Punta Gorda Resilient *Futures*

Punta Gorda City Council | May 20, 2026

Christian Calle, Assistant Scholar + Urban Designer
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NATIONAL ACADEMIES Sciences Engineering Medicine

UF UNIVERSITY of FLORIDA

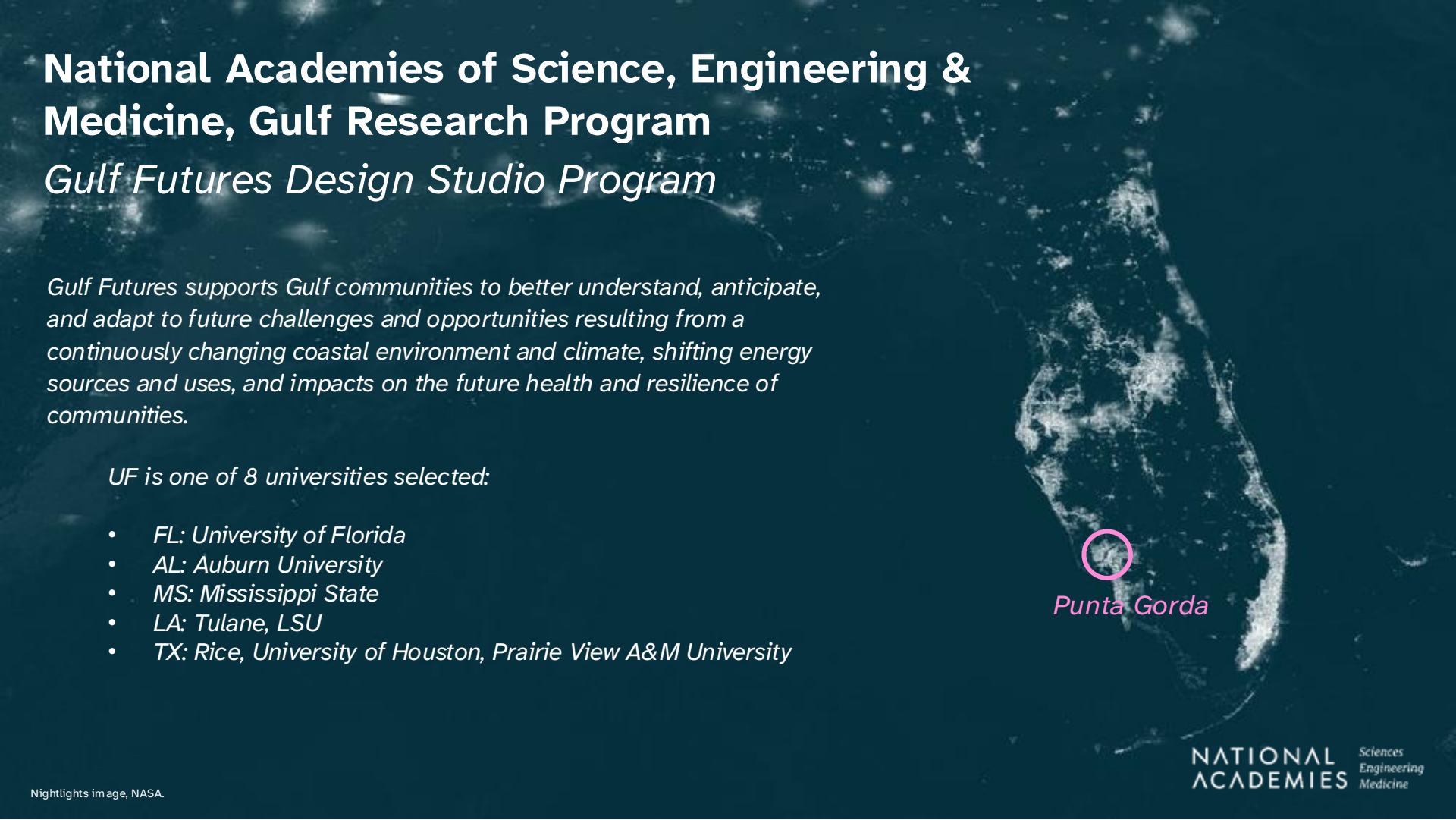
National Academies of Science, Engineering & Medicine, Gulf Research Program

Gulf Futures Design Studio Program

Gulf Futures supports Gulf communities to better understand, anticipate, and adapt to future challenges and opportunities resulting from a continuously changing coastal environment and climate, shifting energy sources and uses, and impacts on the future health and resilience of communities.

UF is one of 8 universities selected:

- *FL: University of Florida*
- *AL: Auburn University*
- *MS: Mississippi State*
- *LA: Tulane, LSU*
- *TX: Rice, University of Houston, Prairie View A&M University*



NATIONAL ACADEMIES Sciences Engineering Medicine

Nightlights image, NASA.

“In the longer run and for wide-reaching issues, more creative solutions tend to come from imaginative interdisciplinary collaboration.”

– **Robert J. Shiller**, Sterling Professor Emeritus of Economics, Yale University

Punta Gorda

Punta Gorda after Hurricane Milton in October 2024

Punta Gorda Downtown


Punta Gorda Downtown Cat1 Hurricane


Punta Gorda Downtown FEMA 100yr floodplain


City Center Site

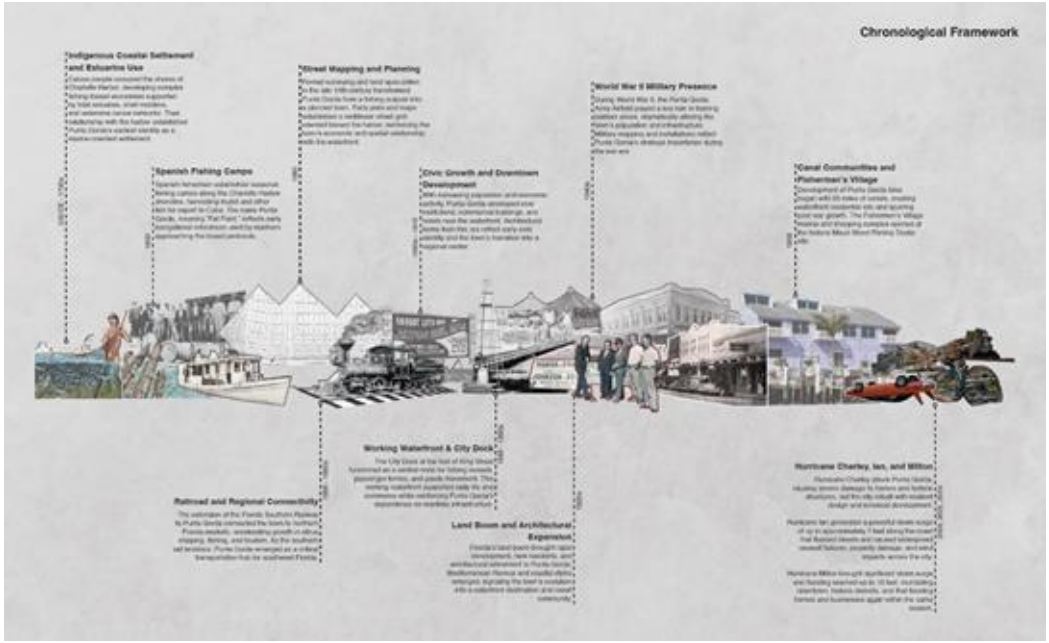
How can we re-imagine the city center through **nature-based infrastructure** and **storm-resilient architecture** to reinvigorate Punta Gorda's downtown area?

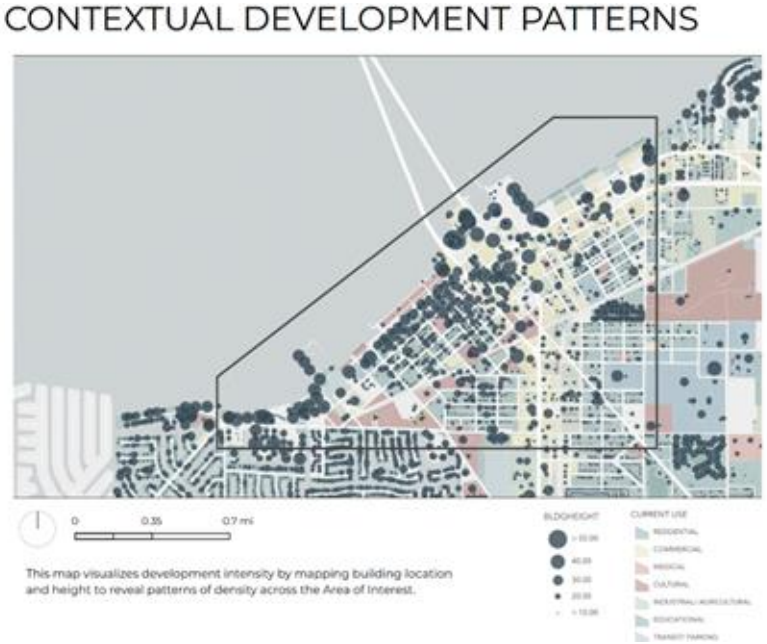
City Center Site

“City Marketplace” Parcel, Downtown PG

Urban Master Plan Framework for City Marketplace Site

Area of Interest Analysis

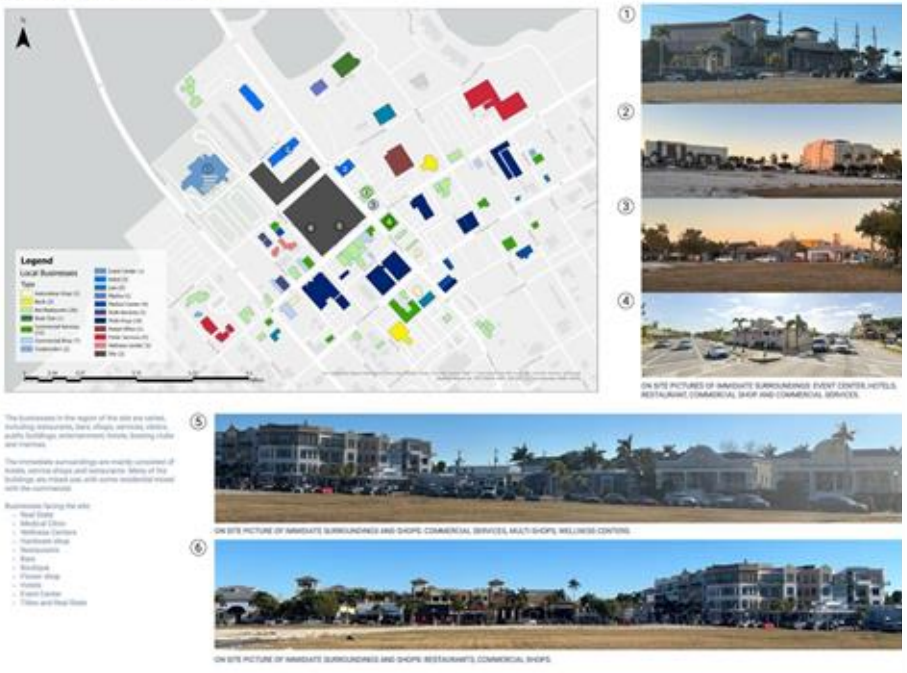




Group 1- Chronological Framework, Development Patterns

Site Analysis

Local Businesses



Team 7- Matthew Sinclair, Rebecca Brown

Stormwater Infrastructure

GRATED CATCH BASIN (On-site)

CURB INLET (STREET EDGE)

Team 4- Veronica Cancio Amadeo, Andrea Otalora

2-Day Field Trip to Punta Gorda!

Team 2 (Bianca Castillo, Kate Bonnoront)

Team 3 (Sam Kaplan and Noah Kartagener)


Babcock Ranch Preserve
EMERGENCY EXIT

Babcock Ranch Development

Co-Design Charrette

Team Manifestos

Punta Gorda

Coastal Resilience IS Community Resilience

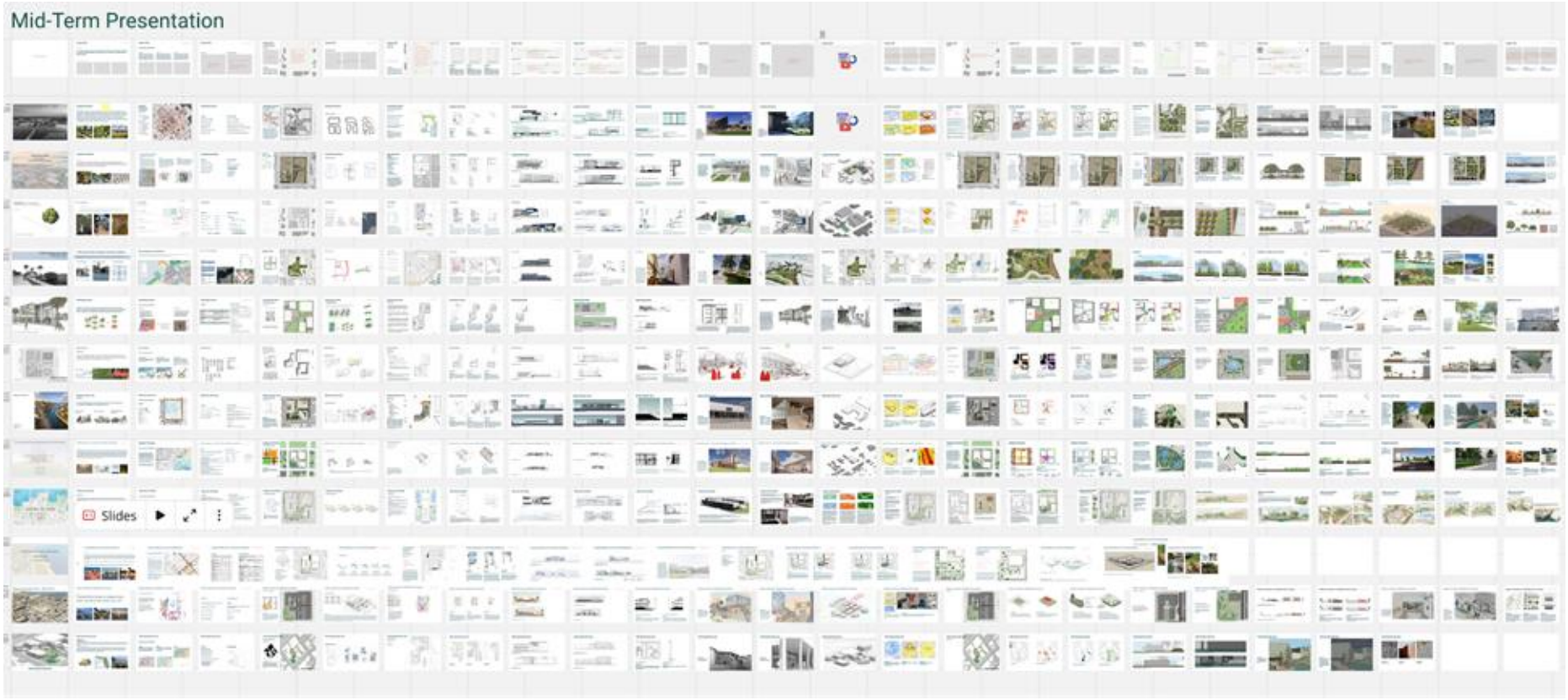
Spencer + Rebecca

Can a single site simultaneously restore ecological function, rebuild social infrastructure, and generate economic value in a landscape defined by uncertainty and change?

Designing with Water

Our greater vision for the City of Punta Gorda is to **design with water**. Florida's ecological history is centered around water, and we want to not just manage for it, but bring it to the forefront.

Many Design Iterations



Final Reviews!

Project 1: Welcome the Water

Rosalba Matta, Branden Justin

Project goal is to reimagine the site as a resilient urban landscape where public life, ecological performance, and water management are closely integrated. The project uses landscape as the connective system that organizes movement, supports gathering, and responds to the flood-prone conditions of Punta Gorda. Through this approach, water becomes not only a risk to manage, but also a visible and formative element of place.

Welcome the Water

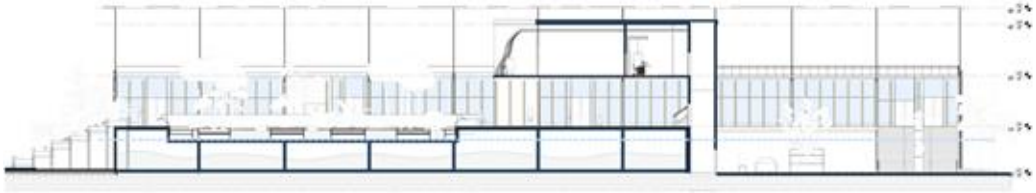
Rosalba Matta, Branden Justin

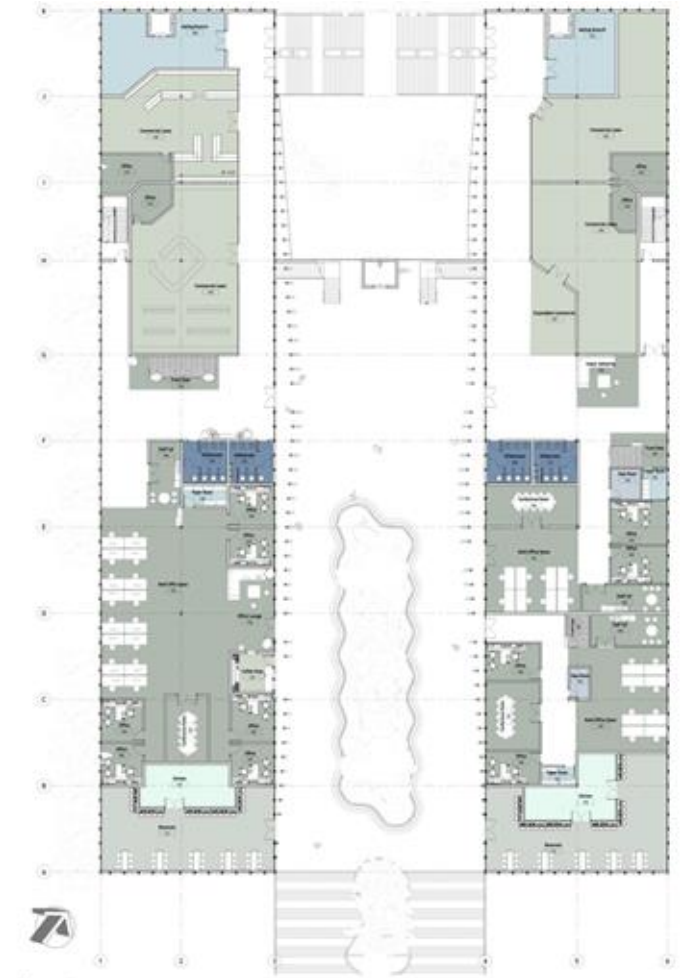
Landscape Section Zoom 1

This section highlights the bioswale as a planted stormwater system integrated with circulation and public space. Grading, planting, and water conveyance work together to slow runoff, support infiltration, and create a visible ecological edge within the site.

Landscape Plan Zoom 1

Welcome the Water

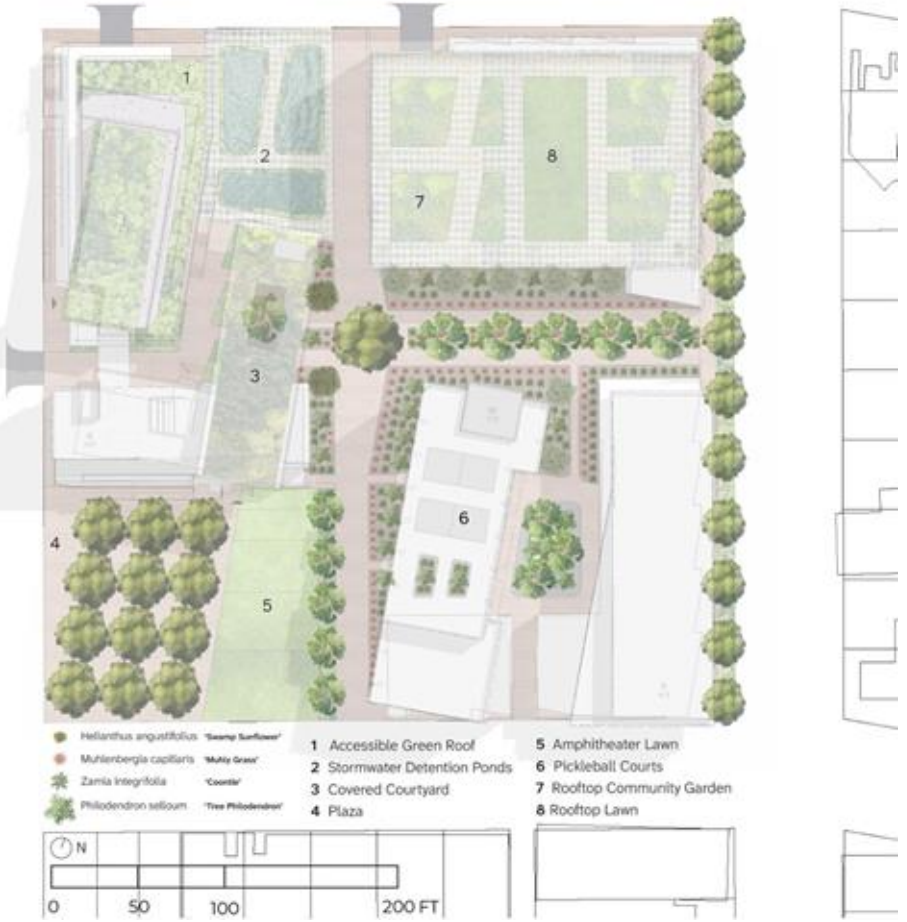




First Floor Scale 1/16"=1'

Project 2: Civic Waters

Sam Kaplan, Noah Kartagener



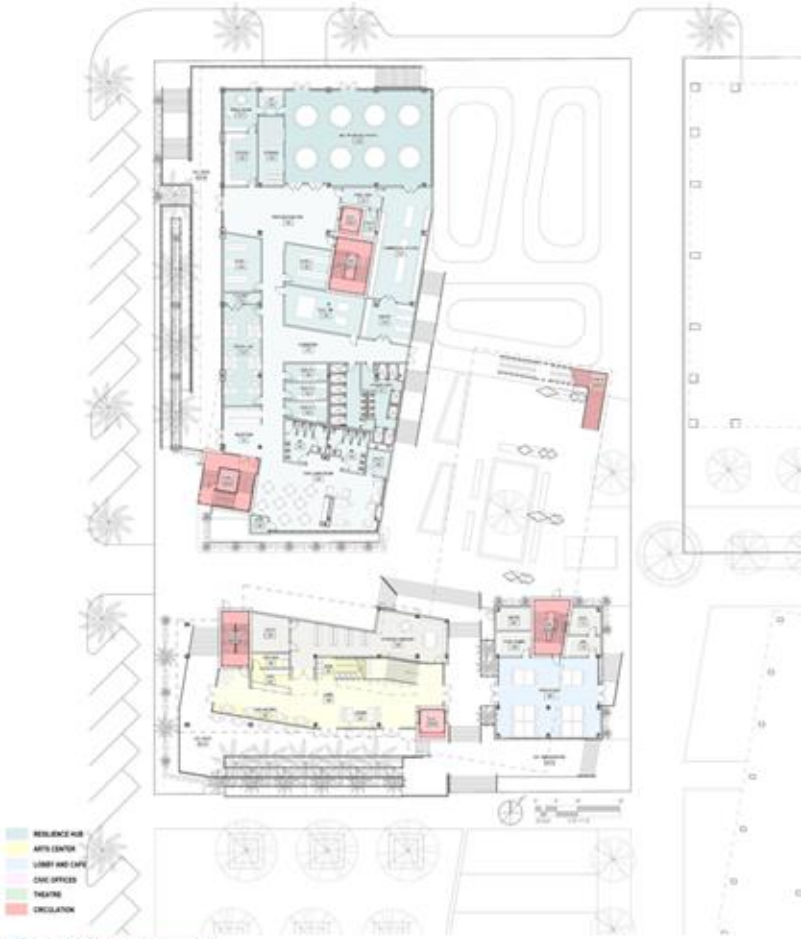
The City Marketplace site in Punta Gorda has an undeveloped potential to serve as a community hub of activity and culture, located in the heart of the downtown urban context. Our design aims to mesh stormwater management, structural adaptivity, and ecological function to provide the community of Punta Gorda with a comfortable and accessible space for year-round use.

Sam Kaplan, Noah Kartagener

Civic Waters

Landscape Plan Zoom 1

Landscape Section Zoom 1



First Floor Scale 1/16"=1'

Project 3: Stitching the Void

Sam Schneider, Anairis Torrado Ruiz

Stitching spaces to enhance community
Our resilient redevelopment proposal focuses on stitching the centralized site back into its surrounding context through enhanced connectivity, active engagement, and integrated water management strategies. By addressing the existing fragmentation within Punta Gorda, the project establishes a new point of connection— transforming the void into a catalyst for future growth that interweaves circulation, landscape, and program.

Masterplan

Stitching the Void

Sam Schneider, Anairis Torrado Ruiz

Project 4: Currents of Community

Rebecca Brown, Spencer Addis

Project 5: Coastal Commons

Spencer Asofsky, Ricky McFarland

This project explores the integration of landscape architecture and architecture in shaping a resilient environment that manages water, supports ecological resilience, and serves the community through integrated programming.

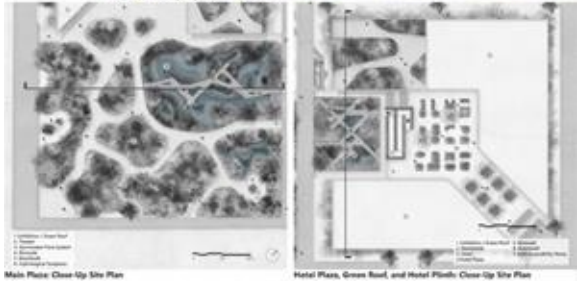
Site Analysis + Synthesis

Masterplan Parti Diagram

Axonometry massing + Use Color-Coded

Masterplan

Perspective- Sunny Day vs Storm Conditions



Main Plaza: Close-Up Site Plan

Hotel Plaza, Green Roof, and Hotel Plinth: Close-Up Site Plan

Plaza Vegetative Massings and Bioswale

Hotel and Residential Plaza Stormwater Systems

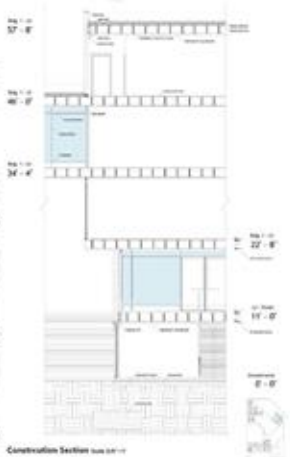
Perspective Section

Parti Diagram

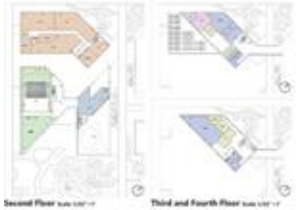
Perspective - Plaza to Plinth Connection

Project Information

First Floor



Construction Section



Second Floor

Third and Fourth Floor

Lessons Learned!

- Resilient **design is not just about storm protection, there are multiple co-benefits** for environment, economy, culture, recreation, etc.
- Resilient buildings can serve **many community purposes** including during "sunny days" as community facilities, arts venues, entertainment centers, and more, while also serving as a **hub for resources** for before and after disasters
- Landscape interventions can achieve **multiple performance metrics** related to biodiversity, pollinator habitat, water quality, stormwater management, etc.
- Opportunities for **new approaches to stormwater management**, however, high water table and seasonal tidal fluctuations also limit the infiltration, creating limits in capacity
- Many opportunities **creative use of public open space** for different community activities, like marketplaces, gathering spaces, outdoor amphitheater, play areas, sculpture gardens, water features, and more!

Lessons Learned!

- We can treat **flood hazard risks as catalysts for community redevelopment**, and create an enhanced public realm that improves both flood resilience and enriches community identity

- Successful projects carefully **integrate landscape and architectural strategies**; intermediate public spaces and other landscape features can create a inviting transition spaces and public amenities

- In commercial areas, **buildings can be designed to safely accommodate water without losing their civic functions**; split-level programming and mezzanines can allow a floodable ground level that still supports vibrant commercial use

University of Florida

Landscape Architecture

Spencer Asofsky
Kate Bonnoront
Sam Kaplan
Veronica Cancio Amadeo
Andrea Otalora
Samantha Schneider
Matt Sinclair
Aerille Agnew
Ana Castro Monteiro Borges
Rosalba Matta Machado
Rebecca Brown
Yiyi Liu
Rosa Shuman
Sebastian Martinez-Wittinghan

Architecture

Ricky McFarland
Bianca Castillo
Noah Kartagener
Marc Burrell
Anairis Torrado Ruiz
Elwyn Hofmann
Alejandro Murillo-Sanchez
Gina Roca Camacho
Branden Justin
Spencer Addis
Chase Stottlemire
Luke VanDenBergh