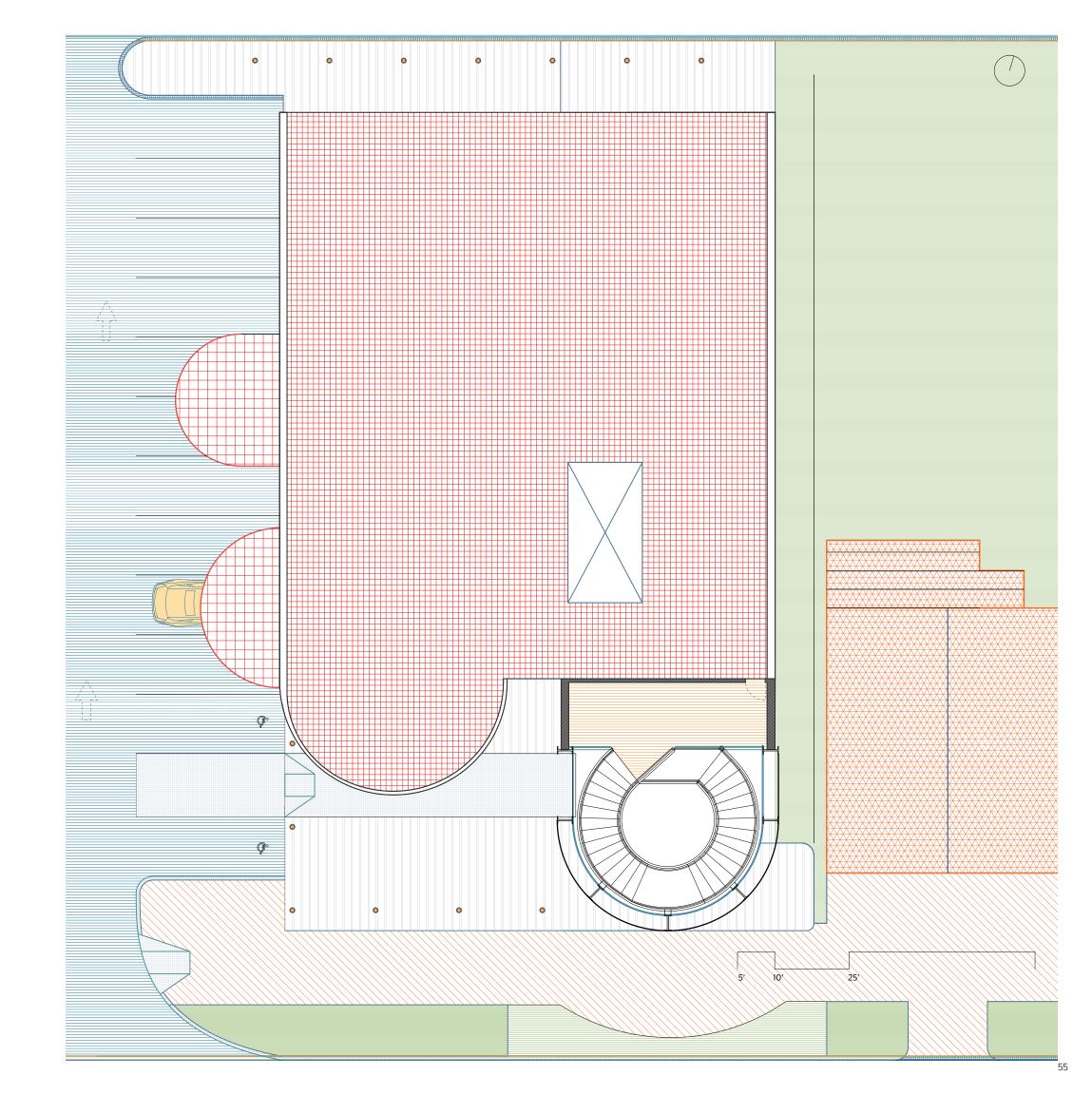




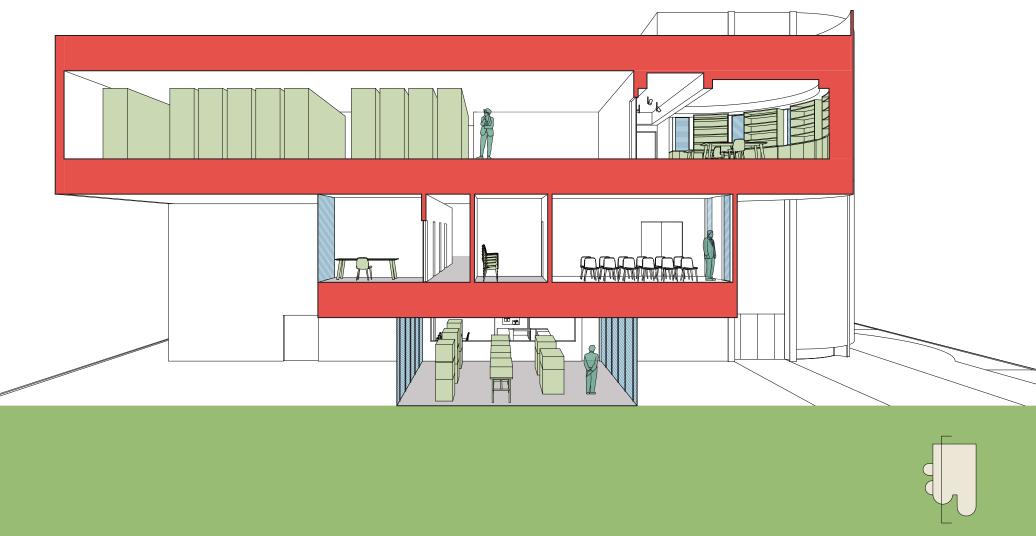


ROOF

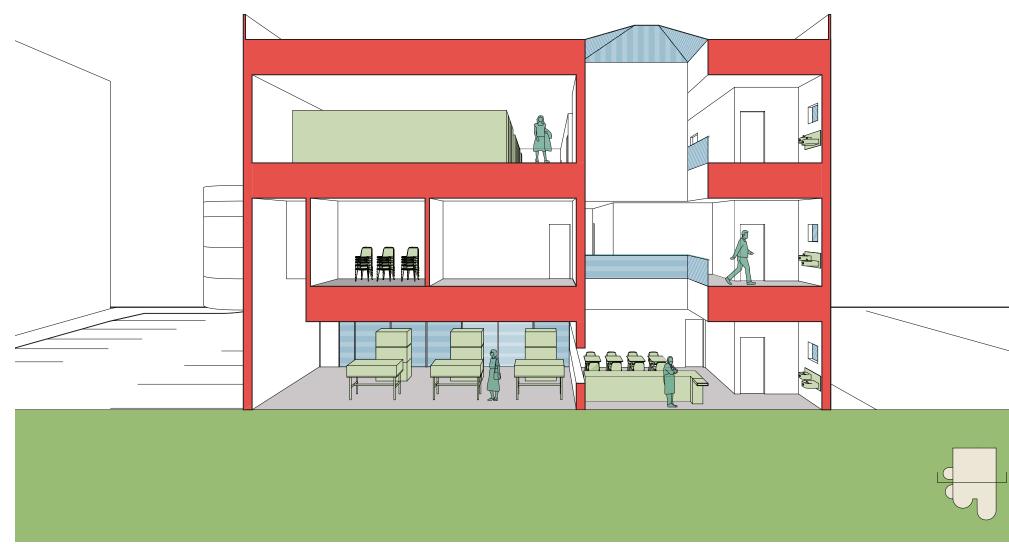




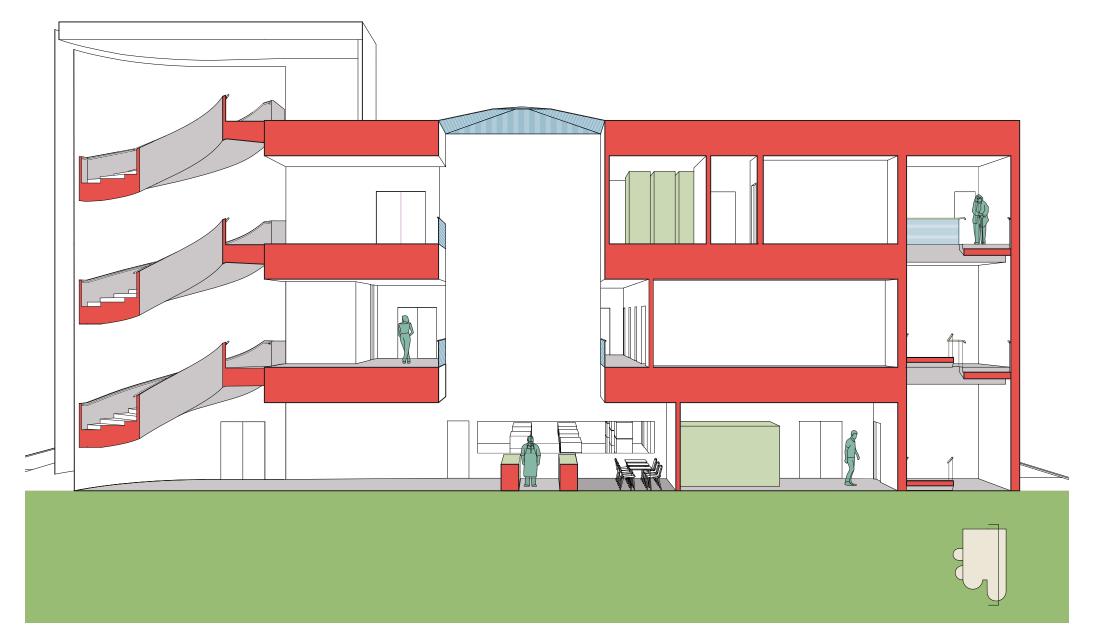
SECTIONS + ELEVATIONS



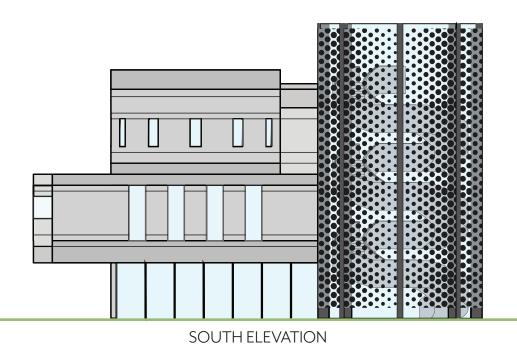
Informed by projected flooding data, the top floors of this building are larger than the bottom floors. The top floors are more than 20 feet above the ground, protecting delicate and irreplacable items from potential storm surges.



This building imagines an entirely new archive. It is not designed for any current museum collection, rather, it seeks to find and collect various artifacts related to Galveston's historic population. It may be populated with family documents that the family knows other people could learn from. I imagine it would mostly be paper, but the option remains for digital or other physical artifacts.

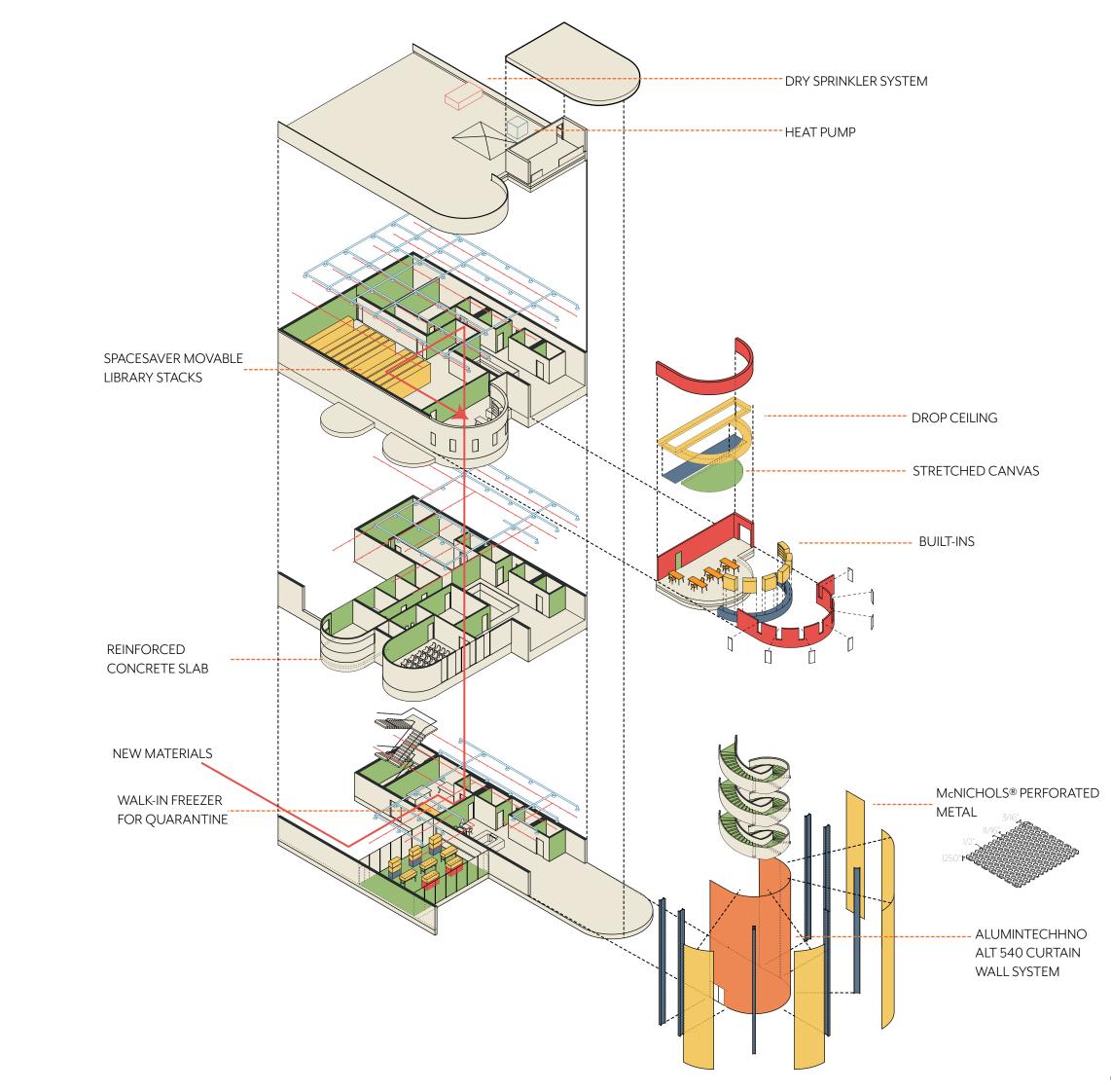


Finding the right balance between light and dark was one of the central challenges of this project, and it is resolved here by the large glass spiral staircase and the light well placed further back.







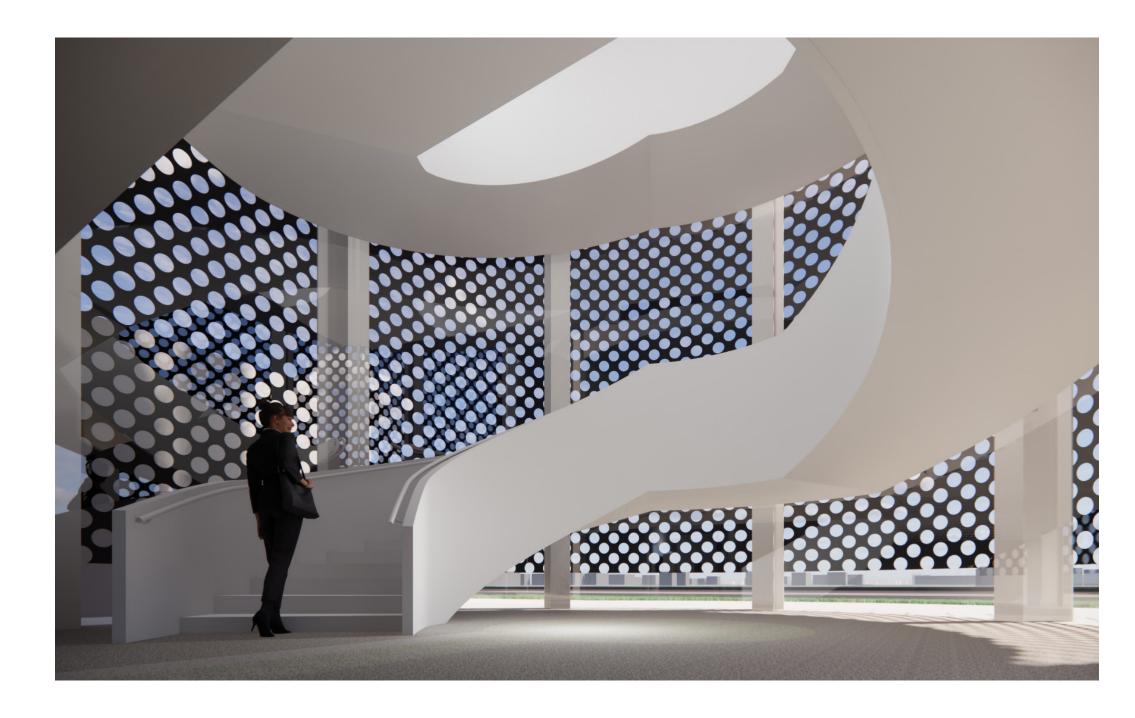
















REFERENCES

Acker, Wouter Van, and Thomas Mical. Architecture and Ugliness: Anti-Aesthetics and the Ugly in Postmodern Architecture. London: Bloomsbury Visual Arts, 2021.

Aerial View of the Marin County Civic Center. June 1, 2018. Photograph. https://www.northbaybusinessjournal.com/article/industry-news/colorful-roof-renovation-continues-at-marin-civic-center/.

Ahlers, Mike, Jeanne Meserve, Barbara Starr, Mike Mount, and Jason Morris. "One Death as Ike Edges toward Category 3 Power." One death as Ike edges toward Category 3 power - CNN.com. Accessed April 25, 2023. https://web.archive.org/web/20080918080126/http://www.cnn.com/2008/US/weather/09/12/hurricane.ike.texas/index.html?section=cnn_latest.

Beanland, Christopher. Unbuilt -Radical Visions of a Future That Never Arrived. London: Batford Ltd, 2021. Blake, Eric S. "Tropical Cyclone Report - National Hurricane Center." NOAA, November 28, 2007. https://www.nhc.noaa.gov/data/tcr/AL092007_Humberto.pdf.

Boyer, Mark. Exterior of the Marin County Civic Center. September 23, 2013. Photograph. Inhabitat. https://inhabitat.com/frank-lloyd-wright-designed-marin-civic-center-in-san-rafael-turns-50/.

"Broadway Cemetery Historic District, Galveston, TX." Historic Houston: June 10, 2016. http://historichouston1836.com/galveston-cemetery-historic-district-galveston-tx/.

Burgle, Klaus. "Skyscrapers of the Future," 1968.

Burgle, Klaus. "Untitled." Commissioned by 'The New Universe' Magazine, 1959.

"Cemetery Preservation." Cemetery Preservation | THC.Texas.gov - Texas Historical Commission. Accessed April 25, 2023. https://www.thc.texas.gov/preserve/projects-and-programs/cemetery-preservation.

Chavkin, Dan. Star Trek: Designing the Final Frontier. the Untold Story of How Midcentury Modern Decor Shaped Our View of the Future. Weldon Owen, 2021.

Cheek, Lawrence. "Taco Deco: Spanish Revival Revived." Journal of the Southwest 32, no. 4 (1990): 491–198.

Clark, Kenneth. The Gothic Revival. London: Murray, n.d.

Craig, Robert M. The Fox Theater. n.d. Photograph.

Crowds on Galveston Beach. Photograph. Visit Galveston. Accessed April 25, 2023. https://www.visitgalveston.com/things-to-do/history-heritage/galveston-history/.

Ezequiel, Troy. Cemetery at Sunset. August 9, 2022. Photograph. Https://Www.texasmonthly.com/Arts-Entertainment/Texas-Novelists-Are-Fascinated-by-Galveston/.

Floor Plan of Bishop's Palace. n.d. Pinterest. https://www.pinterest.com/pin/767723067702144205/. Freeman, Fred. "Our Future World in 1999," n.d.

Galilee, Beatrice. Radical Architecture of the Future. Berlin: Phaidon Press Limited, 2021.

The Galveston Seawall at Time of Installation. Photograph. Galveston, TX, n.d. Rosenberg Library.

"Galveston, Texas History with Tropical Systems." Galveston, Texas hurricanes. Accessed April 25, 2023. https://hurricanecity.com/city/galveston.htm.

GIGUERE, JOY. Characteristically American: Memorial Architecture, National Identity, and the Egyptian Revival. S.I.: UNIV OF TENNESSEE PRESS, 2023.

Grigor, Talinn. The Persian Revival: The Imperialism of the Copy in Iranian and Parsi Architecture. University Park, PA: The Pennsylvania State University Press, 2021.

Hebert, Paul J. "Atlantic Hurricane Season of 1979." Monthly Weather Review 108, no. 7 (1980): 973–90. https://doi.org/10.1175/1520-0493(1980)108<0973:ahso&qt;2.0.co;2.

Hebert, Paul J., and Neil L. Frank. "Atlantic Hurricane Season of 1973." Monthly Weather Review 102, no. 4 (1974): 280–89. https://doi.org/10.1175/1520-0493(1974)102<0280:ahso>2.0.co;2.

Heidorn, Keith C. "Dr Isaac M. Cline." Weather Doctor's Weather People and History: Dr Isaac M. Cline Part 2. Accessed April 25, 2023. http://www.heidorn.info/keith/weather/history/icline2.htm.

Heimann, Jim. Future Perfect: Vintage Futuristic Graphics. Köln: Taschen, 2002.

Hrubesch, Jon. "Future City." Depiction of an unknown city in the future, 2012.

"Hurricane Alicia." Committee on Natural Disasters. Accessed April 25, 2023. https://www.weather.gov/media/hgx/hurricanes/Committee_On_Natural_Disasters_Alicia.pdf.

"Hurricane Harvey -- August 25-September 4, 2017." Weather Prediction Center (WPC) home page. Accessed April 25, 2023. http://www.wpc.ncep.noaa.gov/tropical/rain/harvey2017.html.

"Hurricane Ike 2008." Harris County Flood Control District. Accessed April 25, 2023. https://www.hcfcd.org/About/Harris-Countys-Flooding-History/Hurricane-Ike-2008.

Lewis, Michael J. The Gothic Revival. New York, NY: Thames & Dy. Hudson, 2002.

McQuarrie, Ralph. "Coruscant Monuments." Art for Star Wars, n.d.

Pielage, Andrew. Courtroom of the Marin County Civic Center. Photograph. Frank Lloyd Wright Foundation. Accessed April 25, 2023. https://franklloydwright.org/marin-county-launches-interactive-frank-lloyd-wright-app/.

Posed Group of Workers during 1900 Storm Recovery. Photograph. Galveston, TX, 1900. Rosenberg Library.

Powers, Jim. "Untitled." Boats dock under Googie home, n.d.

ROSS, ROBERT B., and MAURICE D. BLUM. "Hurricane Audrey, 1957." Monthly Weather Review 85, no. 6 (1957): 221–27. https://doi.org/10.1175/1520-0493(1957)085<0221:ha>2.0.co;2.

Rushton, Susan. Wildflowers in the Broadway Cemeteries, Galveston. May 29, 2020. Photograph. https://susan-rushton.net/2020/05/29/wildflowers-in-the-broadway-cemeteries-galveston/comment-page-1/.

Semansky, Patrick. The United States Supreme Court Building. n.d. Photograph.

Sloss, Marlena. Atrium of the Marin County Civic Center. n.d. Photograph.

Staircase at Bishop's Palace. Photograph. Visit Galveston. Accessed April 25, 2023. https://www.visitgalveston.com/directory/bishops-palace/.

Strain, Christopher B. The Long Sixties: America, 1955-1973. Chichester, West Sussex: Wiley Blackwell, 2017.

Street View of Bishop's Palace. Photograph. Visit Galveston. Accessed April 25, 2023. https://www.visitgalveston.com/directory/bishops-palace/.

Third Floor of the Marin County Civic Center. Great Buildings. Accessed April 25, 2023. GreatBuildings.com.

"Tropical Storm Claudette Dumped More than 40 Inches of Rain in 1979." ABC13 Houston, July 24, 2020. https://abc13.com/timely-tropical-storm-claudette-rain-hurricanes/5413970/.

Wessler, Seth Freed. "How Authorities Erased a Historic Black Cemetery in Virginia." ProPublica, December 16, 2022. https://www.propublica.org/article/how-authorities-erased-historic-black-cemetery-virginia.

White, Joshua. The Hollyhock House. n.d. Photograph.

White, Matthew, and Margaret Saizan. "A Visual Story of Hurricane Rita." Wayback Machine. Accessed April 25, 2023. https://web.archive.org/web/20070814022725/http://newyorkreview.org/mag/index.php?option=com_content&task=view&id=308<emid=36.