

An aerial photograph of a braided river delta. The river channels are light-colored, winding through a darker, sandy and silty landscape. In the background, there is a dense forest of evergreen trees, and further back, a range of mountains under a clear sky. The water in the foreground is a milky, light blue-green color.

# WATERSCAPE WALK

LD6 Concept Development | Stephen Chavez

Summer 2025

Callie Ham

# TABLE OF CONTENTS

## PRE-DESIGN

Context and History.....	2
Site History Timeline.....	3
Site Analysis.....	5
Site Inventory.....	9
Site Constraints.....	10
Site Opportunities.....	11
Precedent Case Study 1.....	12
Precedent Case Study 2.....	13
Precedent Case Study 3.....	14

## DESIGN DEVELOPMENT

Design Alternative 1: Low Budget.....	15
Design Alternative 2: Medium Budget.....	16
Design Alternative 3: High Budget.....	17
Inspiration Board.....	18

## FINAL DESIGN

Final Master Plan: Waterscape Walk.....	19
Sections.....	21
Sketches.....	22
Perspectives.....	24
Walk Through Video .....	27

# CONTEXT

## SITE LOCATION



# HISTORY

## NATURAL, CULTURAL, & BUILT TIMELINE

**1850s - 1900s**  
*American Era*

San Fernando Valley transformed into farmland and suburbs, disrupting natural hydrology and increasing runoff and erosion.



**1914 & 1938s**  
*Major Floods*

Devastating floods in the LA basin led to calls for infrastructure-based flood control.



**1940s-1950s**  
*Channelization of Tujunga Wash*

U.S. Army Corps of Engineers concretized the wash, turning the once-ecological corridor into a sterile flood control channel. Ecological collapse of native habitat occurred.



**2000s-Present**  
*River Revitalization*

Growing momentum to re-green the channel and restore ecology.



**Pre-Colonial Era**  
*Tongva Stewardship*

Tujunga Wash supported natural ecosystems. Tongva used the wash as a cultural and ceremonial landscape.



**1769-1848**  
*Spanish & Mexican Period*

Spanish colonization suppressed Indigenous culture and stewardship of the land. Mission San Fernando Rey absorbed local labor and lands.



**1960s-1970s**  
*Civil Rights & Chicano Movement*

Racial organizing grew, particularly among Chicano, Black, & Asian-American communities in LA. Public art and muralism emerged as tools of cultural visibility and resistance.

**1974**  
*Great Wall of Los Angeles Begins*

Led by Judy Baca, the mural project mobilized over 400 youth, artists, and historians to create a people's history in public space.



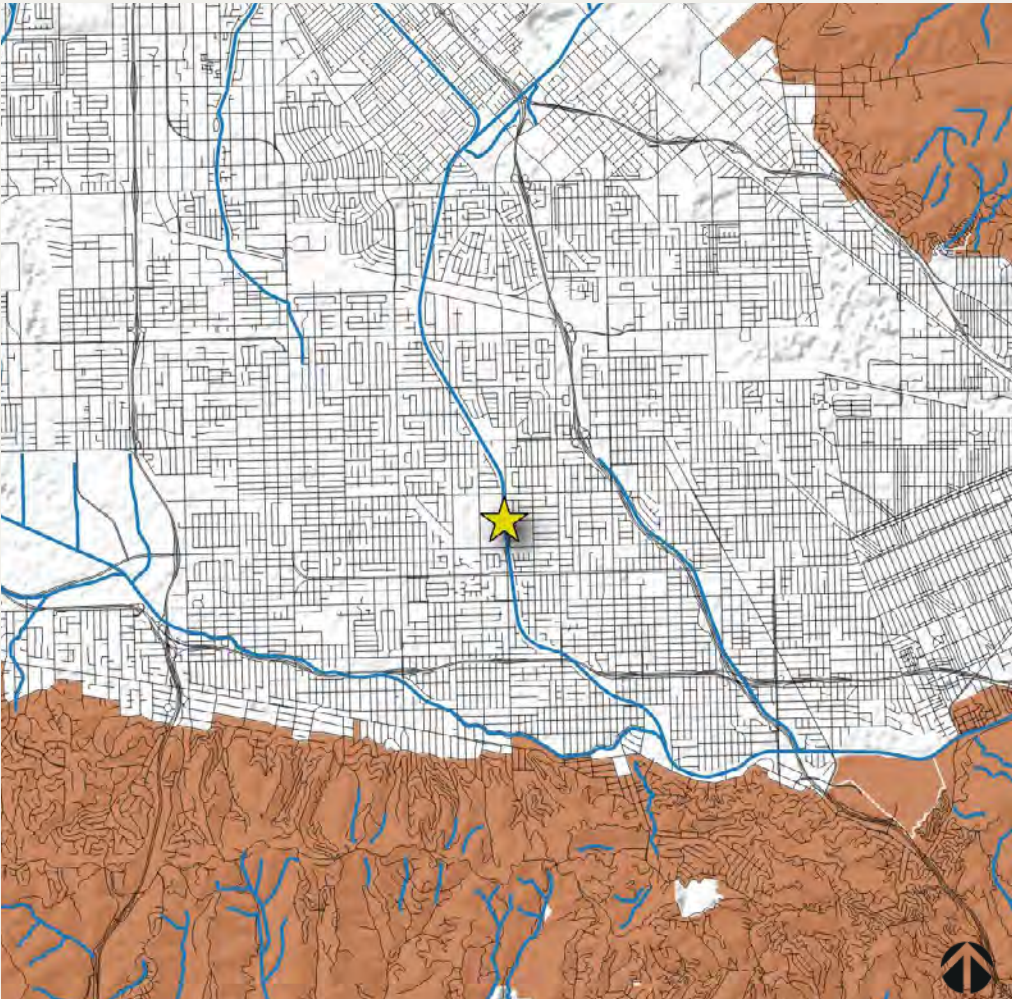
**Today**  
*Mural Expansion*

New murals continue to be added to GWOLA, reflecting contemporary struggles. GWOLA is now internationally recognized as a model for socially engaged public art.



# SITE ANALYSIS

## ENVIRONMENTAL HAZARDS

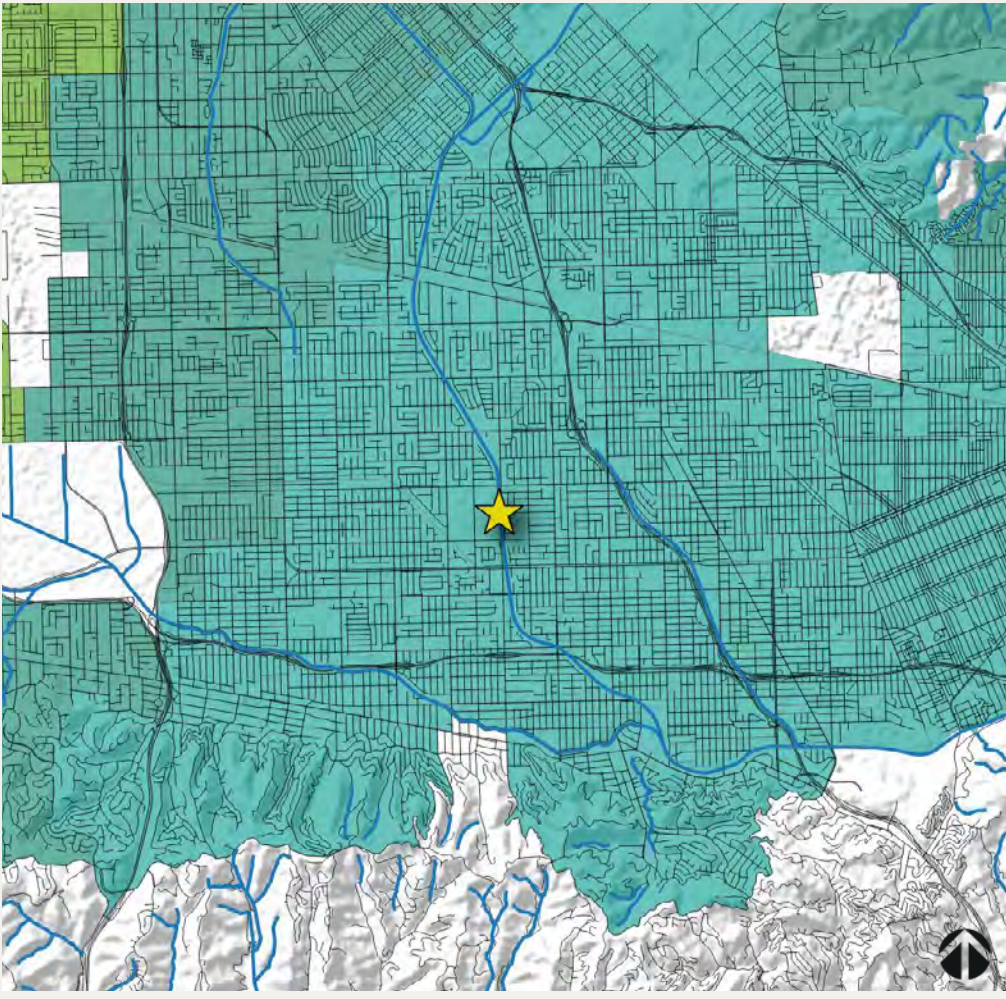


**FIRE HAZARD SEVERITY ZONES**

Source: CalFire NTS

Very High

The wildfire risk is considered very high in the non-urban areas surrounding the site.

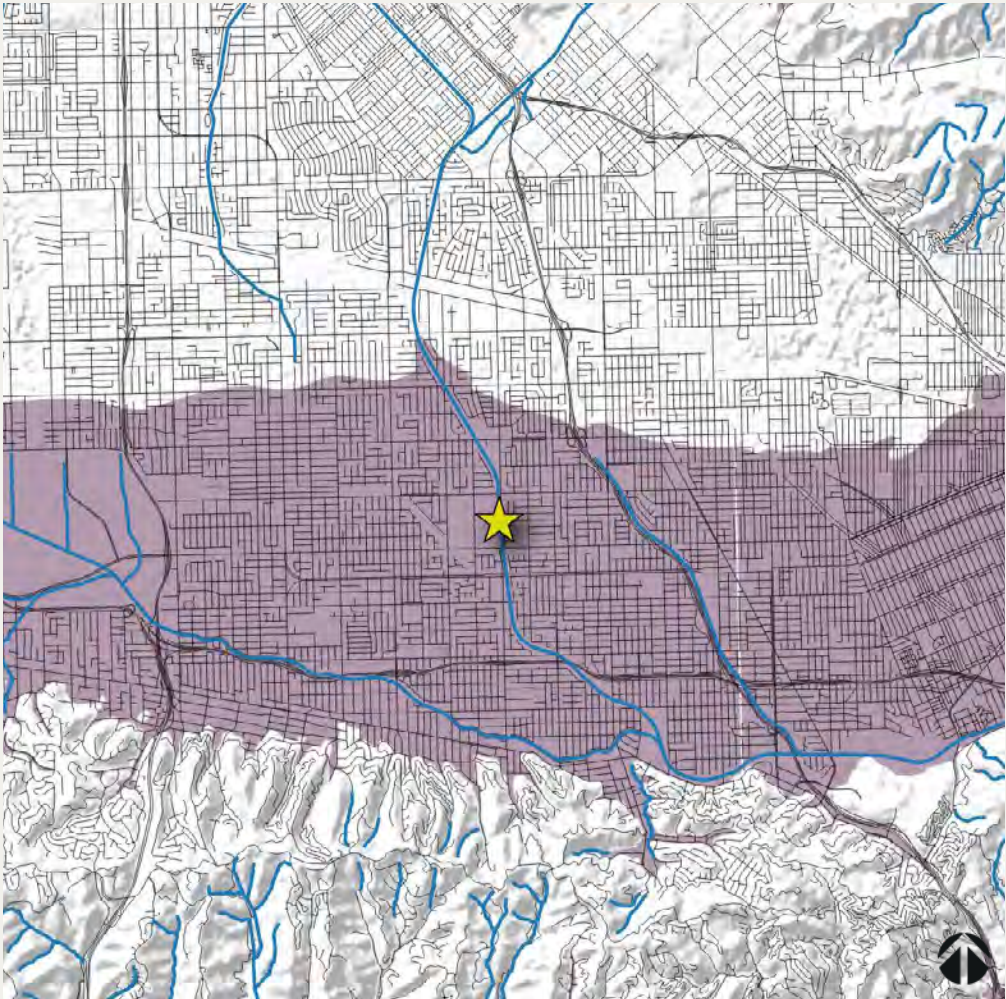


**URBAN HEAT ISLAND INDEX**

Source: CalEPA NTS

- 0-10
- 11-20
- 21-30
- 41-50
- 51-60

The site experiences a low to moderate heat island effect (0-10 degree-hours per day).



**LIQUEFACTION ZONES**

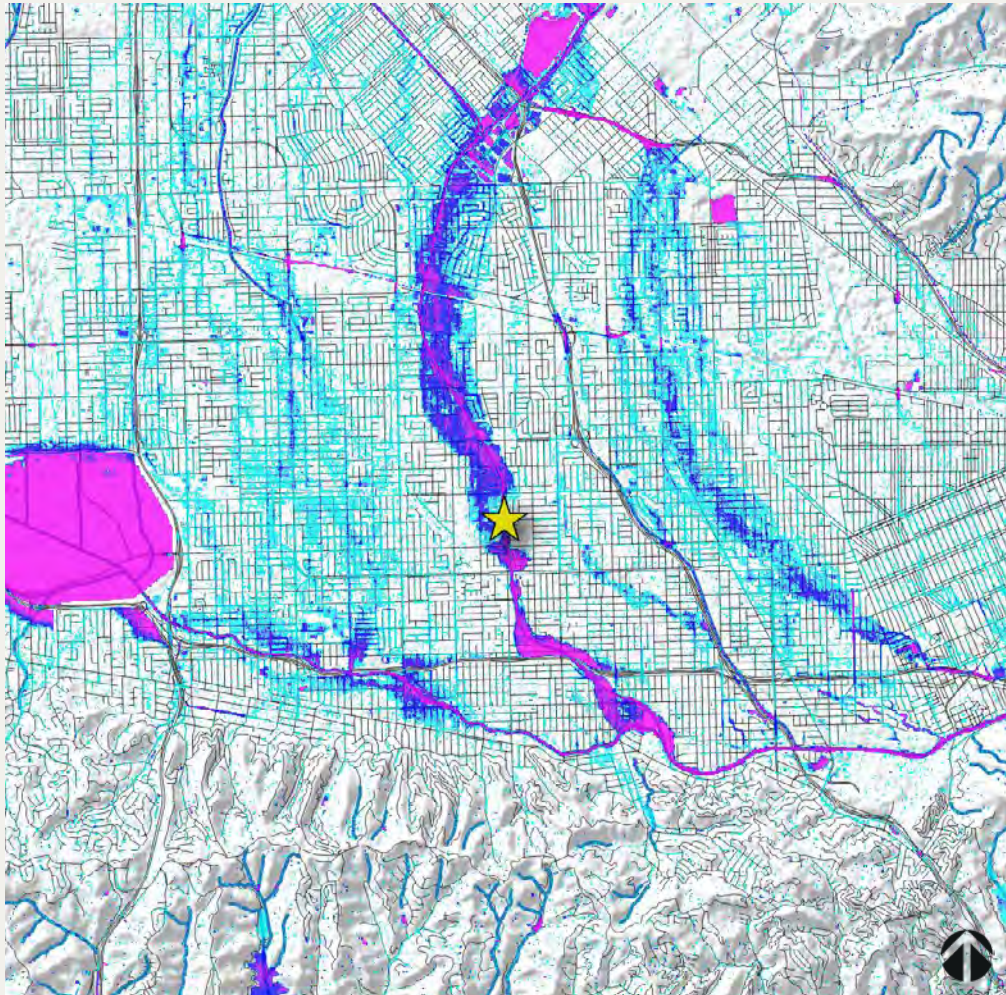
Source: County of L.A. NTS

Liquefaction zone

Liquefaction zones show areas where the ground's stability needs to be evaluated, and steps must be taken to ensure safe building design and construction for human use.

# SITE ANALYSIS

## WATERSHED & STORMWATER MANAGEMENT

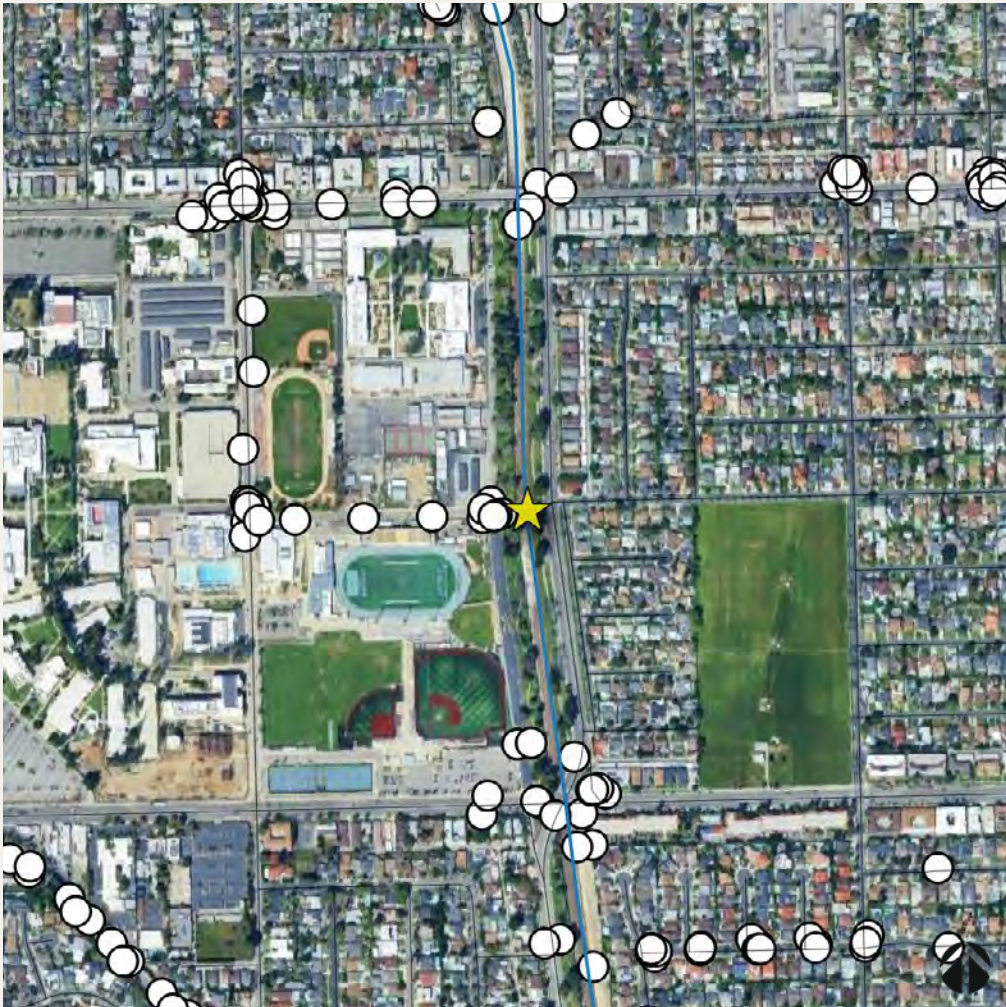


100 YEAR EVENT FLOOD RISK

Source: FEMA NTS

- < Ankle (0.1 - 0.35 ft.)
- Ankle to Knee (0.35 - 1.5 ft.)
- Knee to Waist (1.5 - 3.3 ft.)
- Waist to Head (3.3 - 5.6 ft.)
- > Head (> 5.6 ft.)

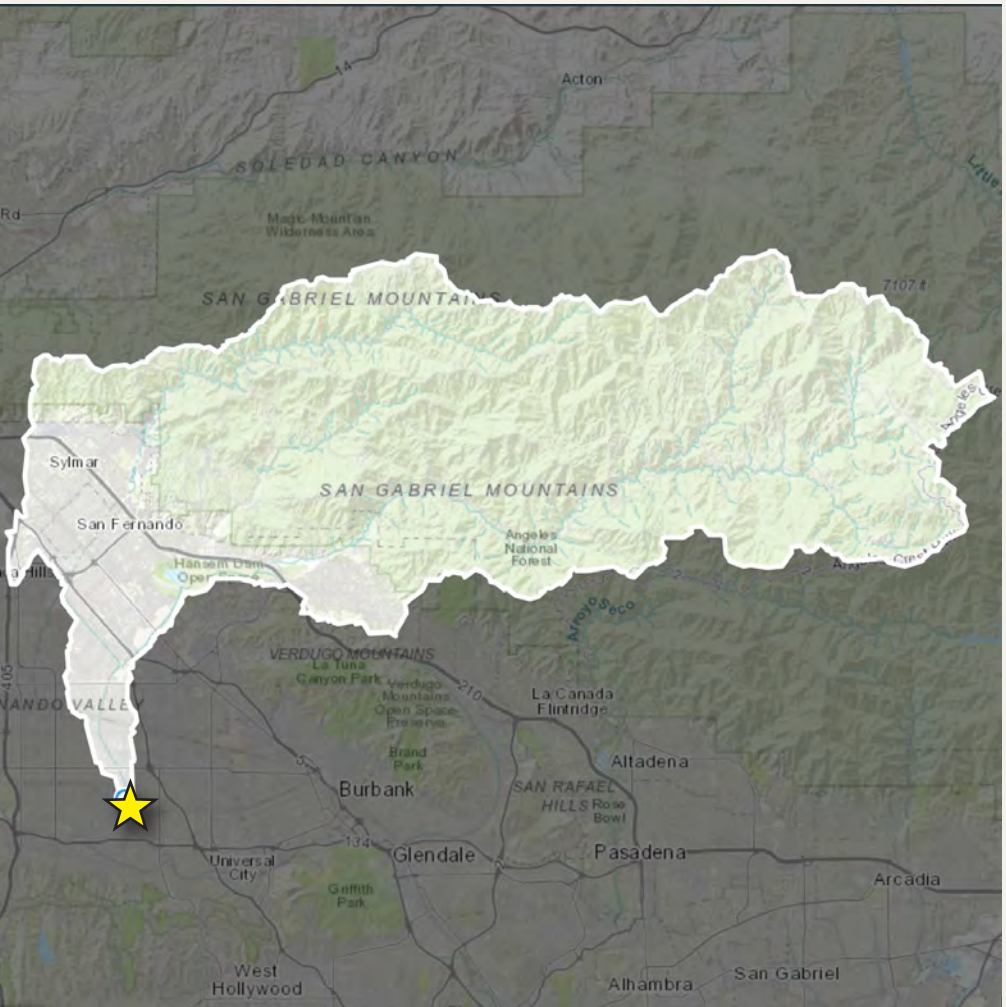
The 100-year flood projection for the site is overhead in the river channel and between knee to waist and wasit to head along the park.



STORM DRAIN SYSTEM

Source: data.lacity.org SCALE 1:10,000

○ Storm Drain Inlet



WATERSHED

Source: Model My Watershed NTS

# SITE ANALYSIS

## ENVIRONMENT



Sun Path



Prevailing Winds



Santa Ana Winds



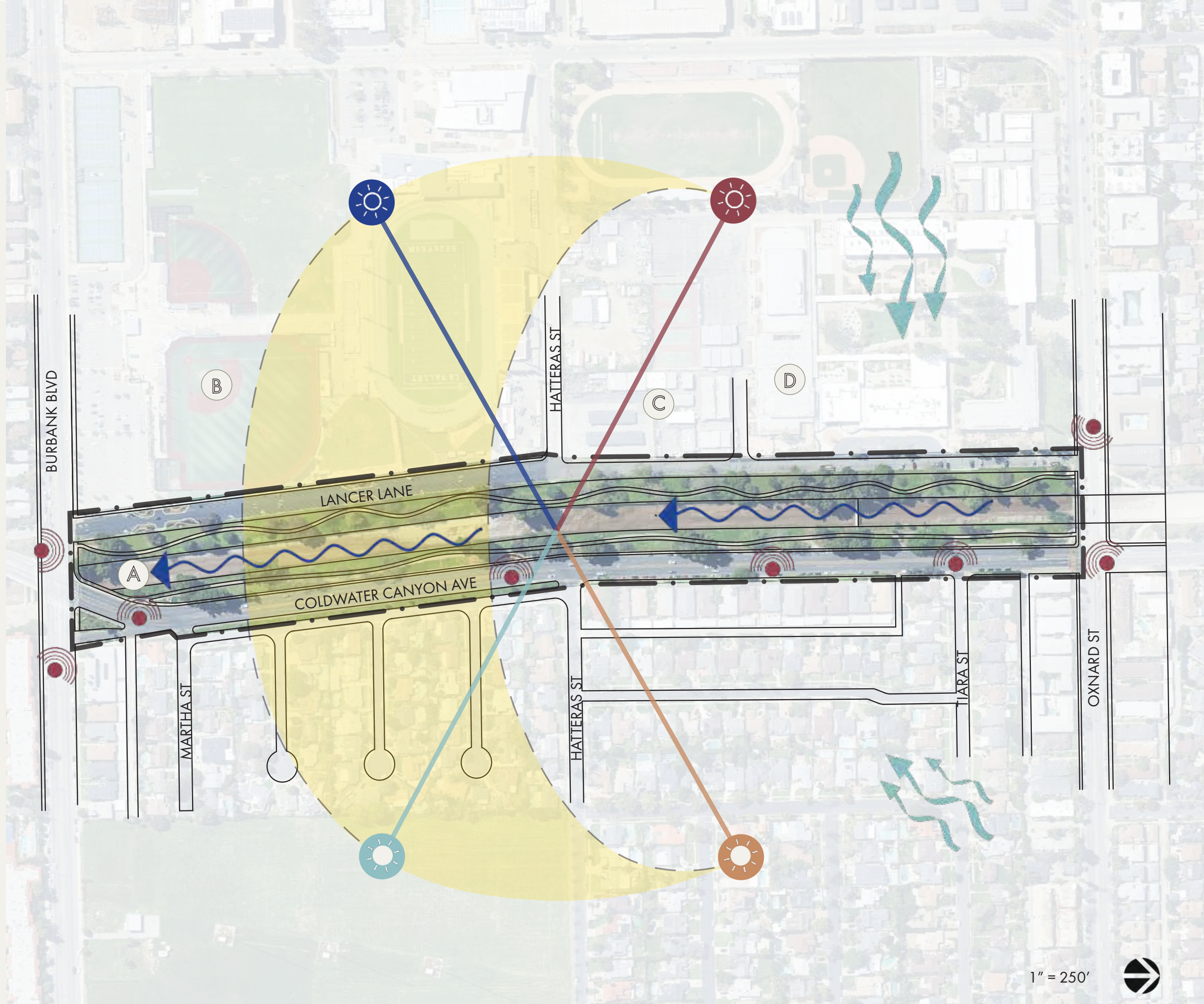
Noise



River Flow

### LEGEND

- A Start of Art Wall
- B Los Angeles Valley College
- C Jack London High School
- D Ulysses S. Grant High School









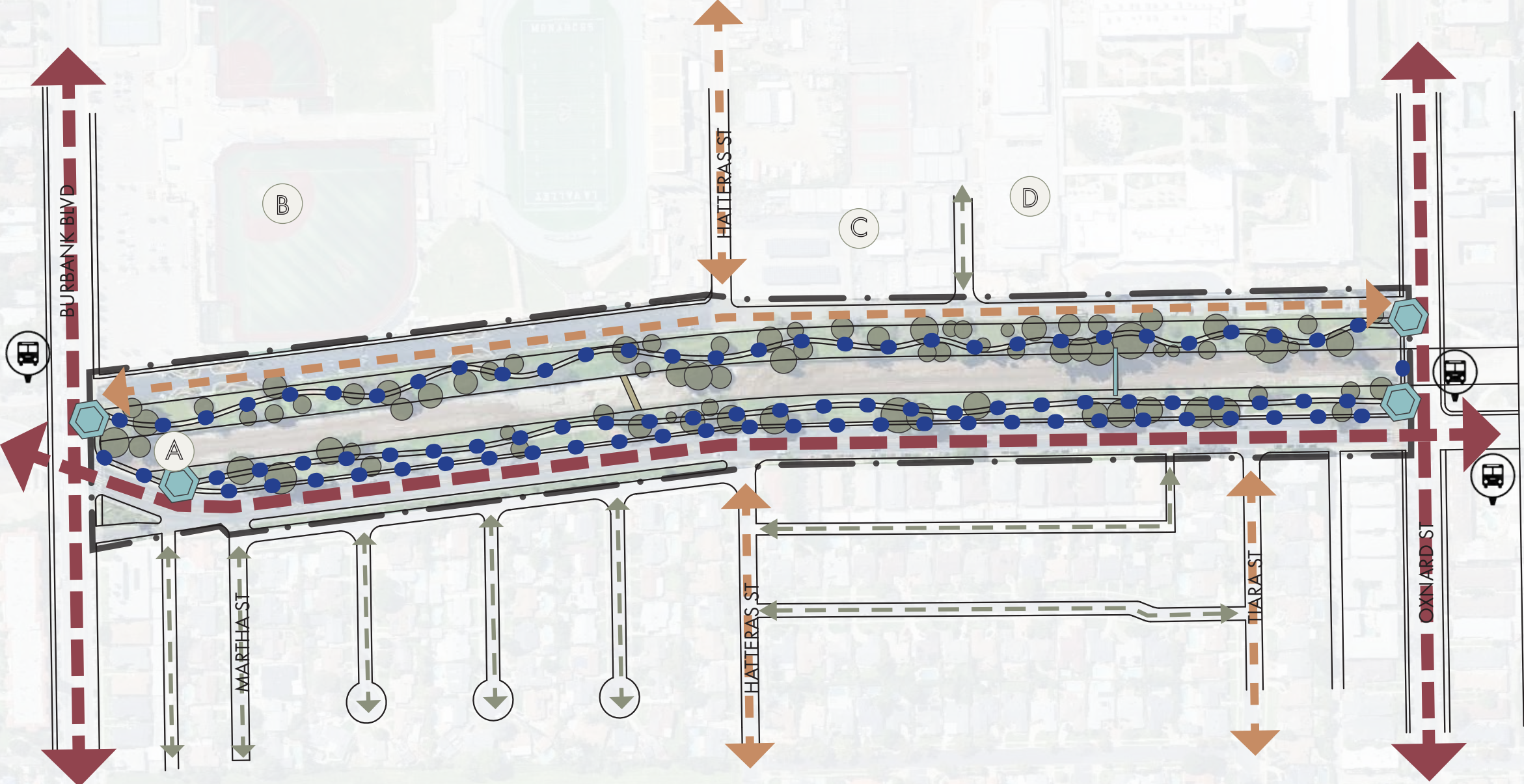
1" = 250'



# SITE ANALYSIS

## CIRCULATION

-  Entrances
-  Primary Vehicular Circulation
-  Secondary Vehicular Circulation
-  Tertiary Vehicular Circulation
-  Pedestrian Circulation
-  Bus Stop



LEGEND

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1" = 250'






# INVENTORY


## TREES & KEY AMENITIES

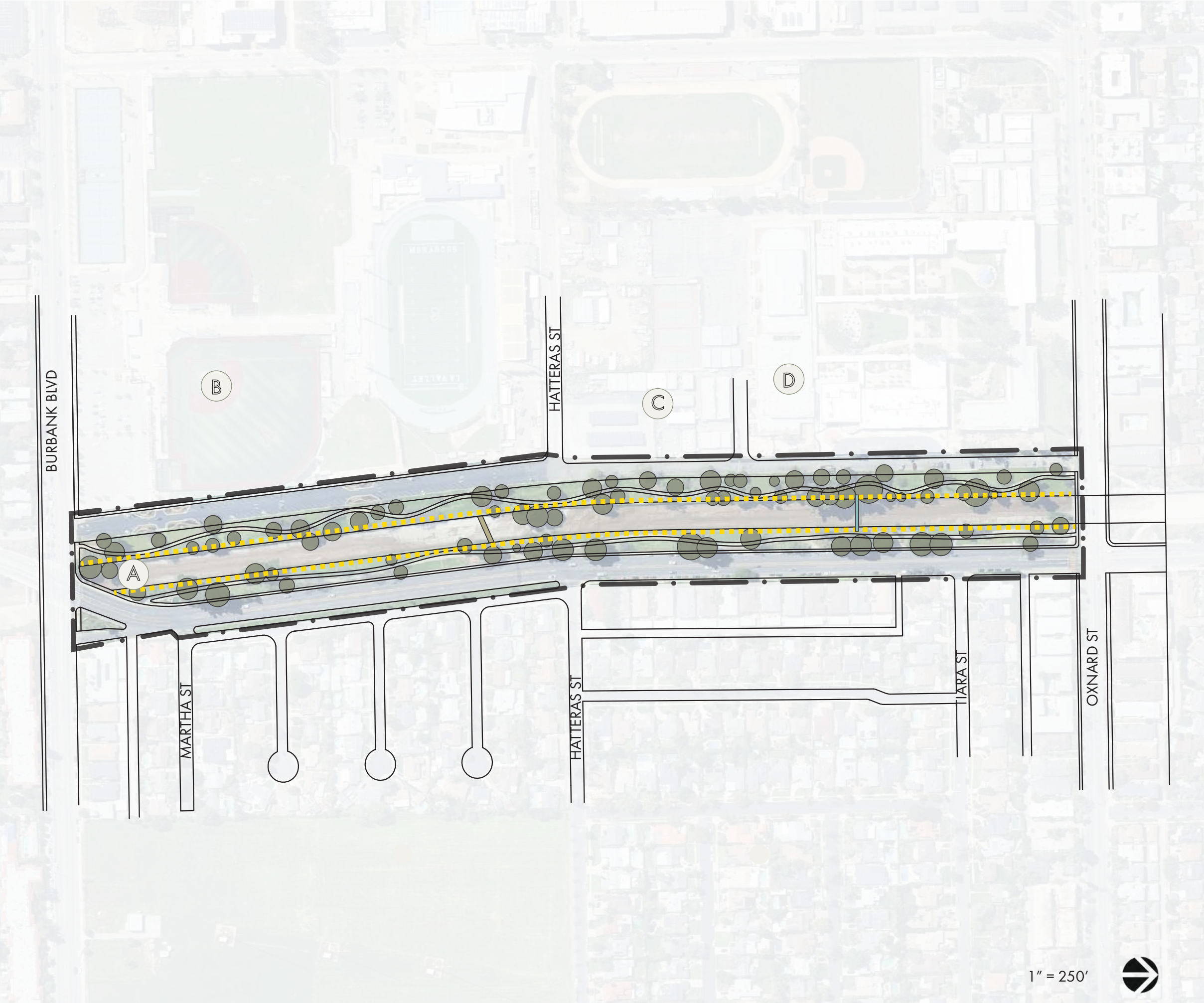
● Existing Trees

Latin Name	Common Name	#
<i>Pinus halepensis</i>	Aleppo Pine	42
<i>Pistacia chinensis</i>	Chinese Pistache	1
<i>Platanus racemosa</i>	California Sycamore	29
<i>Quercus virginiana</i>	Southern Live Oak	1
<i>Schinus terebinthifolia</i>	Brazilian Pepper Tree	14
<i>Ulmus parvifolia</i>	Chinese Elm	3
<i>Washingtonia robusta</i>	Mexican Fan Palm	4

-  Bridge
-  Water Pipe
-  Chainlink Fence

LEGEND

-  Start of Art Wall
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1" = 250'

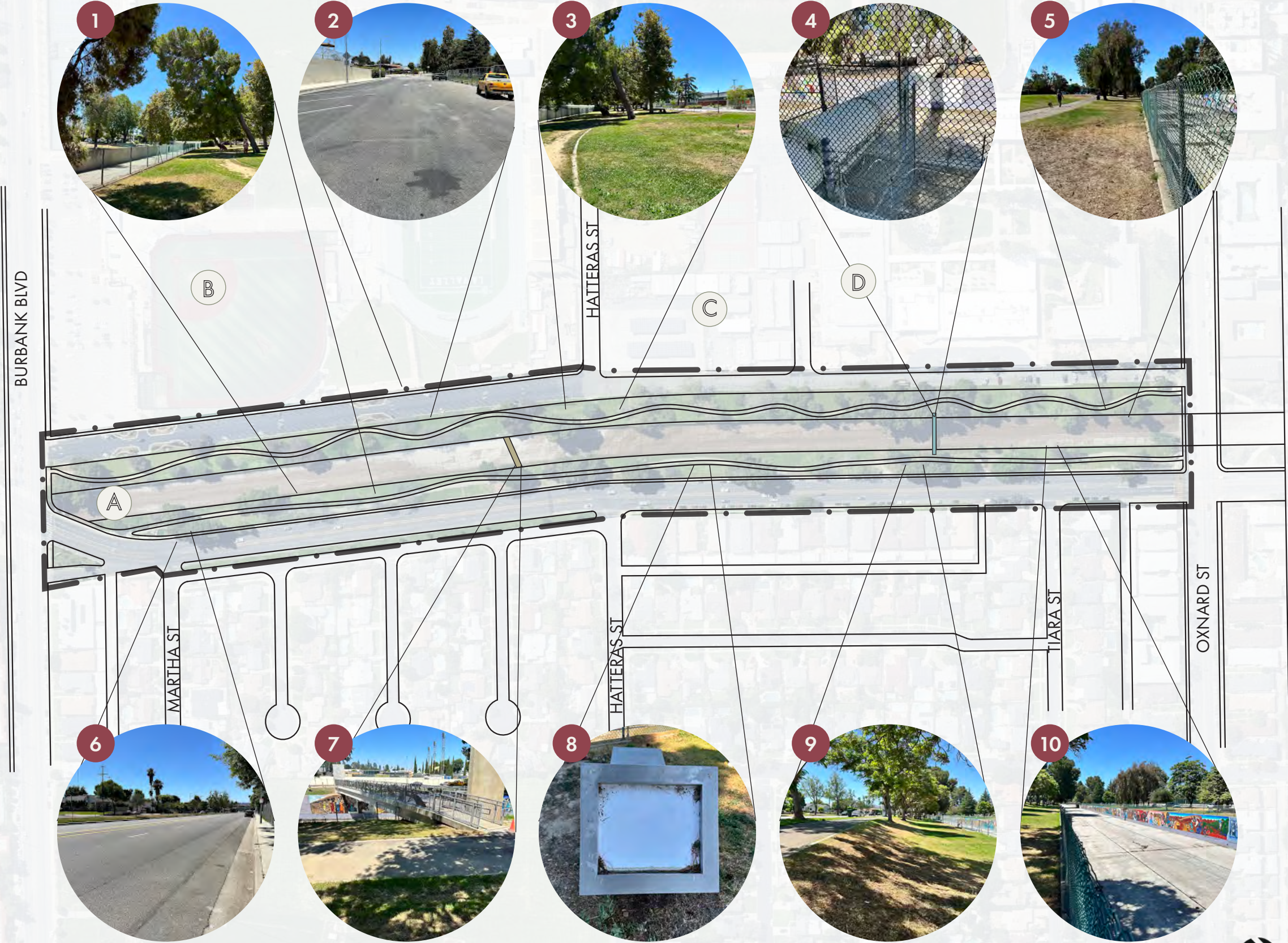


# CONSTRAINTS

- 1 Patches of missing canopy increases temperature
- 2 Impervious surfaces prevents infiltration
- 3 Existing turf has little habitat value
- 4 Water pipe obstructs views
- 5 Chain link fence not aesthetic
- 6 No bikes lanes
- 7 Bridge is misaligned with existing architecture
- 8 Limited lighting and seating
- 9 Steep angle of park on east side limits programming
- 10 Murals have limited viewpoints

LEGEND

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1" = 250'

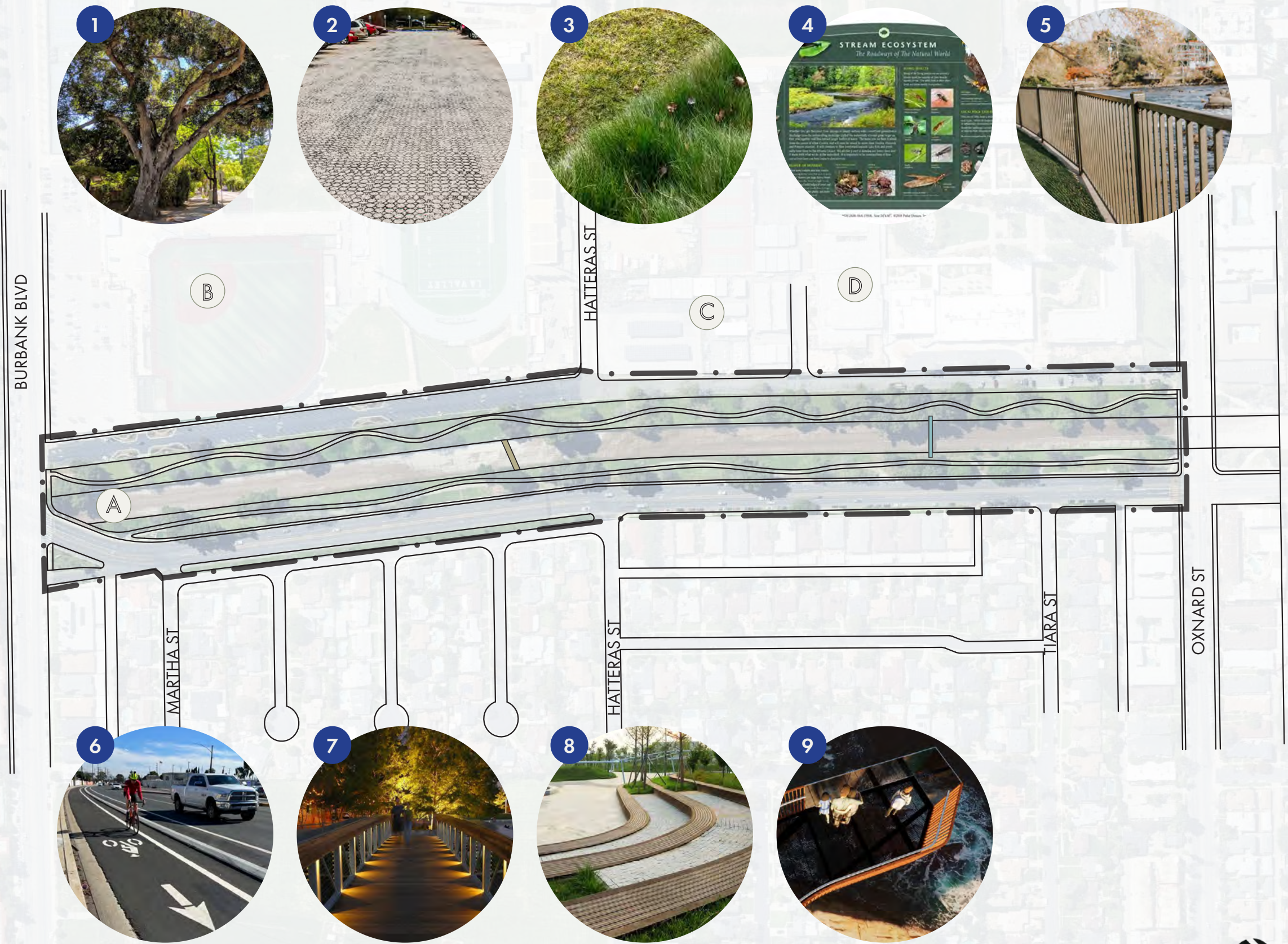


# OPPORTUNITIES

- 1 Space for improving canopy with high habitat value trees
- 2 Potential to improve infiltration with permeable asphalt
- 3 Native grass and shrubs would improve soil, water retention, and habitat
- 4 Improved signage could help educate community on watershed and wildlife
- 5 More aesthetic fencing material could improve connection to river
- 6 Wide streets provide opportunity to introduce bike lanes
- 7 Space to improve lighting and seating
- 8 Regrading opportunity for hillside cutout seating
- 9 Viewing platforms could increase visibility of murals and obscure water pipe

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1" = 250'





# CASE STUDY 2: Mangfallpark Rosenheim "City to the River"

Architect: A24 Landschaft

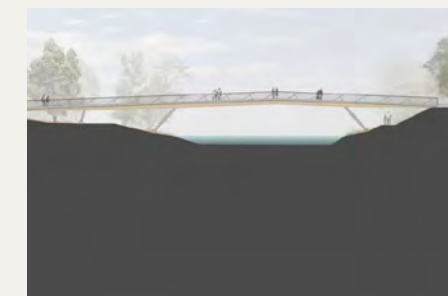
Location: Rosenheim, Bavaria, Germany

Size: 13 hectares

Build: 2006-2010

Cost: €10 million

- Concept to have landscaped walkways that interlink the city with riverscape
- 500 m network of elevated boardwalks and bridges (with spans up to 78 m) forms the core connection between the city center, rivers, and streams, including the Mangfall, Hammerbach, and Mühlbach
- Promenades serve simultaneously as ramps, viewing platforms, seating zones, and river passages
- Leuchtenwald ("Luminous Forest"): An immersive art installation of 30 historical European street lamps arranged like a forest, illuminating paths along the river channel
- Additional sculptural elements and performance venues (e.g., open-air opera, concert stages) activate the space, drawing cross-programming of arts and water flow



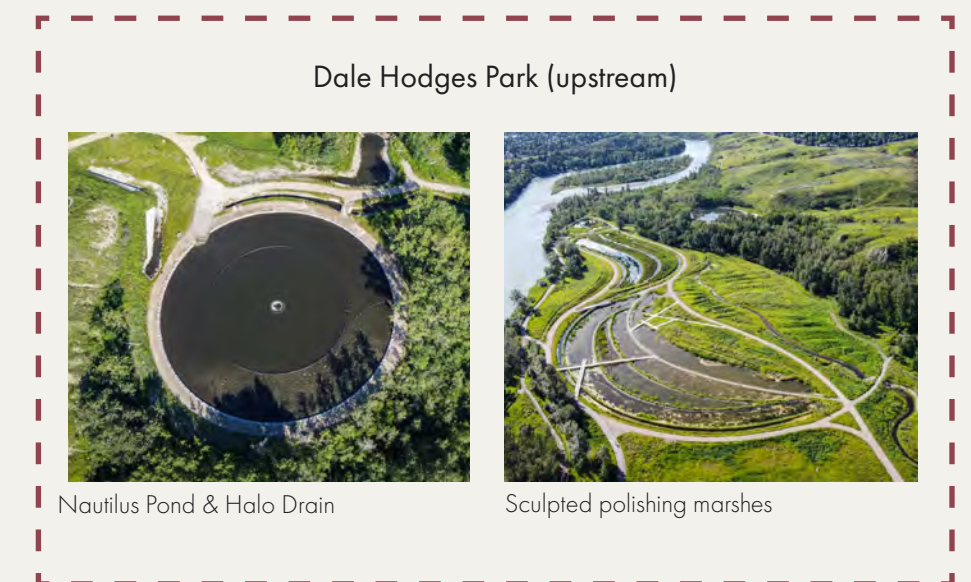
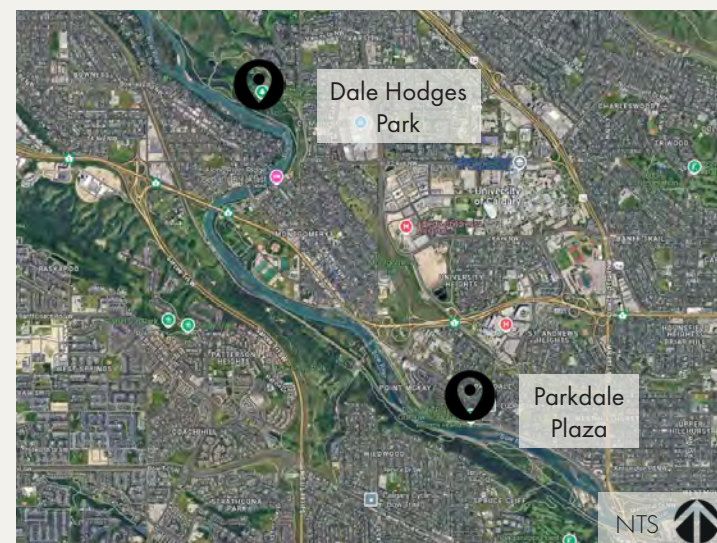
Source: <https://a24-landschaft.de/en/projekte/11/mangfallpark>

# CASE STUDY 3: Parkdale Plaza "Outflow"

Architect: Brian Tolle Studio  
 Location: Calgary, Canada  
 Build: 2015  
 Cost: \$1.85 million

## Parkdale Plaza

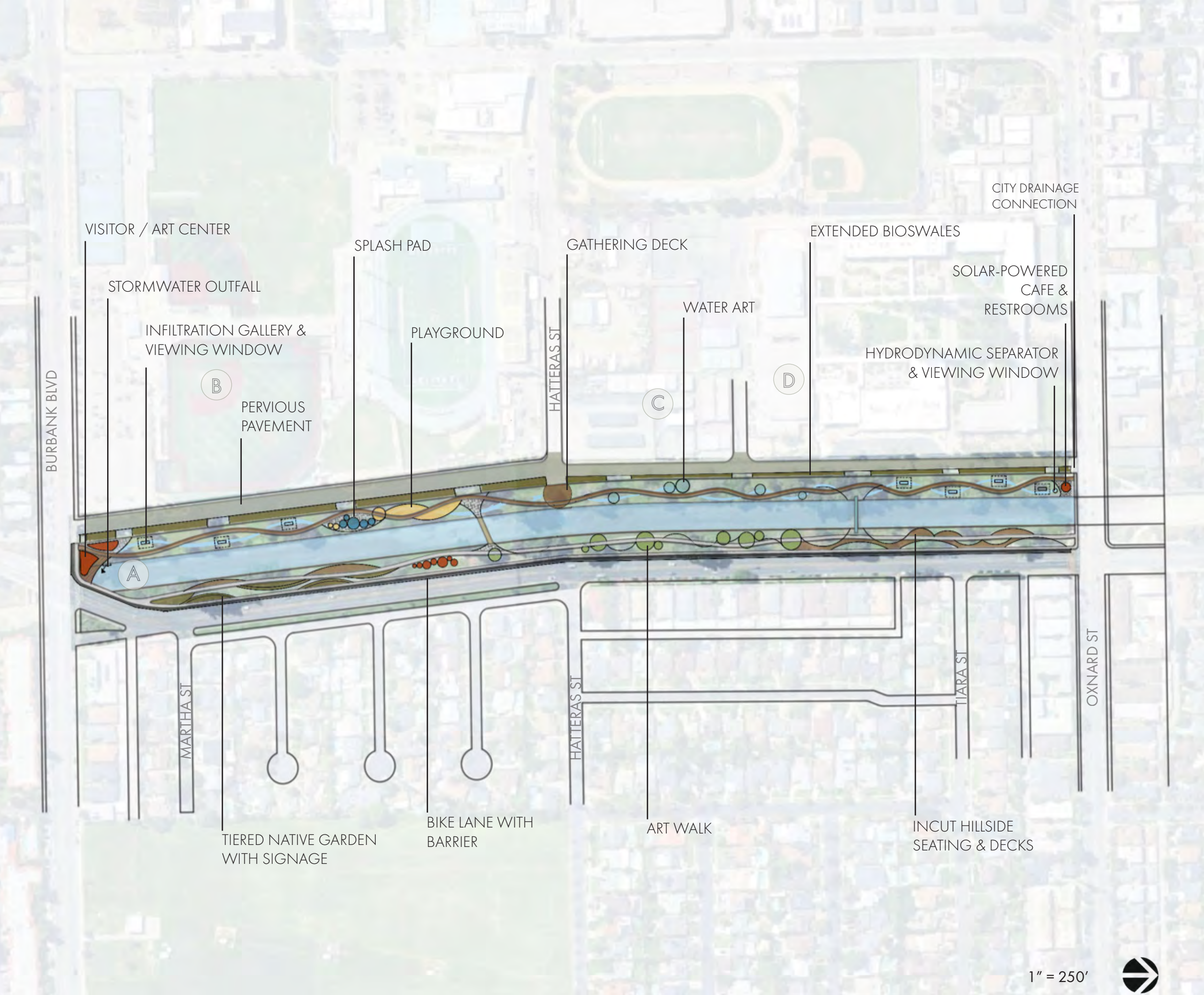
- Part of the City's Utilities & Environmental Protection public art program
- Tolle used computer imaging software to create an inverted 3D image as a sculpture of Mount PeeChee, the third-highest peak in the Bow River watershed
- Viewers can watch stormwater pass through the sculpture into the Bow River. It also serves as an additional filter to capture trash before reaching the river.
- Located downstream of Dale Hodges Park, another stormwater system in which stormwater passes through a circular Nautilus Pond, drops through a halo drain, and streams through sculpted marshes before entering the river.
- Benches, bicycle racks, lighting, and native vegetation frame the sculpture, with lighting in the evening.



Source: <https://calgaryartsdevelopment.com/>

# DESIGN ALTERNATIVES

## #1 LOW BUDGET

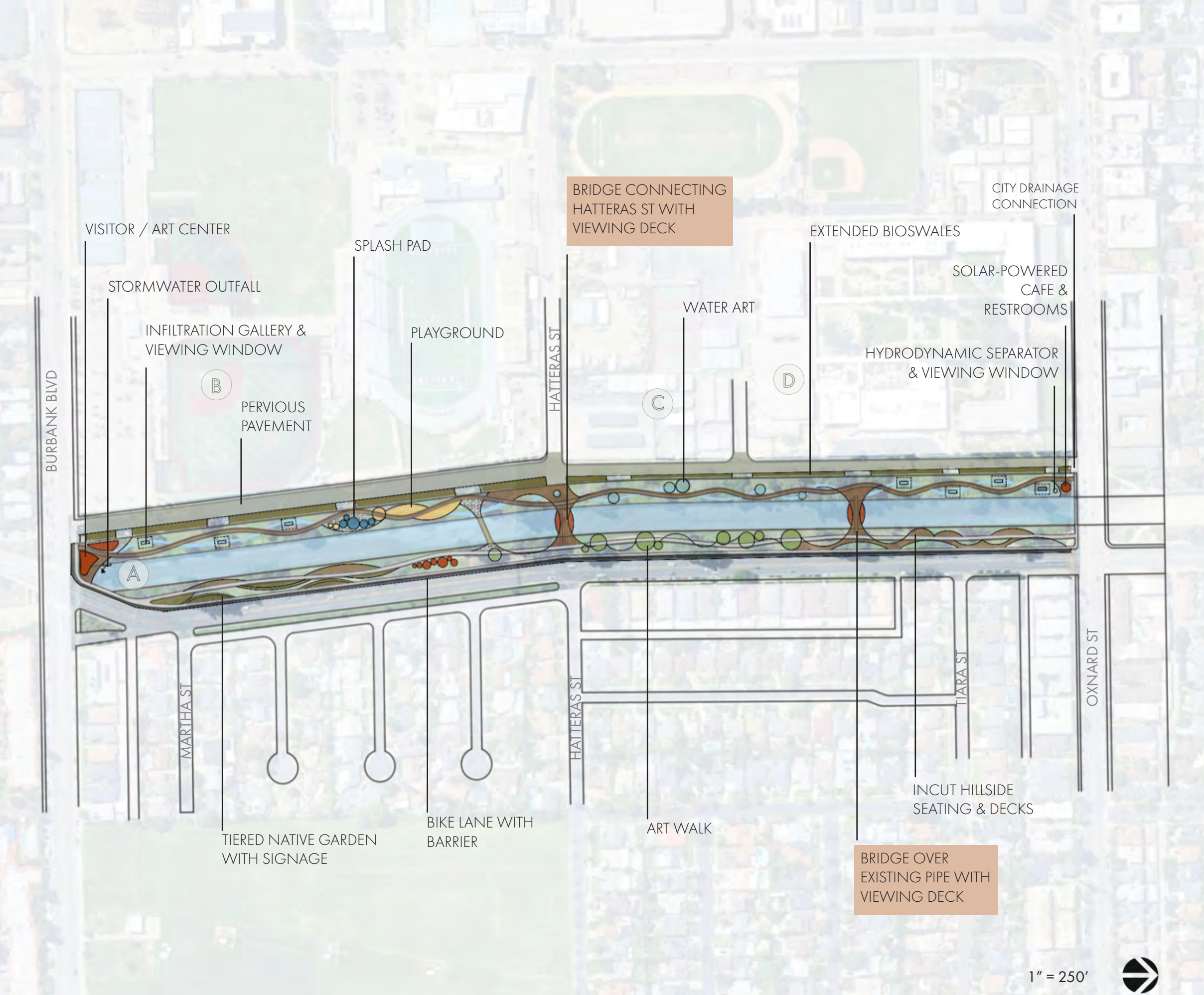


- LEGEND
- A** Start of Art Wall
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1" = 250'

# DESIGN ALTERNATIVES

## #1 MEDIUM BUDGET



LEGEND

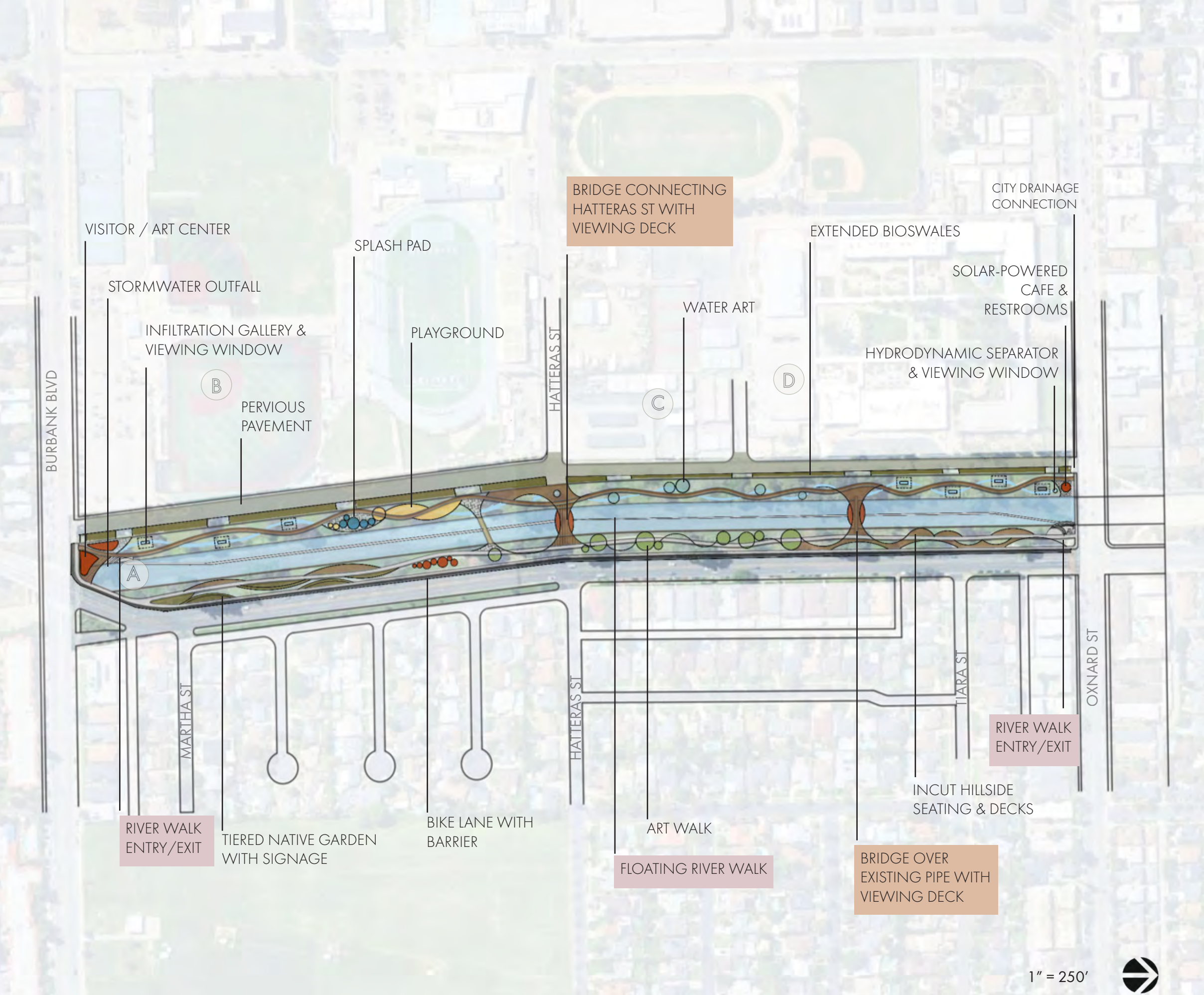
- A Start of Art Wall
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1" = 250'



# DESIGN ALTERNATIVES

## #3 HIGH BUDGET



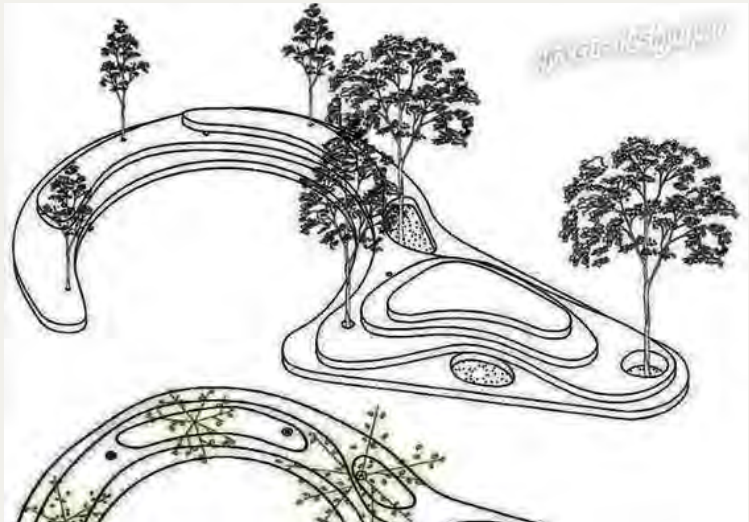
LEGEND

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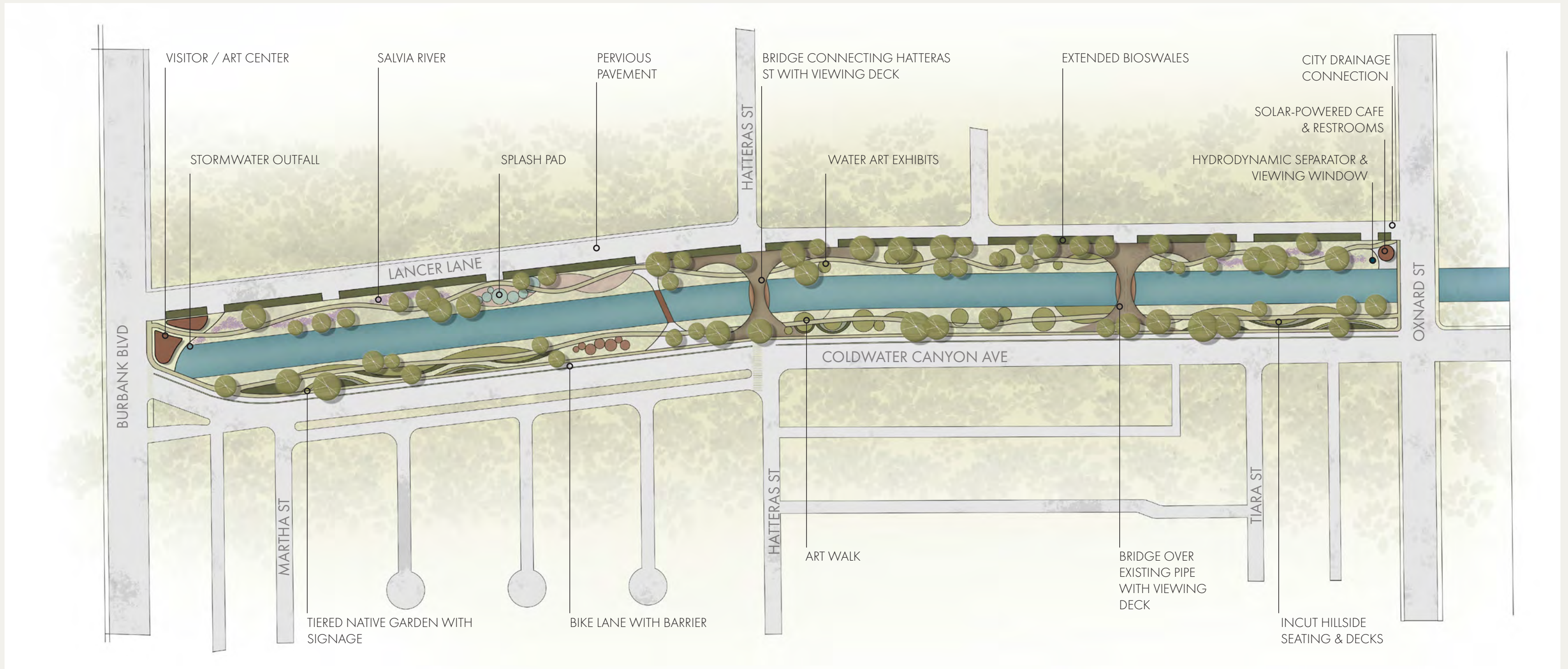
1" = 250'



# INSPIRATION BOARD



# MASTER PLAN: WATERSCAPE WALK



## Waterscape Walk

### Stormwater Management

Water from the surrounding city is captured, cleaned, and slowed through a hydrodynamic separator, infiltration galleries, and extended bioswales. Pervious pavement and an overground "Salvia River" make the flow of water visible, helping visitors understand how stormwater is managed on-site.

### Connectivity and Public Spaces

Two new bridges connect the upper and lower paths, supported by boardwalks, cantilevered hillside seating, and a protected bike lane along Coldwater Canyon Avenue. A playground and splash pad bring families closer to the water, while a visitor center with art exhibits and a café with amenities invite people to gather, learn, and relax together.

### Ecology, Art, and Education

Art walks weave through the site, linking water, creativity, and the iconic Great Wall of Los Angeles. Together with ecological restoration efforts, these elements create a resilient and educational landscape that celebrates both community engagement and environmental stewardship.

0 100' 200' 400'

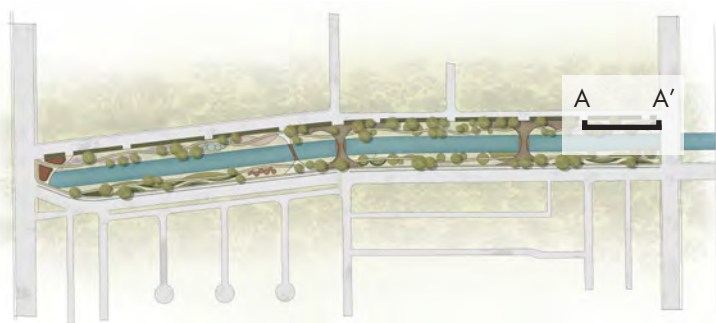
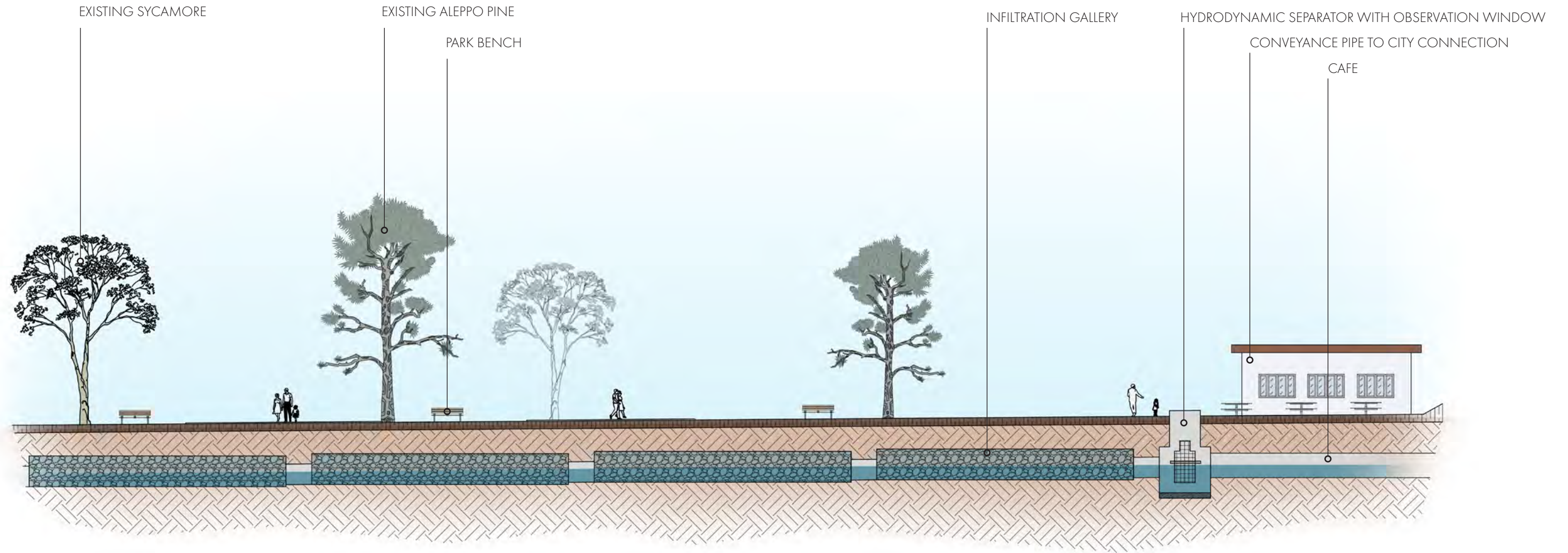


1" = 200'

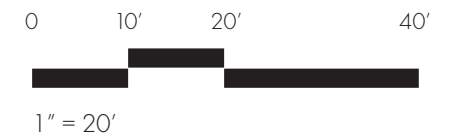


# SECTION 1

## SUBSURFACE STORMWATER SYSTEM

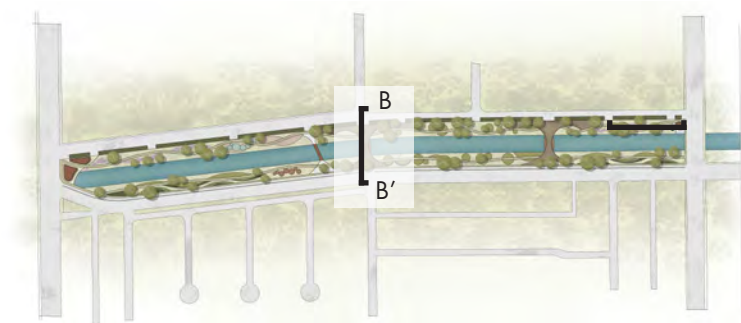
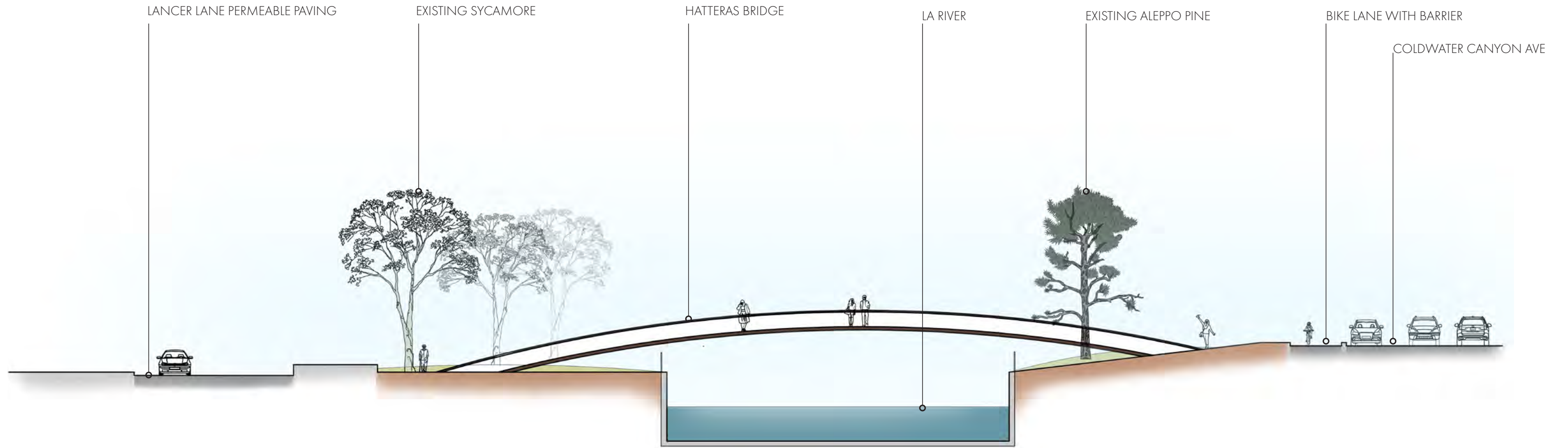


KEY MAP

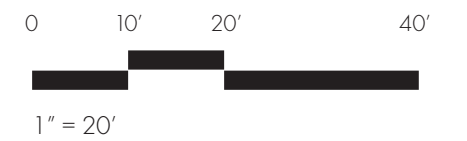


# SECTION 2

## HATTERAS STREET BRIDGE

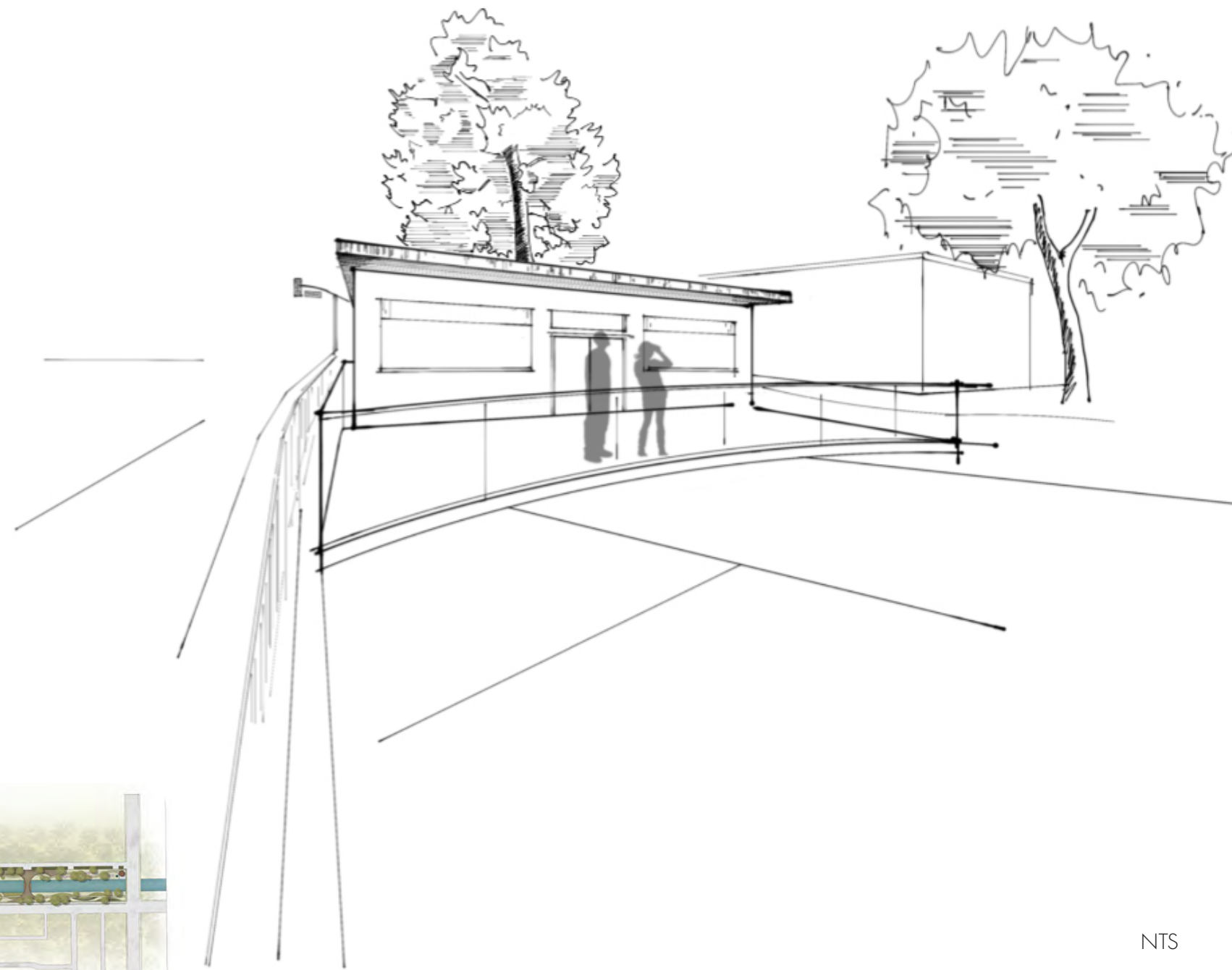


KEY MAP

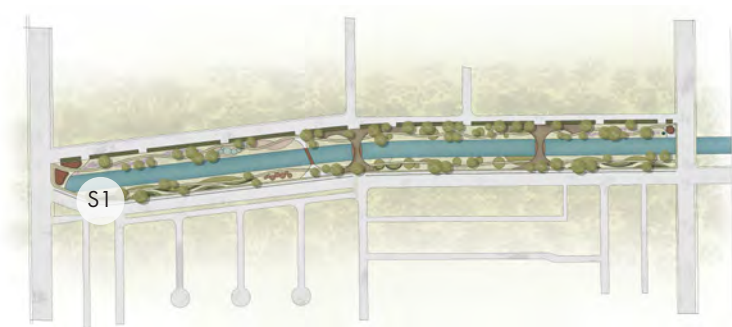


# SKETCH 1

## VISITOR & ART CENTER



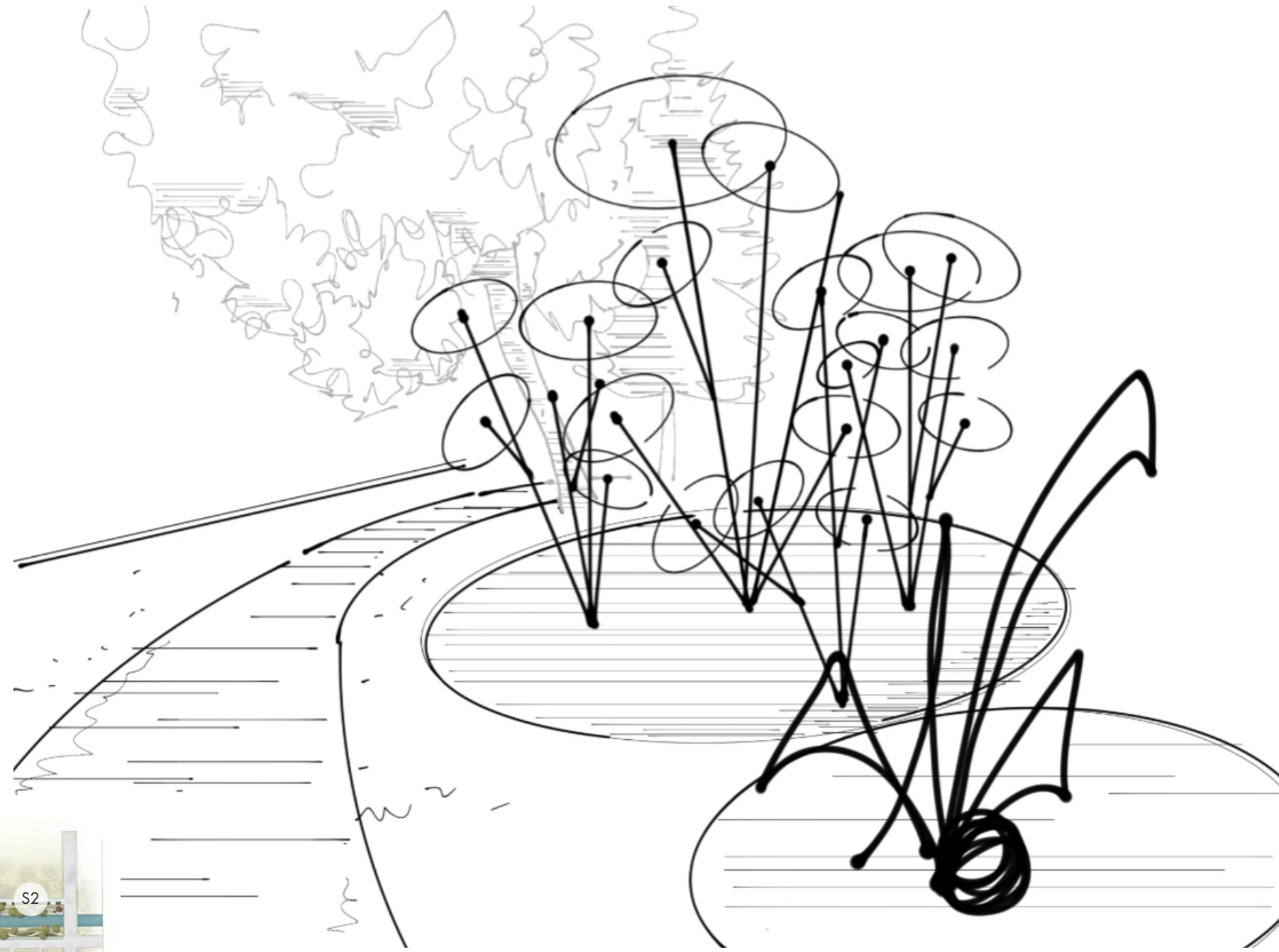
NTS



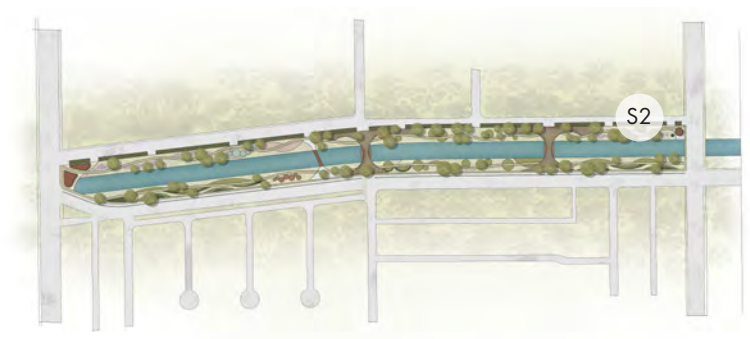
KEY MAP

# SKETCH 2

## ART WALK



NTS



KEY MAP

# PERSPECTIVE 1

## HATTERAS BRIDGE



NTS



KEY MAP

# PERSPECTIVE 2

## VISITOR & ART CENTER



KEY MAP

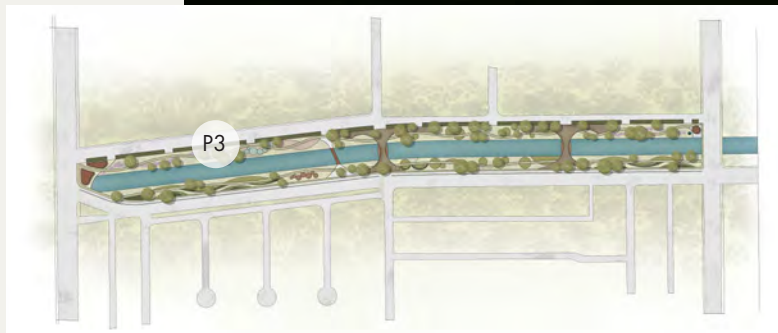
NTS

# PERSPECTIVE 3

## SUNRISE VIEW



NTS



KEY MAP



3D Walk Through Video Link:  
<https://youtu.be/r7Uk1yolt6c>