

Learning From The Non-place: The Urban Surface of Pasadena, Texas

by
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ABSTRACT

“This new world of non-place privileges the fleeting, ephemeral, and contingent”, Marc Auge, *Non-Places: Introduction to an Anthropology of Super Modernity*

Pasadena developed as a small working-class bay area in the early 1900's with strawberry fields as its identity and economic structure. The shift in the 1930's to a petrochemical base grew the economy exponentially, and the city developed as a typical post-war urban sprawl. Denise Scott Brown and Robert Venturi used *Learning from Las Vegas* to embrace sprawl and the commercial strip as a meaningful way to read the city. They state, “Each city is an archetype rather than a prototype, an exaggerated example from which to derive lessons for the typical. Each city vividly superimposes elements of a supranational scale on the local fabric...” The character of the commercial strip is validation of meaning in the growing a-spatial American urban context. Pasadena's idealized strip and petrochemical industry amalgamation create a destabilizing city structure. *Learning from Las Vegas* in Pasadena shows a late 20th century space, dependent on oil and gas in production and consumption. Pasadena resembles the Non-Place. As defined by Marc Auge, the Non-Place refers to anthropological spaces of transience where the human beings remain anonymous and that do not hold enough significance to be regarded as “places”. Pasadena suffers from past celebrations of the sign and strip, forming its existence as Non-Place. However, Alex Wall does offer an alternate way of describing the city- the urban surface. This thesis challenges Pasadena's reliance on the non-place through the study of the urban surface and its barely visible structures that can support a post-petrol city. To stitch together and develop the urban surface of Pasadena, Texas, a solar park research and practice facility works to joins academia, profession, and commerce within the non-place.

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PROSPECTUS

Industrialization has overshadowed history and identities of cities throughout their development. With primary functions based on consumerism and production, there is little room left to grow with changing demand overtime. Pasadena, Texas is one city experiencing stunted growth because of its reliance on industrial programs for its economic structure. Pasadena has a rich history of being built by the working class in a dire point in history. However, that history has not been allowed to shape the city past an industrial standpoint. This stunted and stagnant development is seen in many cities in the United States post the Industrial Revolution.

Through studying a city's pre-industrial history and identity, and understanding where prime infrastructure has succeeded or failed, comes the understanding of where and what to build for the future. A problem that arises in post-industrial cities is that most have been fully developed leaving very little untouched landscape for new infrastructure, meaning infrastructure must be re-adapted from the structures that are already in place. Using Pasadena as a model, spaces that have been left obsolete and abandoned due to their lack of programmatic adaptability become prime locations to accommodate changing community needs and can be redeveloped into spaces that are needed.

Using both Marc Auge's idea on "non-places" (Auge 75) and Alex Wall's idea on the "urban surface" (Wall 233), cities have a model to identify its problem areas and ways to build upon them.

THE NON-PLACE

In *Non-Places: Introduction to an Anthropology of Supermodernity*, Marc Auge exposed that the result to supermodernity and its contemporary methods of spacial production, is the non-place. Over the course of our history, the increasing obsession with security, impatience, and comfort have led to spaces that take away our relationship with society and nature. Airport terminals, hospitals, movie theaters, drive-thru fast food and shopping malls are great examples of such public spaces. This detachment can be broken down to three main abundances the abundance of space, signs, and individuality (lbelings).

Abundance of space is characterized by designing for times of overcrowding. In a mall for example, most of the year, parking lots remain well under 50% capacity, but the spaces are designed for "Black Friday" in mind, the busiest shopping day in America. Abundance of signs comes from our reliance on the car. Most of what we experience outside of our homes is at 60 mph. Signs have been used to overcompensate the need to pass along information. Billboards and signs now compete with each other to gain our attention. Abundance of individuality presents itself in spaces catered to quick services, such as a drive-thru. Individuality in a space is more so a characteristic of the people utilizing the space. The non-place is often characterized by artificial materials such as concrete that take us further from having a relationship to the outside. Materials have this affect through impairing our visual connections to nature. As further described by Auge, the amount of non-places in a city are a quantifiable way to measure time. The more non-places that there is the more sprawl the city has experiences.

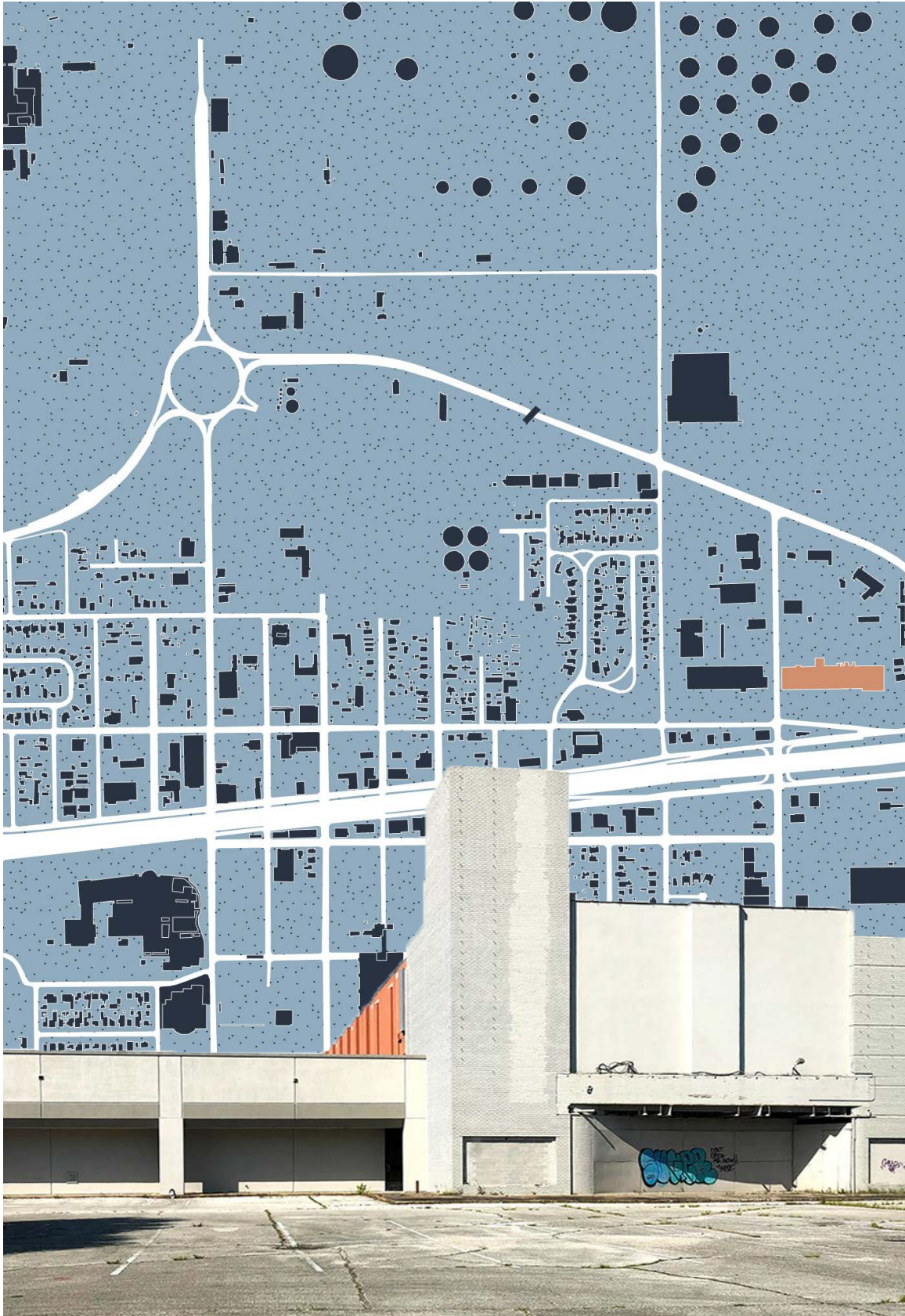
The non-place in Pasadena can be seen in its now reliance on retail and petrochemical companies for its economic structure and identity. The place in Pasadena used to be spaces that associated identity with it's working class and country music. Pasadena has become a transient place where people pass through and are not being kept by any social place. People live here, people work here, but besides that Pasadena is surrounded by architecture that is abandoned, single-use, and outdated. The structures that house non-places are become part of Pasadena's identity, no matter how much we wish to ignore them.

While the nature of the non-place seems rigid and complacent, the idea that it can become a place is possible. What comes after identifying the non-places is to create a balance between places and non-places, therefore allowing cities to be both functional and places for social growth.

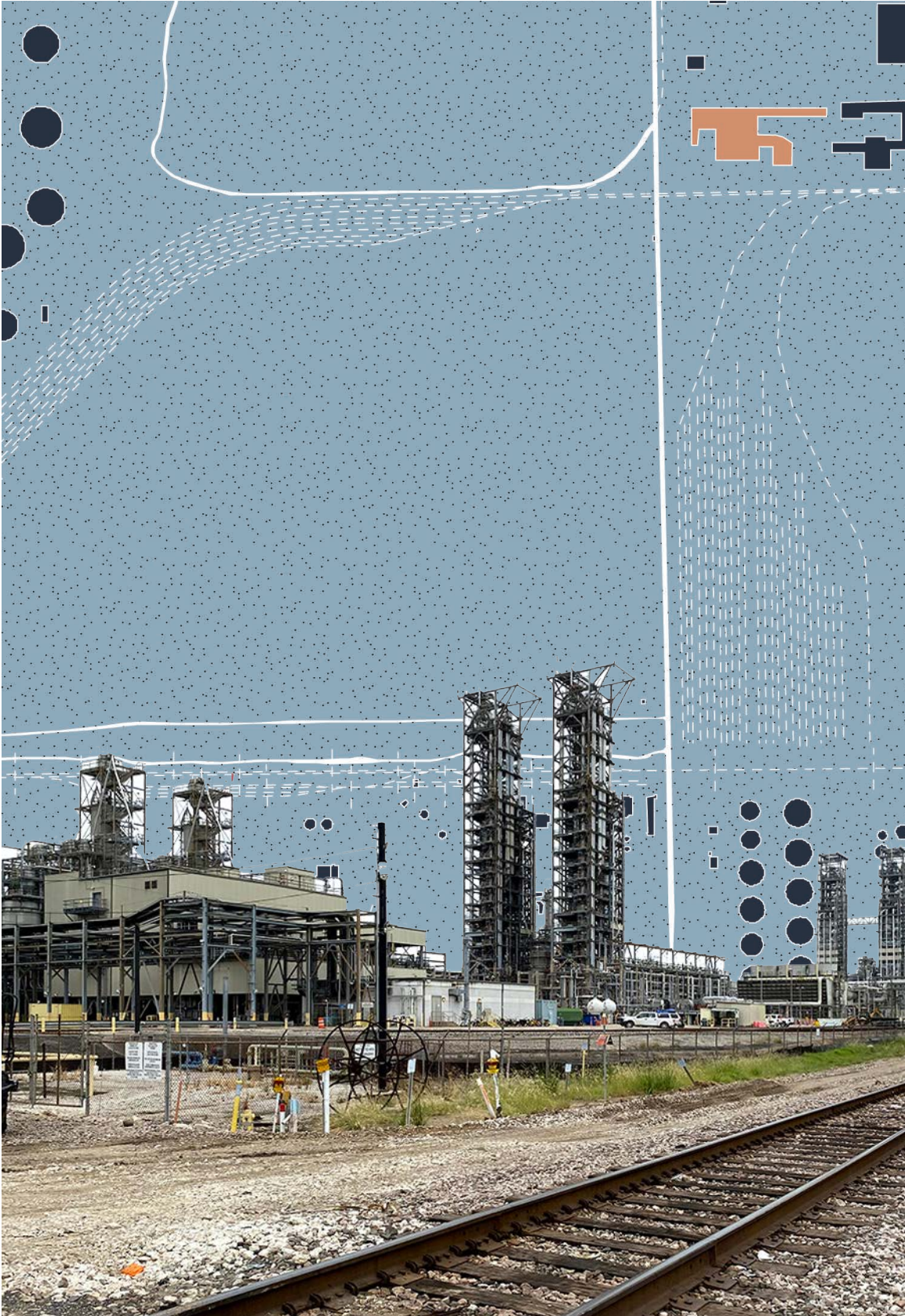
The site of the Macroplaza Mall is an example of failed social space that now adds to Pasadena's list of non-places. A lot of this size that has the potential to be developed is rare to find in Pasadena, due to 90% of the city already being developed. Utilizing this failed mall and placing program that enhances current conditions, helps bring economic opportunities and redefines Pasadena's identity would remove this non-place.



Non-Place: Macroplaza Mall



Non-Place: Capitan Theater



Non-Place: Chemical Plant

URBAN SURFACE

Programming the Urban Surface by Alex Wall gives a unique lens to study the conditions of a city. Through this lens, one can see both the permanence and impermanence that a city works with as it is growing. Permanent structures in a city translate to its investment in transportation infrastructures. Impermanent structures are those meant to mold over time, such as public spaces. He makes the argument that landscape should be seen as an active urban surface that works with buildings and roads, but that is responsive to growth. Rather than a building being restricted or compromised by its surroundings, it should embrace the uncertainty of a city over time and its ever-changing programmatic needs.

Examples noted in Wall's essay show examples of how to treat the urban surface as a network, rather than zones (Wall 237). Superstudio's Superface 5, shows the most basic form of a network, the grid. Archigram's Plug in City shows a crane rearranging and removing pods, as a way to accommodate for more space and flexibility in its desired program. West 8's Theater Square is deliberately empty to create opportunities for "indeterminate futures," giving the user the power to make this place their own. These examples show ways in which the urban surface of a city can be thought of critically to ensure it has structures in place that allow it to grow and adapt over time.

The urban surface of Pasadena contains fragments of abandoned buildings, used for heavy industrial, commercial, and residential use. The urban surface is in pieces because they are disconnected from one another. As Alex Wall argues, a city's urban surface should work to stitch together otherwise unconnected surfaces to create new methods of socialization and interaction. The pieces that make up Pasadena's surface stand alone, showing a piece of history that once was or highlighting a non-place.

One example is the old Town Square, now known as the Macroplaza Mall. Adjacent to the mall, it is composed of a library, city hall, a mall, post office, an abandoned office building and what used to be the Pasadena First State Bank. This site shows that none of the pieces of the urban surface are connected to one another, except through a large, underutilized parking lot.

Breaking down Pasadena's landscape through this lens of the urban surface allows for better understanding of the context that the Mall is a part of. The proximity to many civic structures should translate to an investment in spaces for the community. The lack of pedestrian friendly amenities and relevant programmatic elements is what led to this site becoming obsolete, when it should be the most approachable site.

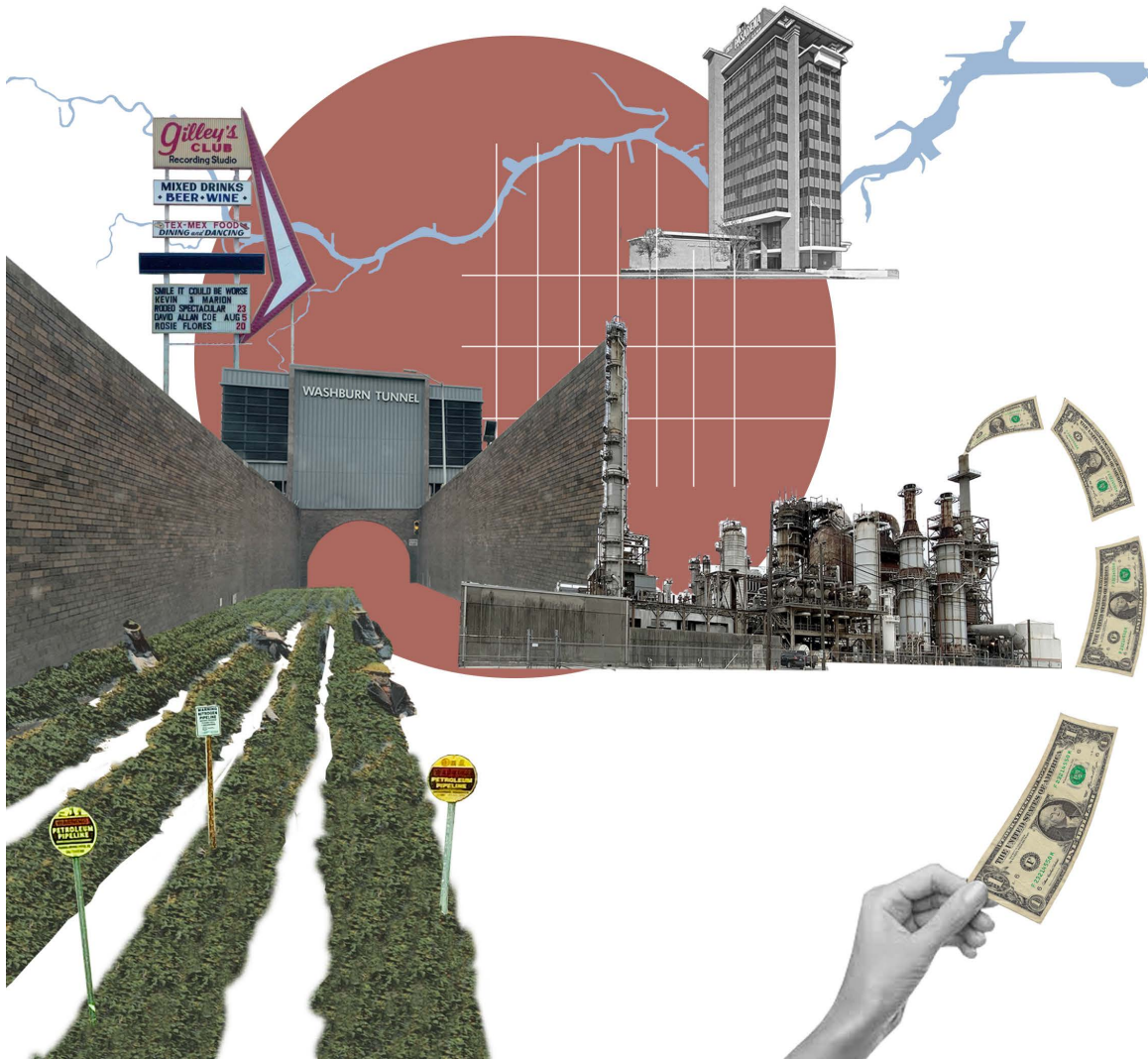


Formula of Pasadena's Urban Surfaces'



Urban Surface: Chemical Plant and Oil Refinery, view from 225

SITE ANALYSIS



Pasadena Collage

EARLY PASADENA

How Pasadena Became the Strawberry Capital of the World

Founded in 1895 by J.H. Burnett, Pasadena began as a prime location for local family farming. Before the 1900's, Pasadena and surrounding areas did not get much attention for those seeking settlement. It was not until after the development of the Galveston, Houston, and Henderson Railroad and the Galveston-Houston Electric Co.'s high-speed interurban streetcar that more families began to see the potential of the area. These transportation lines were the beginnings of suburban development, most coming in from the Galveston port. For much of its early beginnings, Pasadena was seen as the agricultural settlement on Buffalo Bayou. (Pomeroy)

After the Galveston Hurricane of 1900, cheap and unclaimed land became a sanctuary for residents of Galveston who were affected by the hurricane. As refugees came into the area, a donation of 1.5 million strawberry plants from Clara Barton, of the American Red Cross, allowed growth for the people of Pasadena and its economy. Strawberries quickly became the stable crop and the entire southeast area of Harris County became known as "Pasadena Acres".

As this development went on, the Houston Ship Channel also began developing around the early 1900's, as Houston searched for prime locations for oil refineries. While strawberry fields attracted the working class, the beginning of the Texas Oil Boom attracted drilling efforts. The discovery of an oil field in nearby Goose Creek in 1908 started the push for petroleum exploration around the area. By 1917 to 1920, refinery operations had made their way to Pasadena, and overshadowed the strawberry field efforts of the working class.

Academia has also played a big role in Pasadena's identity. Education in Pasadena dates back to 1894 when a private school was established and later became a part of the Harrisburg Common School District by 1895. In 1899 Pasadena residents formed an independent school system, the first in Harris County. A four-year high school program was established in 1924 with the construction of Pasadena High School.

While not apparent at the start of its history, the location of Pasadena is critical, since it leaves it vulnerable to be forgotten. Through the analysis of Pasadena's location between Houston Clear lake and tangent to the Ship Channel, it is clear that it's location has made it a vulnerable city of transience and permeability. As soon as agriculture began declining, so did the need to live and work in the city.



Pasadena 1928 Map and Strawberry Fields Post Card

AFTER THE STRAWBERRY FIELDS

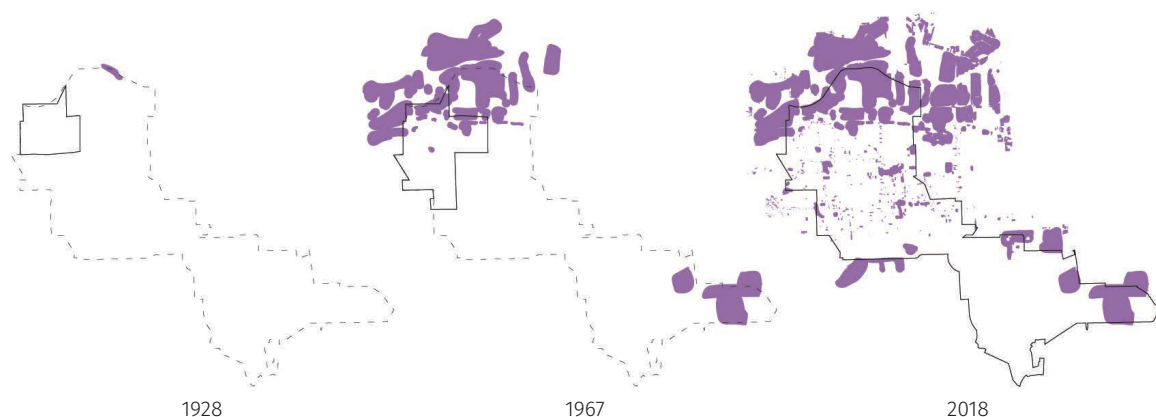
Post-War City

The transition from a farming economy to an industrial one did not occur until the late 1930s, when the demands from the war spurred a major increase in the ship-channel industries. Pasadena's identity and economy permanently shifted as direct result to meet these demands. Pasadena is now home to 387 oil tanks, 4 black water tanks, and many refineries.

At this time, many architects wrote and studied urban sprawl as a way to understand our relationship with the ever growing technology. Denise Scott Brown and Robert Venturi did so in their book, *Learning from Las Vegas*. In their analysis, Venturi and Brown justify urban sprawl and embrace sprawl and the commercial strip as a meaningful way to read the city. (Read more on chapter 4) Reactions such as this one ultimately hurt Pasadena because it leaves it with no current infrastructure to support its changing economy.

Life in the late 70's-90's was defined by country music and working in refineries. *Urban Cowboy* was filmed in Pasadena, Texas in 1980. The film captures a lively period in the area's history, and documents many changes in culture, both locally and nationally. As depicted in the film, people migrated to Pasadena to work in the thriving oil industries to then participate in the night life scene at Gilley's Club. Gilley's Club was a popular nightclub that opened in 1970, it brought a lot of popularity becoming a home away from home for many of the area's residents who worked in nearby refineries and at other jobs before heading to Gilley's Club to dance, drink, and enjoy a night out.

The increase in oil and retail as Pasadena's economic structure did lead to investment in infrastructure, but it is apparent that Pasadena's good economic fortune has not translated into long-term community stability and urban improvements.



Pasadena's Growing Industry Over Time



Pasadena Plaza, 1962-1980



Parkview Theater, 1966-1991



Urban Cowboy, 1980
Gilley's Club, 1971-1990



Spencer Highway

Life Along Spencer Highway

DRIFTING CITY CENTER

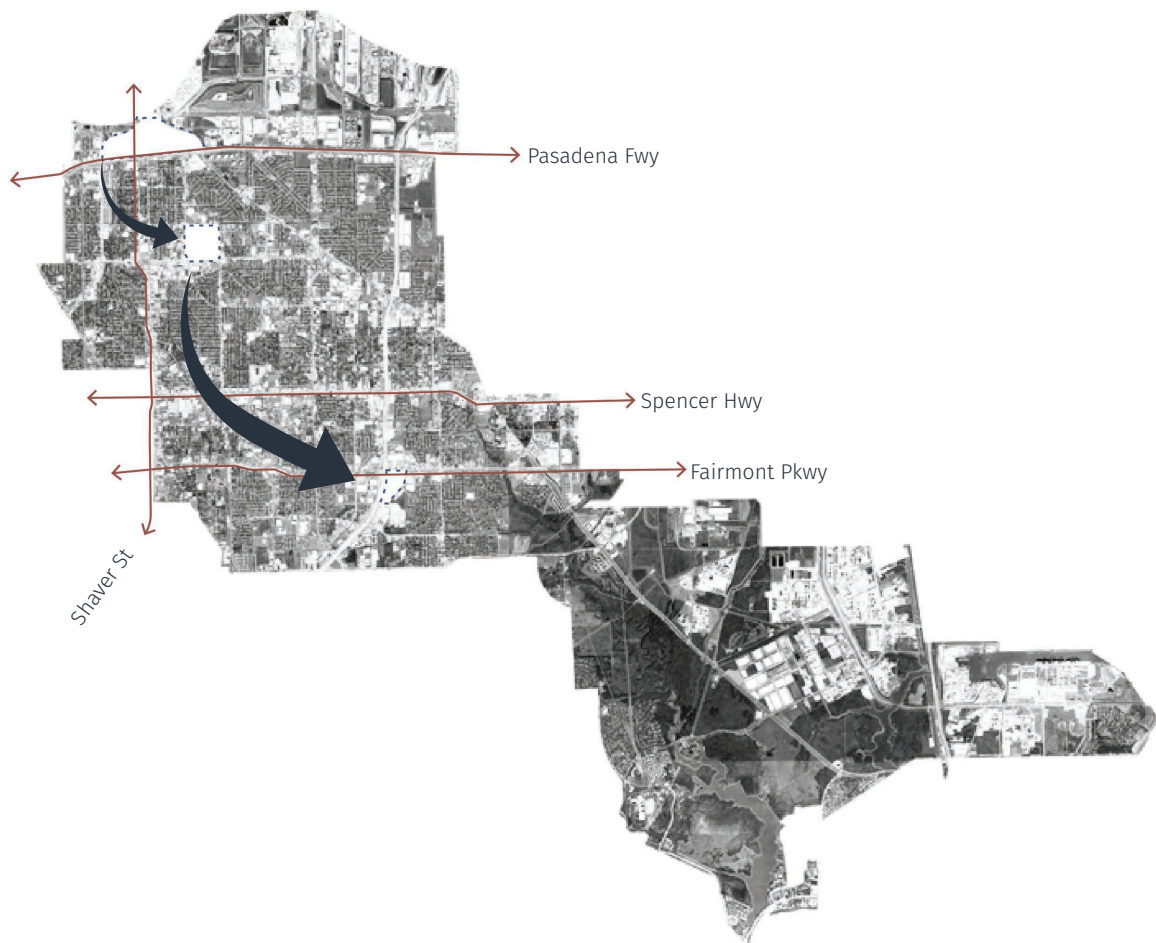
Consequences of Obsolescence

Looking at Pasadena's history, its city center has shifted from its original location. Once happening literally, and once figuratively. The heart of Pasadena started near the bayou and Pasadena freeway 225, seen when you exit the Washburn Tunnel headed south. In this location there was a city hall building, a post office, a hospital, and entertainment. Today, it is mainly abandoned or heavily underutilized.

The center of the city then shifted literally around the 1980's to the intersection of Pasadena Blvd and Southmore Ave. The area was known as the town square and was composed of the Pasadena state bank and the Pasadena mall. The space of the Town Square never really became the attractive city center that Pasadena wanted it to be, multiple developers have tried to re-brand the mall as the main attractor to the area. These efforts have fallen short to engage the public, and the town square now stands as heavily underutilized by the community.

Now, the city center has grown to be along Beltway 8 and Fairmont Parkway, figuratively because the main civic buildings such as the City Hall still remain in the Town square site. The area that is now seeing most of the city's concentration is anchored by the Fairway Plaza strip mall, but is surrounded by many popular commercial businesses that attract people to the area. This area is very active, but the activity is limited to the single programmatic element of retail shopping. This figurative center fails to engage the public further.

The city of Pasadena is also anchored by its major thoroughfares. The main highways that run east/west are highway 225, Spencer Highway, and Fairmont Parkway. This infrastructure serve as the main access point to and from the city, primarily lined with businesses that have evolved from night-life locations to used car shops. Following a similar pattern to the city center, there is also a drift to the concentration of businesses along these major thoroughfares starting in north Pasadena and drifting down to Fairmont Parkway. Studying this phenomena, Pasadena's shifting thoroughfares and city centers are correlated, when one moved so did the other.



Downtown Pasadena
1930-1960



Town Square
1982-2019

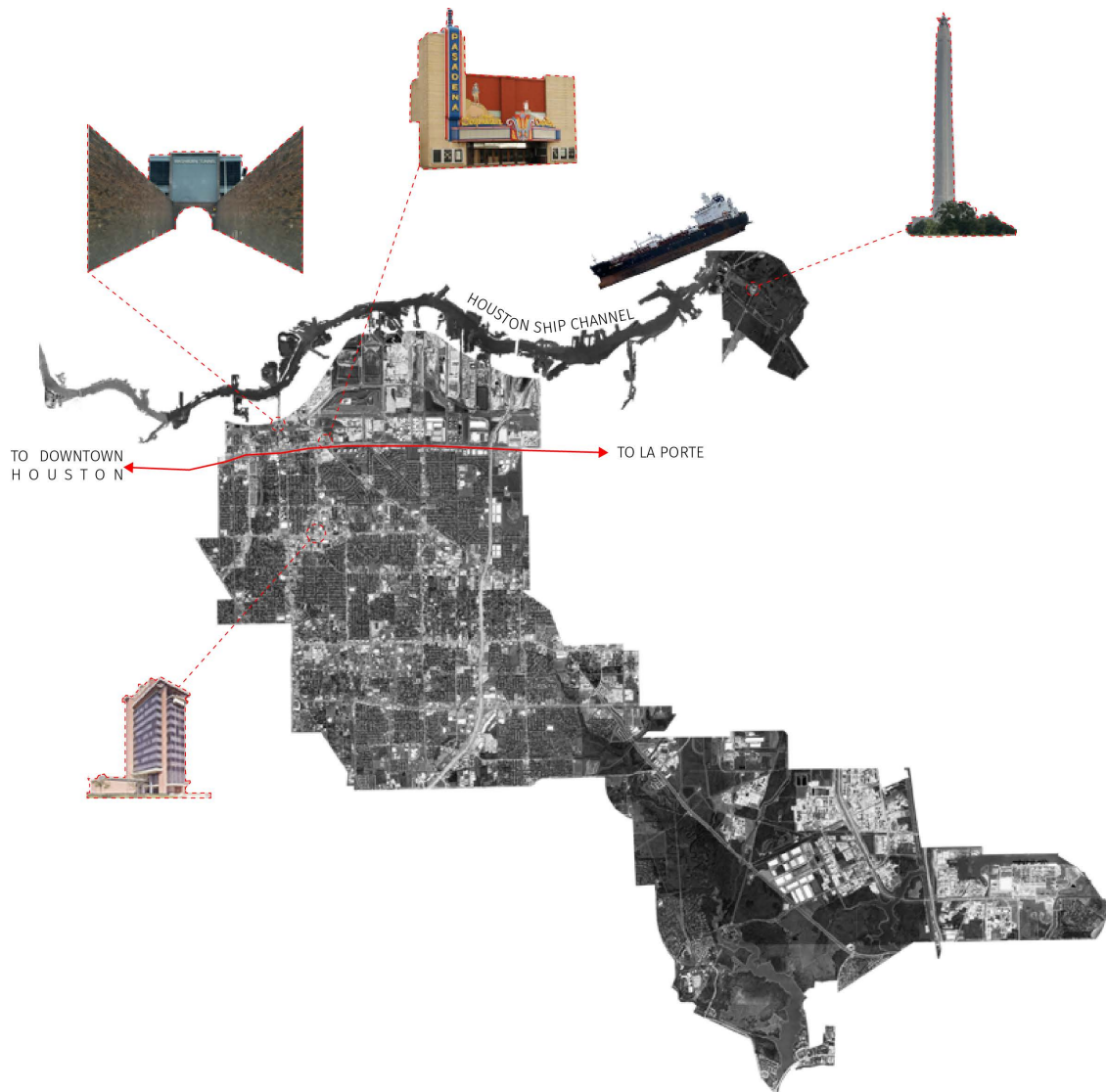


Fairway Plaza
2000-Now

Shifting Pasadena City Center

PASADENA TODAY

In the anthropocene



Pasadena today is leftover pieces of history and post war ideals. A strawberry festival occurs every year to remember the history that earned Pasadena the proud title of “Strawberry Capitol of the South”. However, that piece of Pasadena’s history offered more than just strawberries. Pasadena is no longer supported by its working class, the strawberry fields no longer representing how the community would invest in its own city. Abandoned buildings add by showing remnants of where life used to be. The Pasadena Capitan Theater, located in the first downtown Pasadena is the only recognizable structure that shows the life that was once there. The theater’s exterior and pylon light mast was restored in 2015, but present day is a vacant shell.

CHOSEN SITE

Macroplaza Mall

The site of the Macroplaza Mall is adjacent to a post office, city hall, public library, unused parking garage, abandoned office building and the old site of the torn down Pasadena First State bank. The proximity to amenities and being surrounded by residential presents this location as an ideal place for the development of a solar park research and practice facility.

The Macroplaza mall first started as “Pasadena Town Square” back in 1982. The town square was built with the intention to function as the city center. Although the building is large with the capacity to house many amenities, such as anchor retail stores, and has well lit interiors, the building has failed to maintain a strong standing with the community. After being the Pasadena Town Square for 34 years, the building went through 3 developers before being renamed to Plaza Paseo in 2016. Plaza Paseo was very short lived, and was changed to its current name of Macroplaza Mall. The building in its many faces has failed to make any attempts to connect to any of the public buildings around it. The building never offered a public face, no public image and it was overshadowed when the mall developers failed to stop construction to the Fairway plaza shopping center just 2.75 miles south.

Another icon in the area was the Pasadena First State Bank. Now torn down, the only skyscraper in the city stood at the corner of Southmore Avenue and Pasadena Boulevard for 57 years. When the bank was built in 1963, it added to the identity of the area, it was seen as the heart of the city. The bank was designed by the architecture firm Mackie and Kamrath, who followed design principles of Frank Lloyd Wright. The banks board of directors were filled with people who lived in Pasadena, but after being bought by larger bank agglomerations it was ran by those that had no connection to Pasadena.

After so many failed attempts at making the mall building into the city center of Pasadena, and the Pasadena First State Bank being torn down, the area now stands with no anchor retailers and an oversized parking. The site today is over 50% dedicated to parking spaces, and the nearest green spaces are connected to Jackson Intermediate School and Gardens Elementary School. The only vegetation on the site is a row of trees along Pasadena Boulevard. The parking lot remains empty and unused year-round, it is a waste of space.

Utilizing this site poses a unique opportunity due to its large scale. Finding a site this large that has been untouched is virtually impossible. Developing a site with this large of a surface area brings opportunities that will strengthen Pasadena both economically and communally. This current site, while not completely abandoned, is vulnerable to becoming fully obsolete, because of a huge decrease in how the community has evolved. The only solution for this site is to modify and adapt parts of the mall to house new program that will connect surrounding communities and amenities.



Main Entrance



Parking Lot



City Hall

Chosen Site: Macroplaza Mall

PRECEDENTS

LEARNING FROM LAS VEGAS

Through the lens of Brown and Venturi

During the 60's and 70's, architectural theory shifted to give legitimacy and deeper meaning to the American urban landscape away from traditional European models. Denise Scott Brown, Robert Venturi, and Steven Izenour wrote *Learning from Las Vegas* to specifically gain larger cultural justifications for glorified urban sprawl. In *Learning from Las Vegas*, architecture appears as either a "decorated shed" or a "duck". (Venturi Scott-Brown, 89) The decorated shed, for which the authors advocate for, relies on imagery and signage to convey its program. The duck expresses its program and meaning in its form. Much of the architecture that came before the writing of this book presented itself as a "duck". Venturi, Scott Brown and Izenour propose that by studying and adopting the strategies used in the strip, its buildings and signs, architects could bring meaning to the symbolic content of post-modern architecture.

"Space is not the most important constituent of suburban form. Communication across space is more important." (Venturi Scott-Brown, 82) The argument for more communication came as parking lots and roads began to create more space between buildings and people. The authors point that signs and symbols are necessary forms of communication because of the high speeds that cars travel. The communication that was put in place was not at pedestrian levels. However, the signs and symbols dominate the space, leaving the architecture to be secondary. One side affect of this argument from *Learning from Las Vegas* is a celebration of the post war sprawl dependence on single car, which leads to further degradation of the urban environment, on display in Pasadena today.

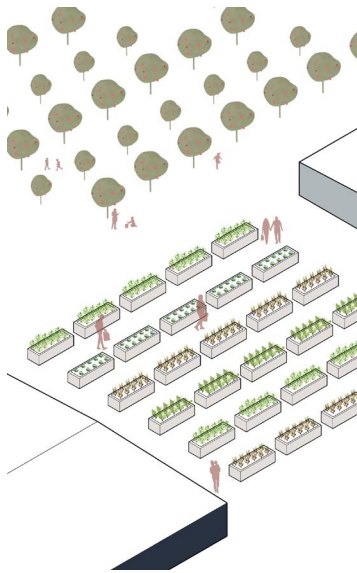
Looking at previous reactions to the post industrial city, *Learning from Las Vegas* is one that embraces sprawl and the commercial strip as a meaningful way to read the city. Despite this optimistic mindset, Pasadena has ultimately been hurt by those ideals because the idealized strip combined with the heavy presence of petrochemical companies have led to Pasadena's reliance on the non place. Pasadena's "strip" was Spencer Highway, it was the spine that brought life into the city. Spencer had the potential to be home to programmatic spaces that molded and responded to the ever changing needs of a city. However, the failed investment in infrastructures to help support growth, led Spencer Highway to become obsolete. The signs and symbols that once did represent cultural identity in Pasadena, are now replaced by the bright lights of the petrochemical companies that border Pasadena. What once were bright lights that invited community engagement, are now used to keep the community out.

Studying this precedent provides a critical view point on the current structures that are existing in Pasadena. It exposes why they have come to fail, and why having a different attitude towards new architecture is needed. This has made the back bone of this project to adapt the current obsolete structures that were left after this era, and to ensure the program that is added derives from history and adaptability to a changing future.

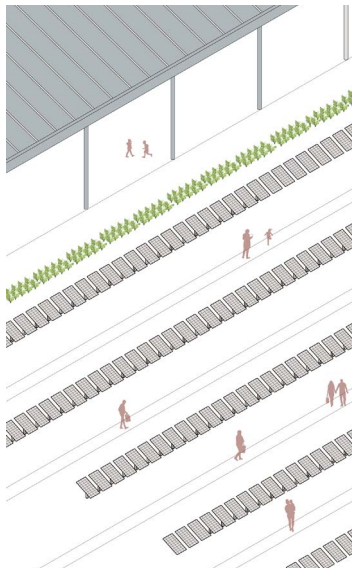
DESIGN STATEMENT & STRATEGY



Design Collage



Agriculture

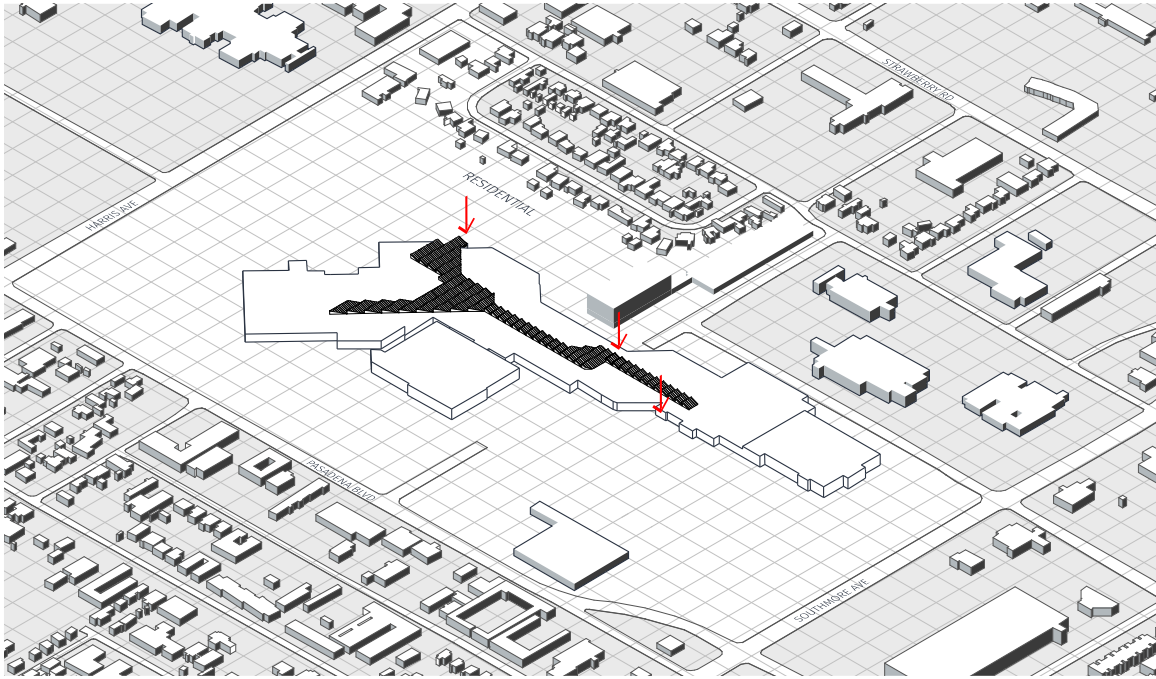


Energy

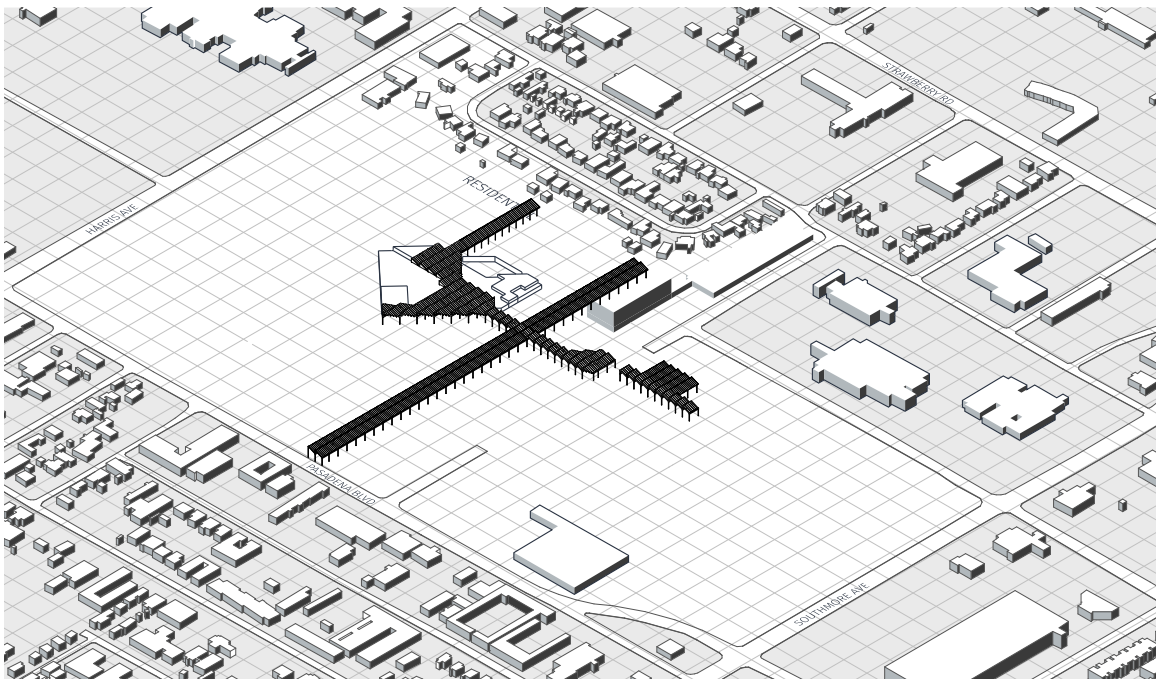


Infrastructure

To stitch together and develop the urban surface of Pasadena, this thesis proposes a solar park research and practice facility. The site program consists of agriculture, energy, and infrastructure. The agriculture and energy programs are founded in the history and identity of Pasadena but are re-imagined to respond to current societal needs and to be reactive to future needs. Infrastructure works to join academia, profession, and community.

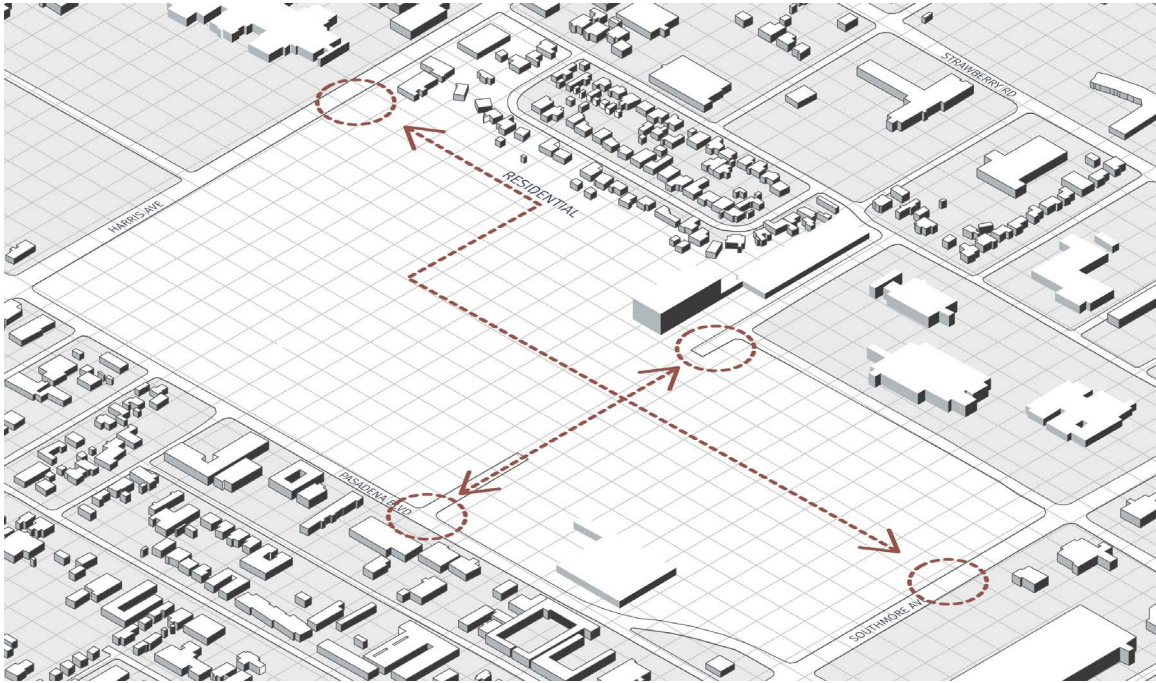


EXISTING

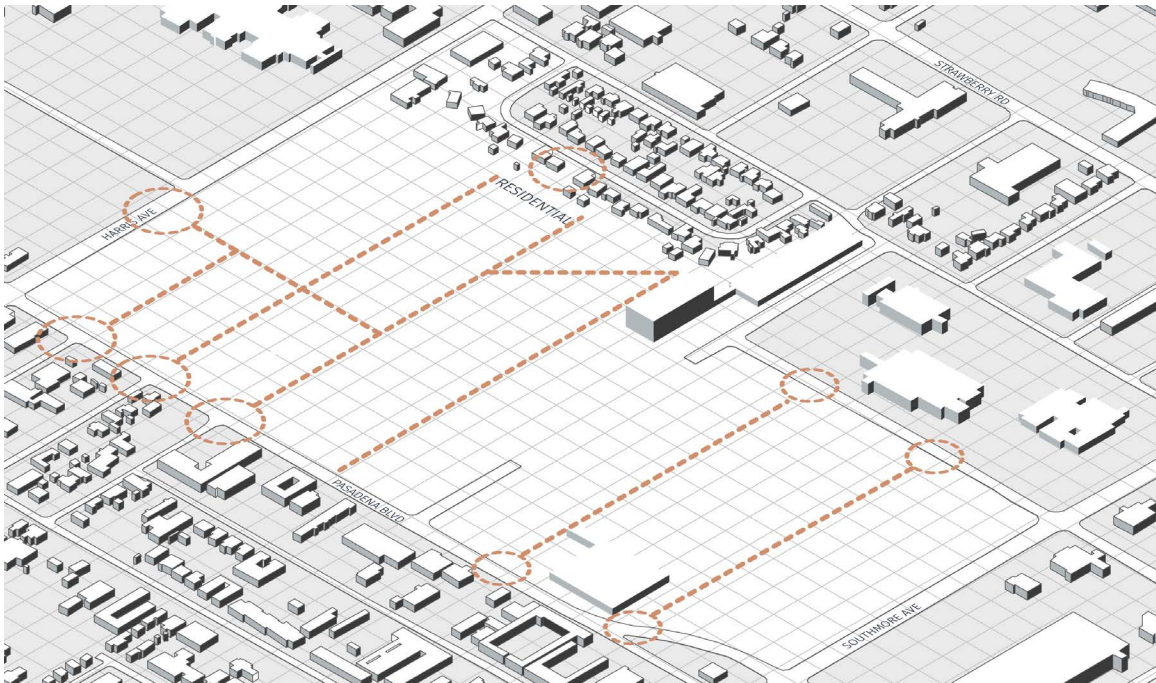


PROPOSED

To begin tackling the site, first was to address the mall that is currently there. There are 3 main entrances to the mall, the one on the north side being the most used so it felt appropriate to utilize that structure. The mall has a main core with skylights, the skylights are a main nostalgic aspect to the mall, so keeping that structure also felt appropriate, however most of that structure is now proposed as exterior and acts as a major corridor to connect northern and southern parts of the site. Additional structure was also added to emphasize connections east and west of the site and to house new added program.

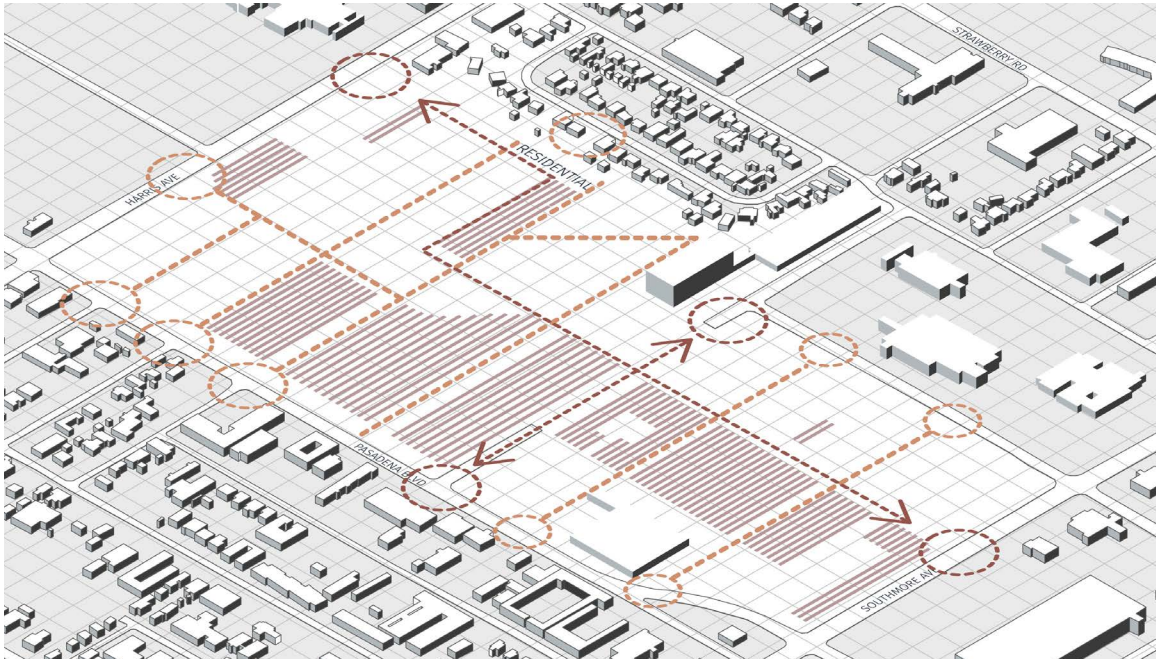


VEHICULAR PATHWAYS

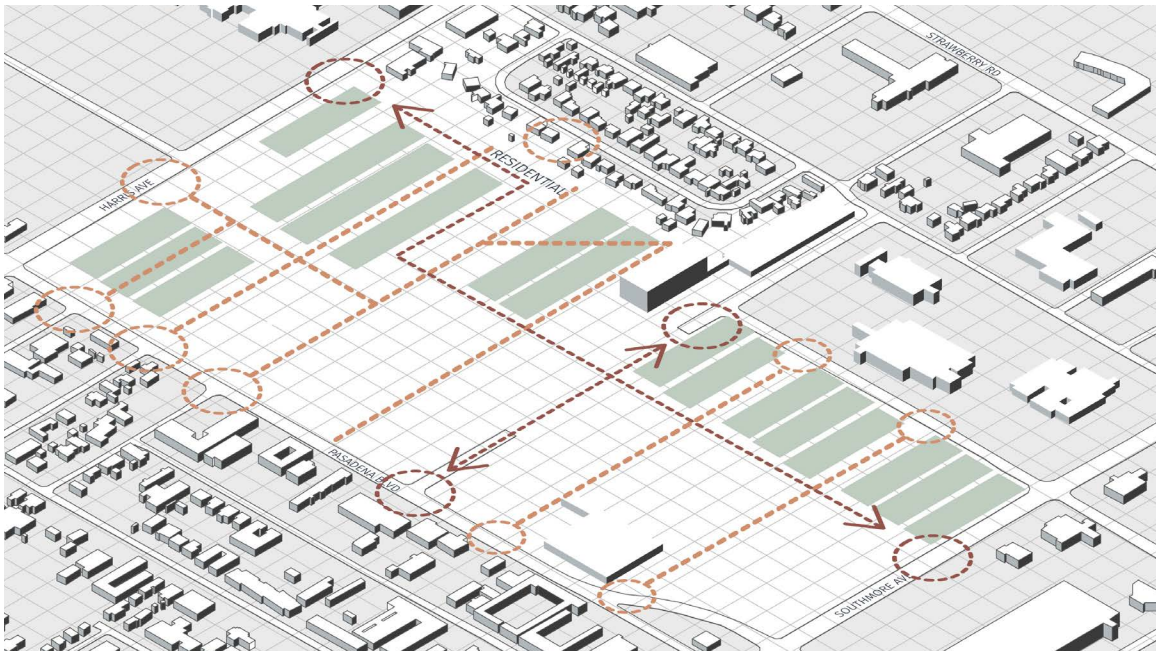


PEDESTRIAN PATHWAYS

The strategy to tackle the landscape started with identifying main vehicular entryways, and pedestrian access points, both existing and proposed and connecting them to each other.

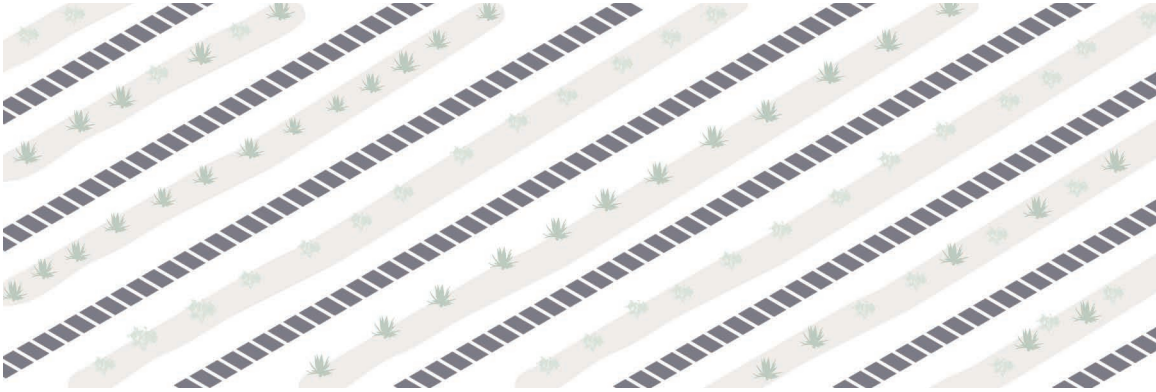


SOLAR FIELDS



GREENFIELD

From there the site was now made up of multiple bisections, making it easier to fill them with solar fields and green fields. Because the solar fields require more uninterrupted landscape, the solar fields are placed primarily on the west side while the green fields are in the east.



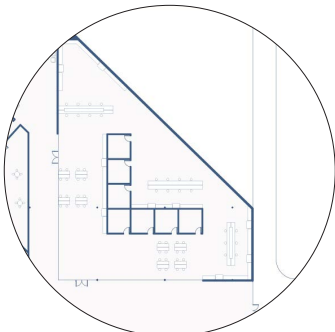
Dual-Use Program: Solar + Agriculture

The almost 3.5 million square foot site area is suited enough to hold a 25 acre solar park, with a practice research facility, with bike paths, picnic areas, public access. The solar park fills the current uninhabitable large parking surface. This surface builds on history of infrastructure, plugging into history and existing vocational structures.

The solar park is a testing ground for new research, and plugs back into the existing power grid. The solar panels themselves would take up about 25 acres of the site, about 1 millions square feet. With approximately 25 acres of land, 5 megawatts (MW) of solar energy would be produced. The park would house about 8,000 300watt solar panels, each producing an average of 36.5 kWh of electricity per month. 300 watt panels are larger than the solar panels used in homes, one panel has 72 solar cells and are on average about 78 inches long and 39 inches wide with a depth of 1.5-2 inches. Spacing is required in between each row of solar panels, and considerations for how long the shadow of each row means that about 20% of the 25 acres of acres dedicated to the solar park is accounted for enough space between each row.

Opposition to solar farms arise due to the large amount of space they take up. The solar farms are usually single use, and are not an amenity that the public can interact with. In order for the solar park to not be single use, and to avoid falling into the same spiral of becoming obsolete, the space in between solar panels is used for farming. Many pilot programs, some from the University of Massachusetts, have found that the spacing in between solar panels provides the perfect space to grow a variety of plants. This dual-use has provided ample benefits to food security in the community, also to the crops. Panels protect the plants from frost, allowing a longer season for avocados, cilantro, peppers, tomatoes and mangos. Additionally, electricity from the panels, which capture both indirect and direct light, can be used to power a crop processing plant and electric farm machinery, offsetting those costs. (Jossi)

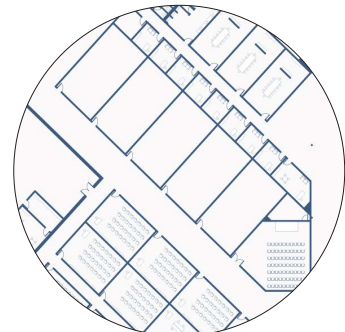
Combining solar energy with agriculture provides Pasadena a unique infrastructure that involves the residents into having a hand in what is produced in their community, and they are able to dictate how it can be modified to meet their needs in the future.



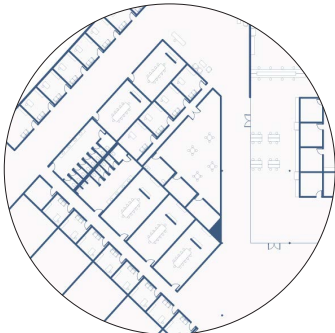
Research Lab



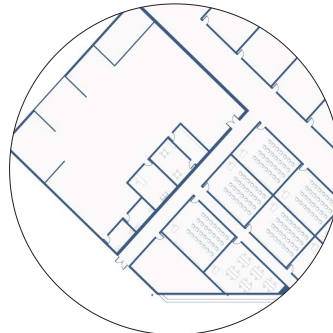
Classrooms



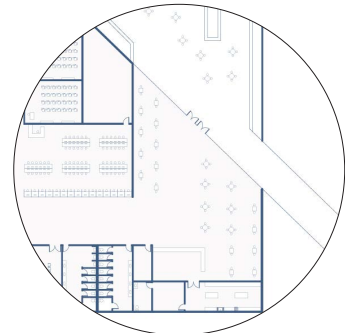
Multi-Purpose Rooms



Offices and Conference Rooms



Fabrication Shop



Cafe

Spacial Conditions for the Building Program

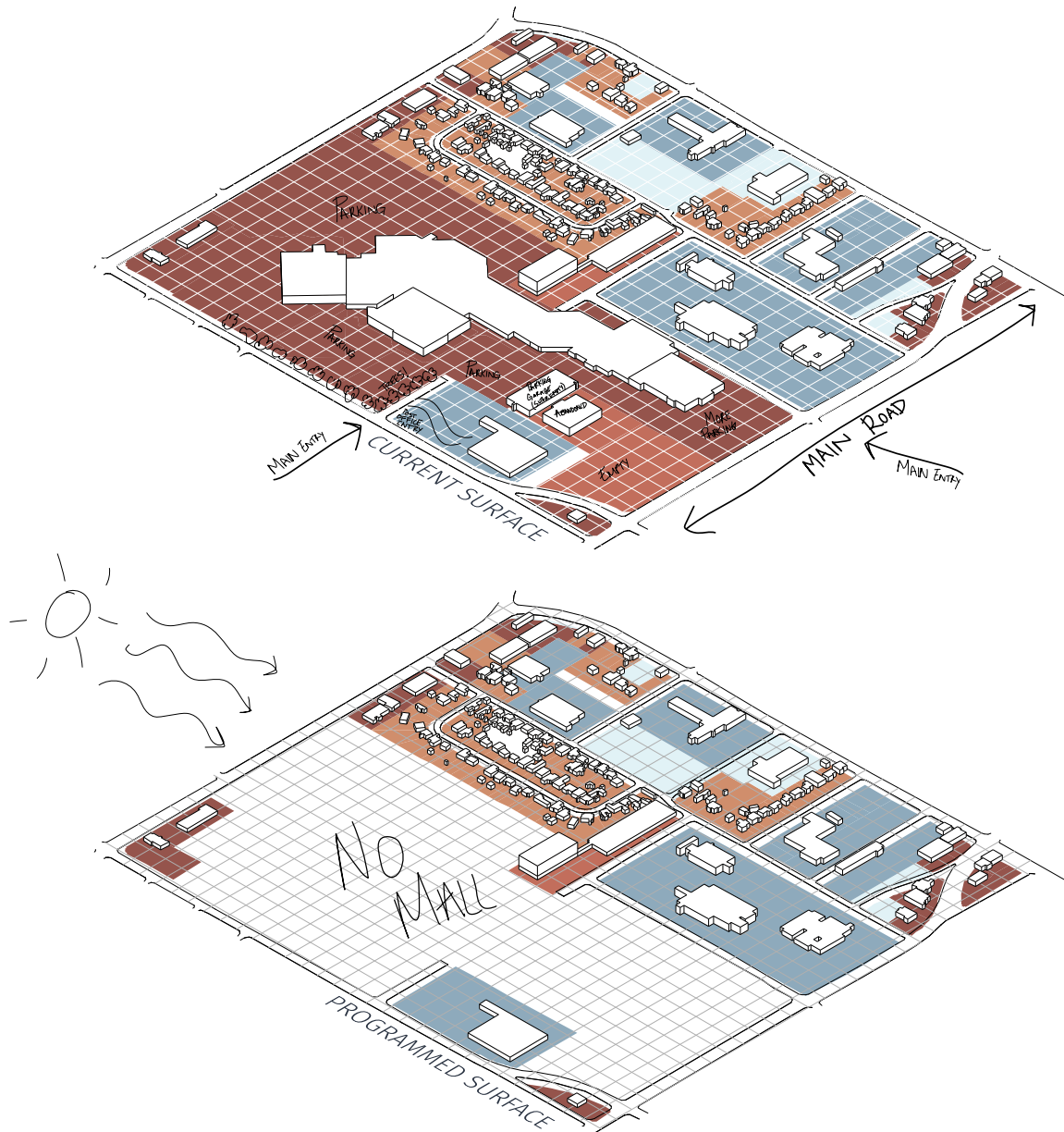
Working with the solar park, a part of the project is the joint research facility that would be directly connected with the park. The research facility would have aspects that cater to academia, professional, and community resources. Firstly, this facility would work within the current academic structures in place such as the San Jacinto Community College System. San Jacinto has been an asset to members of Pasadena since 1960. They currently have many academic career paths to offer, and having an additional program that focuses on the production of solar energy would help make Pasadena a hub for this technology. Programmatic elements to support academia include classrooms, labs, computer rooms, offices, and a fabrication shop. The fabrication shop would allow students to be a part of the process of installing and maintaining all aspects to the solar park.

In addition by offering professional companies office and lab space directly on the site, it would help to connect students to jobs, and to complete the full circle of having every part of the process happen in Pasadena. By having companies directly in the site, it will ensure that the priorities are to serve the people of Pasadena, and that they completely understand their needs. This would also allow for the solar energy company to oversee day to day operations.

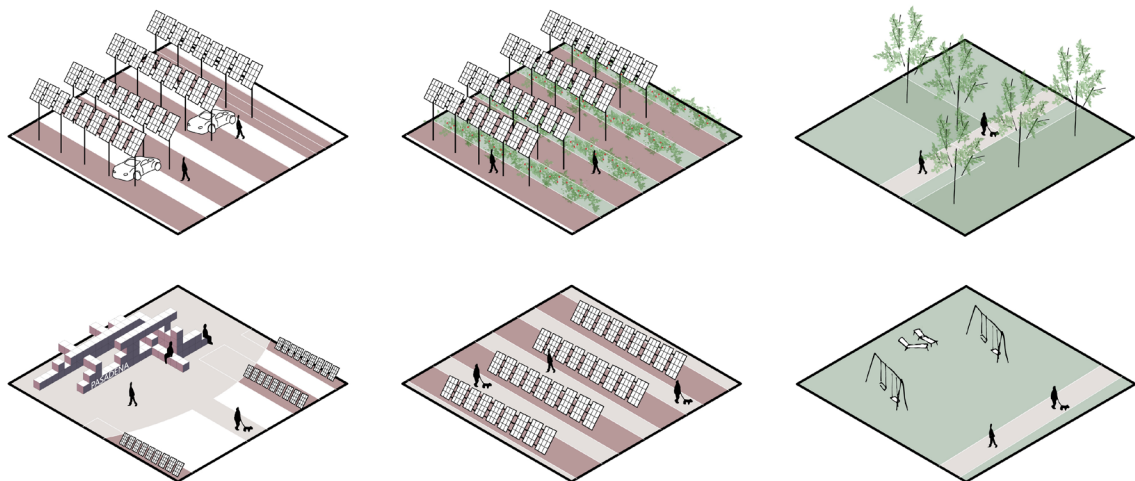
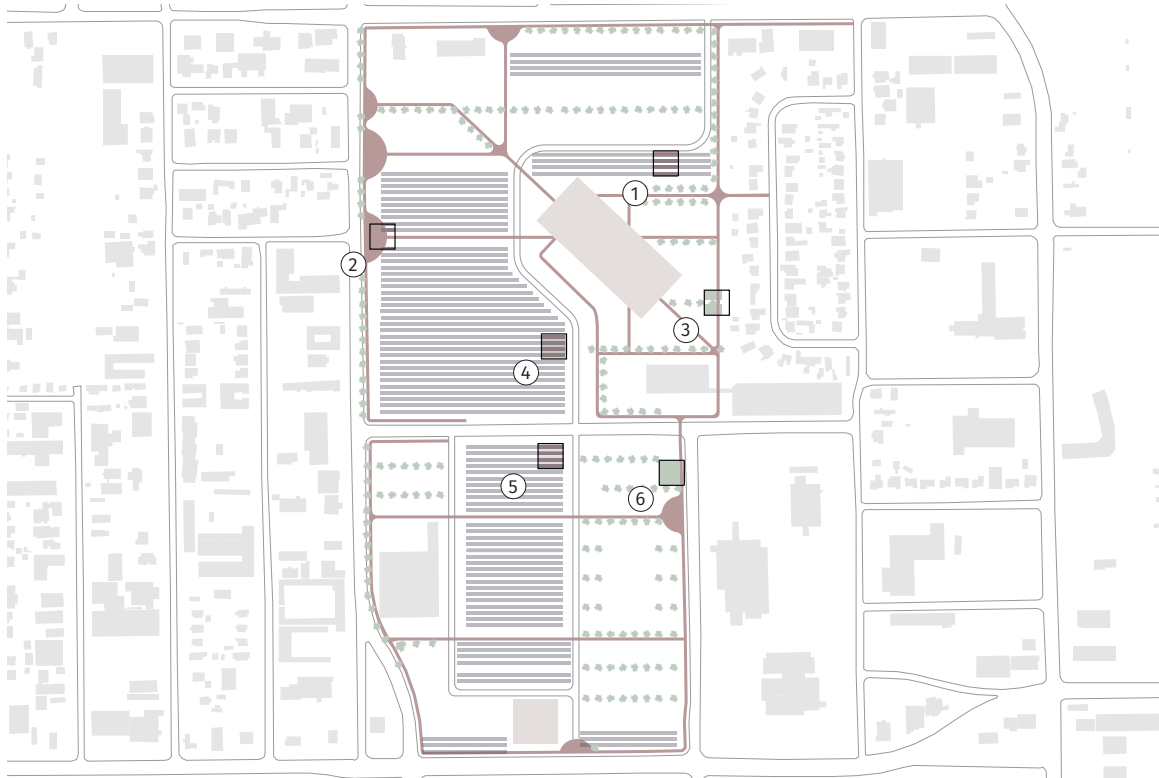
This project will be a part of the public, having community aspects that would be available for everyone is important. The community would have space for an information center, and lecture halls to provide as much transparency with all aspects of the solar park project. The community would also have multi-purpose spaces, a computer lab for easy access to information, and adaptable spaces for whatever may be in need. For example, the multi-purpose spaces could serve as voting poll locations, or could house collaboration events between the academic program and local k-12 schools.

DRAWING AND MODELS

INITIAL DESIGN DRAWINGS

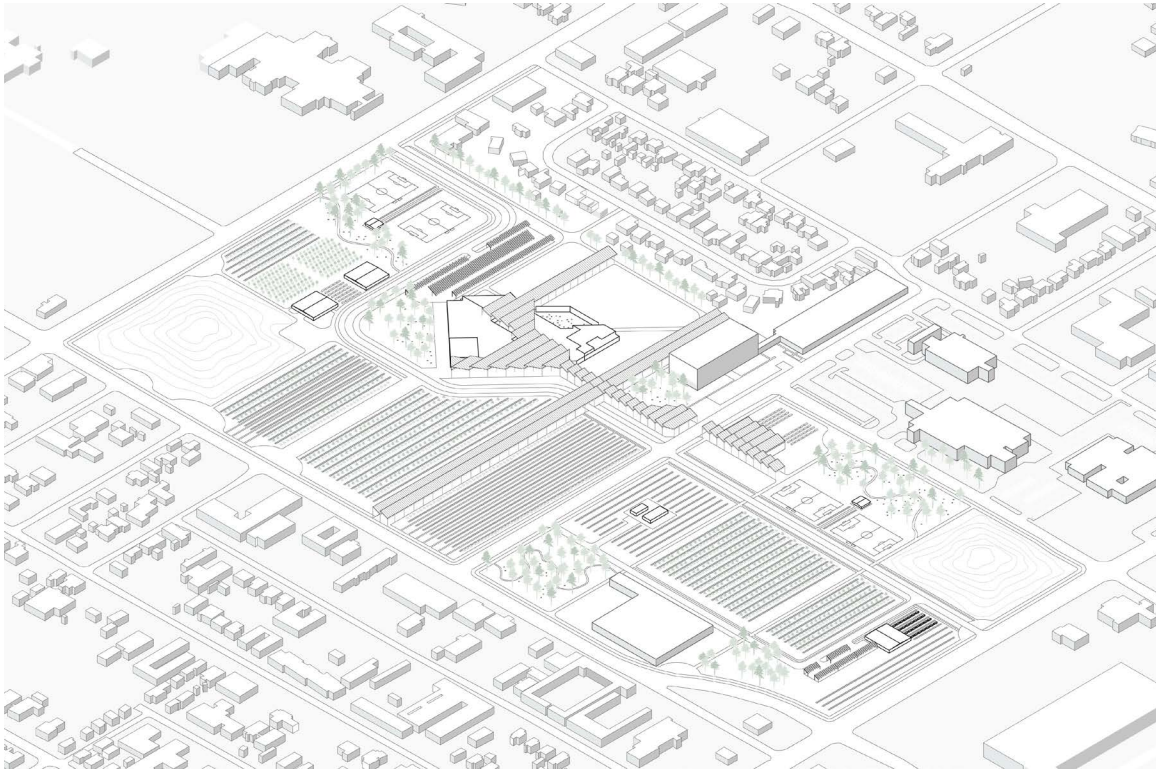


Initial reactions to the site included getting rid of the mall entirely, but as the project developed it was important to establish the nostalgic importance of what this site has to offer. While getting rid of an obsolete mall seemed like the proper response, keeping elements that residents will have a connection to is dire to ensure this proposal is a success with the community.

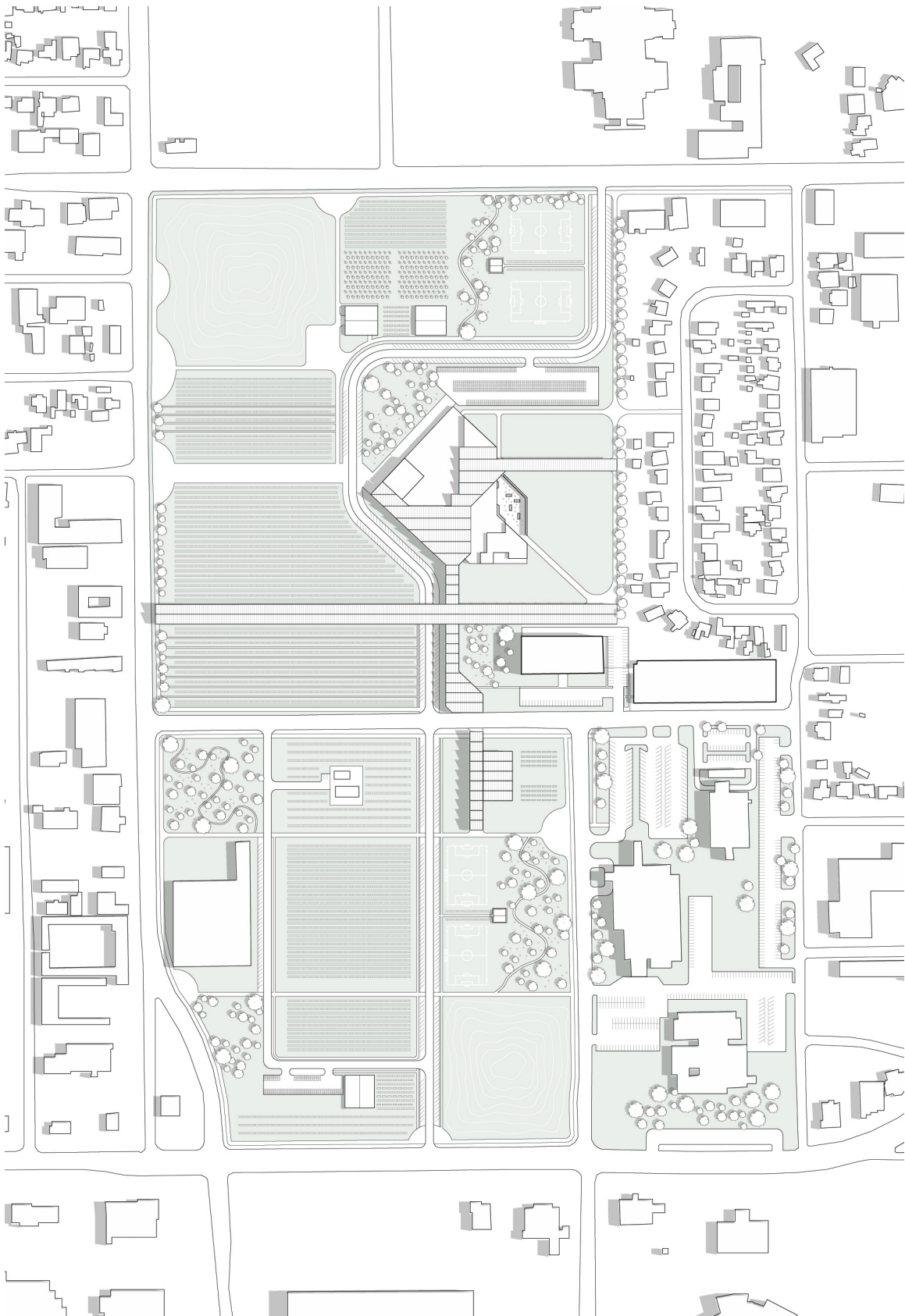


How the vast landscape of the site was to be utilized required many iterations. Elements such as the solar panels are placed throughout the entire site, but studying the different ways that they can be used was a large part of my initial design studies.

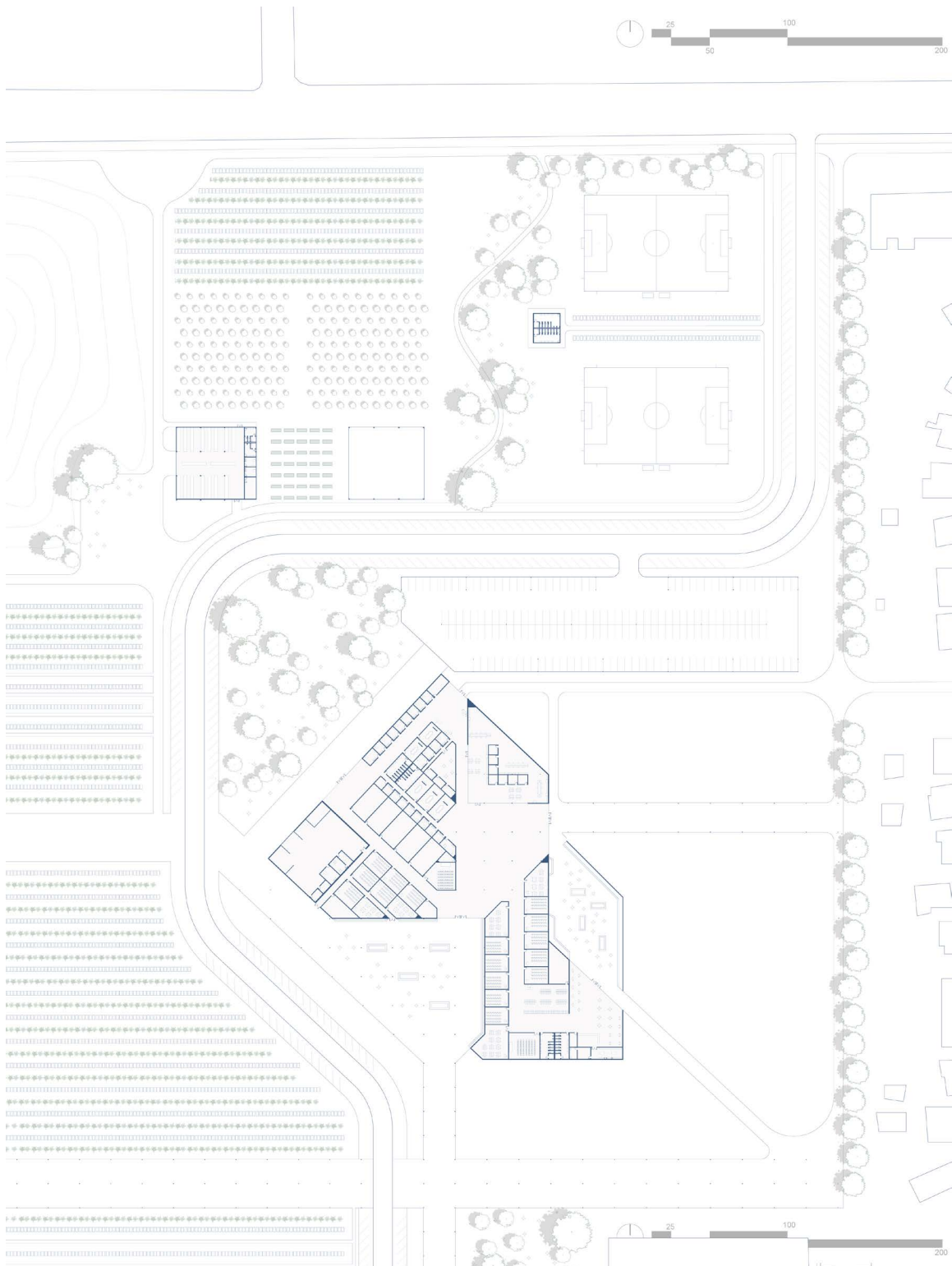
FINAL DRAWINGS



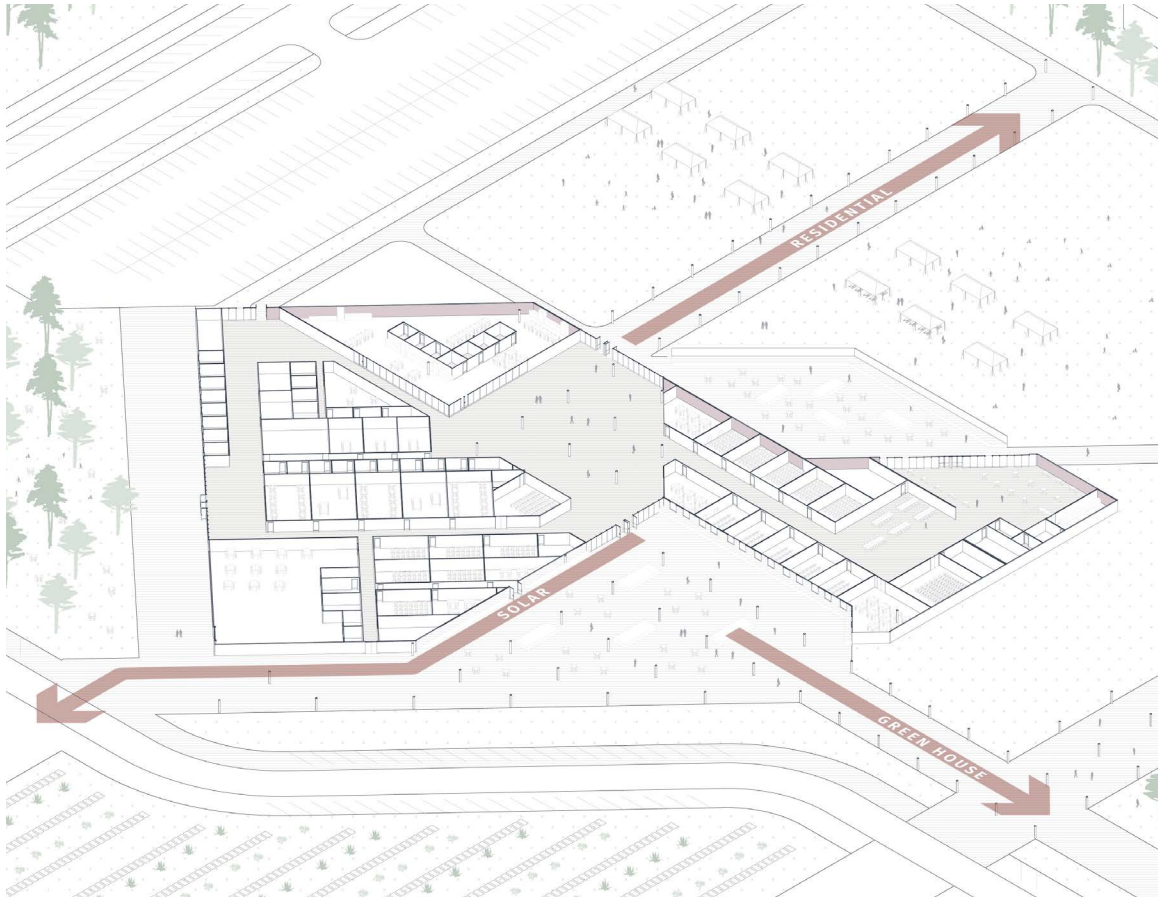
The north end of the site includes one of three green houses, this one includes apple orchards and in ground farming mixed with rows of solar panels. Also, includes two soccer fields in the east and a green hill to the right meant to be seating and picnic areas that provide a full view of the site. The main building of the site houses program for professional use, such as offices and conference rooms meant for companies that could run the solar park. The research lab is meant for both professional and academic use. The academic program additionally includes classrooms and a fabrication shop. The community spaces include multipurpose rooms and cafe. The geometry of the main building responds to the current infrastructure of the mall, keeping some of the main faces of the main entrance and the main skylight core that transitions here into exterior use. The second green house which acts as an extension of that existing core structure with exterior raised beds for community gardening. At the south end of the site is the third green house and community garden and the second hill that provides views to the southern end of site. The site includes around 4 acres of green space to grow different crops and has about 10,000 300W solar panels that can power around 400 homes, or to be used by the facility itself to power its programs. This site responds to Pasadena's history and current infrastructure capabilities to provide a site that adapts to communal needs.



Final Site Plan



Green House #1 and Research and Practice Facility Floor Plan



Building Connections Diagram

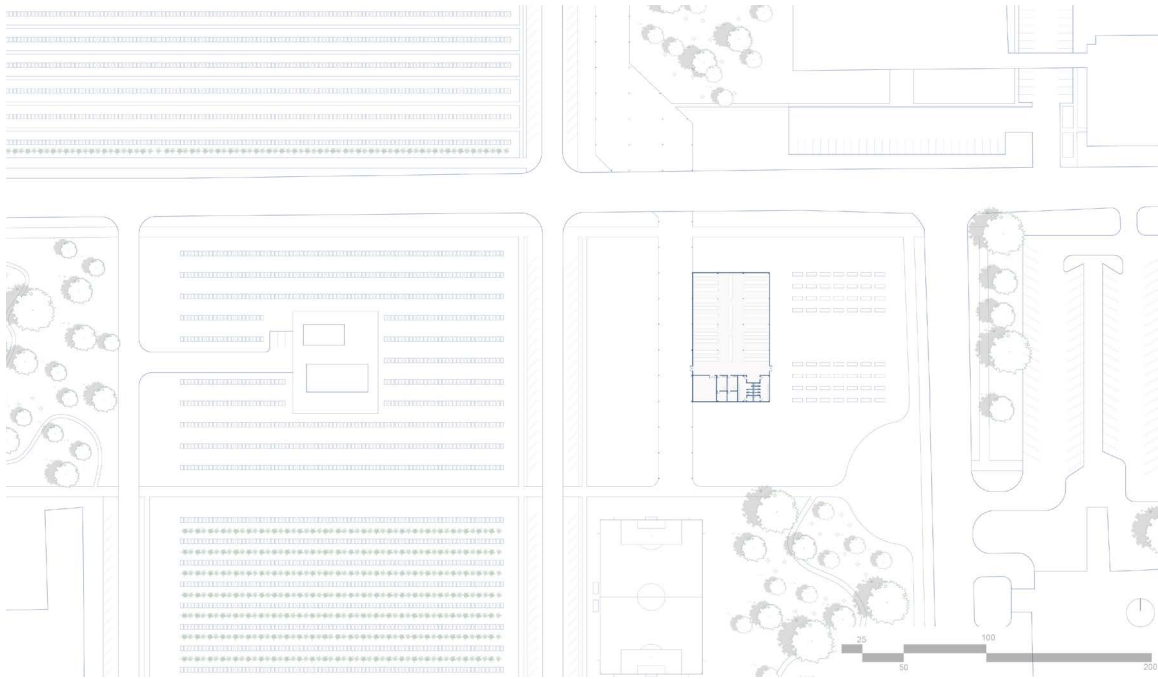
The architecture of the building first derived from the current structure the mall had to offer. After that geometry was set, ensuring connections to the rest of the program elements was an essential part when choosing interior and exterior spaces and main entrances. Beginning with the main public spaces in the building, all programmatic elements can be seen from this view point. Academic, professional, and community spaces are arranged radially from this main space and are then adapted to the geometry of the existing mall. In the exterior, large public spaces are adjacent to the building allowing for different programs to be held there. The building then has pedestrian walkways connecting to the solar park, green house, and residential.



Current Mall Conditions



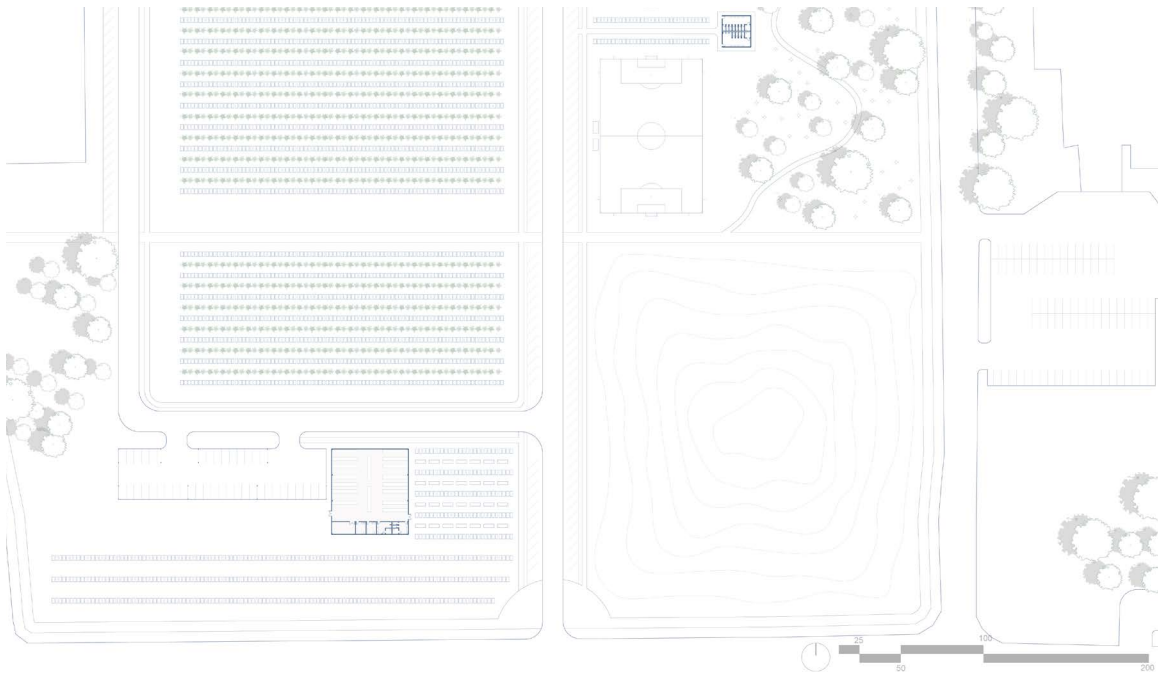
Proposed Conditions Render



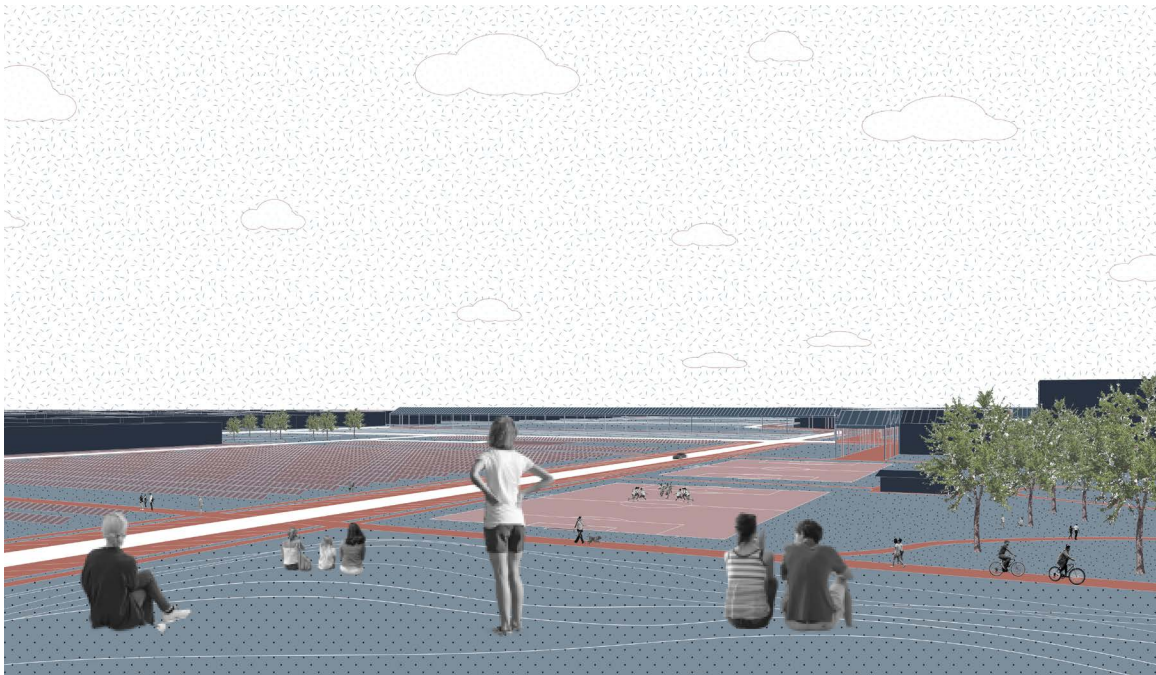
Green House #2 Floor Plan



Green House #2 Render



Green House #3 Floor Plan



View from Southern Hill Render

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