

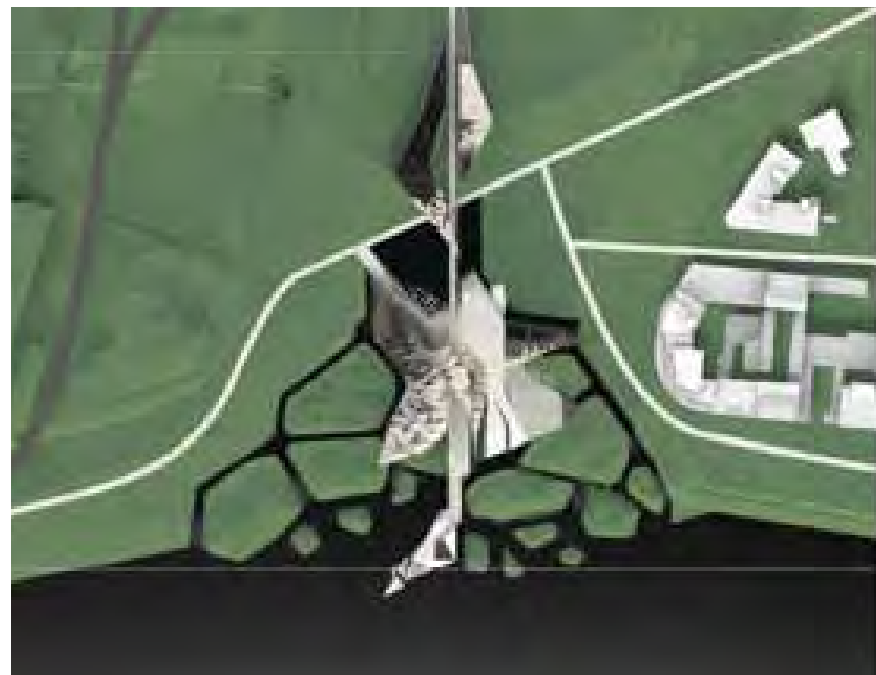
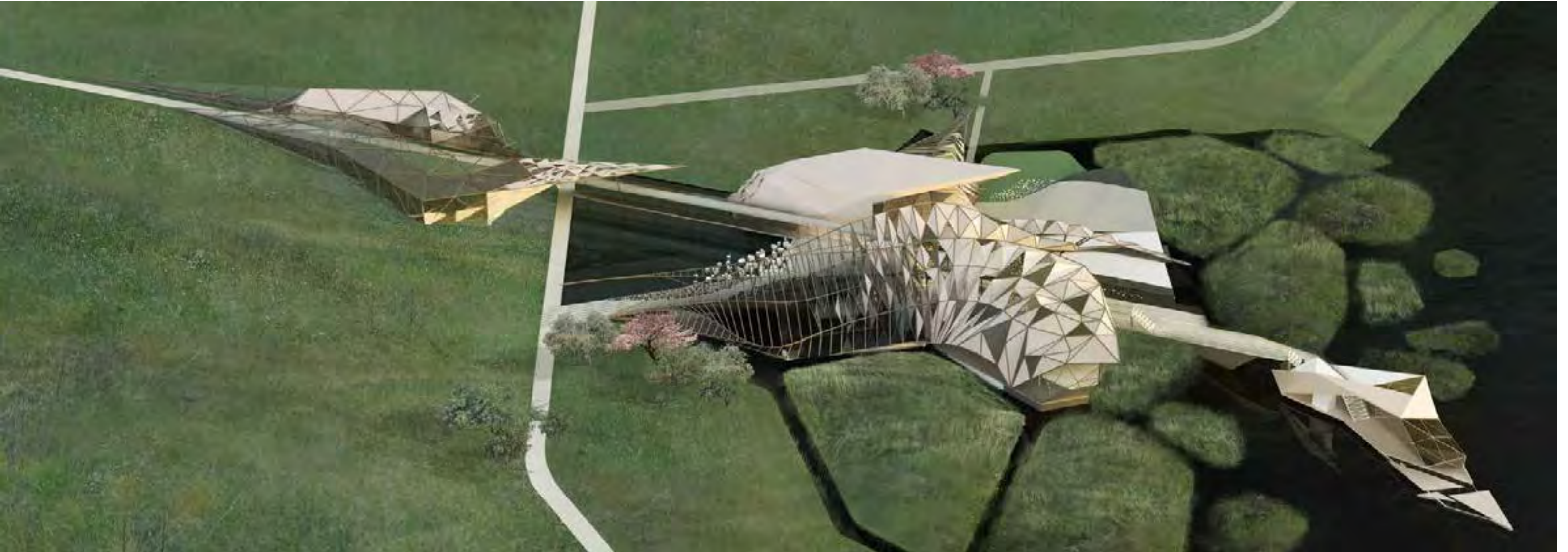
TEACHING PORTFOLIO & PEDAGOGY

For the past thirty-five years the Tejido Group has developed into an interdisciplinary and collaborative applied research program in which faculty and professionals in Architecture, Landscape Architecture, engineering and Planning work side by side with university graduate and undergraduate students in an apprenticeship-style professional learning environment. The Tejido Group is a direct extension of the applied research and community outreach activities of Dr. Mark Frederickson in Africa, Asia, Europe, Latin America, and the USA.

The works of Tejido stand as an effective illustration of Frederickson's leadership, management and pedagogic strategies. They also typify the exceptional outcomes of these complex multicultural and multidisciplinary collaborations. Dr. Frederickson is the founder and director of the Tejido Group and project manager on all projects. The following are select excerpts taken from recent student projects in: Botswana, the Czech Republic (Czechia), Hong Kong, Mexico, Oman, Palestine, Pakistan, Panama, Senegal, South Africa, Turkey, and the U.S., (the underlined title to each project links to a copy of the final published master planning monograph).

P R A G U E





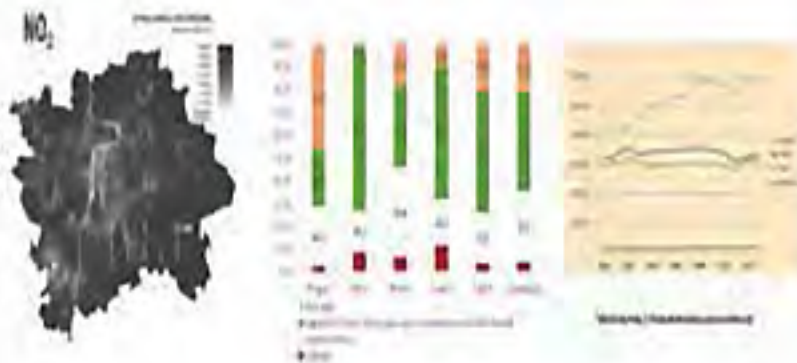


PRAGUE 7 / 4th year studio / Sustainable Urban Development - Brown Field Remediation / Selin Sahin.

ABOUT PRAGUE 7

Historically, the area offered favourable conditions for hunting, fishing, and for agriculture. During the period of Celtic settlement around the year 500 BC the so-called Bubeneč/Dejvice settlement existed here; it was a trade crossroads between north, south, west and east, where many different kinds of goods were exchanged. From the 1st to the 4th centuries AD, one of the largest centres of German iron working was to be found on the territory of today's Prague 6 and 7. With the gradual arrival of the Slavs, however, the centre of settlement shifted in the 8th - 9th centuries to what today is the Old Town.

The historic settlements of Holešovice and Bubeneč form the basis of Prague 7. Today, Prague 7 is a post-industrial site that is slowly developing and is still somewhat isolated from the rest of Prague.



GROWTH IN MOTION : VERTICAL FARM NG AND TRANSPORTATION HUB

Nature and humans: the connection is undeniable and yet, we have perhaps become so disconnected from it as distances have shortened down into minutes through modern technology and various modes of transportation.

Here in the post-industrial Prague 7, the project proposes a new or perhaps a more traditional vision of the future in which the separation once again ceases to exist and men and nature enable each other to prosper.

Drawing from the agricultural history of the site and combining it with its more recent political history, through movement in time and growth interpreted into physical movement, this building project along with its multi-phased masterplan, brings a new value to the Czech society from which they can be proud of.



ABOUT NON-PLACES

A non-place has a huge unused potential. It is usually somewhat only temporarily in existence in the experience of the person, which makes it a very fluid space. This fluidity may perhaps be the perfect environment for changes to start to occur. Once an idea is planted, as time passes and experiences accumulate, it will grow and finally when it's ready, it will present itself as if it has come down from the heavens.



PROMOTING GENDER EQUALITY
IN AFRICA, SENEGAL

A Sustainable Rural Living Prototype For Low Income
Women in Sub-Saharan Africa

SENEGAL

BİLKENT UNIVERSITY
Faculty of Art, Design and Architecture

SPRING 2021

Mark Paul Frederickson

Recep Ögüç

The Women's House

Phase 4:
Sustainable Community

Phase 3:
Production

Phase 2:
Collaboration /
Local Adoption

Phase 1:
Assembly / Construction



The Women's House
In the memory of all the women who embraced the world.



Segoditshane River Revitalization /Botswana

2023 / ARB 421 / 4th year Architecture Projects / University of Botswana /Dr. Katlego Mwale & Dr. Mark Paul Frederickson / Designer: Daniel Ferreira

BOTSWANA





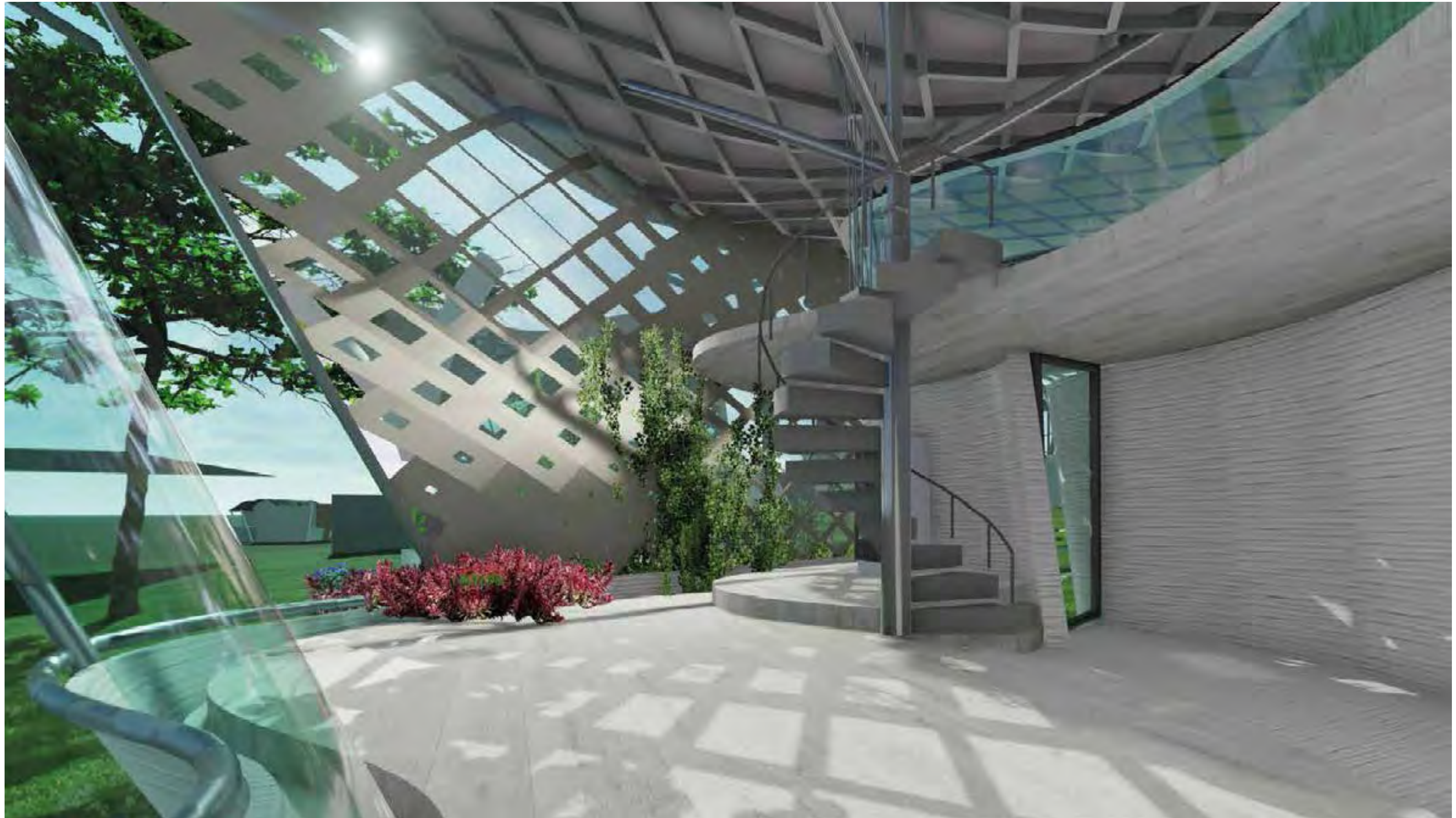
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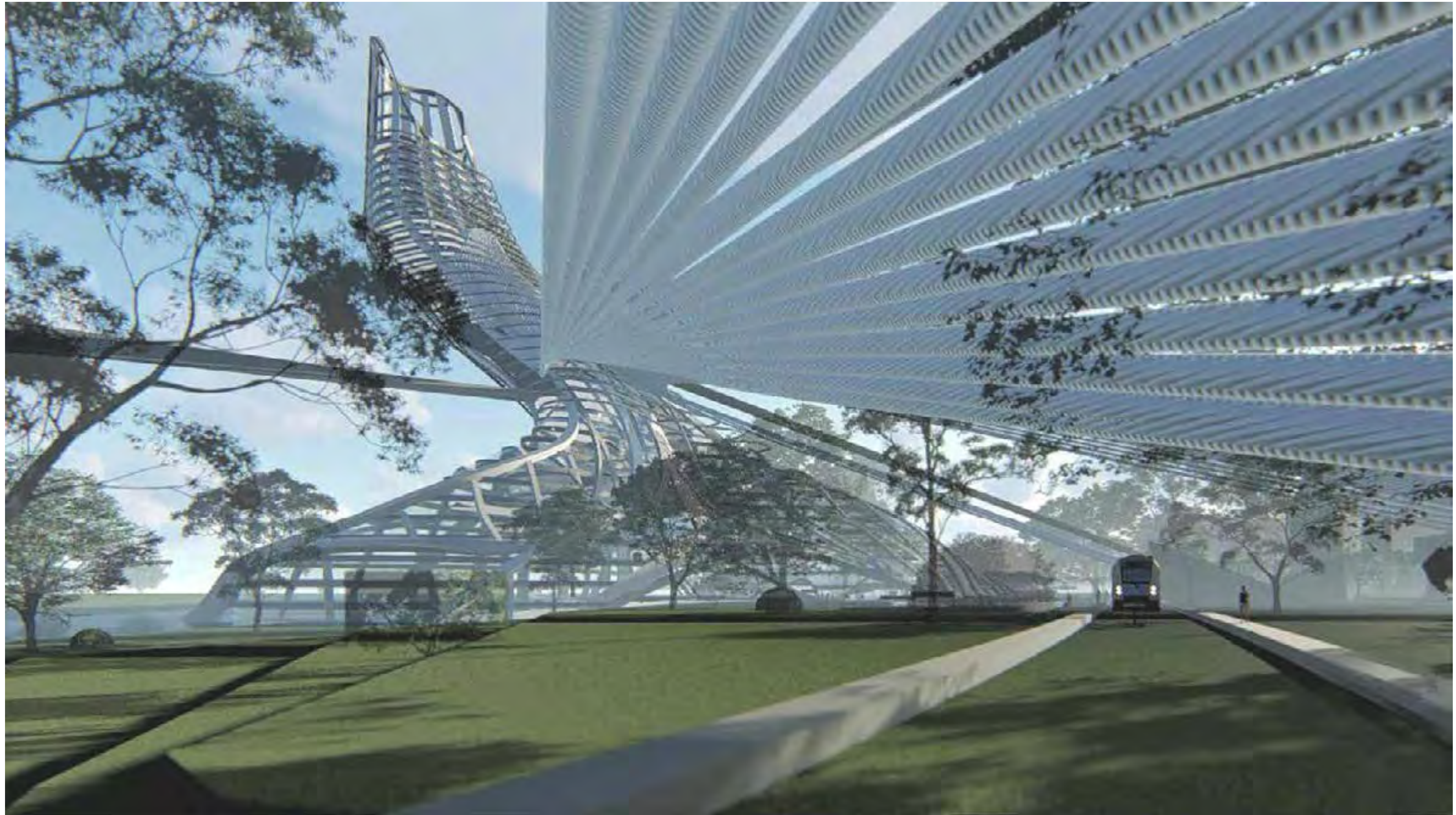




ANKARA







ISTANBUL



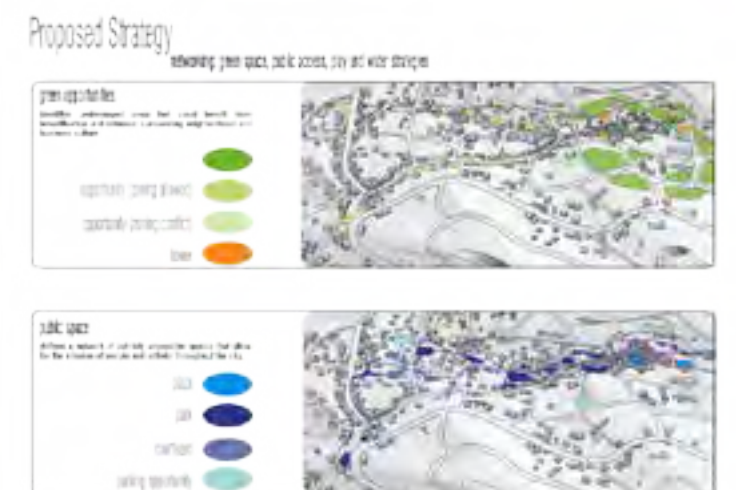




AL HAMRIYA / OMAN:

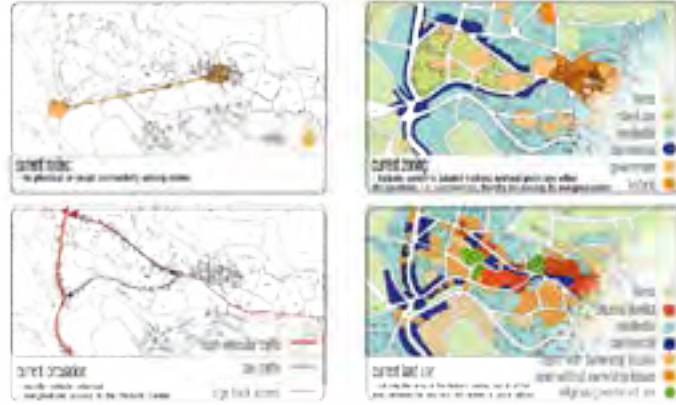
During Fall semester 2014, CAPLA offered a vertical, interdisciplinary and international studio integrated into the core curricula of our three schools. We developed an interdisciplinary team to participate in an urban design studio / practicum in Oman in collaboration with the planning offices of the Muscat Municipality. Their Director and Mayor of Muscat, Sultan bin Hamdoon Al Harthi, invited us to participate in the urban revitalization master planning of the Al Hamriya District of Muscat. The basic pedagogical intent of the program was to enhance cross-cultural and cross-disciplinary awareness, collaboration and learning in the students and faculty of Architecture, Landscape Architecture, and Planning in both the University of Arizona and the Sultan Qaboos University. We trust that the processes employed and the community development solutions generated during this complex and multi-layered project will eventually gain relevance and bear witness in subsequent research and professional work of all student and faculty participants. Although cultural and political schisms are at times all too apparent, students and faculty in the allied design and planning professions do in fact share many common goals. And, we chose to focus this studio experience on perhaps the most important of these objectives: that of creating and revitalizing urban fabric envisioned and developed across a range of interrelated variables that are also their own measures of sustainability. Although we remain apprehensive regarding the use of the term “sustainability”, we do honor it as an elusive yet worthy goal integrated into all of our planning and design efforts. We believe that a truly sustainable urban environment must necessarily be defined across an array of dimensions: economic, cultural, environmental, functional, and aesthetic.





Existing Conditions

nodes, circulation, land use, zoning



Existing Conditions

overall condition of the city

Node Separation



New City Center

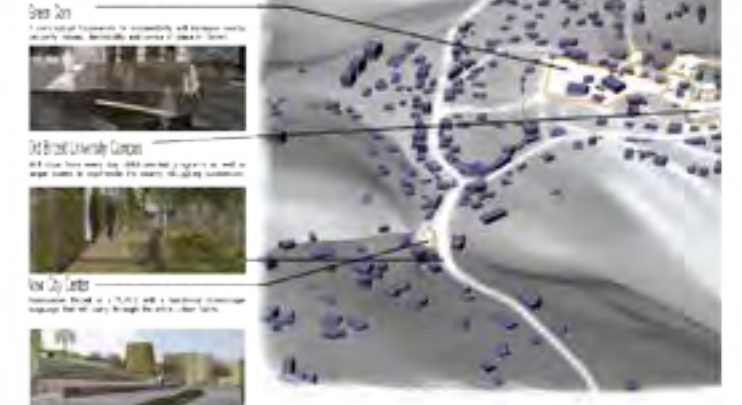


Old Brunei University Campus



Proposed Strategic Plan

overall condition of the city



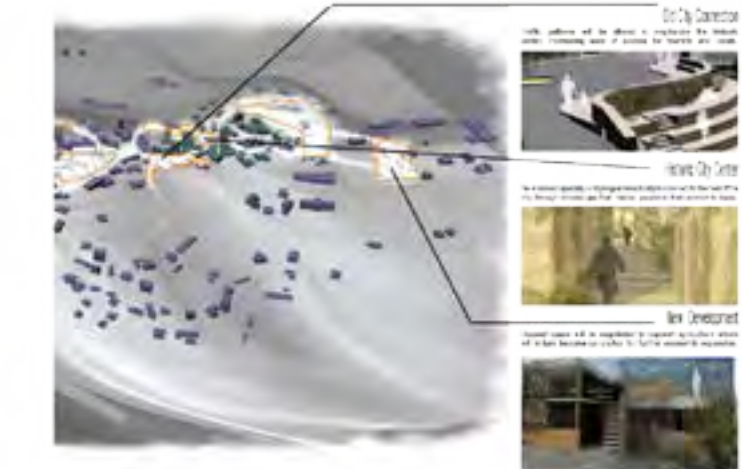
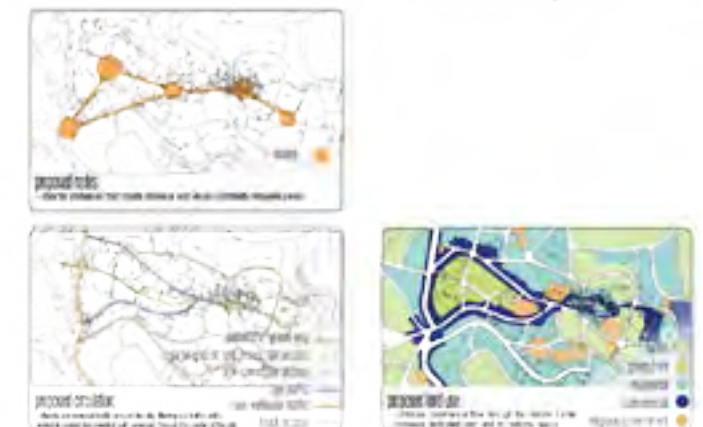
05 Old City Network

public network



Proposed Strategy

nodes, circulation, land use, zoning



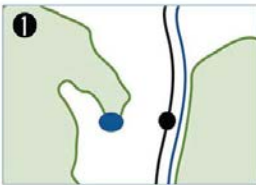
FRONTERAS / MEXICO:

Roberto Valenzuela in the Spring of 2008, approached the Tejido Group to develop a revitalization plan for Fronteras, Sonora, Mexico that would inspire economic stimulus as well as a plan for the anticipated future expansion of the town. The Valenzuelas articulated their vision of an enlivened Fronteras benefiting from the development of “diversified, grass roots enterprises” and an investment in infrastructure to support public health, light industrial and residential development. The Valenzuelas have since expanded their business to include eco-tourism adventures in the mountains that surround their ranch. Unfortunately, the culturally and historically vibrant town of Fronteras has not fared as well. Due to the closing of a local manufacturing facility in 2002, most jobs were lost. The lack of employment opportunities in Fronteras has forced many people to leave in search of work elsewhere. Despite the economic circumstances of the town, it is rich in cultural and natural resources which can serve as opportunities for economic stimulation. The town’s proximity to the Douglas, Arizona border to the north, the Sierra Madre mountain range to the east and west and its rich cultural history are all assets that could serve as a draw for tourism and investors. Community members have a vision for Fronteras, one with a healthier, more diversified economy for the town. A healthy economy will enable the children of Fronteras to remain if they choose and to raise their families in their hometown, secure in knowledge that there will be job opportunities for their children. Our clients envision a future full of growth and opportunity for the community. As Fronteras looks forward to a brighter future, having a master planning document to guide its development and growth has the potential to be a vital asset, particularly for attracting investment. This master planning document is intended to identify ways in which the town could be revitalized and to provide a basic road map for growth. It is important to note that this is a conceptual plan meant to stimulate discussion, begin the idea generation process and serve as a communication tool.

CONCEPT DEVELOPMENT | REGIONAL SCALE DIAGRAMS

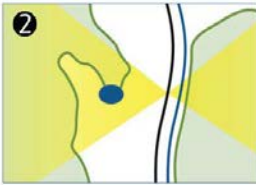


Regional aerial photo highlighting Highway 17 and the Nacozari River running parallel to another, the surrounding Sierra Madre and Lake Jurubana



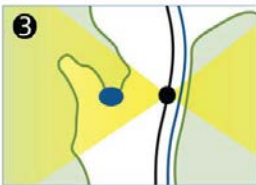
1. TARGET DESTINATION

Whereas Fronteras presently attracts little outside attention, it's rich history and unique environment will form the foundation upon which the town evolves into a dynamic tourism terminus. Fronteras will also exemplify novel economic diversification strategies with rural northern Mexico, and serve as a model for the surrounding municipalities.



2. EXPLORATION NODE

Fronteras currently pursues commercial interests along highway 17, yet, East/West points of interest will redirect traffic and provide more valuable cultural interaction between travelers and community members. The small town will anchor responsible recreational activities and unique educational endeavors along the beautiful landscape East/West of the highway.



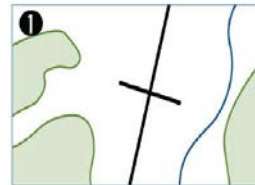
3. FRONTERAS FORKLIFT

Like a forklift, Fronteras will reach low into its cultural base to raise the economic standing of an entire municipality. Economic diversification strategies include environmental tourism, cultural tourism, alternative agricultural training, niche agricultural production, and produce marketing. Fronteras will thrive as it entices business through the outpouring of exceptional educational, recreational, and social opportunities.

CONCEPT DEVELOPMENT | LOCAL SCALE DIAGRAMS

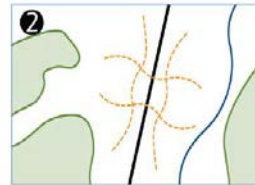


Fronteras local aerial photo highlighting Highway 17, the Nacozari River to the east and the old presidio to the west



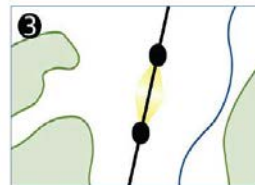
1. JUNCTION FUNCTION

Travelers may presently pass by the town of Fronteras without even recognizing its existence. A prominent East/West axis will slow traffic and welcome visitors off of the highway. This junction will lead guests toward several key activity nodes within the community, and form positive first impressions of the urban environment.



2. PEDESTRIAN LACES

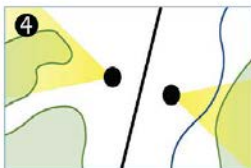
Fronteras is currently divided by a major rural highway, and encompasses several disjointed developments. Like the laces of a shoe, pedestrian corridors and streetscapes will bind various urban patches and unify seemingly dissociated land uses.



3. INNER RADIANCE

The majority of commercial activity in Fronteras presently occurs alongside Highway 17, as businesses pursue northbound and southbound travelers. Activity nodes on the northern and southern edges of the town will describe spatial functions along the highway and reveal town identity. These nodes will draw guests inward and unveil positive town sentiments about education, commerce, tourism, and community.

CONCEPT DEVELOPMENT | FINAL SYNTHESIS DIAGRAM

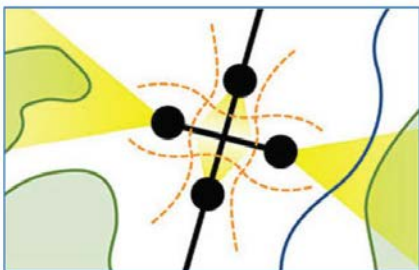


4. OUTER RADIANCE

While tremendous historical, environmental, and recreational interests lay east and west of the town of Fronteras, little has been done to organize, interpret, maintain, or unify these assets. Outer activity nodes will serve as sources of education and recreation, and encourage exploration in the surrounding environment. These nodes will orient visitors as well as provide meaningful interactions with community members.

FRONTERAS FUSION

Fronteras will enhance the lives of local residents through the integration of natural and cultural resources within its urban fabric and beyond. Redefined pedestrian and vehicular circulation routes will unite various community developments, and the gentle slowing of highway traffic will entice drivers to turn off and spend some time in Fronteras. Thoughtful activity nodes will reveal the true "face of Fronteras," and anchor various commercial, community, tourism, and education spaces. Fronteras will fuse town values with physical planning concepts.





GENERAL IGNACIO ZARAGOZA PROMENADE

The main portal into town is the road and railroad running through town, and the adjacent spaces are the face of Fronteras. The redesigning of the boulevard will help create an inviting and comfortable environment that attracts locals and visitor. In turn, this will bring much needed revenue for the town.

The boulevard was redesigned as a pedestrian plaza, primarily as an area for a farmers market, performances, religious festivities and other events. The redesign focuses on accommodating existing north-south pedestrian movement and across the railroad tracks at three designated pedestrian crossings. Local vehicular use was also considered in the redesign of the boulevard. Residents along the west side park their vehicles along the sidewalk, and the boulevard is used as a vehicular corridor. Keeping this use in mind, a one-way, 24km/h thoroughfare was designed, with continued use of parking.



In an effort to accommodate future land use, including the renovation of residential to mixed-use or light commercial, the sidewalk along the existing residential strip was widened to allow space for outdoor dining, passerby, seating, and vegetation. The landscape area in front of the residences is reserved for adjacent residents as communal landscaping space. Currently, neighboring residents use the median as a planting space for small fruit trees, annuals, and roses. The use of the new median will continue this tradition, and promote individual ownership of the new boulevard space.

The largest trees throughout the boulevard are meant to unify the space and create a continuous visual line that extends along the north-south axis,

but also extends east-west through the placitas, main town plaza, and the agricultural and architectural center. Smaller trees, shrubs, and accent plantings are used to create pedestrian scale and an aesthetically pleasing environment. The use of an array of tree sizes and dormancy periods also creates a variety of shade opportunities throughout the year. Trees between the railroad buffer zone and the boulevard are of a single species and serve as a physical and psychological buffer, while still allowing visibility across the railroad tracks.

The entry to Fronteras is its first impression and should be a major focus of redevelopment, beautification, and marketing for the town.

130 DESIGN

DESIGN 131



The gateway emphasizes the east-west axis. The design and materials are simple concrete and stucco, yet aligned with the local vernacular style. More than an architectural feature, it connects the east agriculture area with the west agriculture area through the urban corridor.

The water features are metamorphic of the existing and historic acequias throughout the region. Where possible, the water used will be from a non-potable source, or from an adjacent acequia. The reflecting pools and linear water feature have an interior black finish, designed to hold slow flowing water. The overall design aesthetic of the boulevard is contemporary, with crisp, clean construction lines and edges.



Seating areas are designed to accommodate a variety of users and activities, from people watching and outdoor performance, to private conversation and outdoor lecture. They are made from integral color concrete with a smooth finish.

The hardscape is composed of local stone in a square pattern and is consistent throughout the entire length and width of the boulevard, including the vehicular surface. The sidewalk surface is composed of the same, but the squares are half the size or less. Trees not in raised planters are set in a bed of local cobblestone, similar to the ones seen in Esqueda.



PLACITAS

The primary design goal inherent in the placitas and pedestrian walkways on the east side is to open up the existing barrier of buildings along Highway 17 in order to create circulatory and visual permeability. The placitas are intended to be places activated by commerce and deep, verdant vistas from the highway towards the east in a manner that creates secondary east-west axes.

By creating space that is pedestrian-only, the design increases social interaction and allows for integration of community. It encourages outdoor activity next to the comforting flow of historic acequias, and creates an opportunity for pedestrians, bikers, runners, and horseback riders to enjoy the beauty of Fronteras in an inviting public space. The walkways are programmed to be partially paved so that the space can be enjoyed by cyclists, parents with strollers, and disabled individuals.

DESIGN



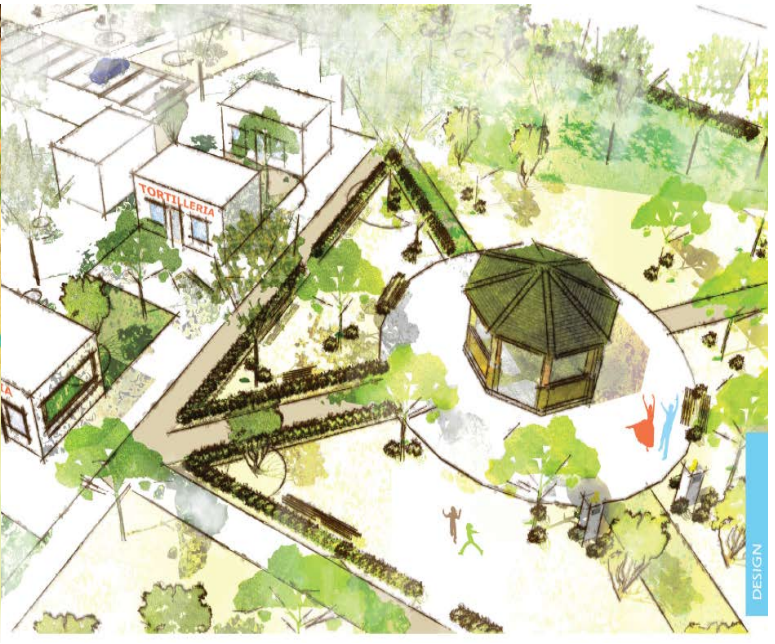
The placitas were designed to be "punch-out," connecting the activity along Highway 17 to the newly-developed pedestrian corridors on the backside. They have been sized and located around public aesthetic amenities to create small-scale commercial activity that could produce jobs and generate income for the local residents. Shop owners will be incentivized to take ownership of landscaped irrigated areas and walkways along their store-fronts in order to maintain an inviting customer environment.



The south placita creates an interior courtyard anchored by symbols of both potable and irrigation waters.

DESIGN 139

140 DESIGN



DESIGN



PLAZA

In Mexico, plazas serve a variety of purposes: park, party hall, gathering place, and landmark. Plazas are places for festivities and yet they are also places for reflection and solace. From elaborate quinceañeras and weddings to a simple coffee and conversation with a friend, Mexican plazas are spaces that are meant to be enjoyed. Plazas in Mexico also play a vital role in a town's identity, acting as a landmark and meeting place. Often when first visiting a town in Mexico, the plaza will be the place in town that you see and realize that you have arrived.

Fronteras' redesigned plaza has become more of a focal point within the town by connecting it to its surroundings. The planter wall between the plaza and auditorium has been removed and the plaza's main axis rotated, creating a welcoming forecourt to the town's cultural centers of activity. Within the plaza itself much of the geometry remains as this clearly directs movement in all directions. Removal of the fence surrounding the plaza and the addition of smaller trees transforms the plaza into an inviting and comfortable place.



146 DESIGN

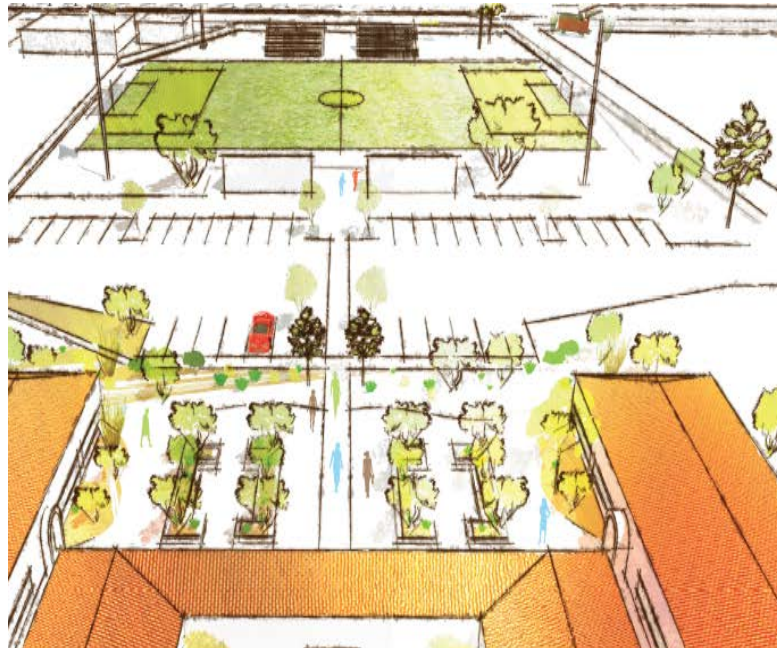


EDUCATIONAL DISTRICT

The educational district anchors the southern end of Fronteras and connects with the Gral. Ignacio Zaragoza Promenade. This zone lies between the Yaqui, Balcon, and Girasoles residential neighborhoods. Access to the educational district is pedestrian-oriented, although vehicles may enter from Plutarco Elias Calles road or the newly proposed highway exit, which crosses Blvd. Jose Lopez Portillo south of the present sports facility. Traffic calming strategies must receive the highest priority, in order to slow vehicular circulation throughout the entire district.

This educational zone would include daycare as well as primary, middle, and secondary school facilities. This region preserves the town's pastoral aesthetic and encourages continued agricultural involvement throughout the landscape. Within the educational district the secondary school assumes stewardship of the current sports ground, and provides the maintenance required for a model playing field. This sports field would accommodate students throughout the day, while catering to large outdoor sporting events on weekday evenings, weekends, and holidays.

DESIGN



DESIGN 151