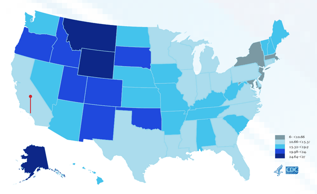
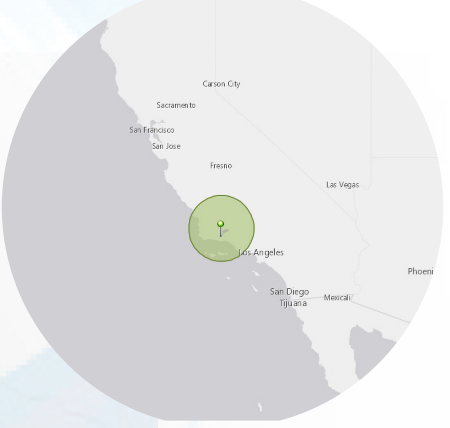
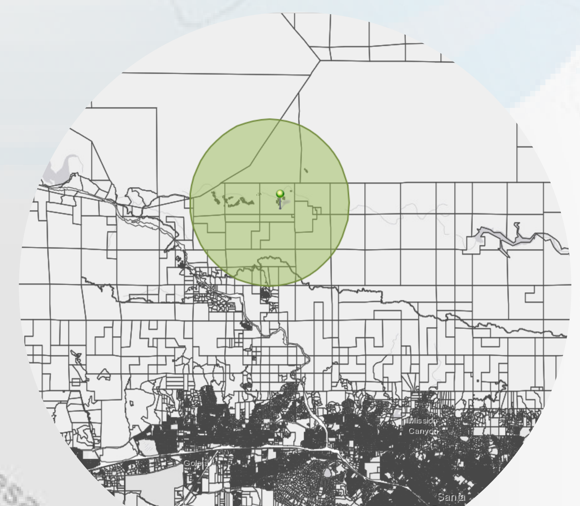
THE OTHER SIDE OF PARADISE

MARY NYARONGA



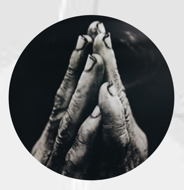




Mark is a 19-year-old college student with alternating episodes of highs and lows. During low episodes, Mark feels like he is a burden.

As a college student, the stress he experiences is considered normal, and the people around him say that once school is out, stress levels will subside. Mark doesn't express his feelings since he is afraid of ridicule and be seen as weak since he is a man. Despite going to the student counseling center, he fears going to a mental institution in case of extreme suicidal thoughts.

Mark does not want to feel trapped hence doesn't seek help in fear of detainment.



Rose is a 78-year-old woman diagnosed with Cancer at Hermanson Medical Institution. She experiences chronic pain in her body, given that she has a few months left to live.

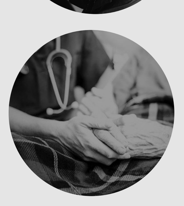
She feels like she can not continue living in pain and has requested the doctors to assist her with putting an end to the pain. Her family insists that she still has so much life left to live, but she feels that every day is getting harder to endure the pain.

Kristi and John are at their son Jamie's funeral after he secretly purchased a gun and took his life. He had attempted suicide before by slitting his wrists three years ago, but he was getting help.

He left a suicide note saying that it was too much to handle, and he didn't want his parents to blame him. Jamie asked for forgiveness multiple times, hoping that his parents wouldn't be upset that he took his life.

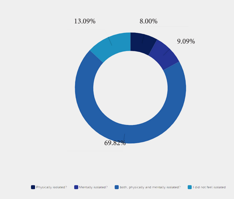
Shayne is a suicide survivor that tried taking his life multiple times a year ago. He has been in and out of the hospital for routine visits and talks to his therapist every week.

He has been lying about feeling suicidal since he does not want to go back to being medically detained held at the mental health institute. He remembers the pain he felt. This time he is planning so that he succeeds in taking his life.



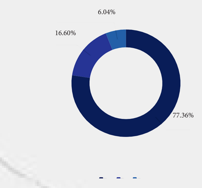
Sarah is a nurse that has witnessed numerous patients come in over the years, and the most heartbreaking scene is when friends and families realize that their loved ones have passed due to suicide.Sherecallstheterrifyingscreechesthathauntthehallsoftheemergencyroomfromgriefanddisbelief.

She hopes that people can seek help and not take their lives. She understands that mental health is an issue that isn't an open conversation, and she hopes that people can be more open to talking to avoid the heartbreak that accompanies the bereaved.

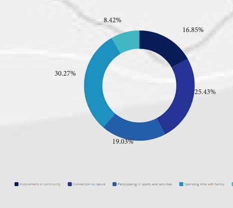


In a survey conducted among 257 students at North Dakota State University, almost 70% of the students felt isolated both physically and mentally during the Covid 19 pandemic.

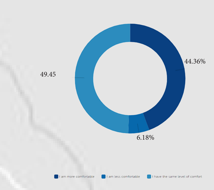
The purpose of this survey was to see how loneliness and isolation could greatly impact the masses and how a design solution could help combat the isue at hand.



77% of the students felt more isolated during the Covid 19 pandemic compared to before.



30% of the students felt less isolated when they fostered a relationship with their families. 25% highlighted that a connection to nature made them feel less isolated. 19% attributed it to being involved in sports and activities, while 16% felt less isolated while being close to the community. The remaining 8% had a variety of responses that included close ties to significant others and community involvement at large.



Almost half of the surveyed students reported feeling comfortable talking about mental health prior to the start of the pandemic, while the other half felt more comfortable after the pandemic.

Based on these responses, the design solution focuses heavily on fostering interactions between users by incorporating art, meditation, family therapy rooms with visual connections to nature. A tennis court and gym is included to ensure users stay active and social areas such as the dining and library to encourage new connections.

3900 PARADISE ROAD SANTA BARBARA, CA

This thesis explores how architectural design can impact the recovery process of individuals with suicidal thoughts, survivors of suicide, and bereaved individuals.

According to the Centers for Disease Control and Prevention, in 2019 , suicide was the leading cause of death. The three states with leading rates of suicide were Wyoming, Alaska, and Montana respectively. According to demographics, women are more likely than men to attemppt suicide than men. Alaska Natives have the highest rates of suicide than any ethnic group in the United States. Individuals with ages 45-64 for women and 75 and older for men had the highest suicide rates in 2019.

Isolation and loneliness partly contribute to suicide ideation in survivors and bereavement trauma in individuals.
Due to the Covid 19 Pandemic, individuals have expressed feelings of loneliness. This is due to a disconnect between the natural environment, reality, community, and architecture contributing to mental unwellness despite being connected to the world by digital means.

Located at 3900 Paradise Rd. Santa Barbara, California, this site was a perfect central point between these three states to have a suicide acceptance center. Not only does the site have the presence of sun which is imperative in the treatment process, it also has very strong ties to nature by having views to terrain and dense vegetation which can provide opportunities for mental and physical restoration through lowering tension and regulating physiological responses, thus improving coping mechanisms during stress.
The center has 100 open dwellings scattered between 9 courtyards with different layouts. It also includes an outpatient clinic, tennis court, gym, religious spaces, community rooms, art rooms, meditation rooms, Virtual reality rooms, a library, a dining center, and nurse stations scattered through out the buildings for safety purposes.

The concept of the dwelling villages in which dwellings share a courtyard not only provides a sense of safety, it offers a choice to interact with other users and be part of a community.

14 Patterns of Biophilia are employed to improve engagement, attitude, and overall happiness by reducing stress, positively impacting mood, and preference, and improving cognitive performance. \ Emotional, physical, and mental wellness will enable users to cope with emotions and encourage healing in this environment, and eventually carry these skills with them after treatment.

GOALS AND PERFORMANCE CRITERIA

Safe Environment Conducive for Treatment

The outpatient clinic, library and dining have high ceilings and clear sightlines that are welcoming to improve attention and concentration. Private dwellings withdrawn from the flow of activity and environmental conditions are incorporated to establish a sense of refuge. Variety within spaces by having biomorphic shapes and patterns increases dopamine and pleasure responses.

Universal Design

All the rooms are designed with minimal complexity to bring feelings of safety and contemplation. All spaces use wood as a material to reflect the local ecology and create a distinct sense of place. The buildings are single-storied to allow ease of movement.

Sustainability

Energy-conscious occupant behaviors have given users control over their environment to reduce heating, cooling, ventilation, and lighting. Every room has access to sun, wind, and light for as many interior spaces as possible for visual and thermal comfort which improves the circadian rhythm.

Community
This design aims to break physical barriers between architecture and nature and unite us with the natural environment by having indoor and outdoor spaces and large glass windows with a visual connection to nature.

Education
Educating the users on issues regarding suicide and de-stigmatize ideologies that are detrimental to recovery is aided by having classrooms and family therapy rooms. Religious rooms allow spiritual activities that provide positive coping and healing strategies.

14 PATTERNS OF BIOPHILIC DESIGN:

Biophilia is the humankind's innate biological connection with nature. Biophilic design can be organized into three categories: Nature in the Space which addresses the direct, physical presence of nature in a space or place, Natural Analogues which addresses organic, non-living, indirect evocations of nature, and Nature of the Space which addresses spatial configurations in nature.

Visual Connection with nature where there is a view to elements of nature, living systems and processes. This pattern improves the mental engagement of individuals which impacts overall happiness.

Non-Visual Connection with Nature includes auditory elements that are a positive reference to nature. This effect positively impacts improvement in mental health and tranquility.

Non-Rhythmic Sensory Stimuli are connections with nature that may be analyzed statistically but may not be predicted easily. This pattern positively impacts heart rate and quantifies behavioral measures of attention and exploration.

Thermal Airflow and Variability are the subtle changes in air temperature across the skin that mimic natural environments. This pattern has been shown to improve comfort, productivity, concentration and well-being.

Presence of water enhances the experience of a place through seeing, hearing or touching water. This pattern has been shown to reduce stress, increase tranquil feelings, lower heart rate, improve memory restoration and has positive emotional responses.

Dynamic and Diffuse light leverages varying intensities of light and shadow that change over time to create conditions that occur in nature. This pattern positively impacts circadian rhythm and functioning.

Connection with natural systems is the awareness of natural processes especially seasonal and temporal changes characteristic of a healthy ecosystem. This pattern enhances positive health responses and shifts perception of the environment.

Biomorphic Forms & Patterns are symbolic references to contoured, textured or numerical arrangements that persist in nature. Biomorphic forms provide an observed view preference.

Material Connection with Nature include materials and elements from nature that, through minimal processing, reflect the local ecology or geology and create a distinct sense of place. This pattern has been shown to reduce blood pressure and improves comfort and creative performance.

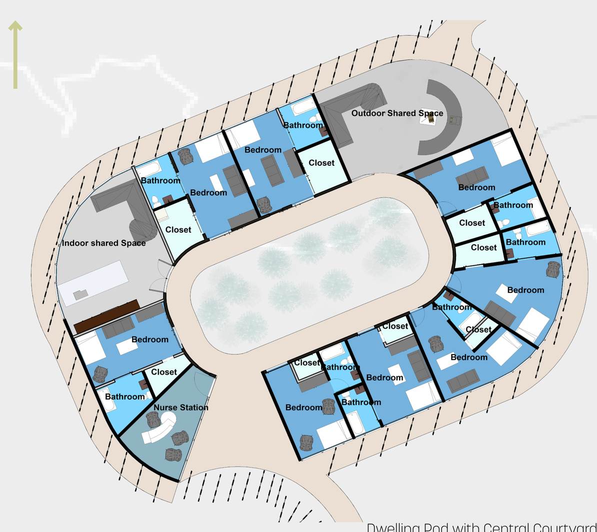
Complexity & Order is the rich sensory information that adheres to a spatial hierarchy similar to those encountered in nature. The geometry is organic, but the fluid geometry combines different architectural styles that preceded modern architecture. Order positively impacted perceptual and physiological stress responses in individuals.

Prospect is an unimpeded view over a distance for surveillance. This pattern has been shown to reduce boredom, irritation and fatigue and improve comfort and perceived safety.

Refuge is a place for withdrawal from main flow activity in which an individual is protected from behind and overhead. This pattern has been shown to improve concentration and perception of safety.

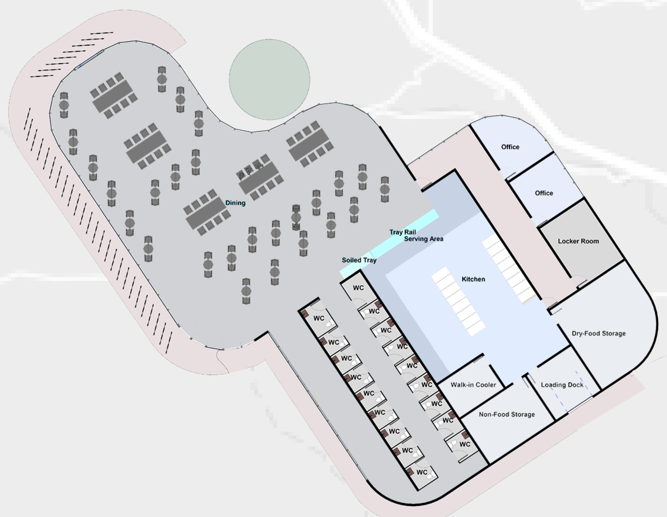
Mystery is the promise of more information through partially obscured views that entice the individual to travel deeper into the environment. This pattern has been shown to induce a strong pleasure response.

Risk is an identifiable threat coupled with a reliable safeguard. This pattern has been shown to increase dopamine, hence a strong pleasure response.



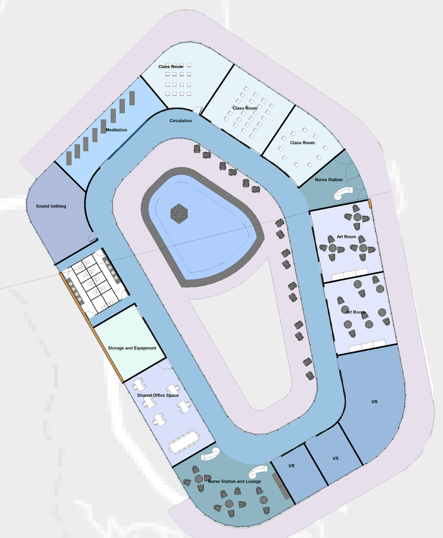
Dwelling Pod with Central Courtyard.

Scale: 1/8"-1'



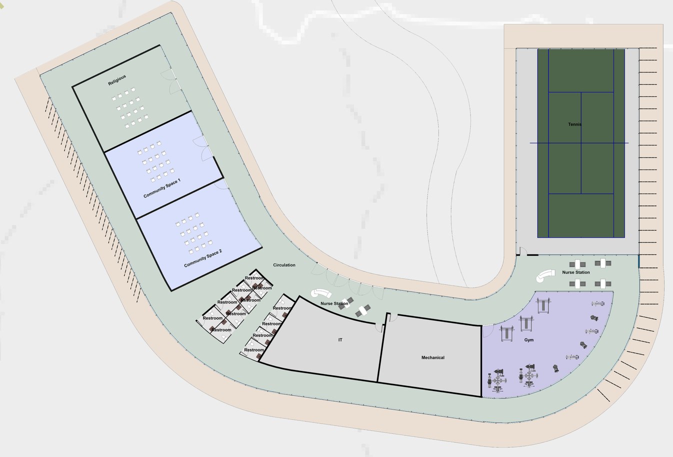
Dining and Kitchen Pod

Scale: 1/8"-1'



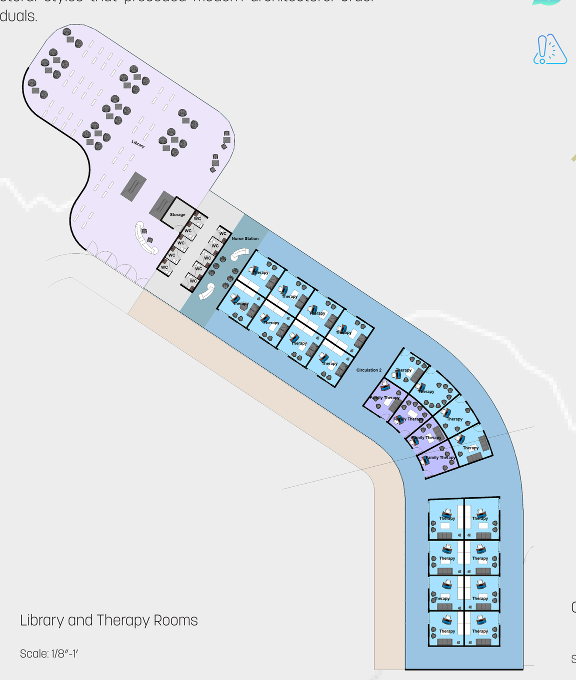
Art Center Pod

Scale: 1/8"-1'



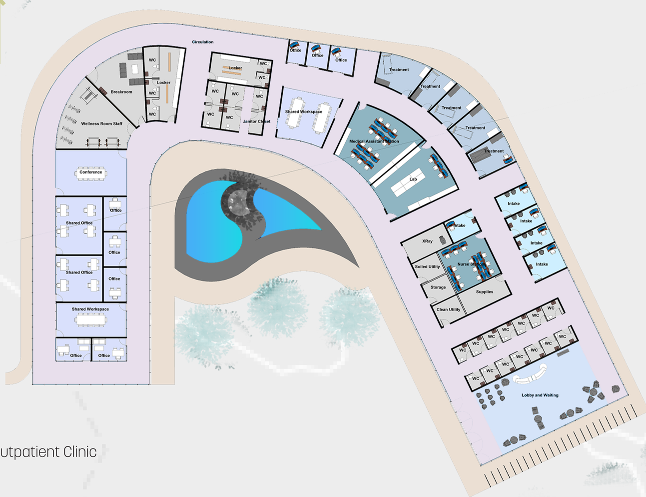
Tennis and Community Spaces Pod

Scale: 1/8"-1'



Library and Therapy Rooms

Scale: 1/8"-1'



Outpatient Clinic

Scale: 1/8"-1'

Interior of Dining room with skylights

North west view of dining and kitchen

The dining room has skylights located on the northern side to allow diffuse lighting in, which positively impacts circadian rhythm. Large glass windows offer a strong prospect where the extensive terrain of the Santa Barbara mountains can be surveilled. This has been shown to improve comfort, and reduce boredom and fatigue.

South view of therapy rooms

The therapy rooms have large windows with a direct connection to natural systems which enhances positive health responses by shifting the perception of the environment.

Corridor with view to central Courtyard

Entrance Lobby with admissions desk

The rooms and lobby of the outpatient clinic have visual connection to nature and dynamic lighting by use of big clear windows and vertical louvers with a hexagonal pattern that increases visual comfort and positively impacts mental engagement and attentiveness.

Exterior of Dwelling Pod

Studio

The dwelling courtyards have the vertical louvers to offer privacy to users, and offer a reliable safeguard that protects the residents from leaving the site. This is to impact physiological stress responses positively by having a place of refuge away from activity flow, but offering a choice to engage in social interaction.

Interior of Library

The interior of the library has a curved shape which brings mystery and variety. This results into strong dopamine levels and gives users an observed view preference.

Exterior Art Center

Entrance to Art Center

The Art Center has a central courtyard with a presence of water and different species of plants which increases feelings of tranquility, lowers heart rate and improves concentration, which is imperative in meditation and education. The windows have a spectrum of colors that positively impact circadian functioning by making colorful dynamic shadows.