CHRISTINE ARMIJO

ARCHITECTURE PORTFOLIO





THE WATERFRONT RESIDENCE



the waterfront residence san juan islands, wa

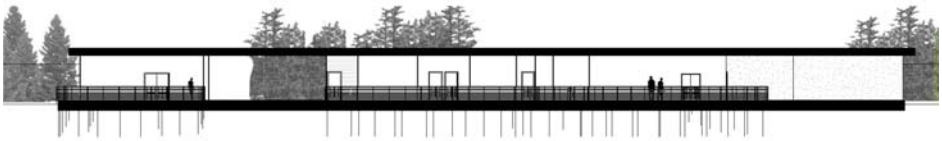




West Elevation



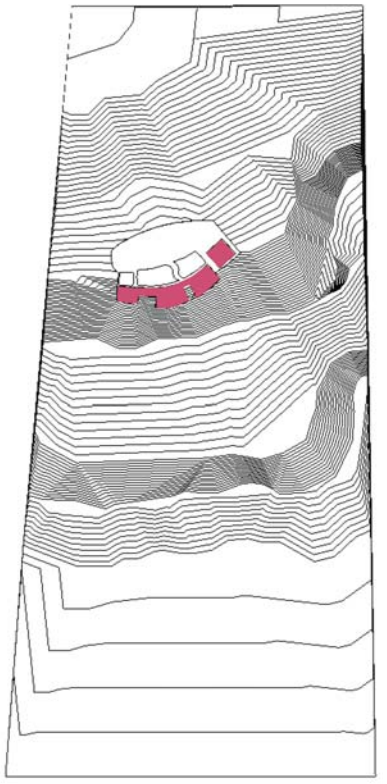
East Elevation



South Elevation



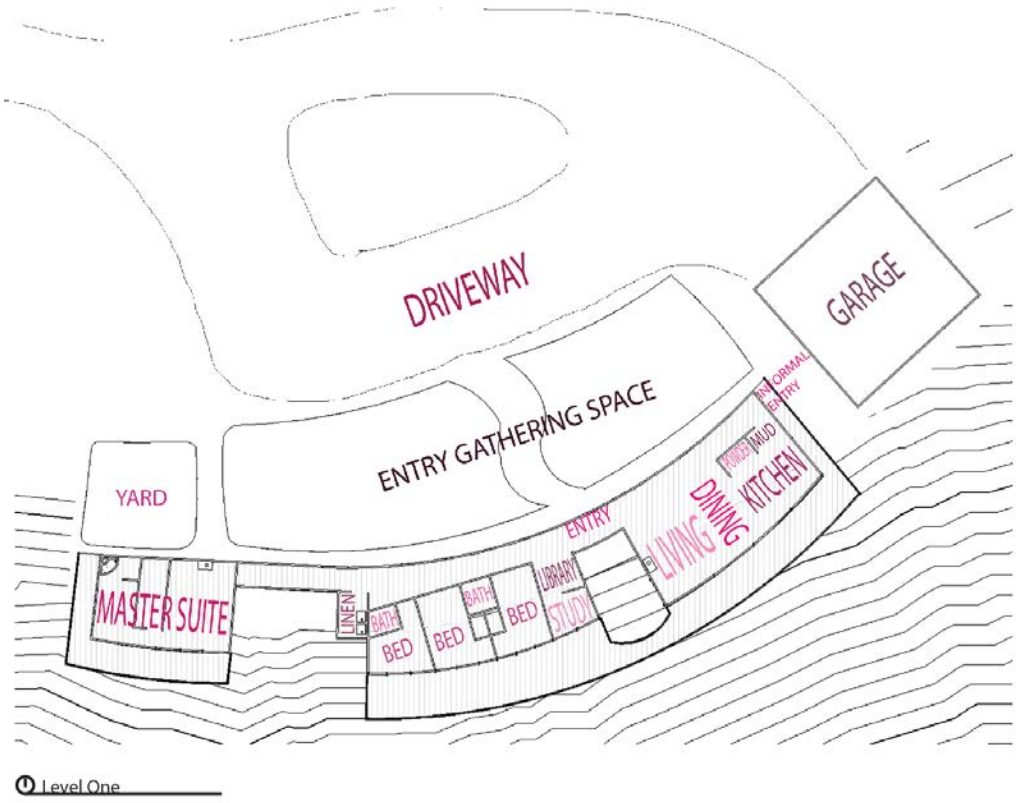
North Elevation



The waterfront residence in the San Juan Islands is designed to reflect its built environment. The San Juan Island site faces south looking onto Aleck Bay on the Strait de Juan de Fuca, and mirrors the characteristic materials of Pacific Northwest architecture.

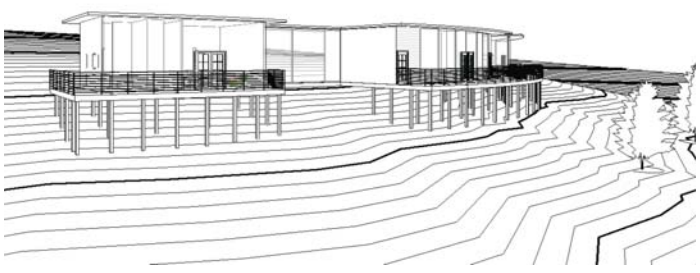
the waterfront residence san juan islands, wa





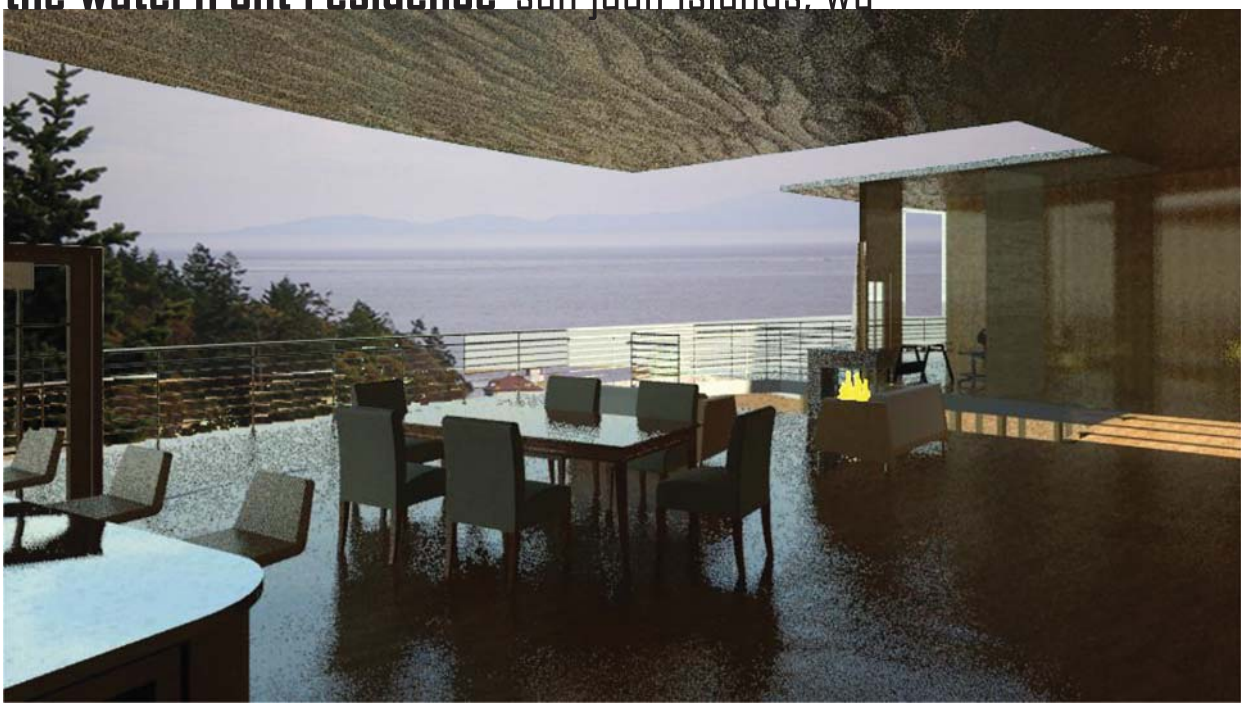
Level One

The structure is divided into private and public spaces, and takes advantage of the topography and sightlines on the Island to navigate throughout the house. The circulation and program revolve around the users' progression through the structure, the beginning impression of trees and a nature scape in the grand entry, to the brighter, public spaces in the living and dining spaces,and then circulating to the more secluded private residential bedrooms, eventually leading to the master bedroom. The ultimate goal is to utilize the built environment while creating unique spaces within the structure, taking the user on a journey throughout each progression of a space.



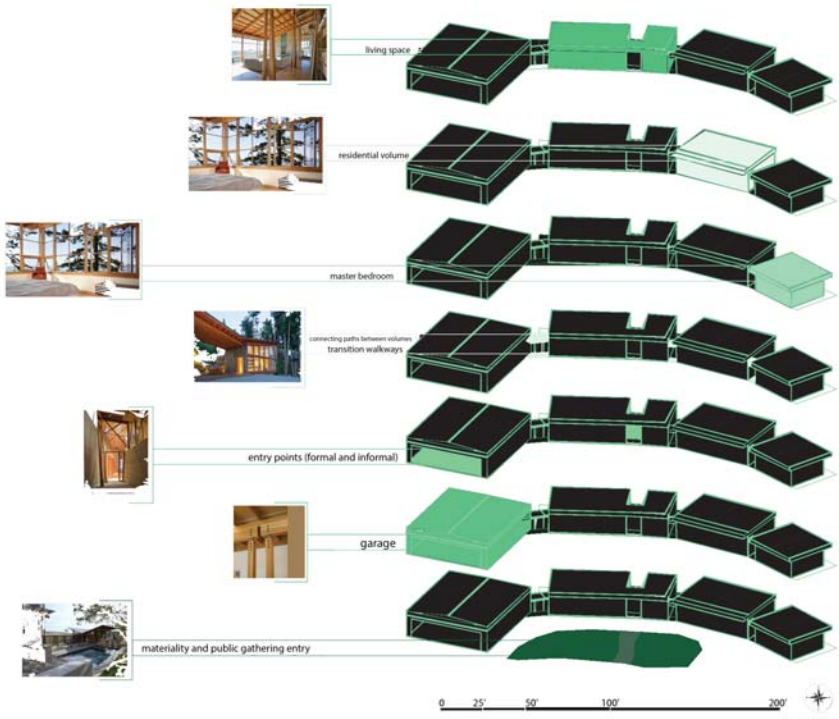


the waterfront residence san juan islands, wa



The grand entrance emphasizes not only the striking implementation of nature in the structure, but the separation of private and public spaces. The structure's circulation and programmatic process is staggered in different layers, and separated with different forms of nature and views.

The center gathering space is the living room, including the kitchen and dining space, also referred to as a public space. The private spaces are the bedroom and storage spaces, and transitional private-public spaces in the area are the study/library and open hallways. The constant view and connection to nature, whether a private, personal view of a small garden or the magnificent view of the bay, creates the strong relationship and integration of structure to environment.





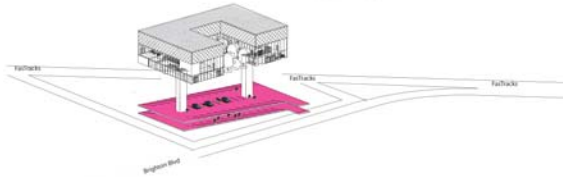


THE COMMUNITY CENTER

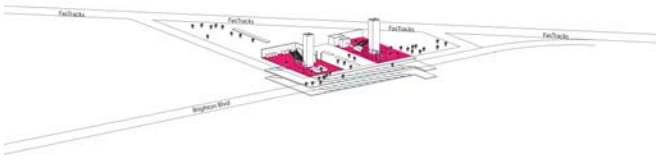


the community center at elyria swansea

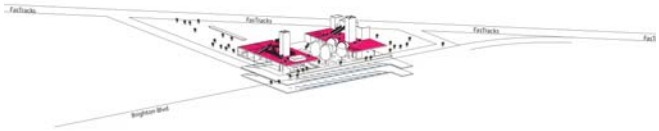




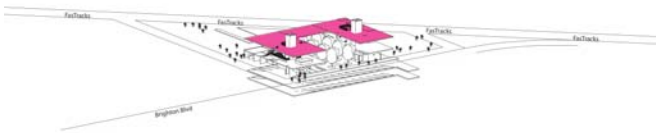
Parking



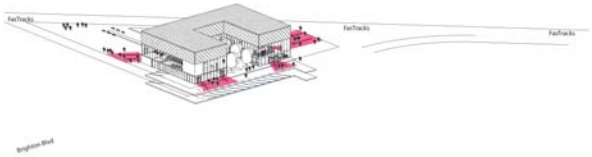
Ground Floor



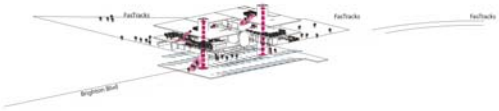
Second Plan Layer



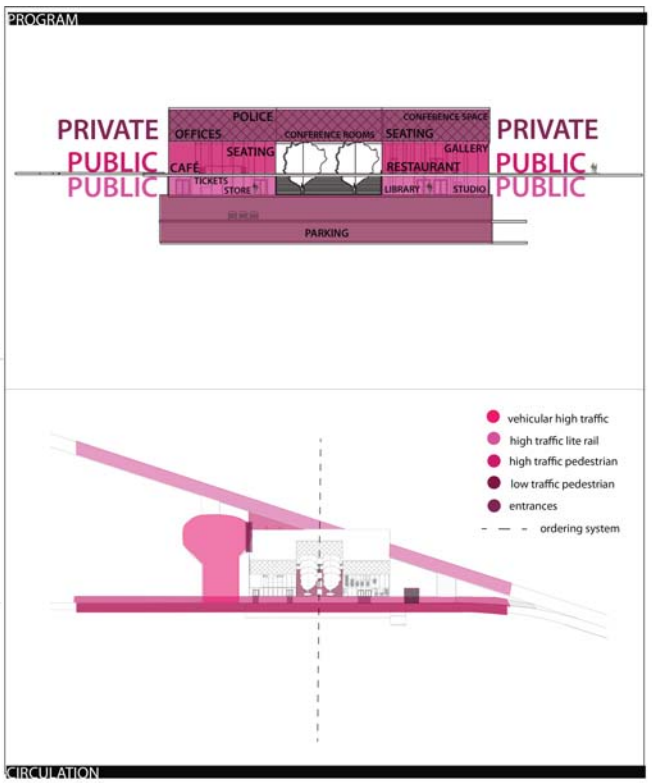
Third Plan Layer



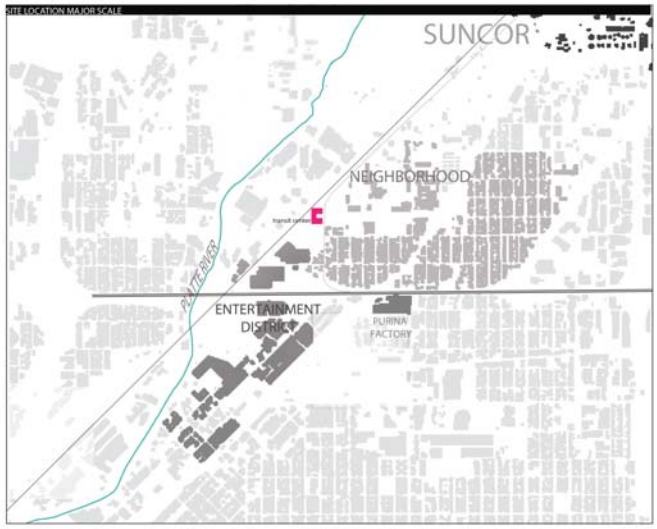
Building Entrance and Envelope



Periphery and Interior



Thesis: The concept is to create a program that interacts with materiality while integrating a sustaining catalyst of opportunity for the neighborhood, that being art. The concept is to create a circulatory process of positive exposure of the community's art contributions to transit travelers through exhibits themed throughout the building. The building, therefore, supports Elyria-Swansea *and is unique to it* as it is featuring the community as an interactive, creative, and non-threatening one. The concept is to balance this social goal of visualizing Elyria-Swansea as a more approachable community, and creating a fast paced transit center, programmed to experience the community's art while traveling.



the community center at elyria swansea









Wendell Burnette

Wendell Burnette Architects is involved in numerous projects across Arizona, mostly private structures, however the palo verde library/marryvale community center (in congruence with Gould Evans Associates) was a true example of a renovation project-combining the much needed safety in the area and programmatic spatial use to its fullest, while working on a low budget using innovative materials to create an architectural masterpiece.

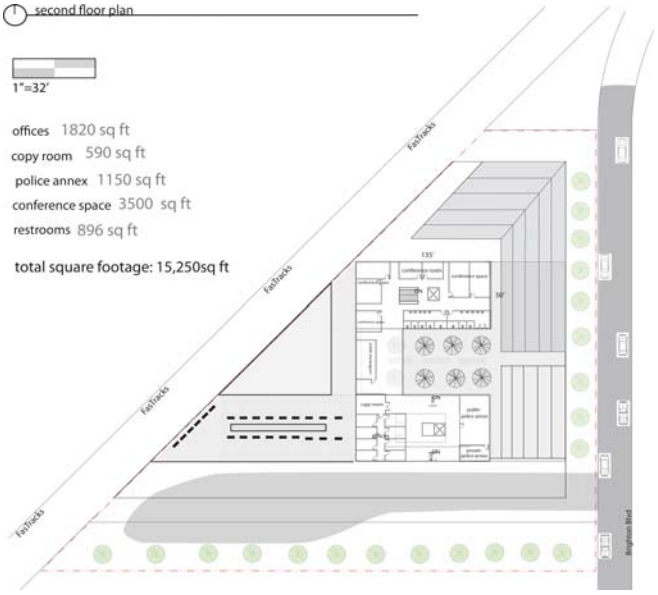


second floor plan

1"=32'

offices 1820 sq ft
copy room 590 sq ft
police annex 1150 sq ft
conference space 3500 sq ft
restrooms 896 sq ft

total square footage: 15,250sq ft



Ben van Berkel

Ben van Berkel founded UNStudio (with Caroline Bos) in Amsterdam. He worked in the offices of Zaha Hadid in London and Santiago Calatrava in Zurich, and was named Architect of the Year 2007 by Architecten Werk.



The intertwining trajectory of the loop relates to the 24-hour living and working cycle of the family, where individual working spaces and bedrooms are aligned but collective areas are situated at the crossing points of the paths. In a similar manner these unfolding lines are materialized with glass and concrete, swapping the conventional use of these materials.

The Möbius House, Netherlands





Roy Lichtenstein



Favoring the old-fashioned comic strip , Lichtenstein's work was heavily influenced by both popular advertising and the comic book style. He described Pop Art as, "not 'American' painting but actually industrial painting".

Andy Warhol developed Lichtenstein's idea of painting on a silk screen which furthered the history of painting.

Andy Warhol- example of reflected image and silk screen image



Warhol&Lichtenstein Sculptures

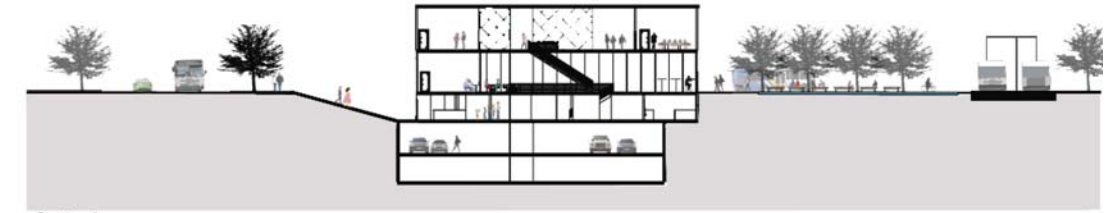
The BMW Art Car Project was introduced by the French racecar driver Hervé Poulain, who wanted to invite artists to create a canvas on an automobile-Warhol and Lichtenstein both participated in the exhibition.





the community center at elyria swansea





1 Section 6
1/16" = 1'-0"

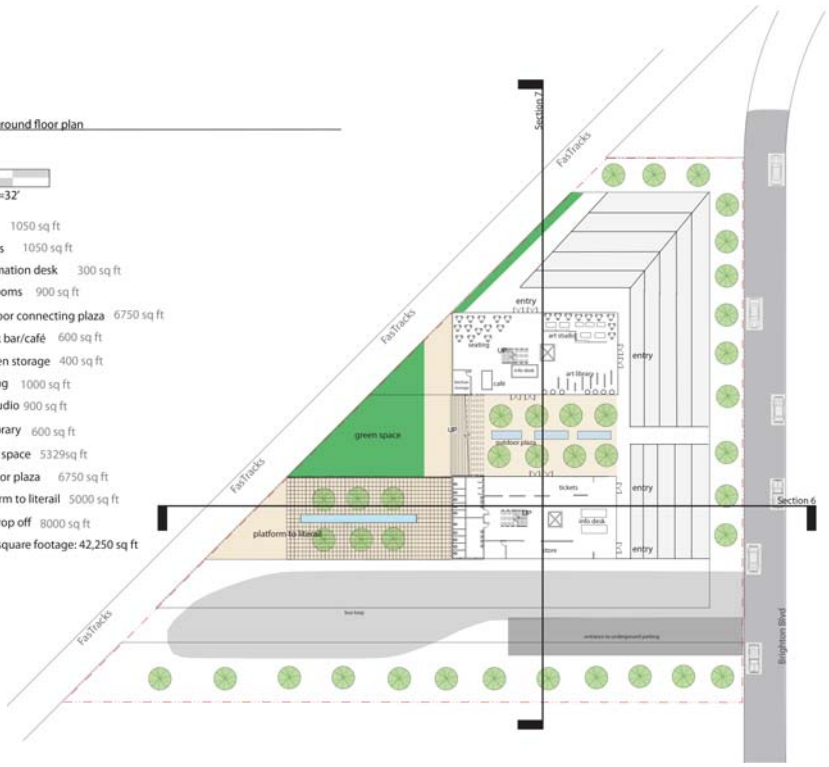


1 Section 7
1/16" = 1'-0"

1 ground floor plan

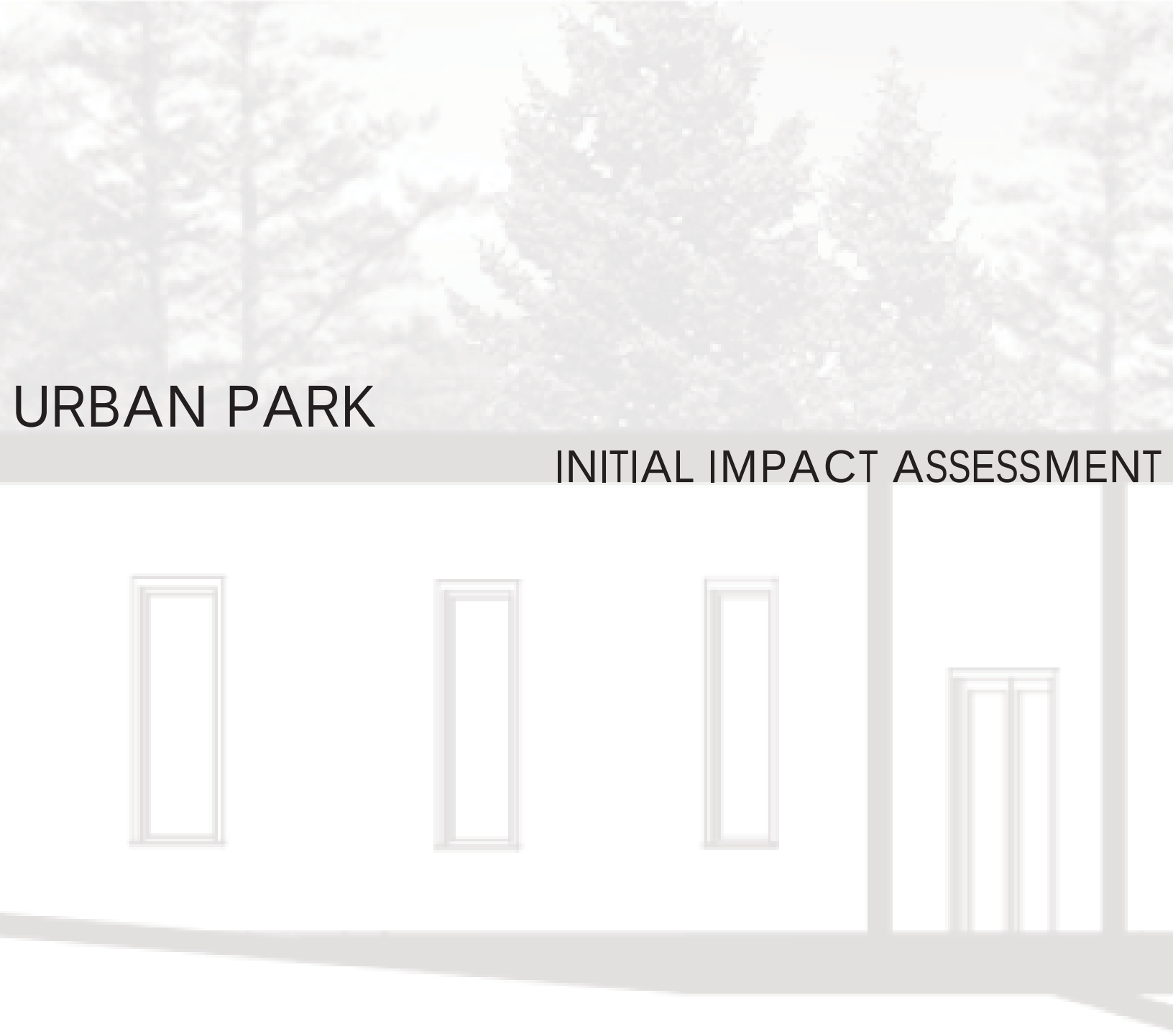
1"=32'

store	1050 sq ft
tickets	1050 sq ft
information desk	300 sq ft
restrooms	900 sq ft
outdoor connecting plaza	6750 sq ft
snack bar/café	600 sq ft
kitchen storage	400 sq ft
seating	1000 sq ft
art studio	900 sq ft
art library	600 sq ft
green space	5329sq ft
outdoor plaza	6750 sq ft
platform to literail	5000 sq ft
bus drop off	8000 sq ft
total square footage: 42,250 sq ft	



The program consists of three structures all strongly connected (The Transit Center, the Connection bridge, and The Community Center) as well as an "open space" connecting the buildings using a visual relationship of a nature (water) display also displaying statues. In each structure the public's art is exhibited and used to divide spaces, direct circulation, and act as focal/interactive art points.

Community Center (aka The C Center): has an above ground parking lot connected by sidewalk to entry, computer lab, "design lab" or art lab (where different art materials are available like paints, materials, stencils, charcoals, spray paint booth, as well as lessons on computer art design and basic computer skills like email,word,excel,etc for basic job requirements-therefore this space is encouraged for use to new, inspired artists to adults of Elyria Swansea looking for job skills-therefore catering to a larger demographic. Donations of art materials and lessons taught by city volunteers would be the catalyst for the program's potential, gallery and flex space for hearing and visual performances as well as community meetings. Restaurant is flexible as well as it is reservable, therefore can be formal or informal, cater to the occasion. The library contains sections on artists(warhol,still, picasso, graffiti, pollock, bourgeois-sculptures, photography section, architecture section, fashion section, AND how-to section). The café connected to library-books allowed inl- and total art displays on sides of café wall menu (these are more famous art pieces from warhol to hadid.) Bike rental visible from transit center on street so users will be interested and maybe want to join or check it out later. Program revolves around community functions, is much slower, but a transparent building.

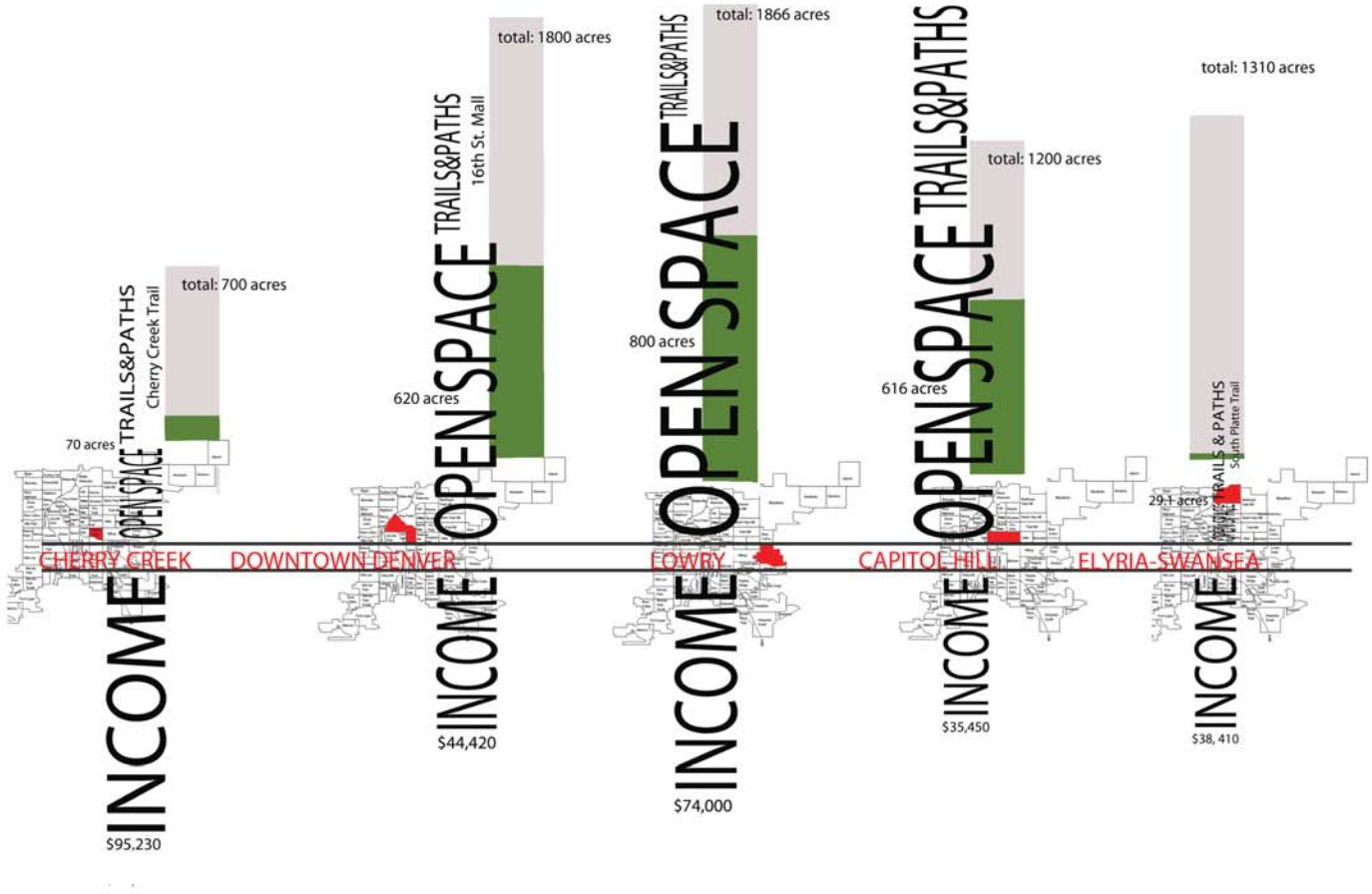


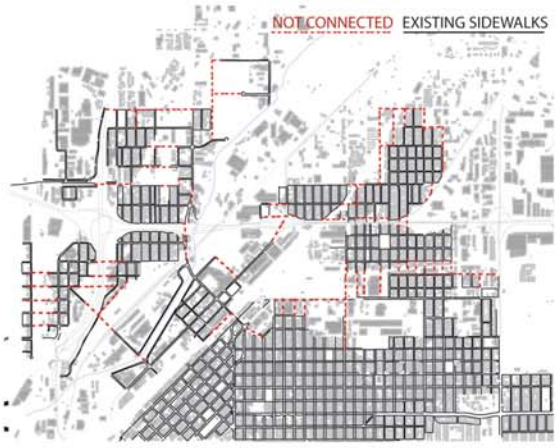
URBAN PARK

INITIAL IMPACT ASSESSMENT

Curating Urban Connectivity

Urban Voids



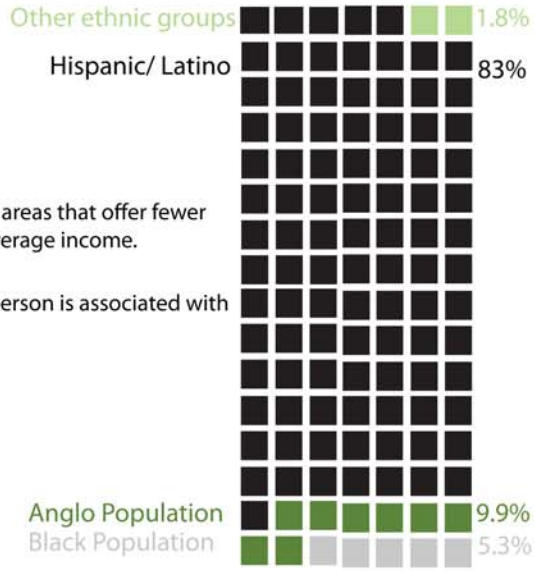


The Department of Public Works has identified unimproved and disconnected alleys and estimate that these constitute about 40% of alleys in Elyria-Swansea.

They also estimate the unimproved streets constitute about 30% of the streets in the neighborhood.

Latinos are more likely tolive in areas that offer fewer park acres per person due to average income.

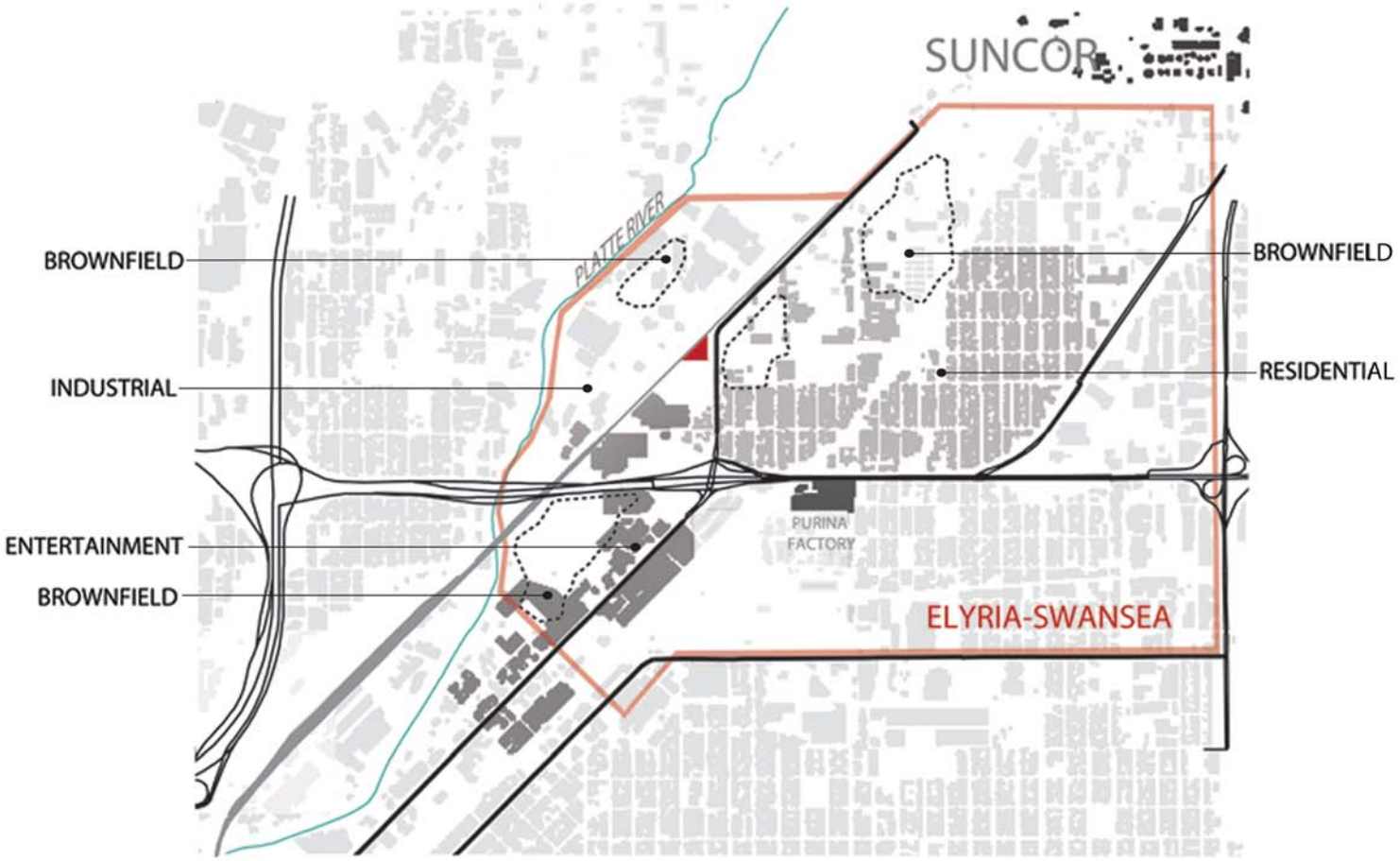
The number of park areas per person is associated with lower income.

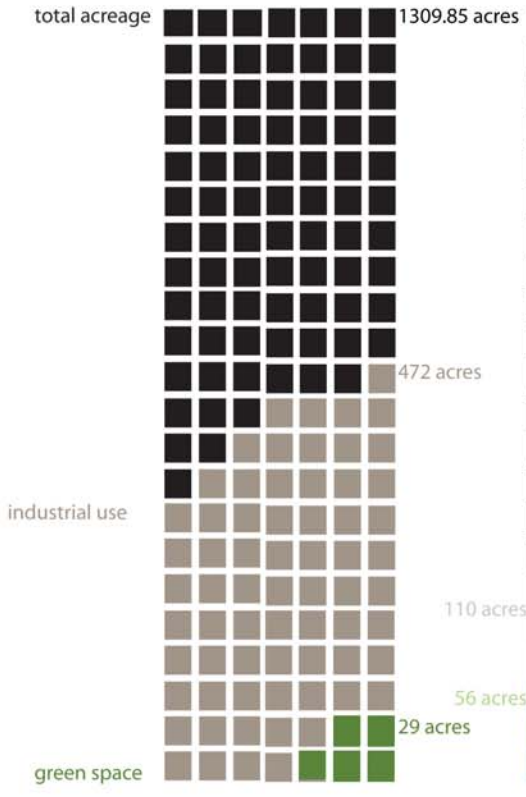


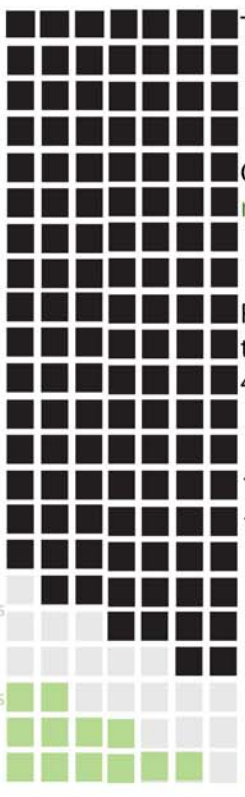
ELYRIA-SWANSEA DEMOGRAPHIC

Curating Urban Connectivity

Urban Voids







The total acreage of Elyria-Swansea is 1309.85 acres.

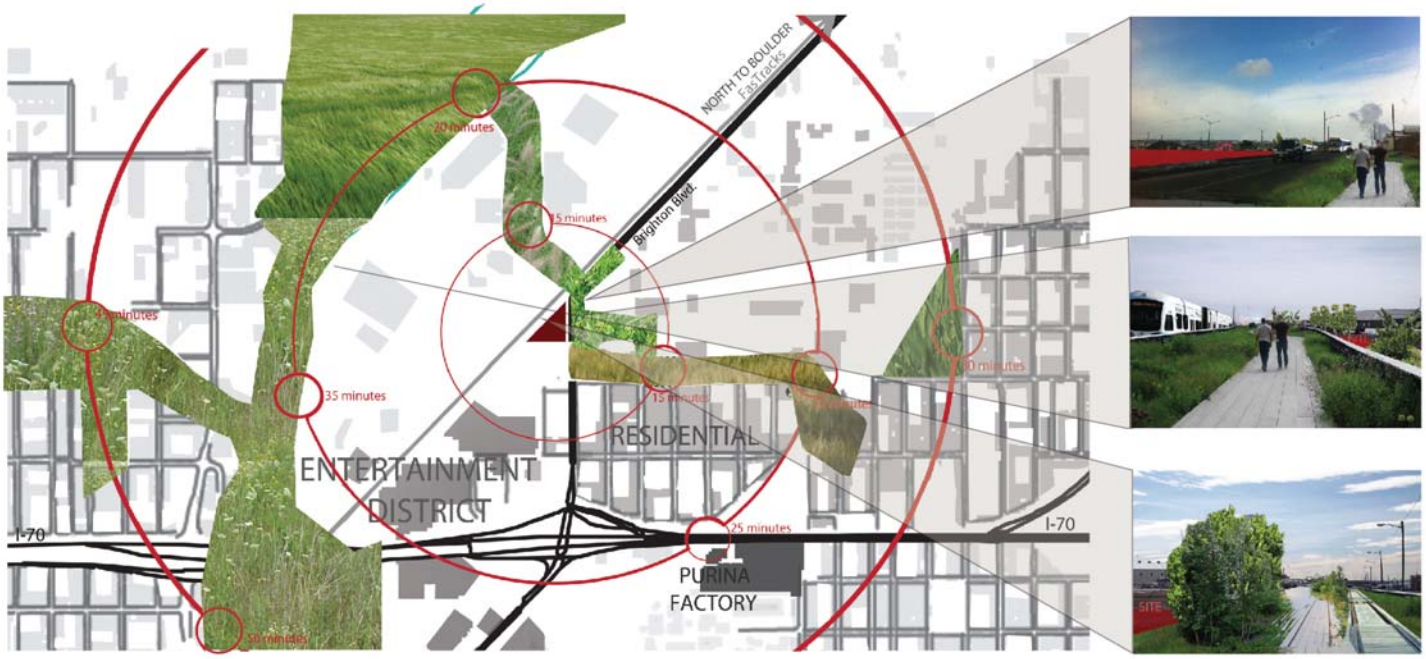
Of that only 29 acres is designated for parks and recreation.

Retail and Office Services represent 56 acres, compared to Industrial Use, (for ex. Purina Factory) represents 472 acres.

There are 110 acres of "Vacant Space". An example of this is the many empty parking lots surrounding the neighborhood.

Curating Urban Connectivity

Concept and Solutions



PEDESTRIAN INFRASTRUCTURE THROUGH URBAN GREEN SPACE

ORIGINAL INFRASTRUCTURE



KEY CONNECTION POINTS IN NEED OF RENOVATION: EXISTING SIDEWALKS

URBAN PARK

Curating Urban Connectivity

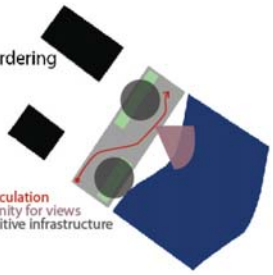
Concept and Solutions



EXPERIENTIAL TRANSITIONS

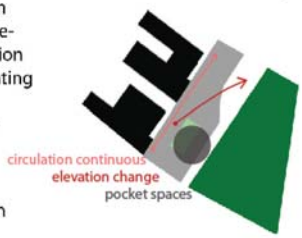


This walkway section is an example of the landscape repetition found throughout the entire structure. This section bordering the Platte also allows for circulation pace to slow down when curving through the landscape cuts.



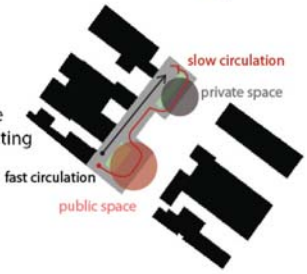


This walkway section has elevation change- dividing the circulation paces as well as creating a natural water drainage source for plant life.





This walkway section creates public and private space. When designing this walkway it is important that there are gathering spaces that are as versatile as possible when contributing to the neighborhood as a design structure .



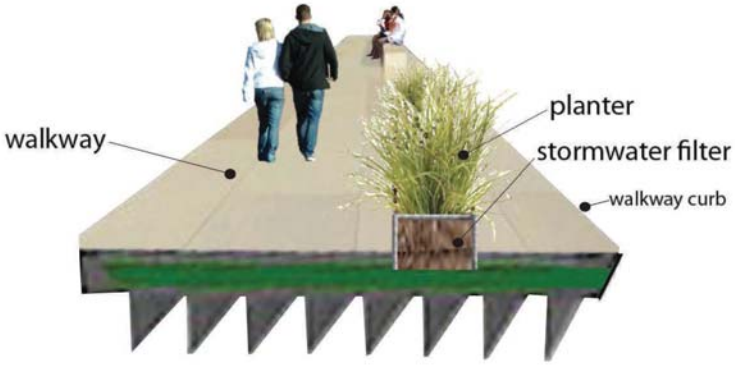
SPATIAL PATTERNS

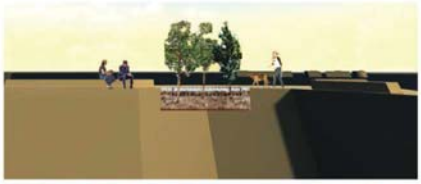
The walkway must have a design consistency to attain recognition when connecting open spaces and key hierarchial points t hroughout the area. The design consistency rests with the rectangular cuts of vegetation planted throughout. However, the experience also creates fast and slow circulation points, public and privatespaces, as well as elevation changes to change pace (conveniently located on sidewalk curbs for ADA accessible sidewalks).

Curating Urban Connectivity

Infrastructure Integration







Seating spaces are spaced between vegetation and stretches of walkway. The amount of seating and its positions vary on the space. Shorter seating blocks are spaced in private spaces, where longer blocks are in public gathering spaces.



Vegetation variation is impenitent, wild grass and native Colorado trees grow in the landscape "cuts" throughout the walkway, with soil interchanged with fresh mulch seasonally.



Elevation changes are a unique feature of the walkway, changing the circulation pace. At some points the elevation change slopes continuously to the sidewalk, not only providing ADA crossing but a natural water drainage system.



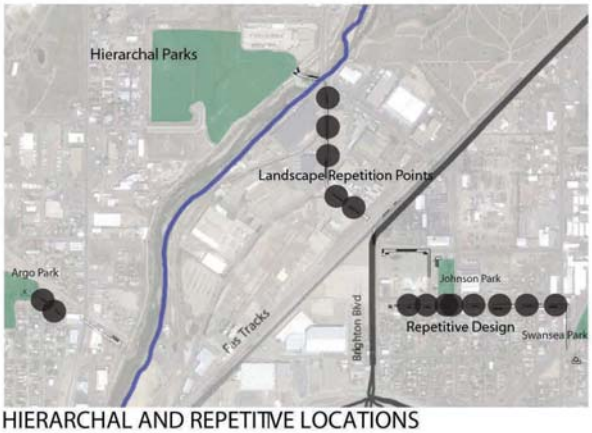
Along the Platte the walkway allows opportunity for new views of the landscape as well as a mixed use. As it will be a safer transportation connection, pedes and bikers can use the walkway.



Safety is a main concern when using the walkway at nigh Lighting run under the tapered concrete planks will be available withing the transit center's electric circuit span. Safety is not just designed by lighting features, the infrastructure as a new, and clean developing project adds to the comfort when using this walkway at night.



PLAN IN NEIGHBORHOOD CONTEXT



HIERARCHAL AND REPETITIVE LOCATIONS

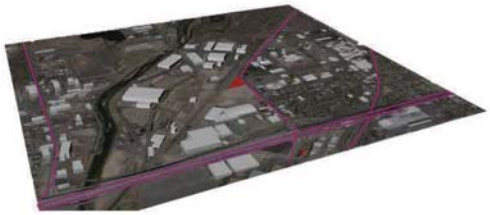
Curating Urban Connectivity

Infrastructure Integration



PLAN IN AERIAL CONTEXT









The heaviest pedestrian activity is located in the residential area, with the South Platte Trail as one pedestrian feature.

Vehicular traffic is what seperates Elyria-Swansea from Denver (I-70) and poses noise and pollution hazards to the neighborhood. A dangerous environment can be created when vehicles do not follow the speed limit, and turn low-traffic roads into high traffic ones.

Elyria-Swansea's green space surrounds the industrial sites, making access to open space difficult.

The vacant lots and acreage in the neighborhood have potential as they are in areas close to neighborhoods, and easy to build on as the majority of them are emptyparking lots.





PREFAB ARCHITECTURE

DISASTER RECOVERY

build. choose. live.

prefab for disaster recovery

prefab: adaptable contexts



Each prefab combination evolving from the core unit caters to certain cultures, different additions include a unit with a larger closed space, where the Japanese dining culture would work most appropriately. The Pacific Northwest Style contains more room for the kitchen, or dining space, corresponding to the culture of open floor plans. Shingle Style architecture has a traditional, assymmetrical structure, with a gambel roof and shingle wood envelope. The scaleability of the additions create the culture of each prefab house, catering to each resident as they grow with the house, creating the connection of permanence.









designing for the future

Small scale living is the most efficient living style today. Saving space with prefab means saving energy costs, and cuts down on excessive use of fuel and water.

Climate change is an issue considered more and more in design, and having a homw that can withstand extreme weather conditions while producing less emissions and use of energy is the key to designing for the future.

cultural urban fabric



Seattle, Washington

Pacific Northwest architecture consists of an open floor plan, wood exterior, and stone. This context includes dense forest, rain and cloud weather patterns, and constant green landscape. Hedges are used as road dividers, bike path guiders, and commonly used in domestic landscape.
The culture in Seattle is very lively with the younger generation guiding its rapid modern development.
Prefab as a movement fits well into the culture, and the versatility of the size and style of each house creates an attractive and promising future for further development.



Long Beach Island, NJ

Long Beach Island in New Jersey consists of a strong sense of community, therefore acceptance of a new form of building might even bring doubts. However the Shingle Style architecture is the traditional and consistent style of the area, the character of Long Beach Island is rich in beach town culture. Demographically, the area is more attractive to retiring persons, therefore, their preferences and actions growing older must be accounted for to use the correct size additions of prefab modules.
Retiring residents may prefer an assymmetrical, open floor plan, so there is easy accessibility around the house, and natural light at all angles. To create a long-term home, there must be a psychological connection, a peaceful environment by the beach is a perfect setting when integrating prefab into the lives of others.



Japan

Japan architecture is a peaceful retreat from the busy and crowded population of the city and street. Materials such as bamboo and shoji (sliding paper doors) that organically divide spaces, as the Japan culture is a division of public and private. The lifestyle prefab residences would have to fit into is extremely busy on the outside, but tranquil interior design and transition throughout the house. Adding prefab to Japan would have to comfort residents as identical materiality, and public and provate boundaries. For future design proposals, stackable prefab modules imitating rich and sacred Japanese culture, while being able to save space and adapt to the growing country. Proposing prefab units to Japan as a solution to housing crisis after a natural disaster would have to feature not only the available additional prefab parts, but the core unit as a sustainable, tranquil and peaceful unit that is a smaller square footage and versatility, in such a high quality living space for a lower price per square foot than any module alternative.

choose. build. live.

prefab for disaster recovery

Proposal

This project proposes using permanent prefabricated housingin response to a natural disaster. However each prefab unit is designed based on the vernacular environment of each site, in this proposal the chosen site contexts include Japan, Seattle, and New Jersey.

Adaptable

These prefab residences are unique in comparison to other proposals along similar lines. This proposal not only specifically caters to each vernacular culture as a universal prefab unit and core, but itd scaleability as a growing residence with the resident creates a long term relationship to the house, and the image of permanent prefabricated housing will become more acceptable as a natural disaster recovery solution. As a resident grows, this prefab house can grow in accordance. The first core unit is a 620sq.ft. residence that caters comfortably to 2, then , step by step, additions are available to improve the add on to the home, whether just a single second space or bedrooms and bathrooms as the residents expand their living quarters in the house.

Fast

Prefabrication as a building process is extremely time efficient, as less resources are needed on the site and the set up of each residence is organized and can usually be completed in a day. This short time frame is juust another benefit of prefab. However building time means a lot more when the resident is homeless. The response time to build a residence can take less than 2 months, sometimes one month, and this approach is moe effective than rebuilding the sate in the same process. This solution will help in the recovey period and certainly take less than 10 years.



Site Specific

Site 1 : New Jersey



Natural Disaster: SuperStorm Sandy
Architectural Style: Shingle Style, assymmetrical plan, open dining and kitchen programs, and a gambel roof is typical in the specific style of wood shingles for the facades and asphalt shingles for the roof. . The average household is 3 per family in Long Beach Island, with that age averaging at 41. Long Beach Island is designed for spaces at a comfortable living scale with lower plans for prefabricated additions, as the population is aging and most likely the number of persons per household will not increase for elderly or older couples.

Site 2: Japan



Natural Disaster: Tsunami
Architectural Style: Japanese Style
Some cultural values that effects architectural design include the sacred and traditionally valued tea and dining ceremonies in the Japanese culture. Therefore, dining rooms are extremely private. There is not a huge focus on the living area, as traditionally when resident's entertain, they leave the house and go out instead. There is typically one child in a home consisting of two parents, and the average age of a homeowner is 32. This allows for additional space and prefab pieces to be added on eventually, with the growing of the family.

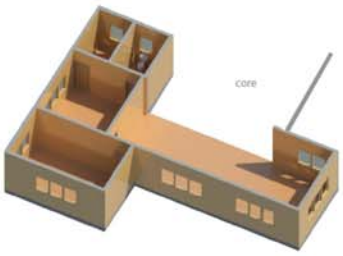
Site 3: Seattle

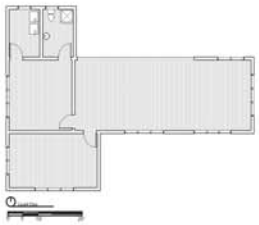
Natural disaster: Earthquake (overdue 100 years)
Architectural Style: Pacific Northwest
Pacific Northwest architecture is designed as an open floor plan. Similar to Japanese architectural style, there are many surrounding windows as the dependence of natural light is part of the house design. Smooth transitions from one space to another are accentuated with wood detail on ceilings or walls. However the open floor plan of dining, living and kitchen is consistent. The average age of homeowners is 29, therefore Seattle is a younger and more vibrant culture. There is also only 2 per household, predicting that the core might be the first living space for awhile, and when families establish their place, additional prefab units can be added to support the residents needs.

choose. build. live.

prefab for disaster recovery

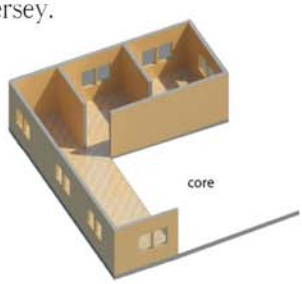
Additional Parts

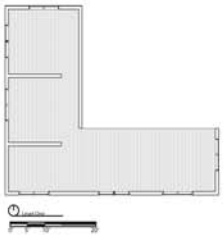




Proposal

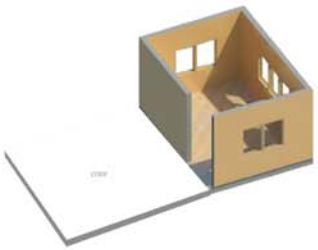
This project proposes using permanent prefabricated housingin response to a natural disaster. However each prefab unit is designed based on the vernacular environment of each site, in this proposal the chosen site contexts include Japan, Seattle, and New Jersey.

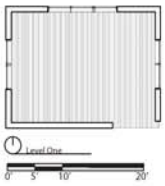


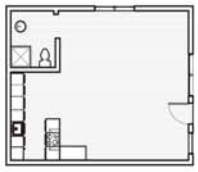


the core

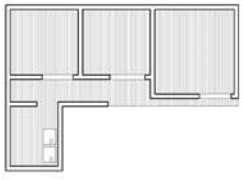




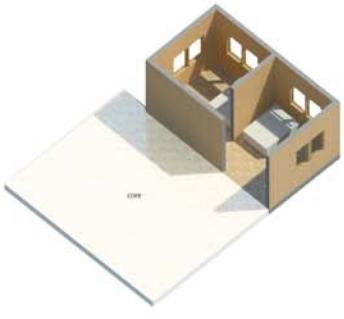








The core is a universal starting point for every prefab installation. There is one kitchen, one full bathroom, and one living and sleeping area, along with a dining nook. The core is the inspiration for the proposal, it represents the first step to building a home, catering to the residents need of space, future plans, and responds to financial adaptability.





Adaptable

Fast

Site Specific

choose. build. live.

prefab for disaster recovery

"Half a year after the storm, tens of thousands of people remain homeless and hopes of recovery remain a question mark..."

-New York Times

a sustainable solution

Residential Prefab is an efficient and sustainable solution when responding to a natural disaster.

the problem

Superstorm Sandy hit New England: October 2012
Number of people still without a home: >10,000 people

"Some people are still very much in the midst of recovery. You still have people in hotel rooms, you still have people doubled up, you still have people fighting with insurance companies, and for them it's been terrible and horrendous."
-New York Times

Superstorm Sandy hit New Jersey on October 28, 2012. The damage in December was estimated at $75 billion, however Congress is currently in the process of increasing that amount, as the estimation of damage in the United States as of May 2013 has raised to $173 billion.





Governor Chris Christie of New Jersey announced that rebuilding process will take a decade. Many people are still homeless, and the plan of action for redeveloping those neighborhoods has yet to be officially announced. This superstorm, with increasing effects from climate change, will not be the last natural disaster of New England in the next decade. The current process of lack of rebuilding and financial stress only furthers the areàs chance for redevelopment in the next year, meaning many people will remain homelless until the process is executed correctly.

learning from katrina

Hurricane Katrina hit New Orleans: August 2005
Number of people still without a home: 4,900 people

Seven years after Hurricane Katrina, New Orleans' homeless population is estimated at 4,900, nearly two and a half times bigger than before the levees failed. The majority of the homeless sleep in the 40,000 abandoned buildings that remain as a legacy of the storm.

Hurricane Katrina devastated New Orleans. The slow reaction to the initial emergency and to the ongoing crisis exposed troubling realities about the response capabilities of the American government when the citizens of our most culturally diverse city were in desperate need of help.

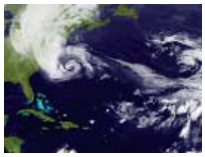


In part, problems with the program on a lack of a clear goal for the program, which was intended to build houses that would serve as alternative sources of emergency housing and an intermediate-term housing solution for the area.

ecological benefits

The prefab building process leaves little waste when building, mwaning less waste from extra materials built on site. Energy effieciency with less use of energy as the usage of energy and utilities are designed to save energy, therefore having less impact on the surroundings.

climate change response



Climate change is increasing the frequency and strength of hurricanes.
There is a rising cost of energy, placing strain on low-income residents.
Climate change is increasing the tmperature of the ocean, therefore weather is unstable, irregular, and extreme.

time efficiency

Manufacturing prefab units can take 1-6 months in the factory (off site).
On site construction can be completed within one day. The time efficiency of building is so unique and convenient because there is less use of construction resources and materials.



financial adaptability

Prefab housing prices do not include excessive cost from on site construction, because the building process is extremely time eficient with little extra materials after the completion time.
In this prefab proposal, there are options in accordance to the size and living style. Residents can begin with the smallest square footage space, and when the residents are ready to add another extension to their house, there are numerous choices of additional prefab pieces.

The solution for displaced residents during Katrina: The Katrina Cottage



The cottages ranged from 612 square feet to 1,112 square feet and cost an average of $145,216, according to Purpera's office. With infrastructure costs added, some homes cost as much as $195,452, by the auditor's estimates.

CONNECTING ISTANBUL

URBAN PLANNING



RECLAIMING SERENITY IN USKUDAR: PROPOSED

Recreating the Shoreline Culture

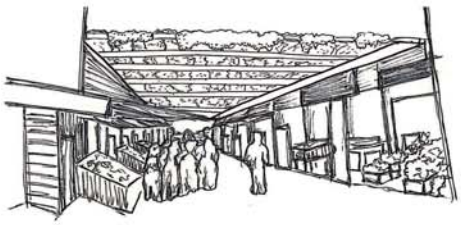
INCREASED SEATING:

Since we want people to be able to sit and interact in all areas of the space, we have proposed and increased number of benches. Places with key focal points (i.e. the fountains, parks) will have more benches surrounding them in order to create public gathering spaces.



INCREASED SHADED AREAS:

Throughout our observations it became obvious the importance of shade. People simply did not want to sit in the sun. Therefore, we propose shade to be increased by adding trees and overhang areas (as seen in the markets). This will create cooler environments that are welcoming for the pedestrian.



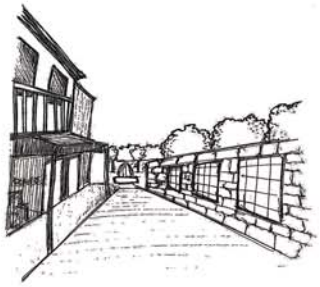
PRESERVATION & INTEGRATION OF HISTORICAL BUILDINGS:

The existing historic buildings were extremely important to us as we looked to propose a new plan for the area. While we wanted these buildings to maintain their unique and often calming spaces, we also wanted to make them an integral part of the new plan. To do this we proposed having pedestrian pathways that will connect them with new parts of the zone (i.e. public fountains, opposing commercial centers).



EASY TO NAVIGATE PATHWAYS:

One of the main issues we wanted to identify was creating an ease of movement throughout the space. To do this we proposed having wide, open pedestrian pathways. The main ones will have viewpoint at the end, which will allow the user to see where they are going. Smaller pathways will wind together between buildings creating a network of paths for the local, more familiar user.



By Catherine Czajkowski, Christine Armijo, David Marowitz ENVD 4300

RECLAIMING SERENITY IN USKUDAR: PROPOSED

Recreating the Shoreline Culture



USKUDAR AS A PLACE TO OBSERVE:

The district of Uskudar has a different feel than that of the European side of Istanbul. The oveall pace is much calmer and laid back. The district is a space where users are able to look across the water and observe the commotion happening on the other side. Therefore, when redesigning the space, we felt it was important to create areas that would maintain this feeling.



THE PLAN:

CREATING A PEDESTRIAN ZONE:

In the existing site was not friendly for the pedestrian. Instead of welcoming use, obstacles such as narrow streets and motor vehicle traffic made the space busy and congested. To solve this problem we proposed the creation of a pedestrian zone so users could navigate the area more safely.

MIXED-USE BUILDINGS:

Through mixed-use buildings we will create an environment in which one can live, work, and play. Allocating the first level of buildings for commercial use with residential and educational centers above will achieve this. Additionally a number of small public gathering spaces and a large park will add to the diversity of use within the area. This will help to maintain a human scaled, pedestrian friendly environment.



BUILDING HEIGHT RESTRICTION:

The height of buildings in the newly proposed area will be a maximum of three stories. This will ensure that the current feeling of Uskudar is preserved (and that no skyscrapers be built to destroy the skyline). Implementing a height restriction near the shore will not impede views of the shore. In addition this restriction will help to maintain a scale that does not make the user feel suffocated by buildings.





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RECLAIMING ISTANBUL: URBAN DESIGN STUDIO

PROPOSED SITE PLANS: SUMMER 2011

CHRISTINE ARMIJO



carmijo@rh.com 303.859.4880