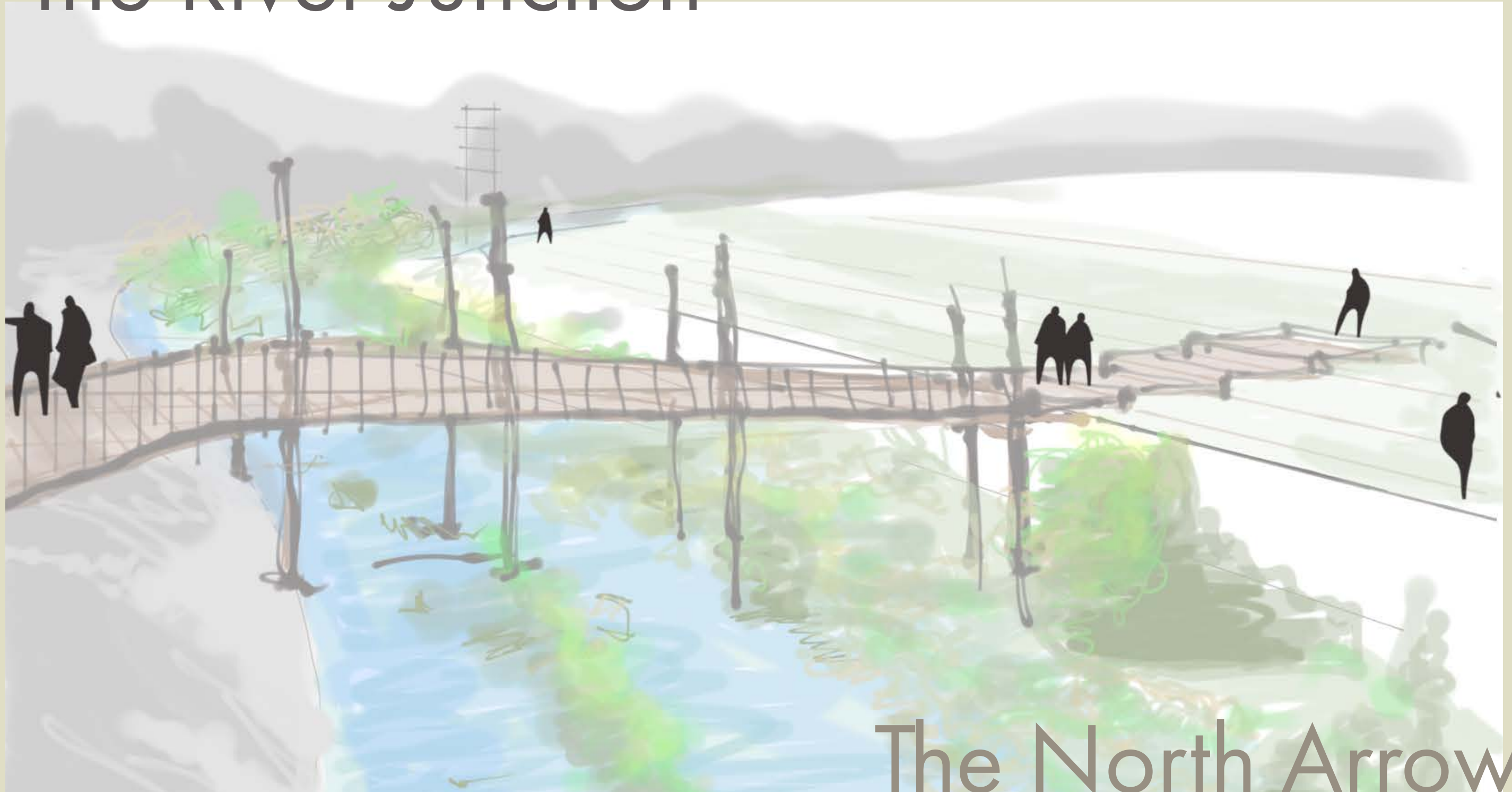


# The River Junction



## The North Arrows

Kristin Byrd, Holly Cory, Michelle Levy, and Victoria Stover

LD 4 | ARCHx 472.9 | EMILY GABEL-LUDDY AND SOO WAI KIN | WINTER 2025

## TABLE OF CONTENTS



## INTRO

- 3 The Big Idea
- 4 History
- 5 Location

## SITE ANALYSIS

- 6 Limit of work
- 7 Site Context
- 8 Constraints and Opportunities
- 10 Analysis
  - inventory, zoning, circulation,*
  - topography, flowlines, sun and views*
- 12 Vegetation and Trees
- 13 Climate
  - floods and wildfire*

## CONCEPTUAL DESIGN

- 14 Diagrammatic concept diagrams
- 15 Case Study
- 16 Existing Site
- 17 Final Concept

## RE-IMAGINATION

- 18 Illustrative Site Plan
- 19 Design Program
- 20 Linkages
- 20 Plant/Wildlife palette
- 22 Section and Perspectives

## NORTH ARROW VISION

- 24 Individual Work
  - Holly, Kristin, Michelle and Torie*
- 29 Design Reflections

# WE ARE ALL CONNECTED



## PEOPLE

Create space for gathering

Increase educational opportunities

Create nature play areas

Improve bike access and public transit

Create a healing garden

Support local business with vendor spaces

## LAND

Build a corridor across the river

Create a pollinator garden

Protect native trees

Use a native plant palette

Create creek and wetland

Habitat restoration to support local biodiversity

## WATER

Create terraces along river

Slow the water and increase infiltration

Expand the creek

Install Clean drinking water

Put a bend back into the river

Clean stormwater run off through phytoremediation

# HISTORICAL CONTEXT

## Pre-Colonial



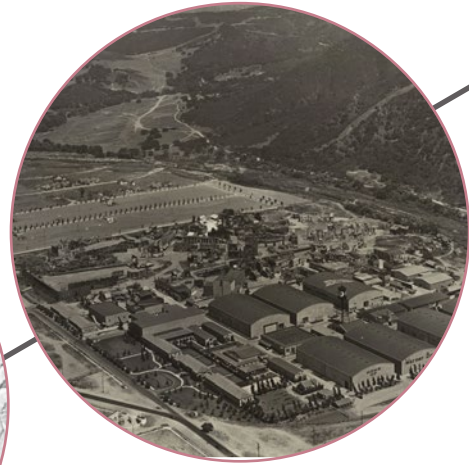
Dozens of native american tribal villages had become established in the area of present-day LA County, including in the City of Burbank. Fernandeano Tataviam, Gabrielino and Tongva were often positioned near streams and springs, as wetlands served as an important resource for the plants and animals that provided sustenance. Our project site was historically considered riverwash and woodland habitat based on historic records and scientific analysis (Ethington, 2020)



A Mexican land grant consisting of 4,600 acres was granted to Comandante General Jose Castro, known as Rancho La Providencia

1843

1866



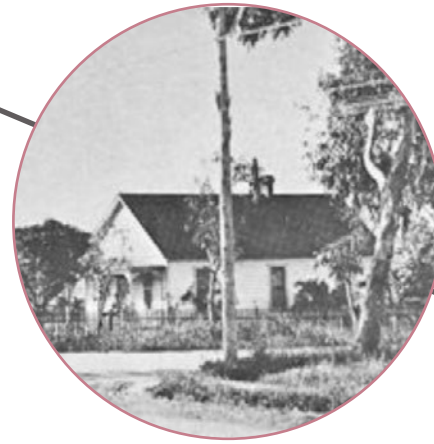
Dr. David Burbank purchased Rancho Providencia and a portion of nearby Rancho San Rafael. Burbank's sheep ranch was at the current location of Warner Brothers Studios.

1887



The City of Burbank was founded, with special chartered rail coaches from Los Angeles shuttling interested investors to Burbank. Los Angeles Railway Company runs its first train to Burbank.

1911



Burbank was incorporated and grew into a residential and industrial community.

1920-1930s



The motion picture and aircraft industries (such as Lockheed) flourished. Warner Brothers, Disney, and Columbia Ranch studios established Burbank as an economic center and led to the expansion of residential developments.

Post WWII



Post-WWII- The post-war period was marked by another boom period which was due in part to the influx of returning veterans and formerly interned Japanese-American citizens into the city and the general migration of the nation's population westward. After WWII the city experienced significant growth. By the 1960s and 1970s, more of the Hollywood entertainment industry was relocating to Burbank. NBC moved its west coast headquarters to a new location at Olive and Alameda avenues. The Burbank studio was purchased in 1951, and NBC arrived in 1952 from its former location at Sunset and Vine in Hollywood. Alongside the commercial development, residential suburban development and multi-family housing also flourished during this period.

1896 LA River



The project site was at the intersection of valley foothill riparian, cropland, and orchard/vineyard habitat type.

(1897 Map obtained from Huntington Library, developed by C.S. Compton and J.H. Dockweiler, City Engineers)

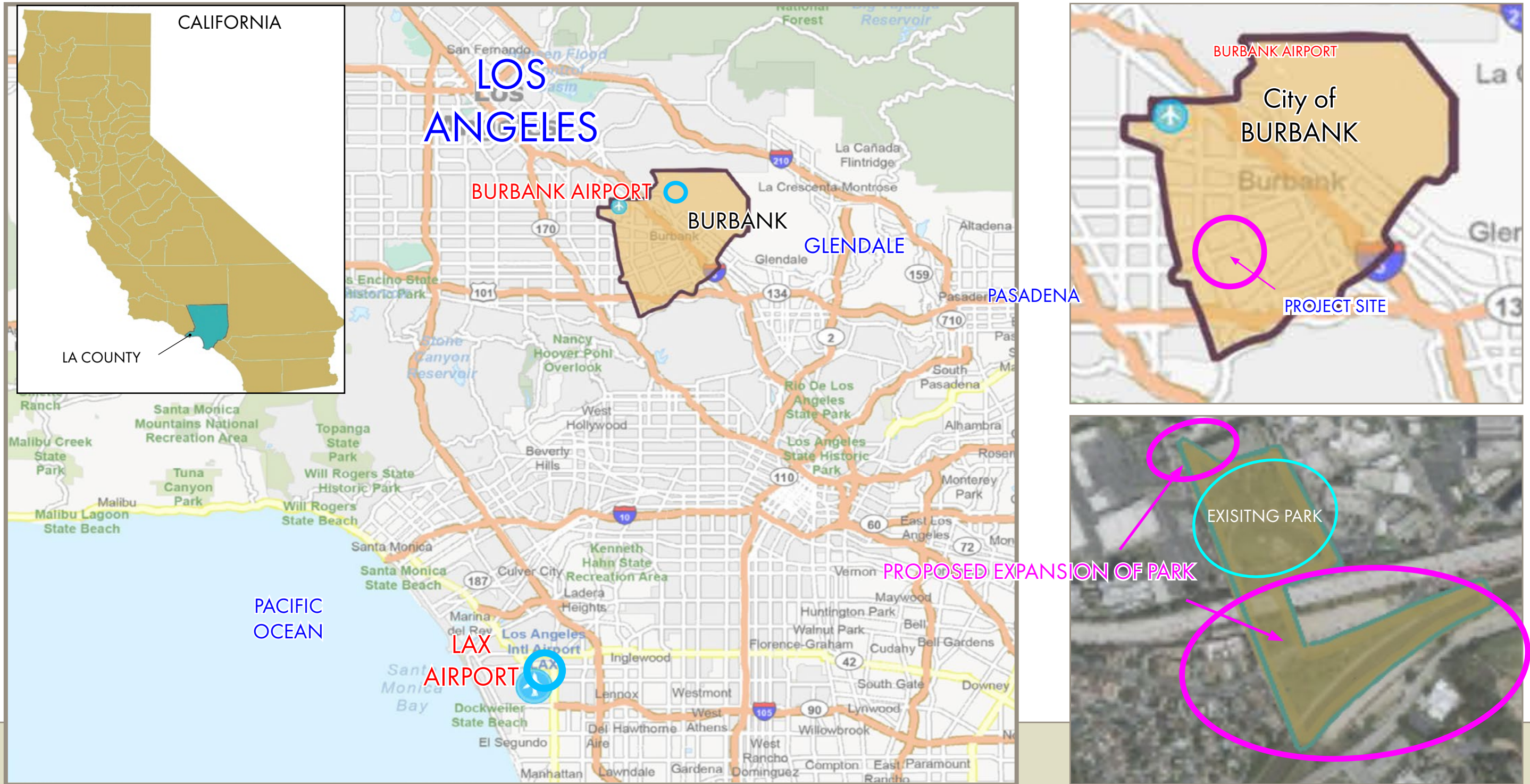
2010 LA River



The project site in 2010 is a reflection of what is seen today. The habitat type is considered a ravine that is channelized with cement with urban habitat around it.

(US Army Corps)

LOCATION MAPS

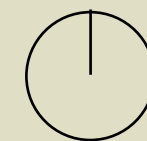


CITY OF BURBANK STATISTICS AS OF 2022

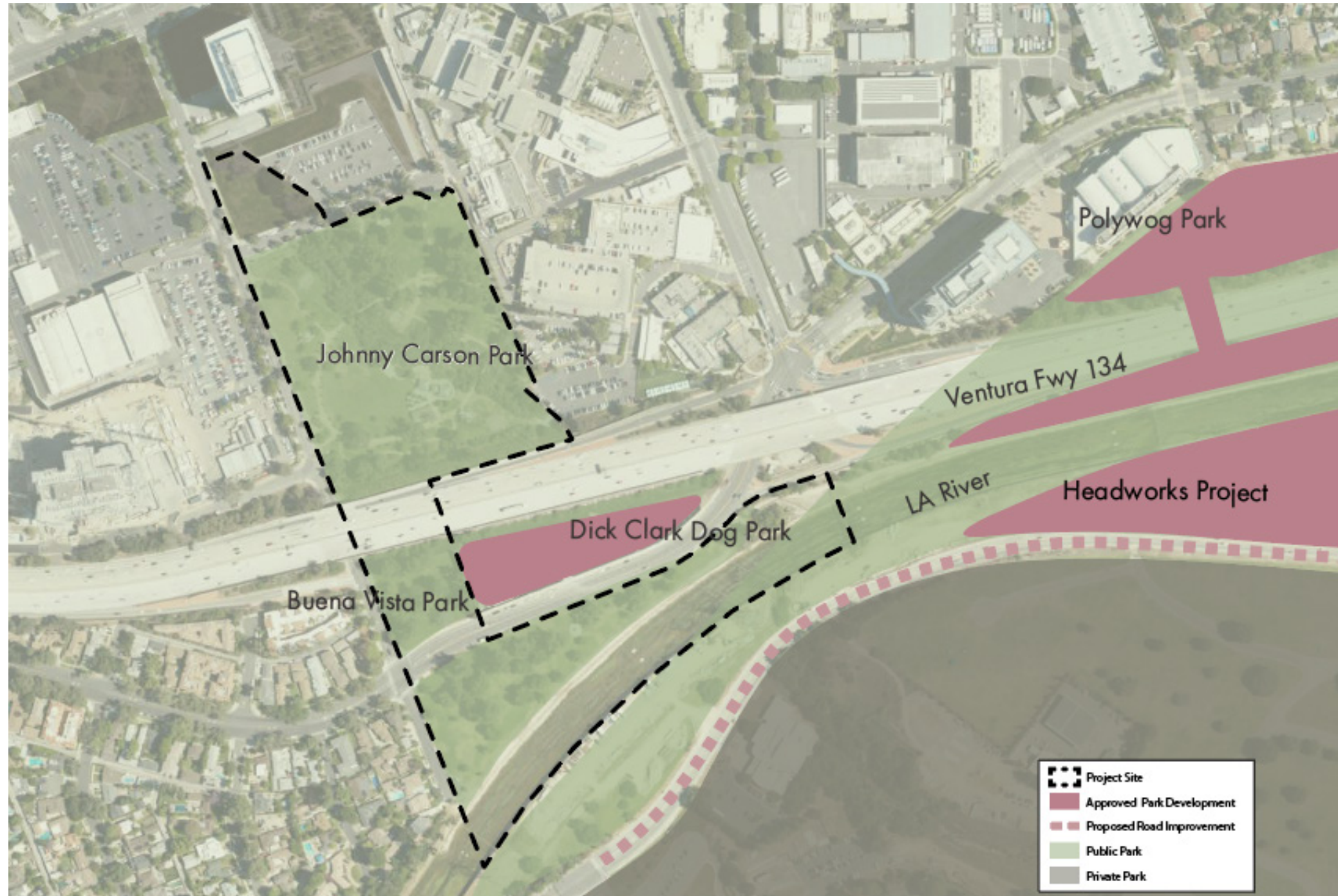
Population 106,000

Median Age 39.6 yrs old

Median Household Income \$91,455

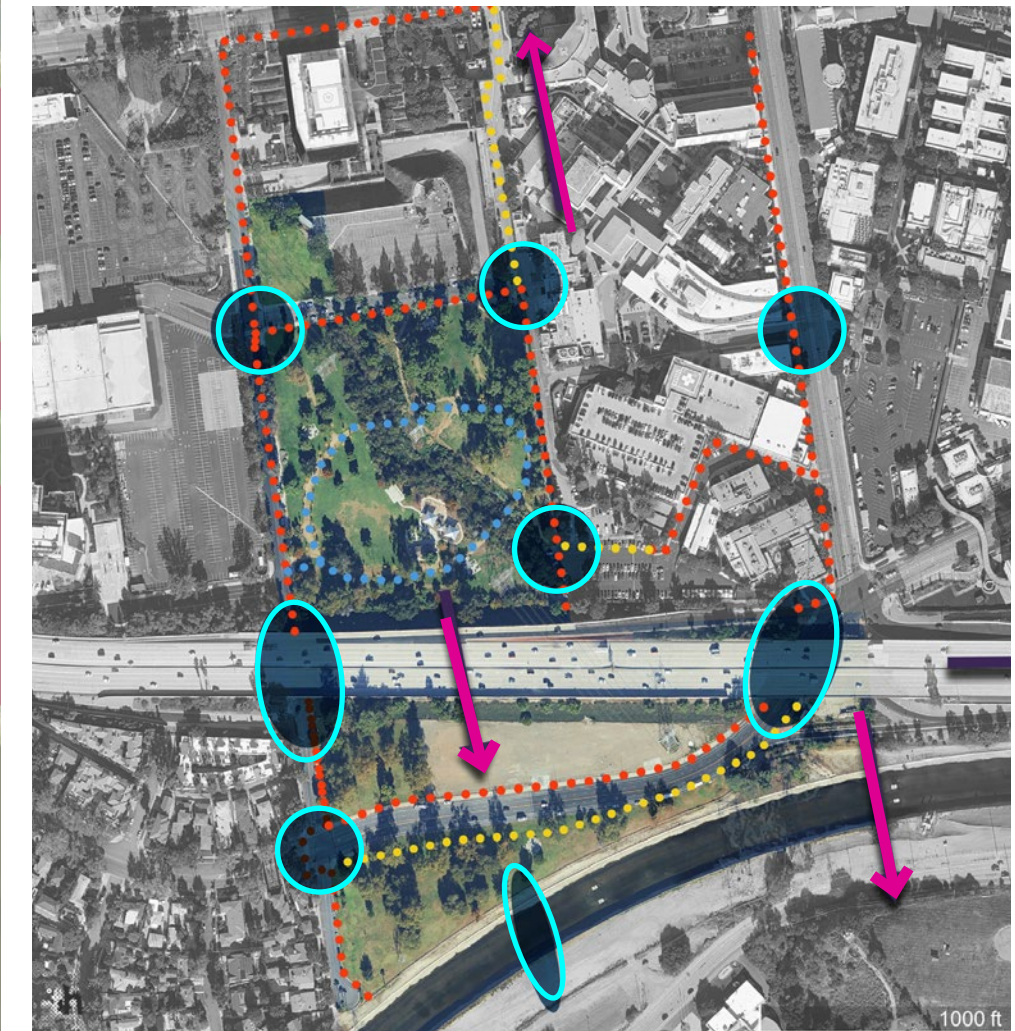


## LIMIT OF WORK



From an early concept development stage, our team made a decision to integrate future improvements at the future Dick Clark Dog Park adjacent to the site, and Pollywog and Headworks parks east of the site, focusing the “limit of work” on improvements to the existing Johnny Carson Park and Buena Vista Park that build connections to future nearby open spaces and the LA river. The project design enhances these connections along the edges and through the site, by improving the pedestrian experience along Bob Hope Drive with active retail uses, creating clear vistas from within Johnny Carson Park to the river which were once obstructed by the freeway, and promoting connections along Riverside Drive. Finally, converting existing vehicular driveways to shared streets/woonerfs will help create a more pleasant walking experience and bring foot traffic through the park to Buena Vista Drive to the east and Alameda to the north.

## PATHWAYS AND LINKAGE OPPORTUNITIES

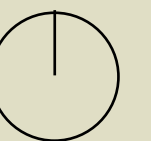


- ..... EXISTING SIDEWALK
- ..... AREA LACKING SIDEWALK
- ..... EXISTING DG/PAVED PATHWAY
- OPPORTUNITY FOR IMPROVED CROSSING OR LINKAGE
- ➔ OPPORTUNITY FOR IMPROVED CONNECTION TO NEARBY PARKS AND AMENITIES

# SITE CONTEXT



# CURRENT PROGRAMMING



## CONSTRAINTS

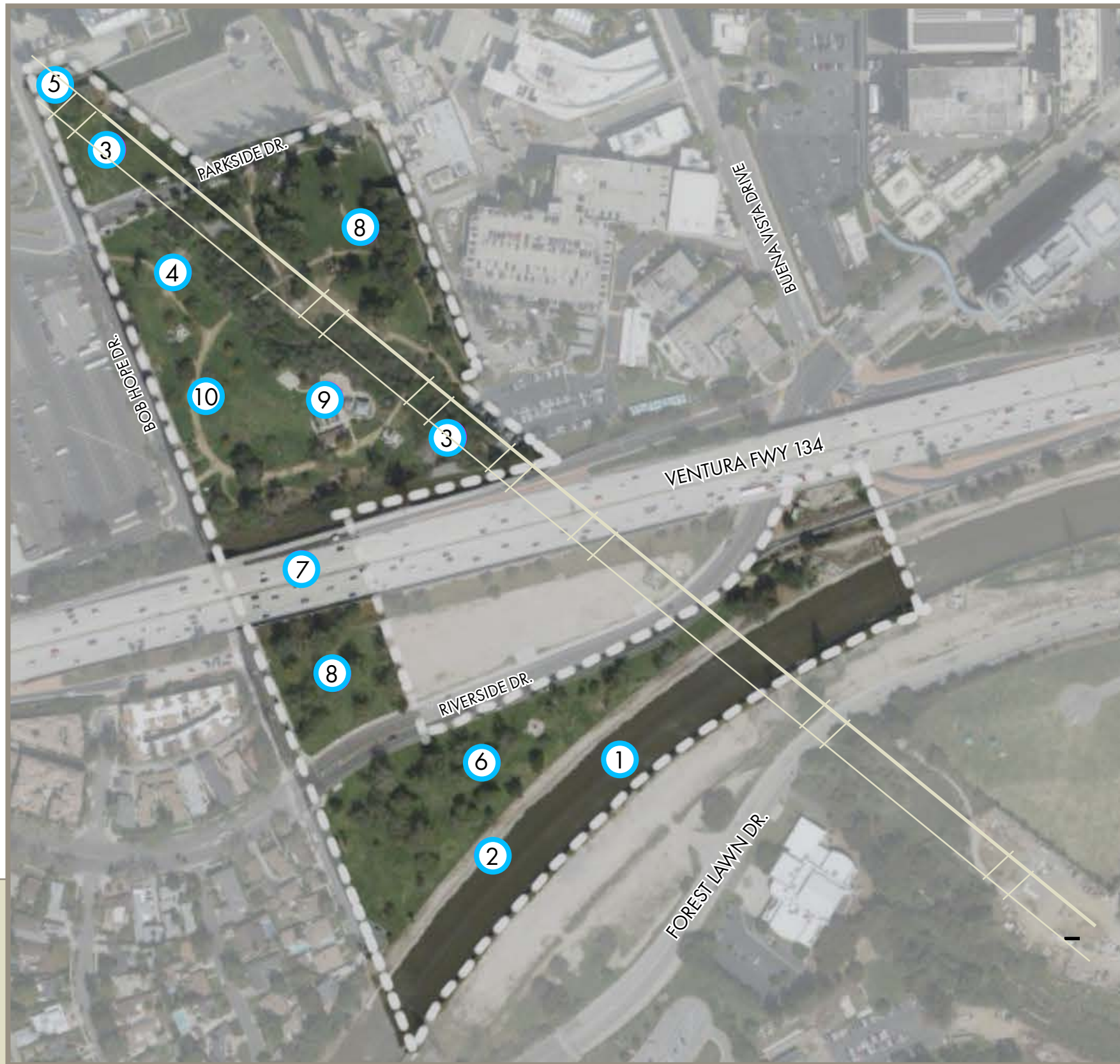


## LEGEND

- 1 The LA River fragments site from neighboring parks for pedestrians, wildlife, equestrian riders, and bicyclists
- 2 Los Angeles River is inaccessible to people, plants, and wildlife due to its high walls and impermeable cement floor
- 3 Water capture on site is limited
- 4 Lack of opportunity for kids to play in nature
- 5 Limited connection to the Whitnall Highway
- 6 Existing protected Oak and Western Sycamore trees on site
- 7 Abandoned freeway bisecting two parks with berm underneath, blocks views
- 8 Climate change creating hotter dryer temperatures and more flood events
- 9 Amenities are lackluster
- 10 Commercial or concessions non-existent

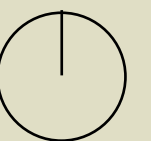


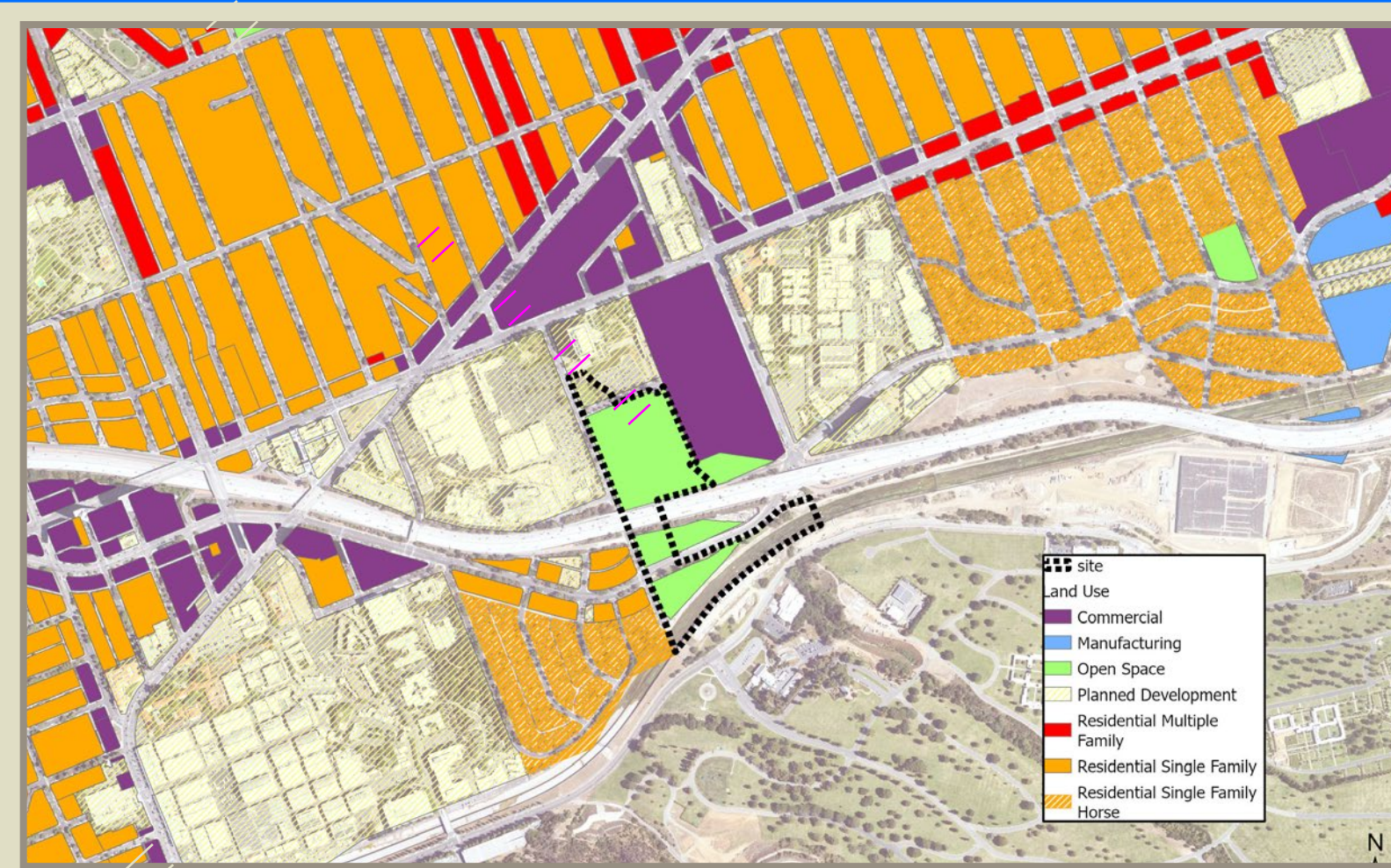
## OPPORTUNITIES



## LEGEND

- ① Build a corridor between sites that allow for comfortable and safe passage of pedestrians, wildlife, equestrian riders, and bicyclists
- ② Create terraced space adjacent to the river to allow for access and restore soft bottom floor
- ③ Create more bioswale areas for water infiltration
- ④ Create an opportunity for play using natural materials, sensory integration and access to clean water to drink and play
- ⑤ Create a stormwater run off connection the Whitnall highway powerline corridor, capturing downstream surface water to improve groundwater quality and reduced local flooding
- ⑥ Create a design that benefits protected trees and add more oak trees to help maintain and improve the health of the existing native trees
- ⑦ Remove freeway berm to connect parks, wildlife habitat and create views
- ⑧ Use locally native plants that are adapted to drought and heat to combat climate change by providing shade, cooling the climate, and provide habitat. Create more floodable areas to help with infiltration
- ⑨ Create a beautiful design using renewable resources and repurposed goods to build better bathrooms, clearer wayfinding and educational signage
- ⑩ Create a place for businesses and local vendors to sell their goods and provide beer, food and ice cream to visitors





ZONING MAP

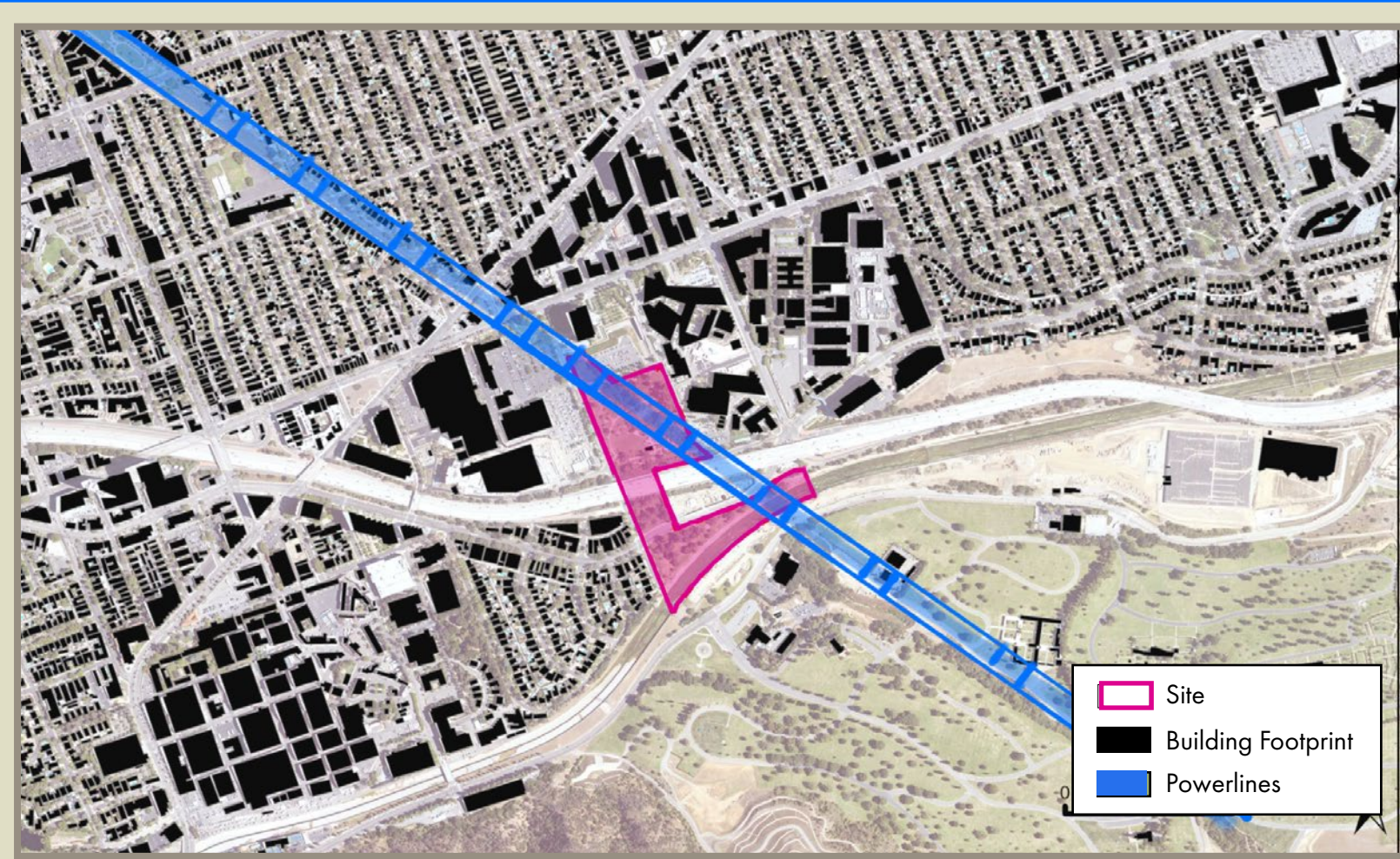
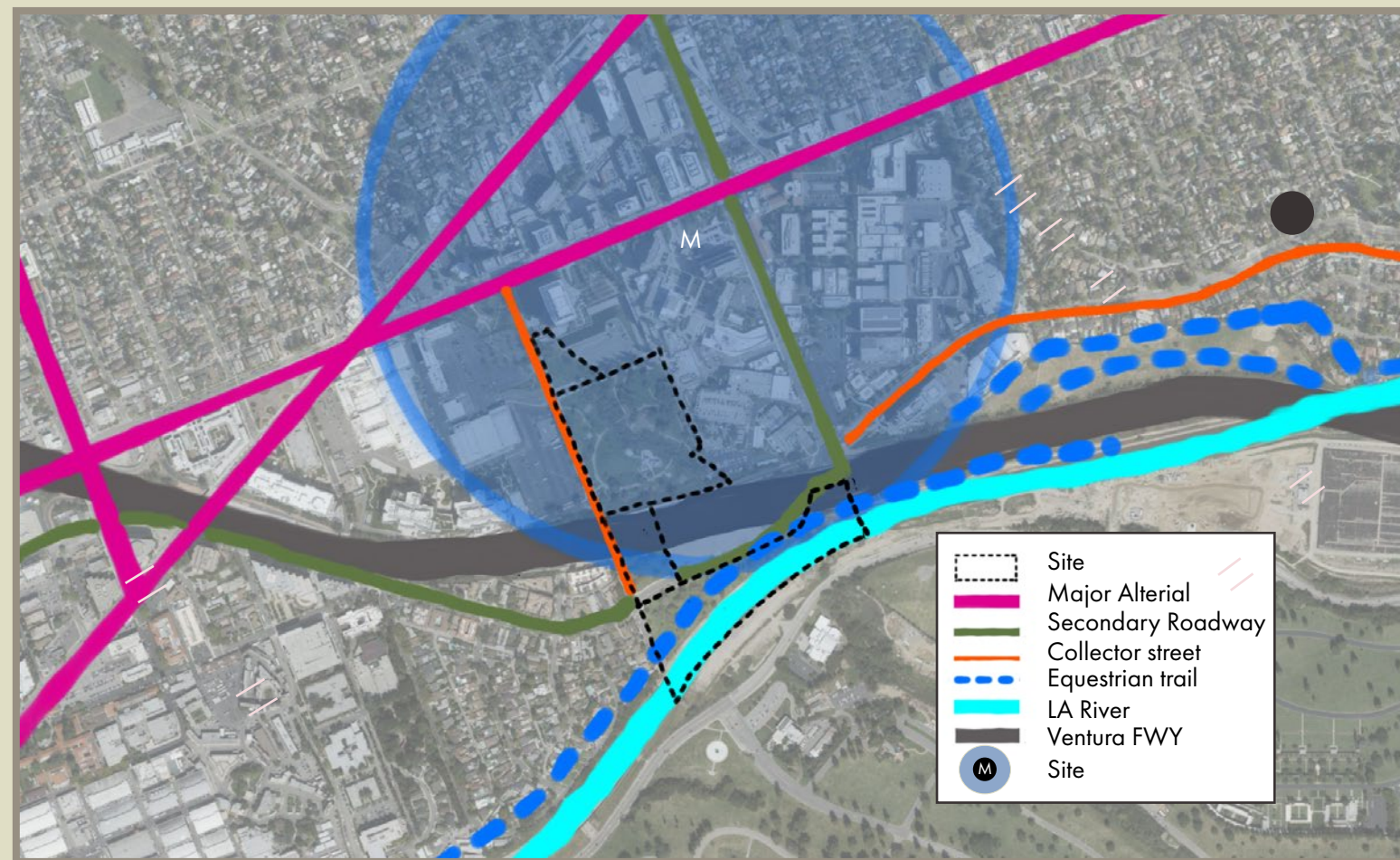
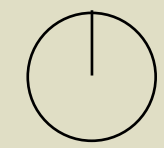
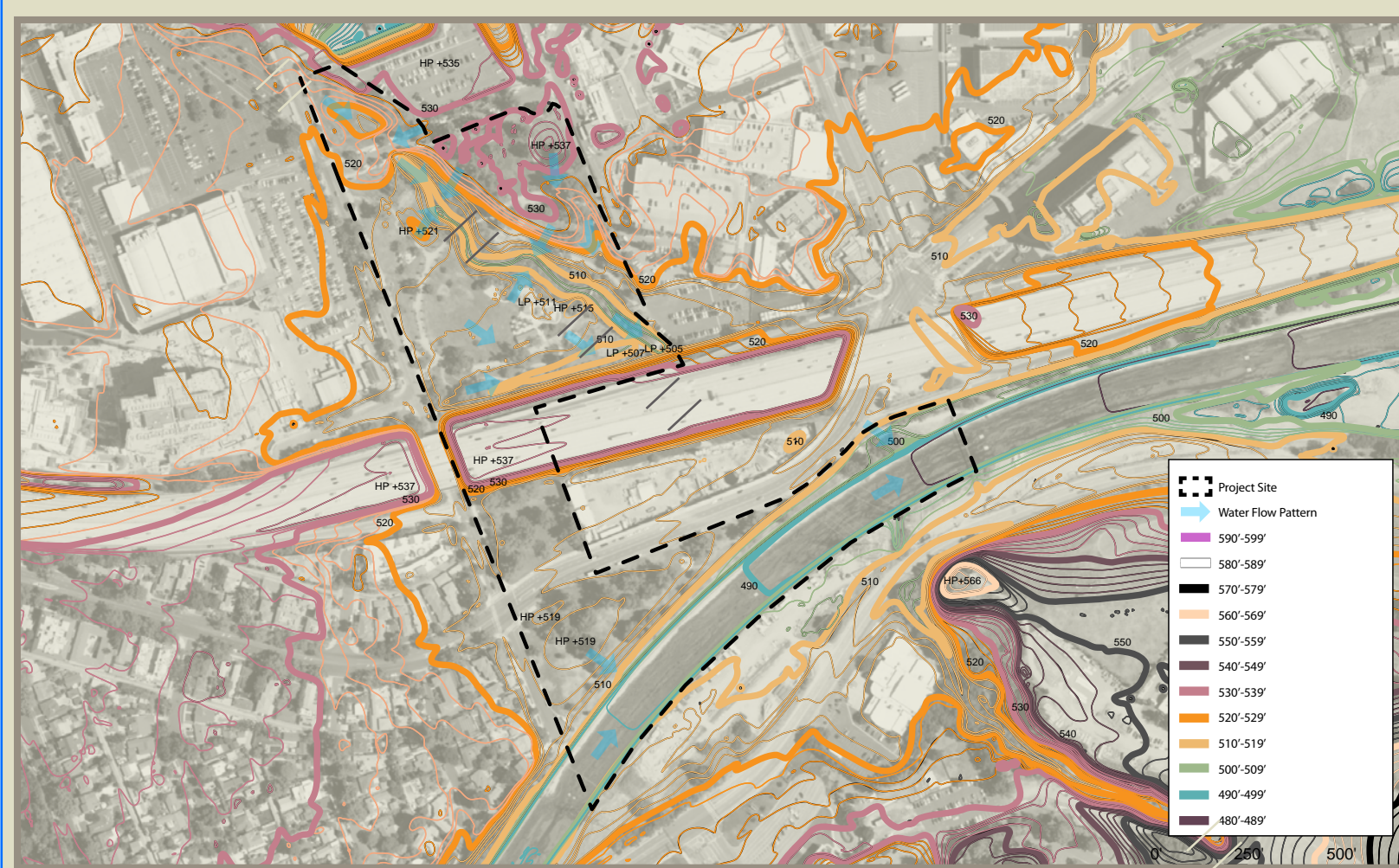


FIGURE GROUND

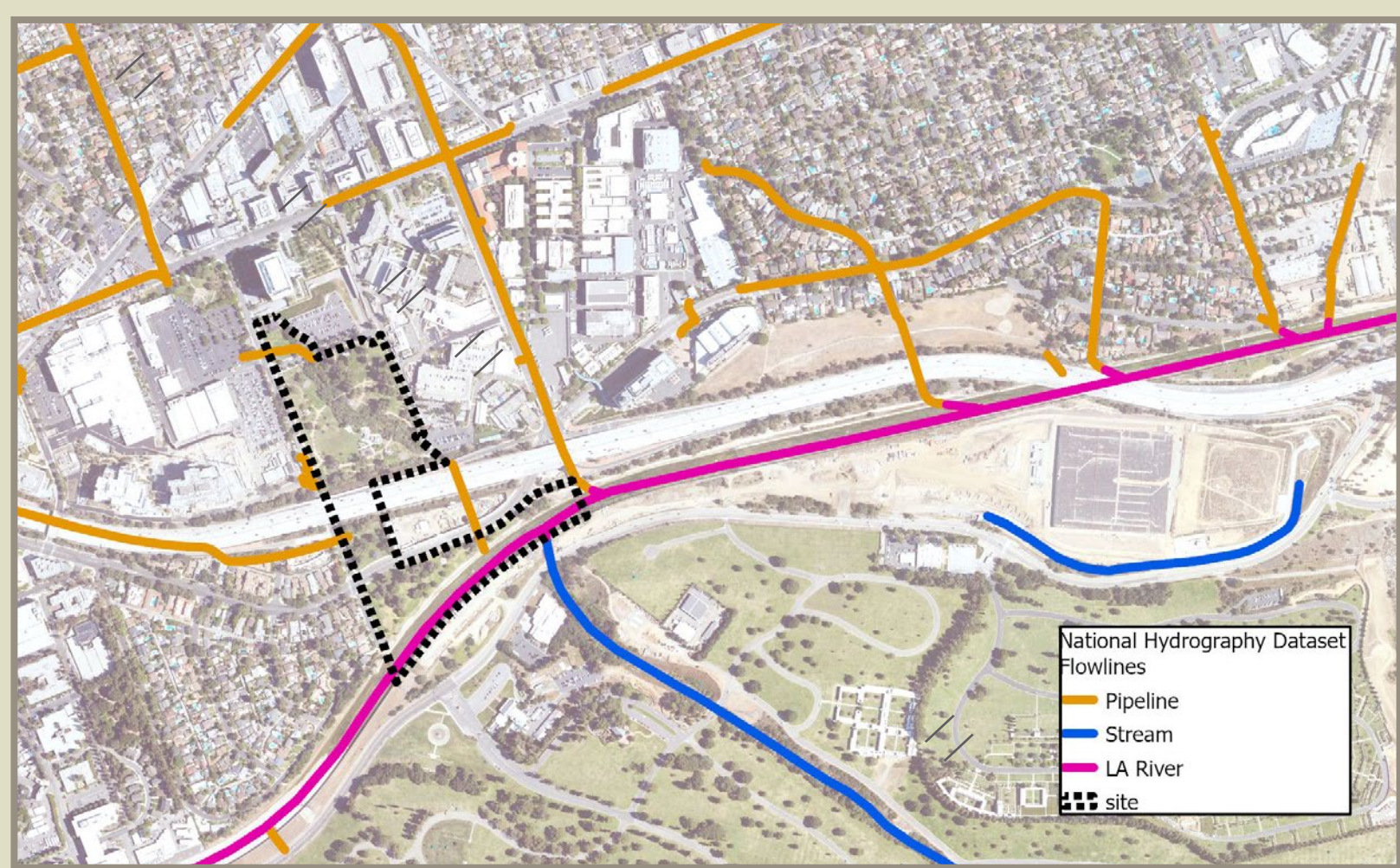


CIRCULATION MAP

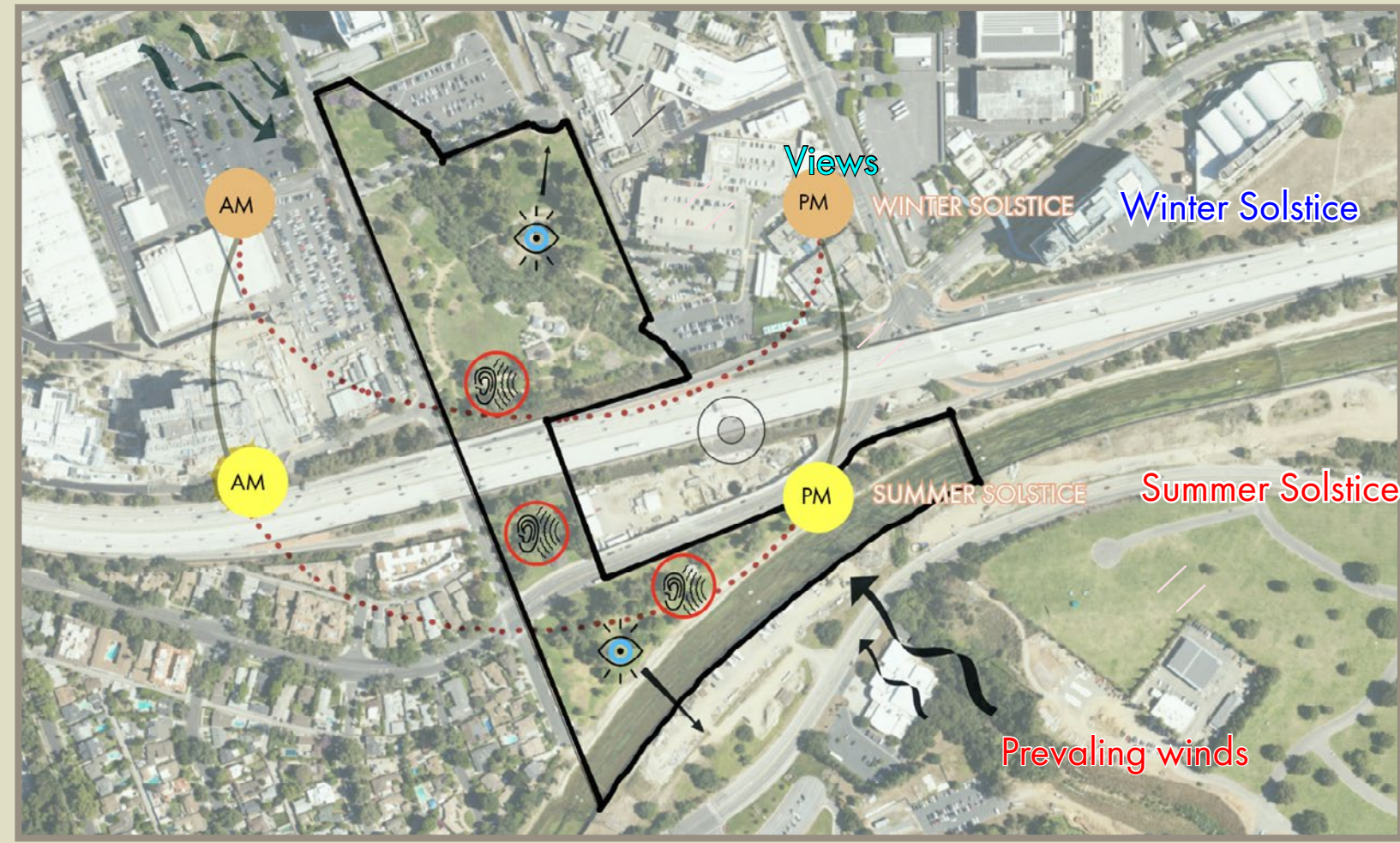




TOPOGRAPHY MAP



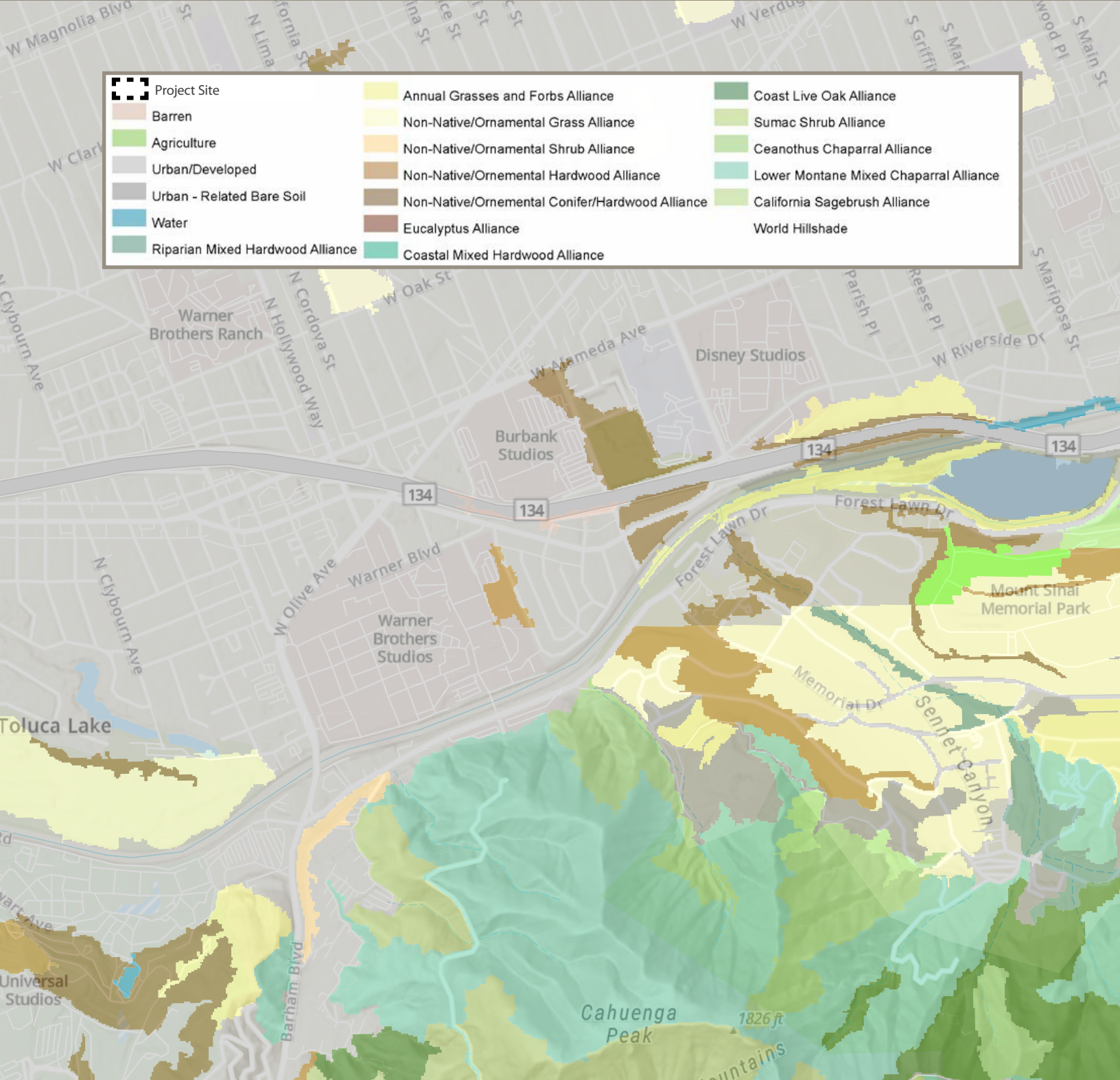
FLOWLINES MAP



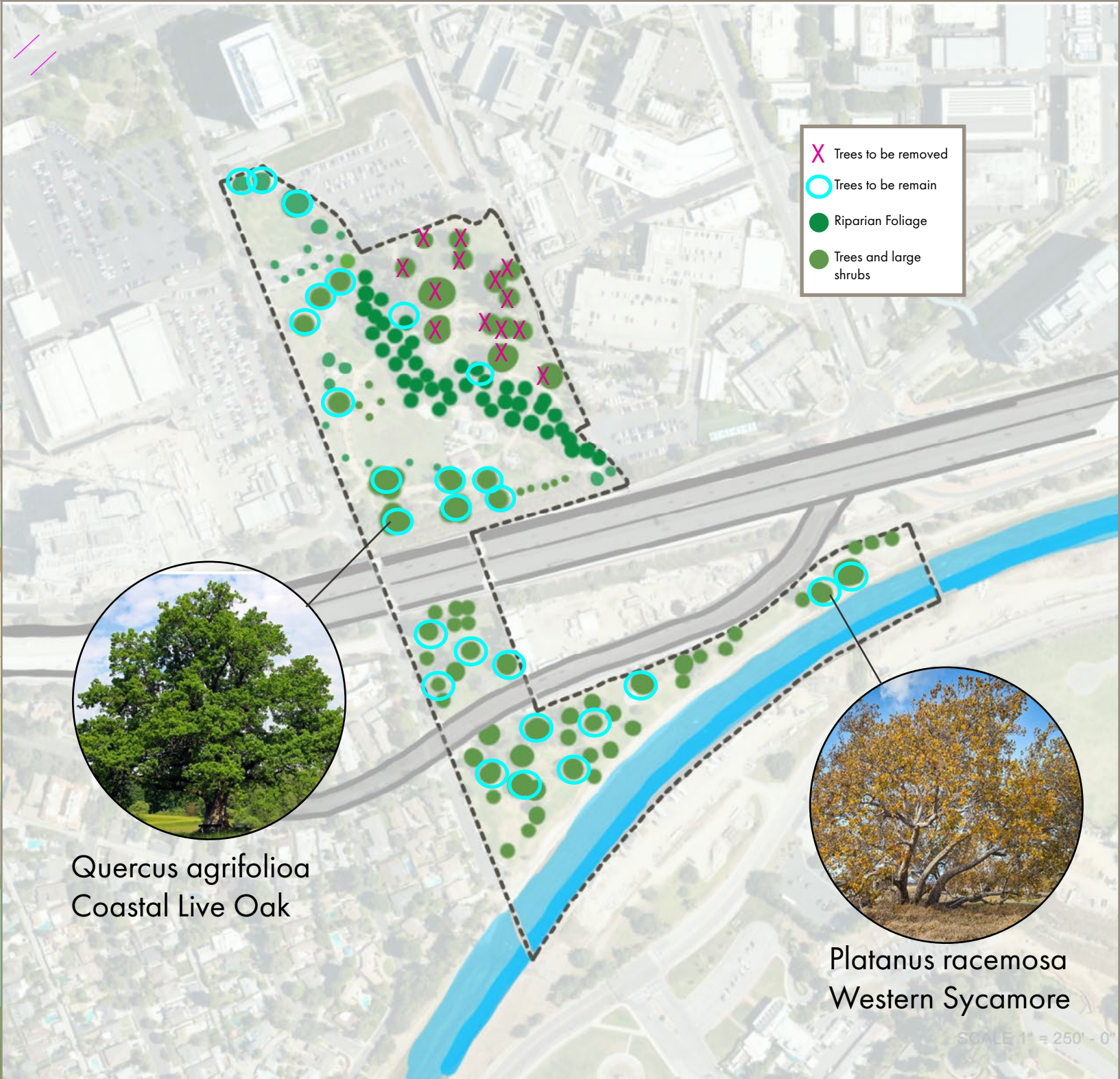
SUN PATTERNS, SOUND AND VIEWS

A low gradient change of 3 feet is present from the north to south of the park, with a depression area north of the former highway suitable for a swale





Project Site	Annual Grasses and Forbs Alliance	Coast Live Oak Alliance
Barren	Non-Native/Ornamental Grass Alliance	Sumac Shrub Alliance
Agriculture	Non-Native/Ornamental Shrub Alliance	Ceanothus Chaparral Alliance
Urban/Developed	Non-Native/Ornamental Hardwood Alliance	Lower Montane Mixed Chaparral Alliance
Urban - Related Bare Soil	Non-Native/Ornamental Conifer/Hardwood Alliance	California Sagebrush Alliance
Water	Eucalyptus Alliance	World Hillshade
Riparian Mixed Hardwood Alliance	Coastal Mixed Hardwood Alliance	



Trees to be removed
Trees to be remain
Riparian Foliage
Trees and large shrubs



*Quercus agrifolia*  
Coastal Live Oak



*Platanus racemosa*  
Western Sycamore

SCALE 1" = 250' - 0"

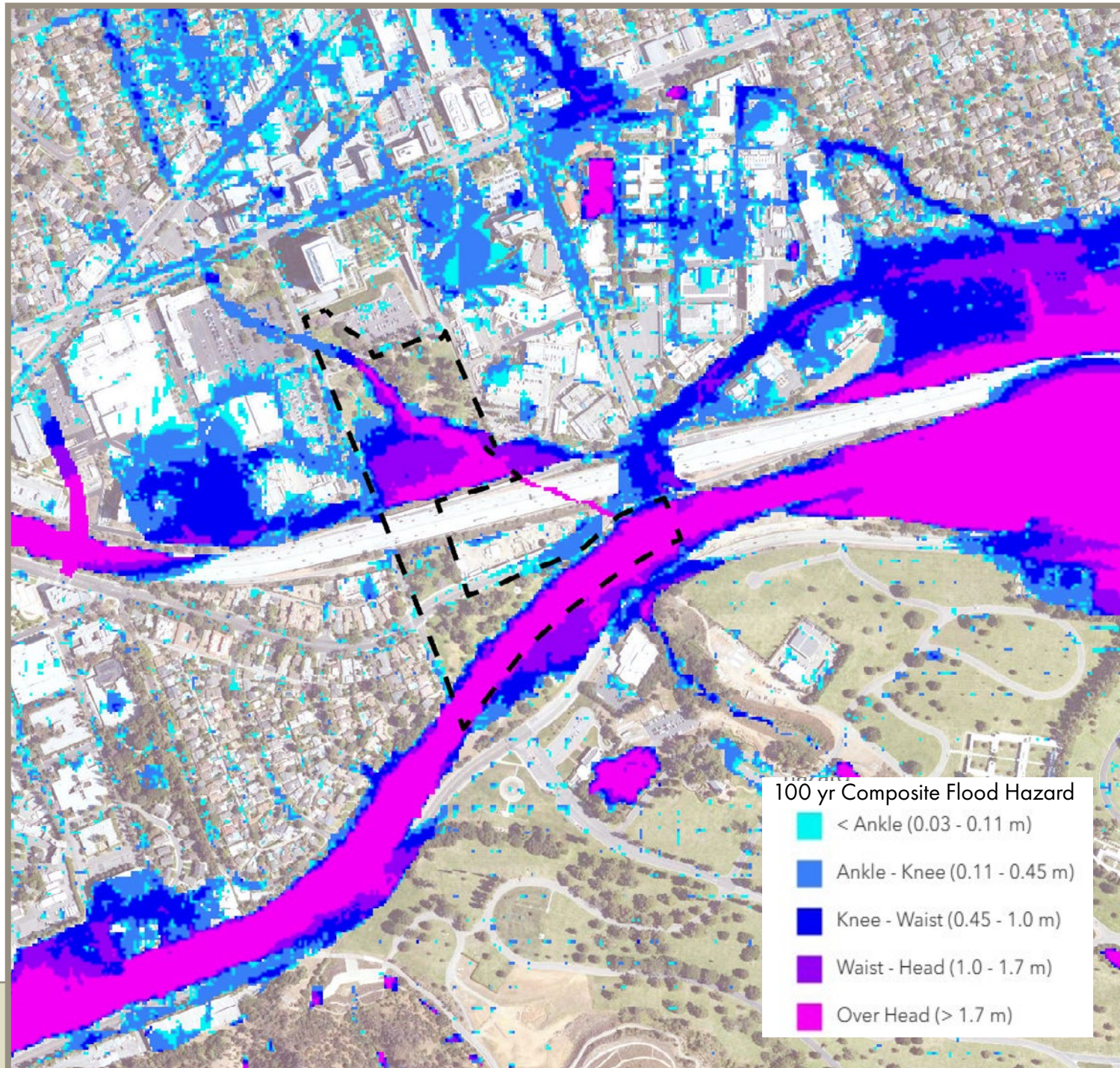
## JOHNNY CARSON PARK VEGETATION ALLIANCES

## TREE INVENTORY

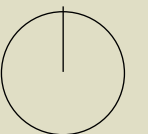
**\*X** We are proposing to remove all the non-native Pine trees in the northeast area of the park due to overgrowth. They no longer provide much needed shade, yet provide high fuel load and fire risk. These old trees are also susceptible to disease and falling down.



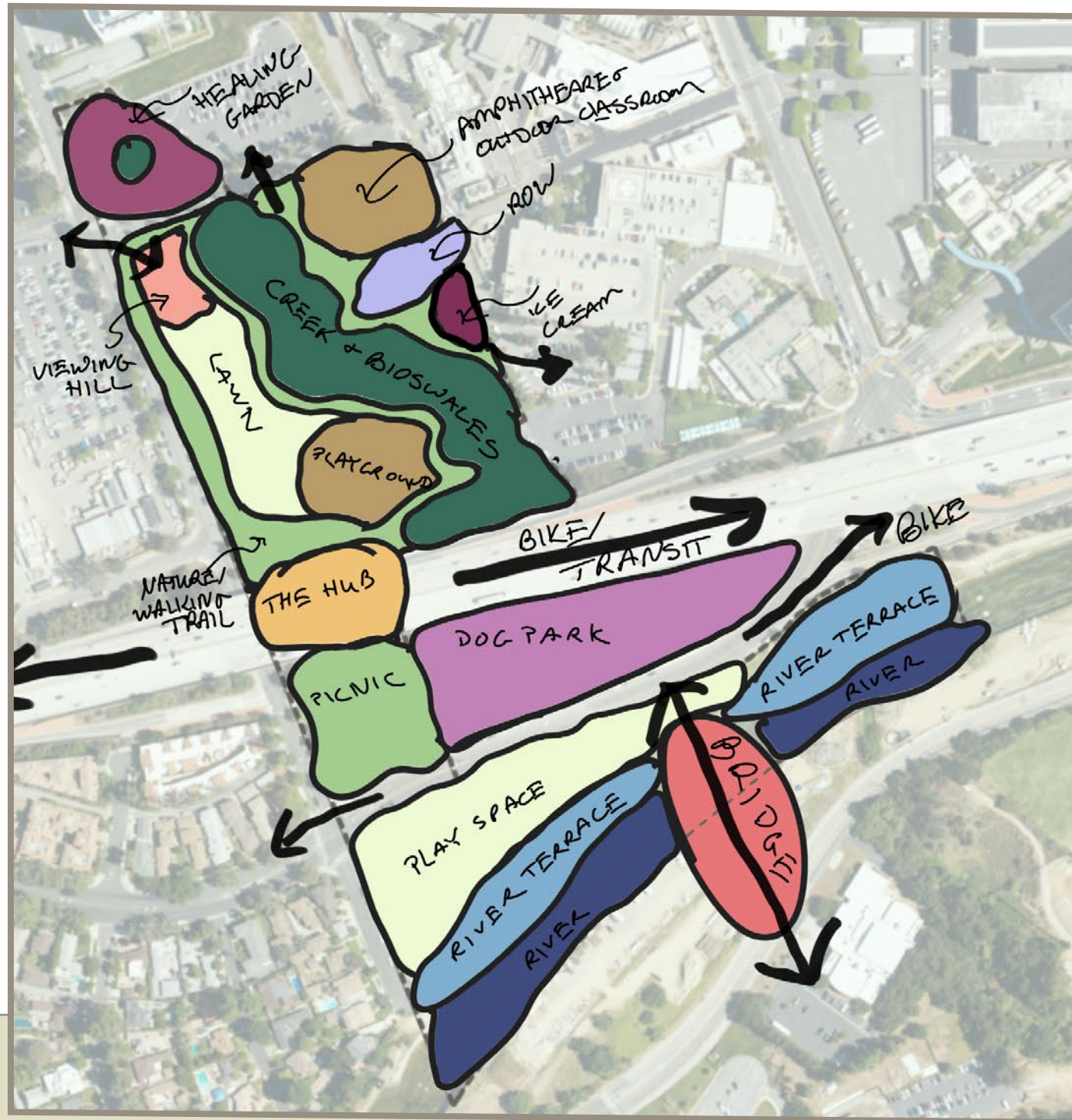
# CLIMATE INFO: FLOOD AND WILDFIRE RISK



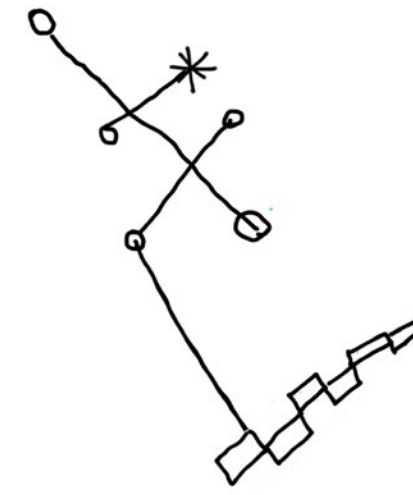
As the climate warms, flood and fire risk increase. Floods will be more common especially along the creek, which could be lessened with the addition of an infiltration basin



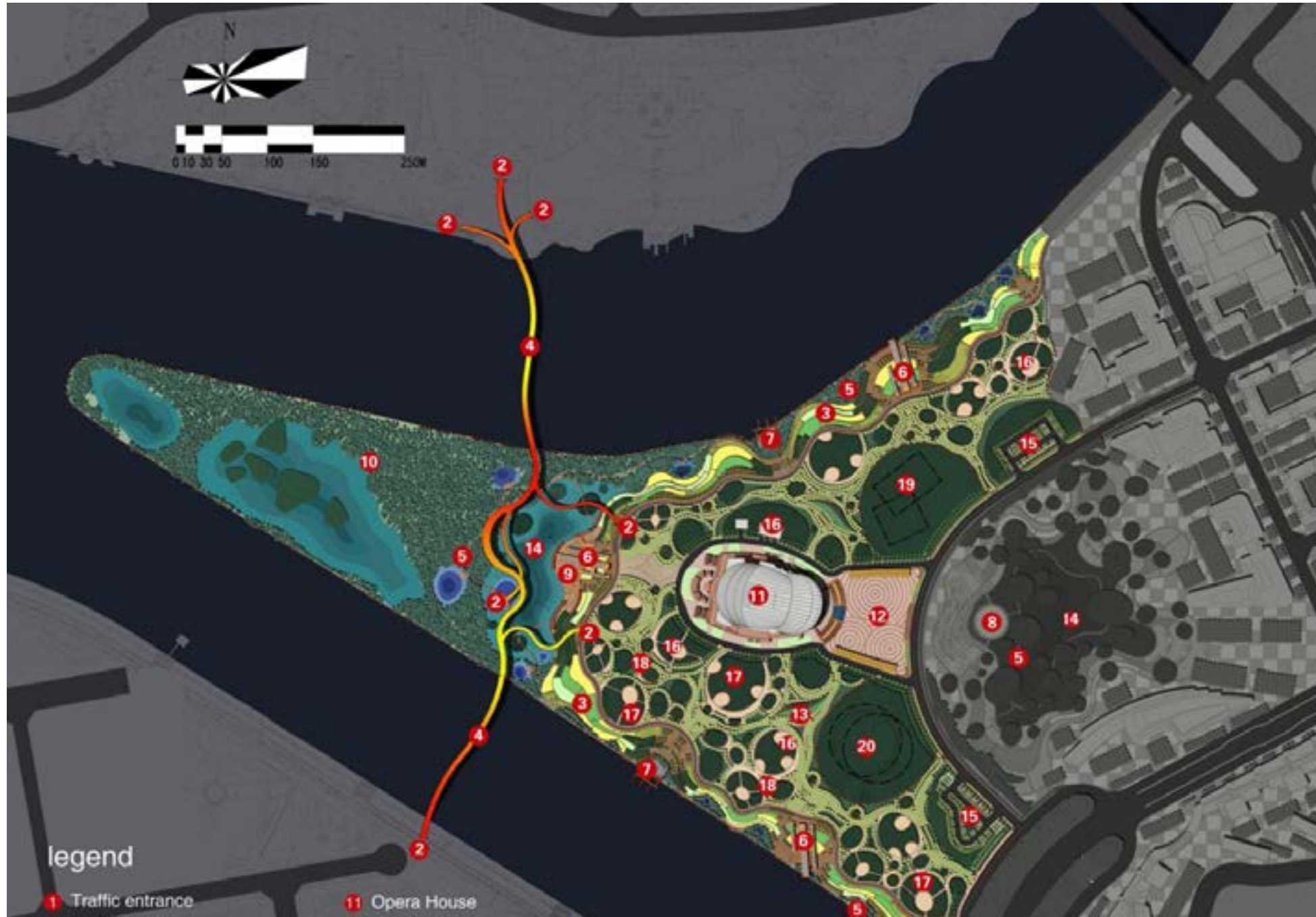
CONCEPT DIAGRAM



PART I



CASE STUDY | Yanwuzhou Park, China



YANWUZHOU PARK

Jinhua, Zhejiang Province, China

A sustainable approach to water constraints, connectivity needs, and habitat restoration

WATER

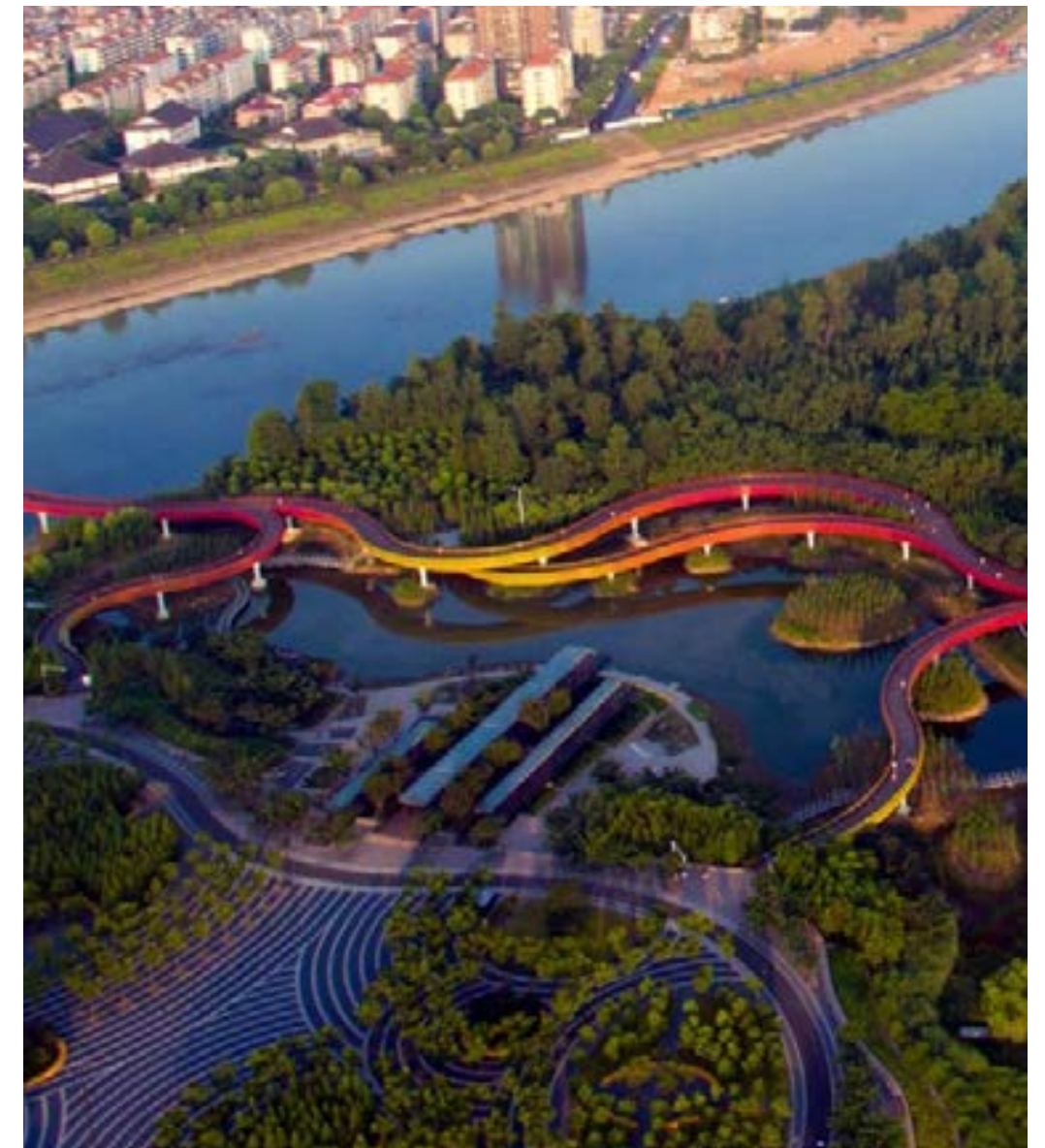
- Design themes represent water in every aspect of desing
- Design incorporates annual flooding, infiltration, and "sponge city concept"

CONNECTION

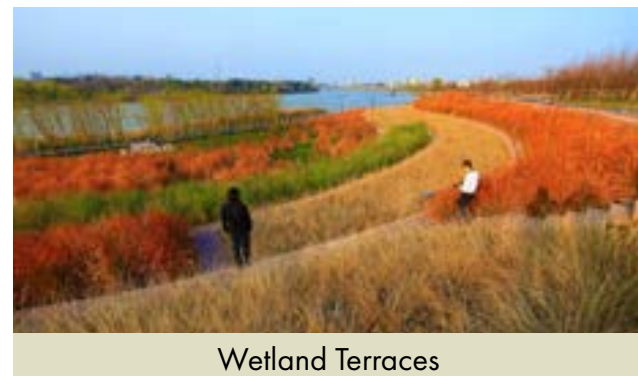
- Binds the city with nature
- Creates link between neighboring parks and communities

HABITAT

- Enhanced existing wetland with additional native wetland species
- Embraced natural systems of monsoonal flooding conditions



Pedestrian Bridges Over River

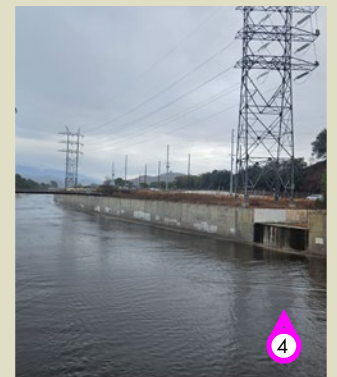
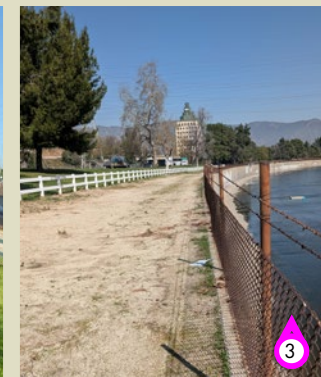
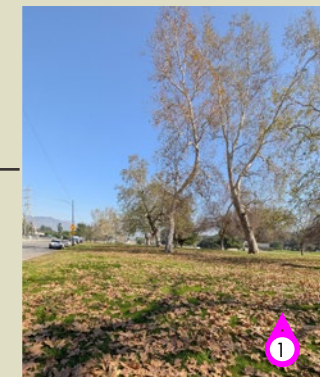
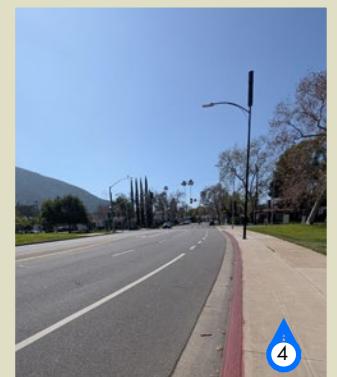
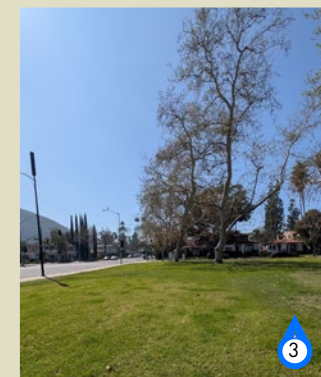
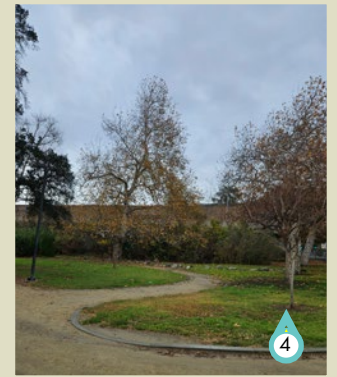
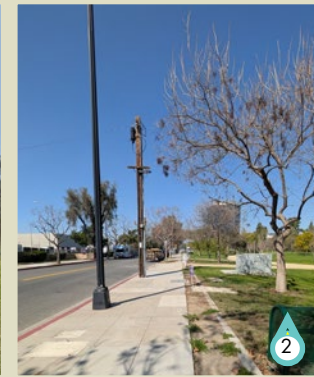
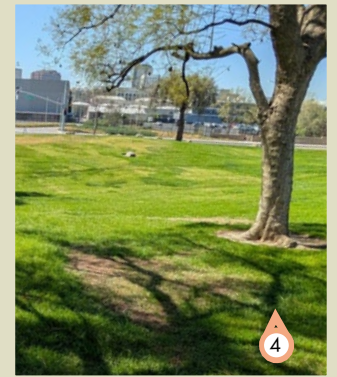
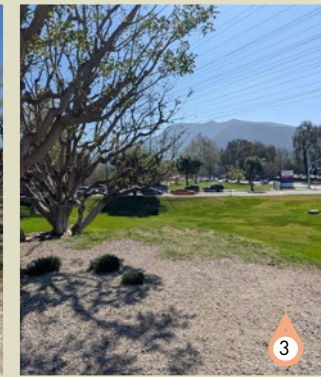
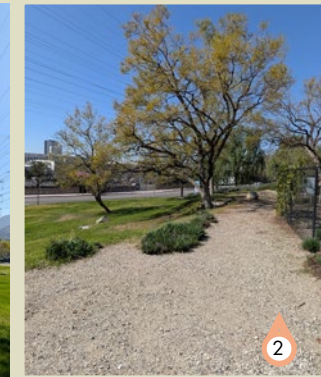


Wetland Terraces



Plaza

# ZONES





# JOHNNY CARSON PARK REIMAGINED

Existing Swale to be optimized for filtration

Climbing Wall

Commercial Area

Infiltration basin with native vegetation

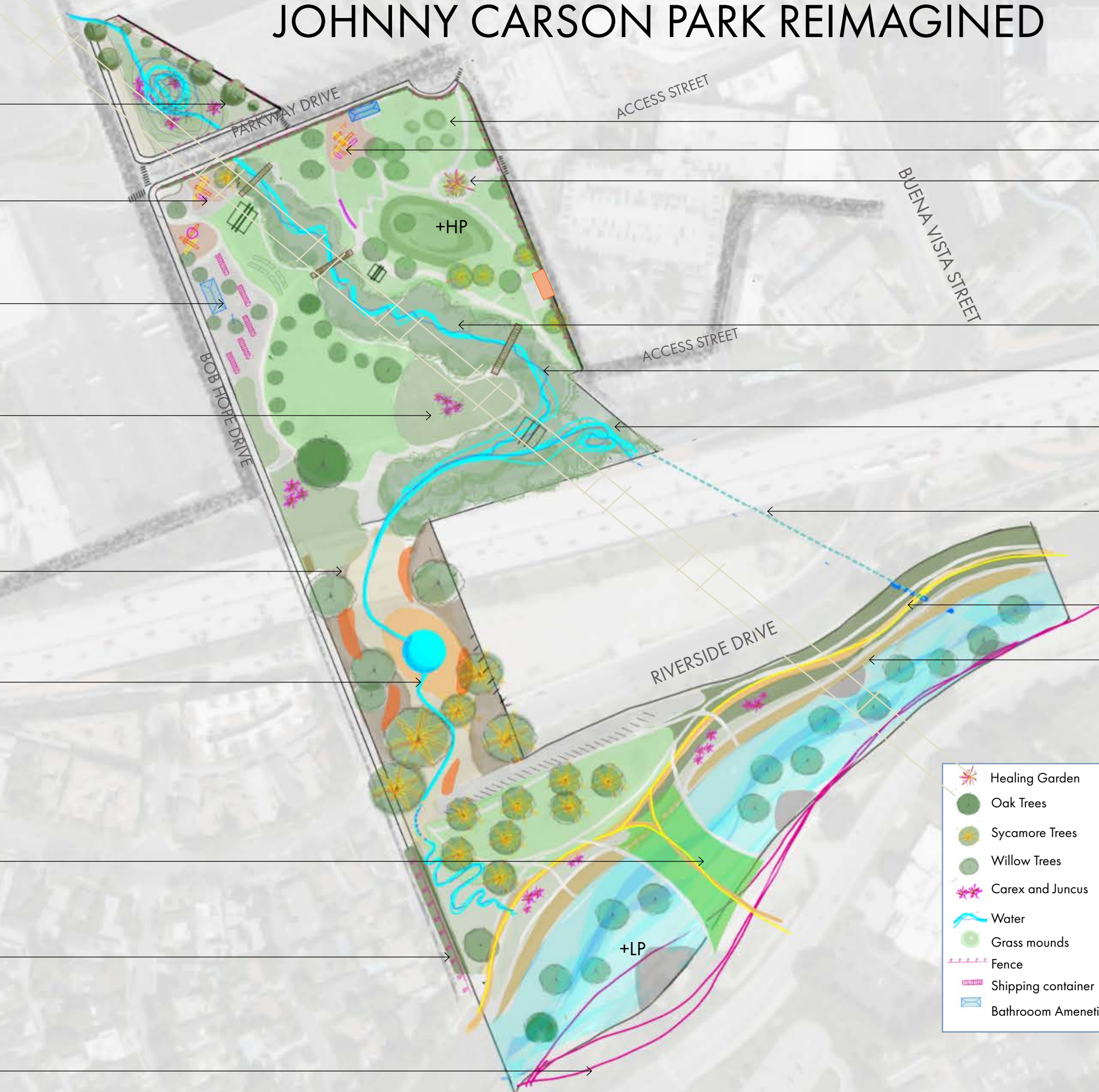
Light rail and two-way bike path under bridge

The HUB with large fountain, seating and raised wooden deck

Bridge path for bicycles, equestrian, pedestrian and wildlife crossing

Privacy screen

Not in plan, future terrace extension



Grass mounds

Playground

Healing garden with plants and water feature

Natural swale with checkdams and planted with native vegetation

Swale

Water overflow drains to the river

Bike Path

Terraces

- Healing Garden
- Oak Trees
- Sycamore Trees
- Willow Trees
- Carex and Juncus
- Water
- Grass mounds
- Fence
- Shipping container
- Bathroom Amenities



INSPIRATION



Climbing



Healing garden



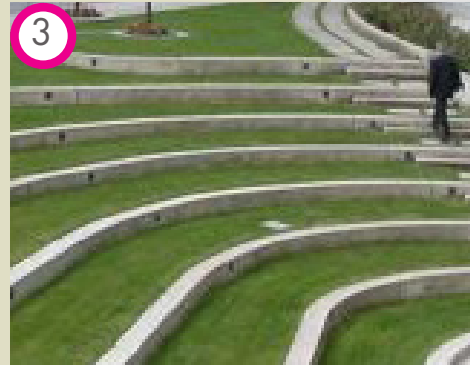
Adventure playground



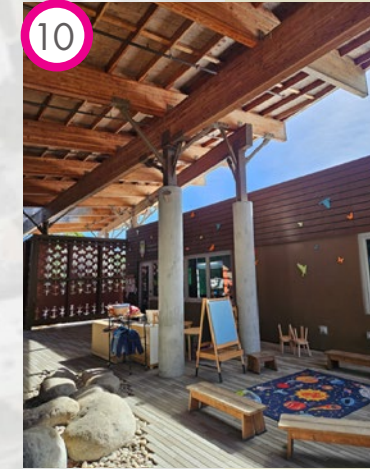
Exercise



Container cafe



Terrace seating



Environmental Ed



Swale



Circular paths



Boardwalk



Bike path



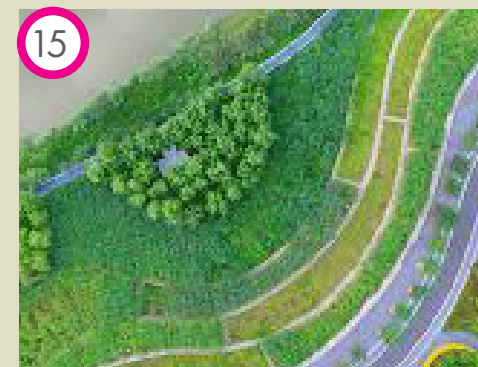
Transit station



Soft bottom river



Wildlife overpass



Terraces



# SHARED STREETS AND PASEOS



Shared streets are urban design approaches that prioritize pedestrians and cyclists by minimizing the segregation between different modes of transport, often removing features like curbs and traffic signals. Paseos, on the other hand, are typically pedestrian-focused areas or walkways, often with landscaping and amenities, designed for leisure and social activities

# HABITAT RESTORATION

## PLANTING PALETTE

The planting palette reflects the surrounding plant communities in order to support the local biodiversity and wildlife of the area. Many of these plants are known to have phytoremediation properties to help clean the toxins from the water. Below are the plant communities and a sample of the selected plants in planting palette as well as local wildlife to represent these celebrated ecosystems



### WILDFLOWER MEADOW

*Stipa pulchra* Purple Needlegrass  
*Asclepias fascicularis* Narrowleaf Milkweed  
*Achillea millefolium* Common Yarrow  
*Eriophyllum confertiflorum* Golden Yarrow  
*Eschscholzia californica* California Poppy  
*Lupinus bicolor* Miniature Lupine



### WETLAND TERRACE

*Achillea millefolium* Common yarrow - Hg Mercury removal (Mishra,2009)  
*Helianthus annuus* - Pb,Cd lead cadmium (Raj, 2020)  
*Phragmites australis* Common Reed - Uranium (Černe, 2011) Cu  
*Echinodorus berteroi* Burrhead - mono-, di- and triethylene glycol (Teamkao, 2010)  
*Juncus effusus* Soft Rush -Cu (Lu, 2017) Methyl Red and Methylene Blue Dyes (Urucu,2025)  
*Festuca rubra* Red Fescue - Hg (Rodriguez et a., 2003)  
*Eleocharis acicularis* Needle Spikerush Cu (Sakakibara, 2011)



### COASTAL SAGE SCRUB

*Acmispon glaber* Common Deerplant  
*Artemisia californica* California Sagebrush  
*Ericameria palmeri* Palmer Goldenbush  
*Heterotheca grandiflora* Telegraph Weed  
*Eriogonum fasciculatum* California buckwheat  
*Corethrogyne filaginifolia* Common Sandaster  
*Salvia leucophylla* Purple Sage  
*Salvia mellifera* Black Sage



### CHAPARRAL

*Malosma laurina* Laurel Sumac  
*Rhus ovata* Sugar Bush  
*Baccharis pilularis* Coyotebrush  
*Brickellia californica* California Brick-lebush  
*Romneya coulteri* Coulter's Matilija Poppy  
*Pseudognaphalium californicum* California Cudweed  
*Eriodictyon crassifolium* Thickleaf Yerba Santa



### OAK WOODLAND

*Quercus agrifolia* Coast Live Oak  
*Ribes malvaceum* Chaparral Current  
*Rhamnus ilicifolia* Hollyleaf Redberry  
*Prunus ilicifolia* Hollyleaf Cherry  
*Sambucus mexicana* Blue Elderberry  
*Epilobium canum* California Fuchsia  
*Heteromeles arbutifolia* Toyon



### RIPARIAN WOODLAND

*Baccharis salicifolia* Mule-Fat  
*Platanus racemosa* Western Sycamore  
*Salix lasiolepis* Arroyo Willow  
*Salix laevigata* Red Willow  
*Salix gooddingii* Goodding's Black Willow

## WILDLIFE

### MAMMALS



Mountain Lion (*Puma concolor*)



Bobcat (*Lynx rufus*)

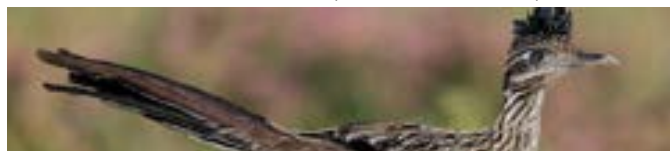


Coyote (*Canis latrans*)



California ground squirrel

### BIRDS



Greater Roadrunner (*Geococcyx californianus*)



Cooper's Hawk (*Astur cooperii*)



Western Screech Owl (*Megascops kennicottii*)

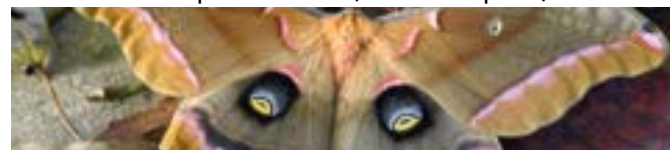


Downy Woodpecker (*Picoides pubescens*)

### INSECTS



Western Tiger Swallowtail (*Papilio rutulus*)



Polyphemus moth (*Antheraea polyphemus*)



Sycamore Borer Moth (*Synanthedon resplendens*)



Wandering Tiger Moth (*Spilosoma vestalis*)

SECTION LINE

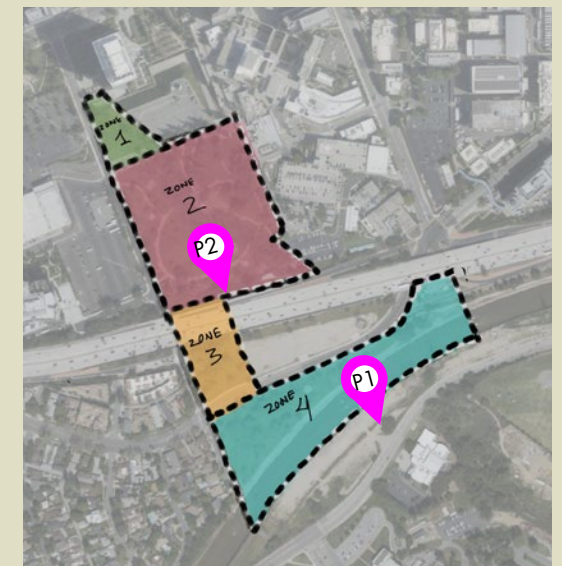


# PERSPECTIVES

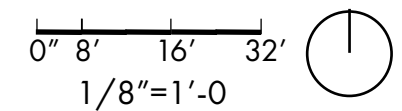
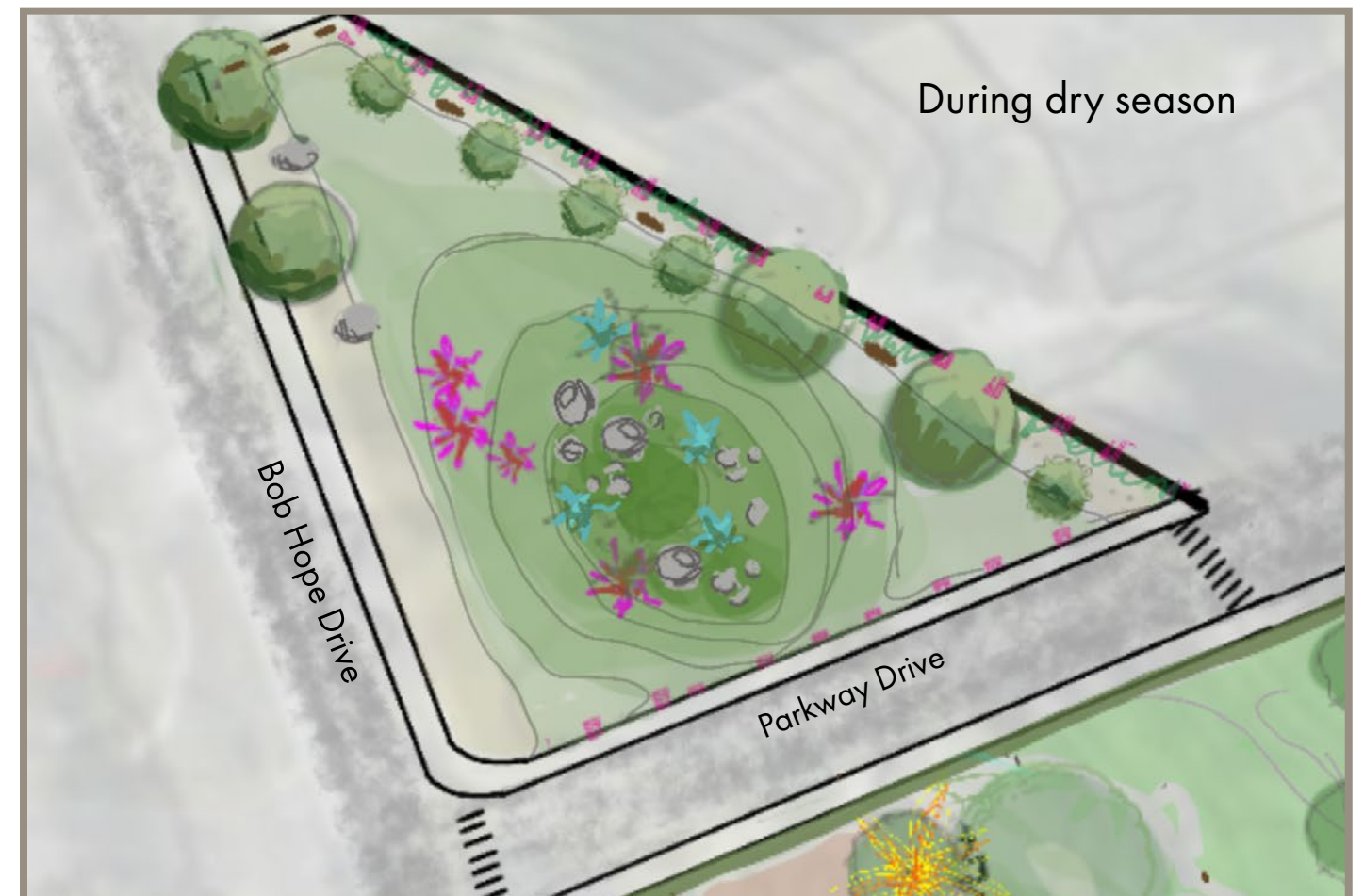
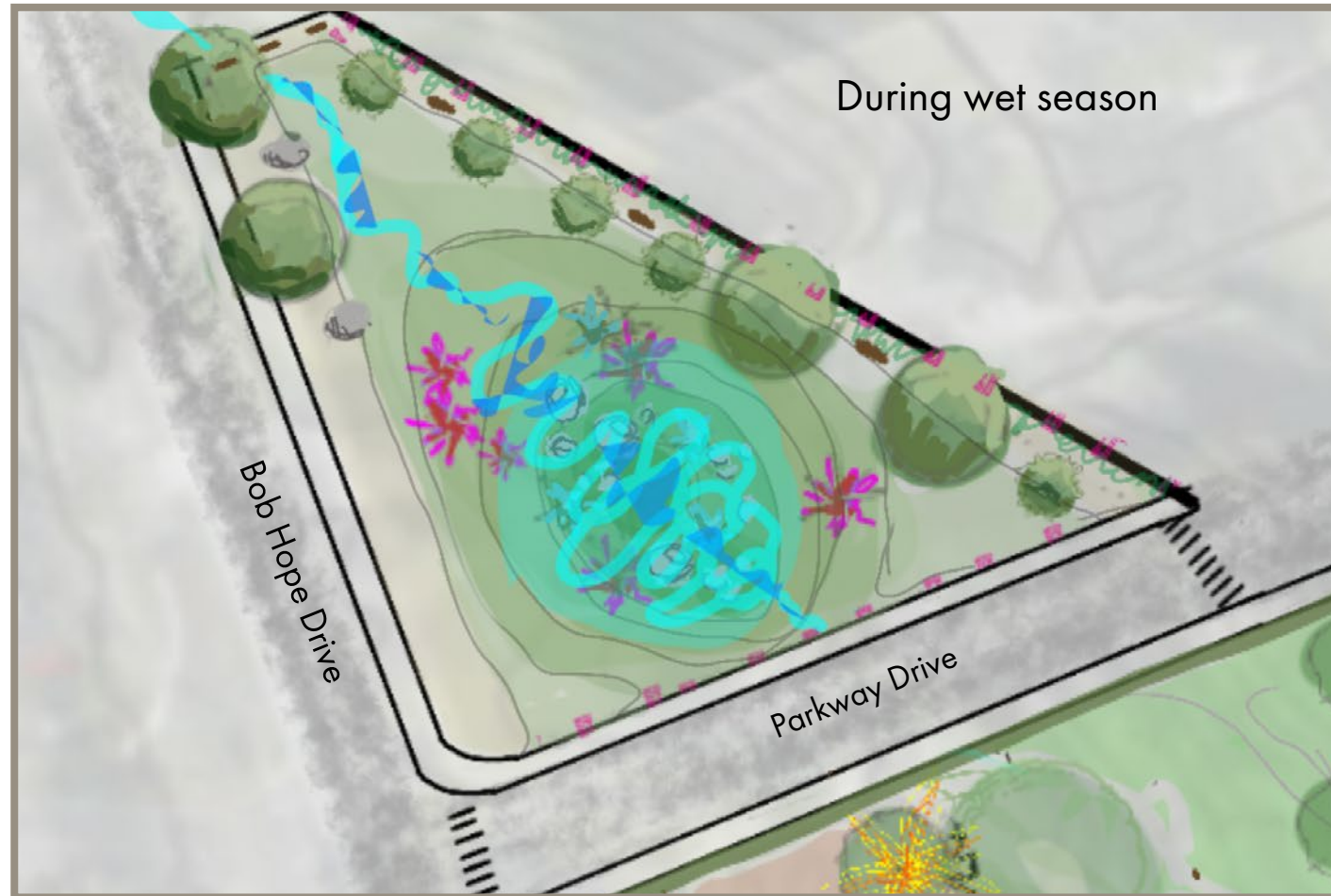
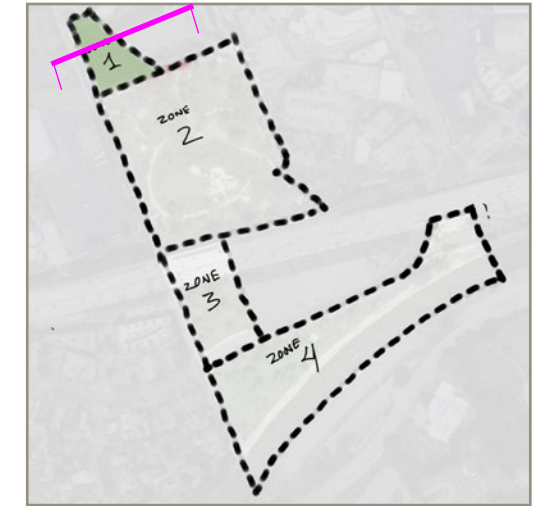
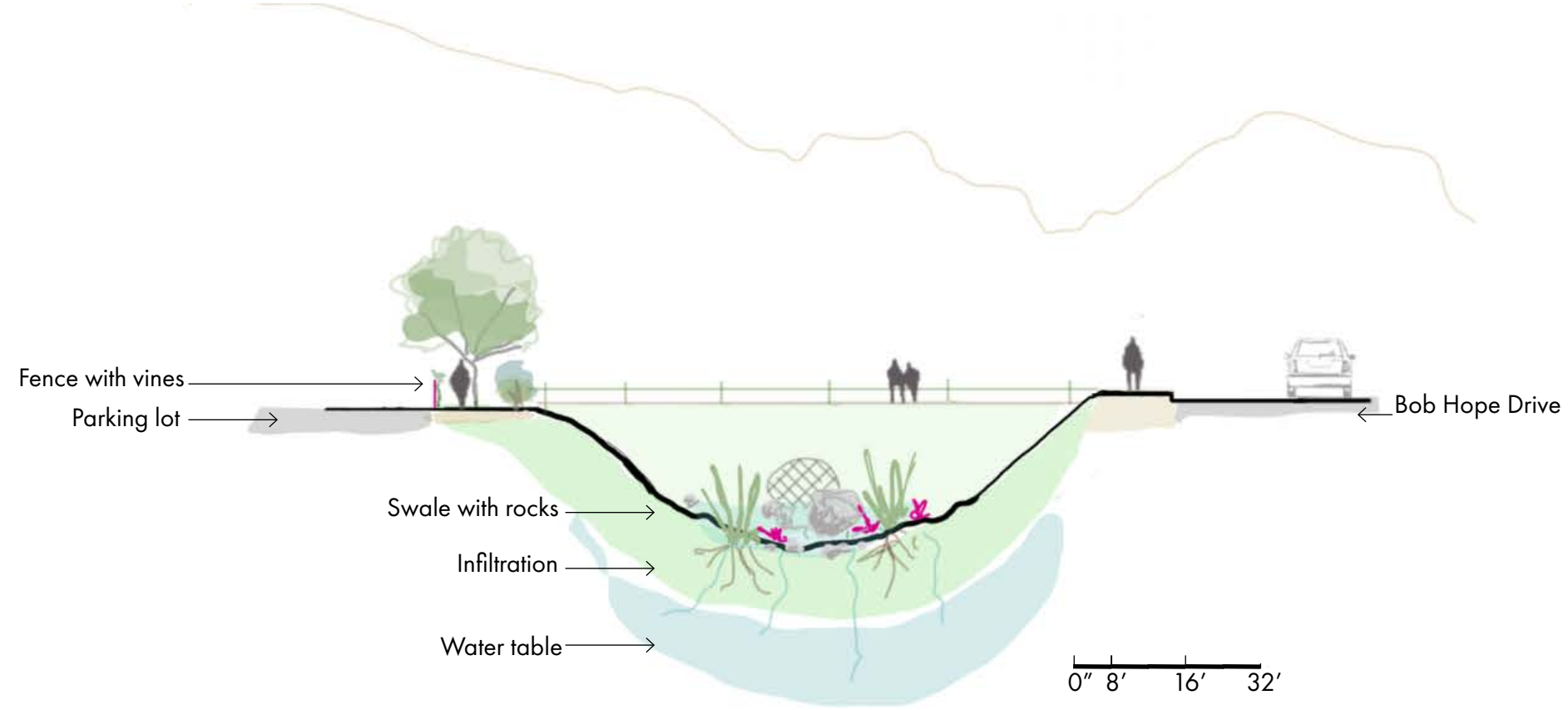


**P1** View south of a horseback rider on a bridge path over the LA River. This path is designed for bicyclist, equestrians, pedestrians and wild-life crossing. Griffith Park is in the distance.

**P2** View south of a dogwalker walking on a path adjacent to the infiltration basin and swale. Native pollinators occupy the basin. An oak tree is in the distance



ZONE 1



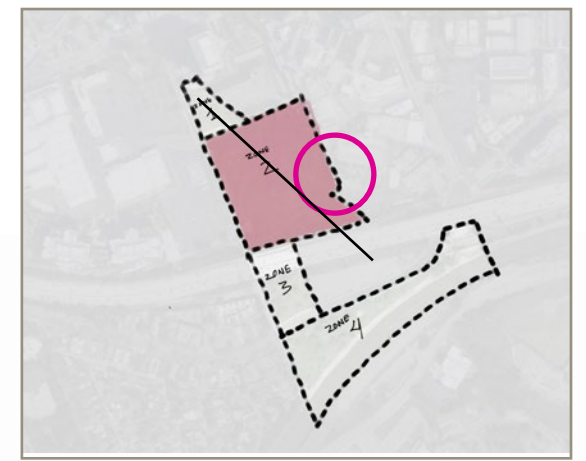
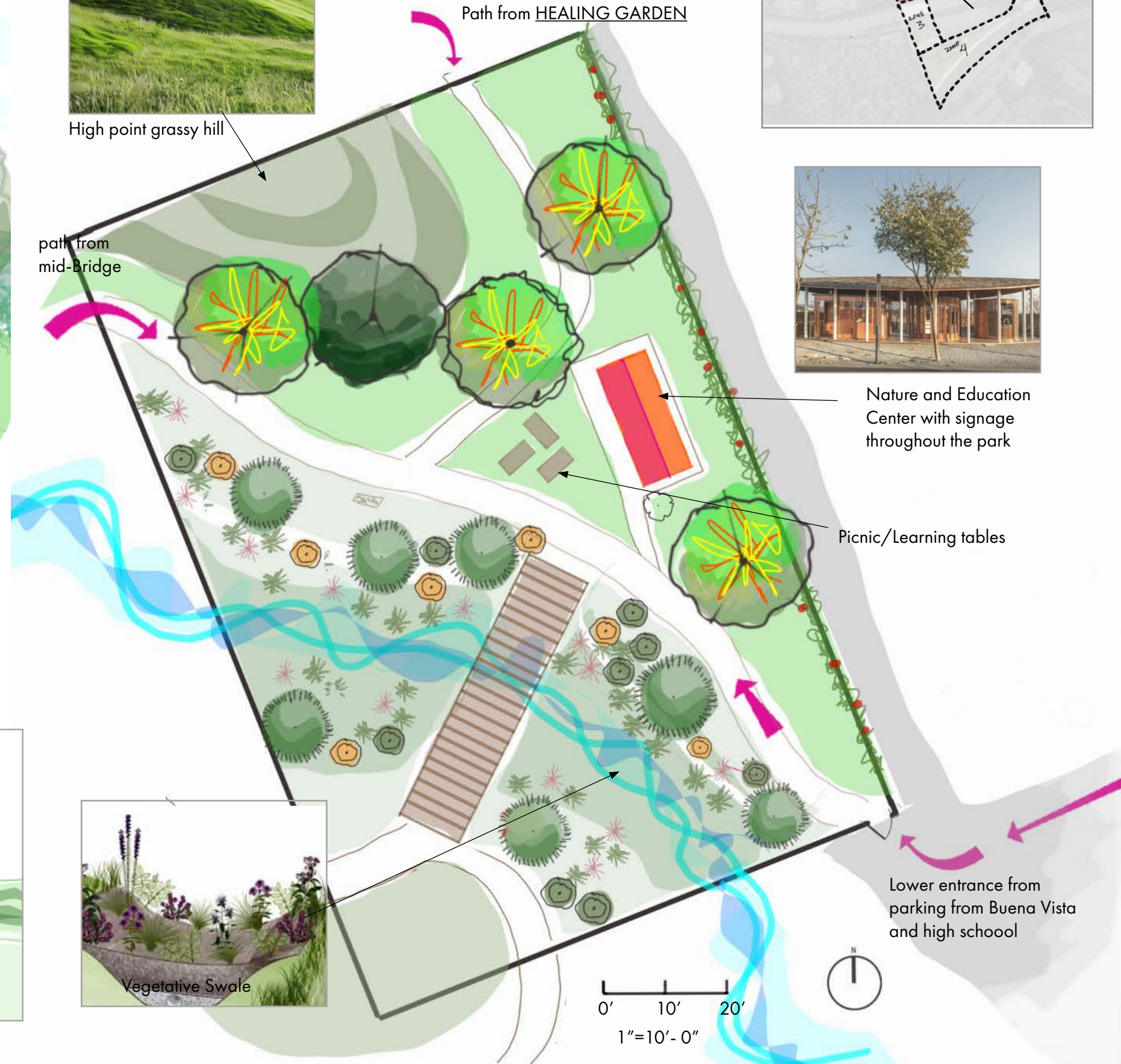
ZONE 2B



High point grassy hill

path from mid-Bridge

Path from HEALING GARDEN

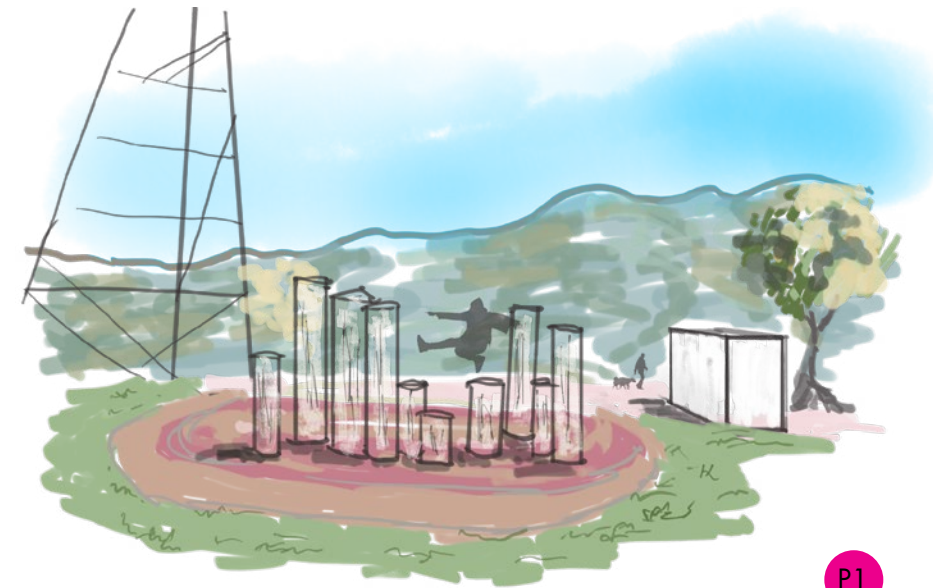
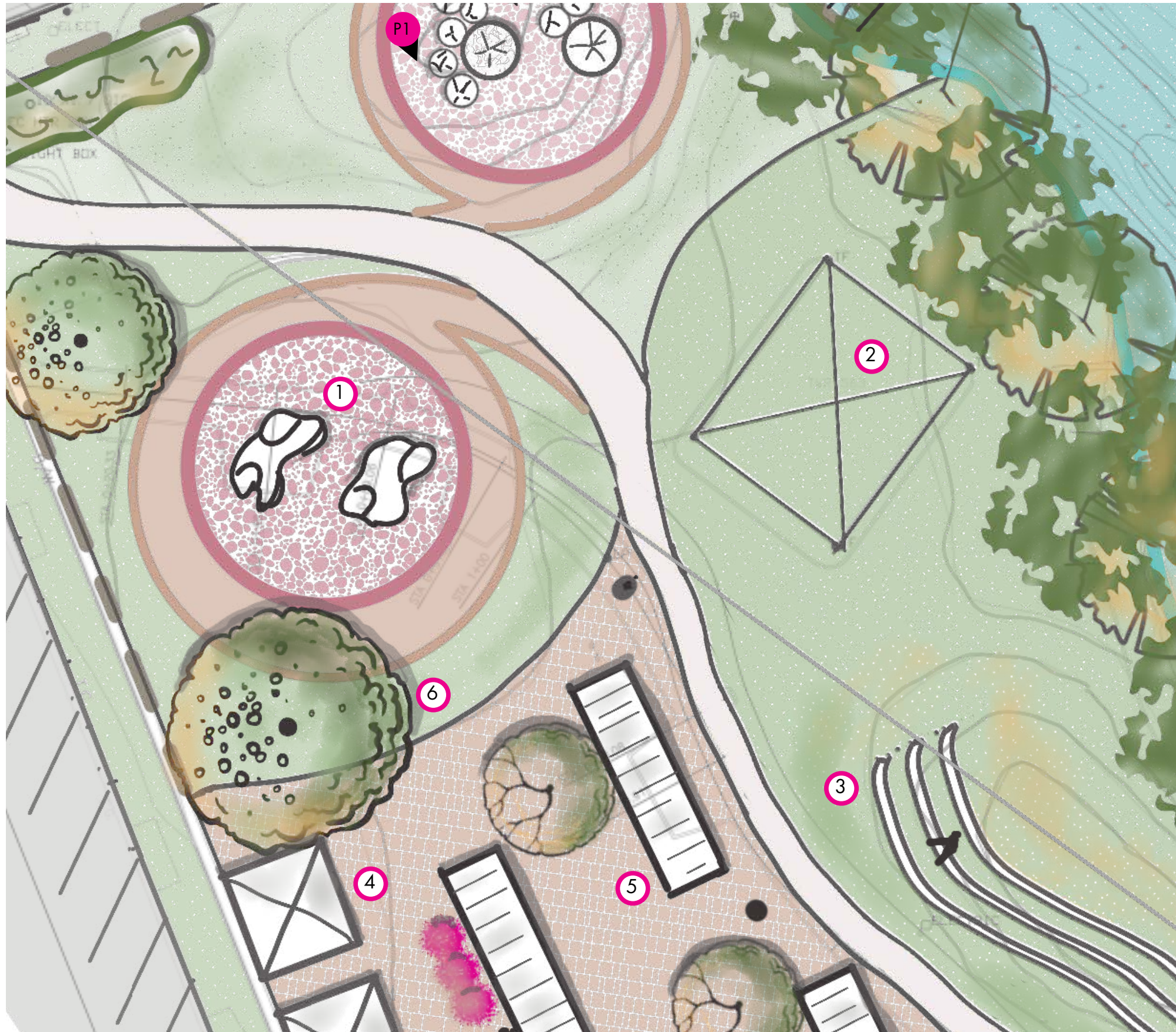


Nature and Education Center with signage throughout the park

Picnic/Learning tables

Lower entrance from parking from Buena Vista and high school

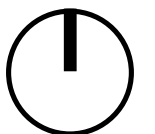
ZONE 2A



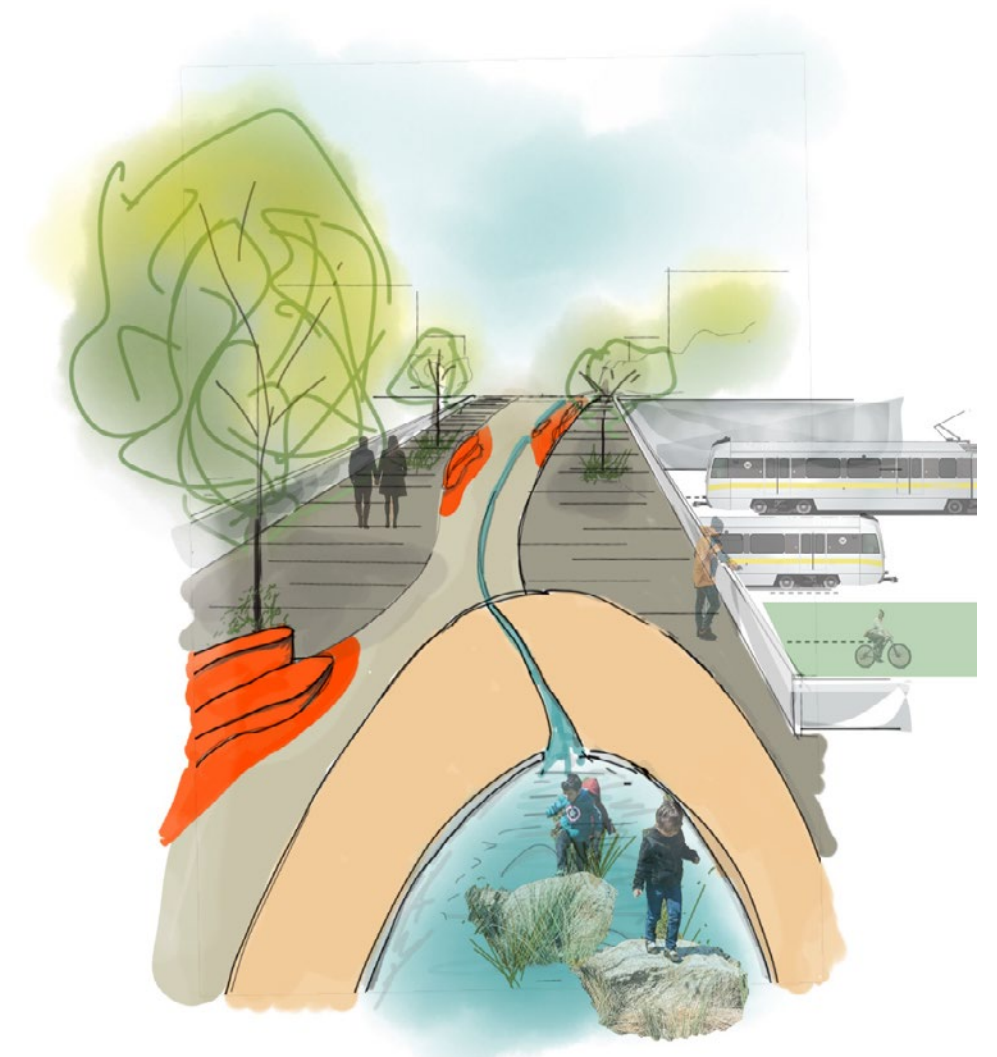
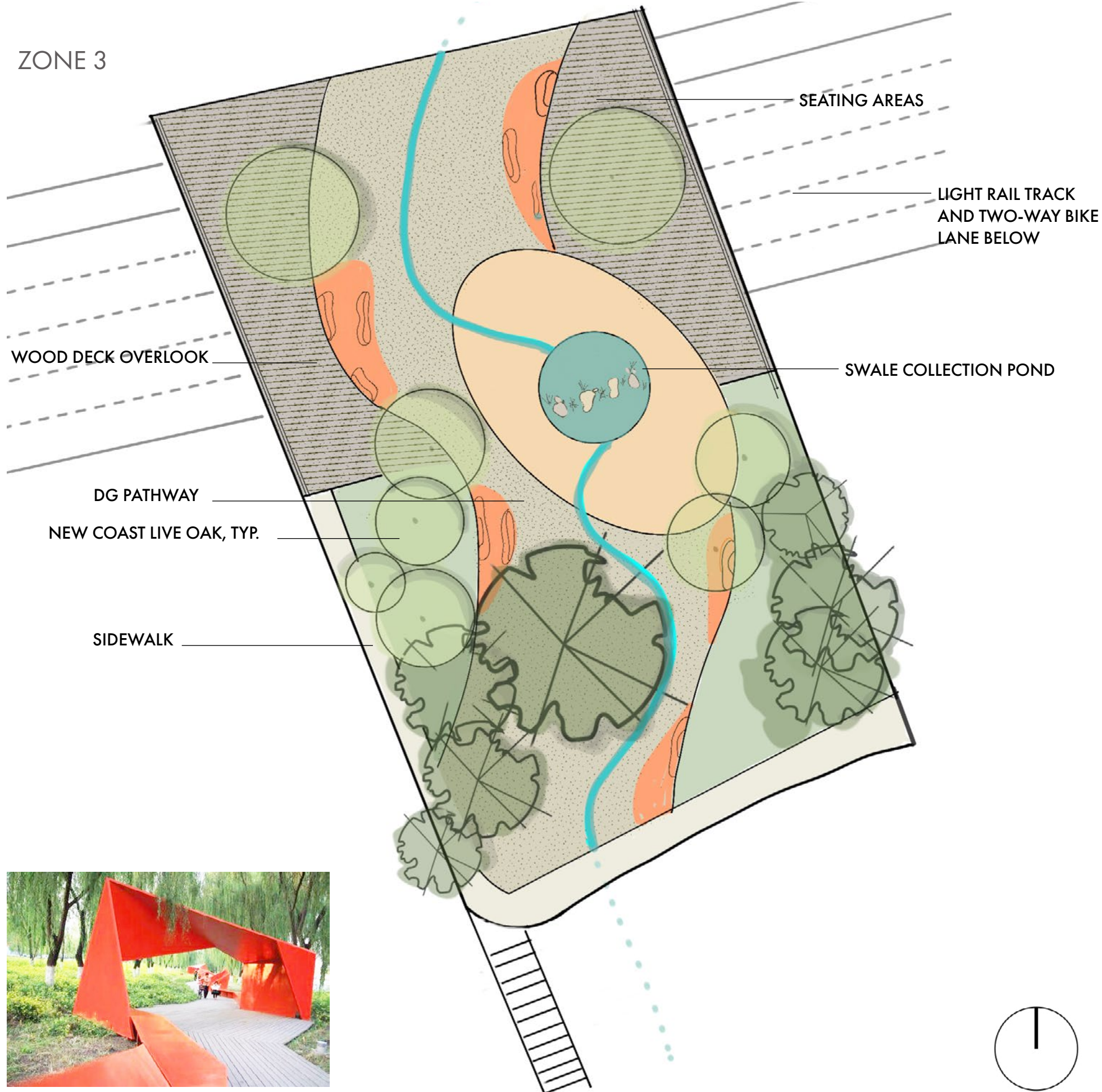
- ① Climbing structure
- ② Transmission tower
- ③ Terrace seating
- ④ Farmer's market
- ⑤ Container cafes
- ⑥ Shade trees



0' 10' 20' 40' 1" = 20'-0"



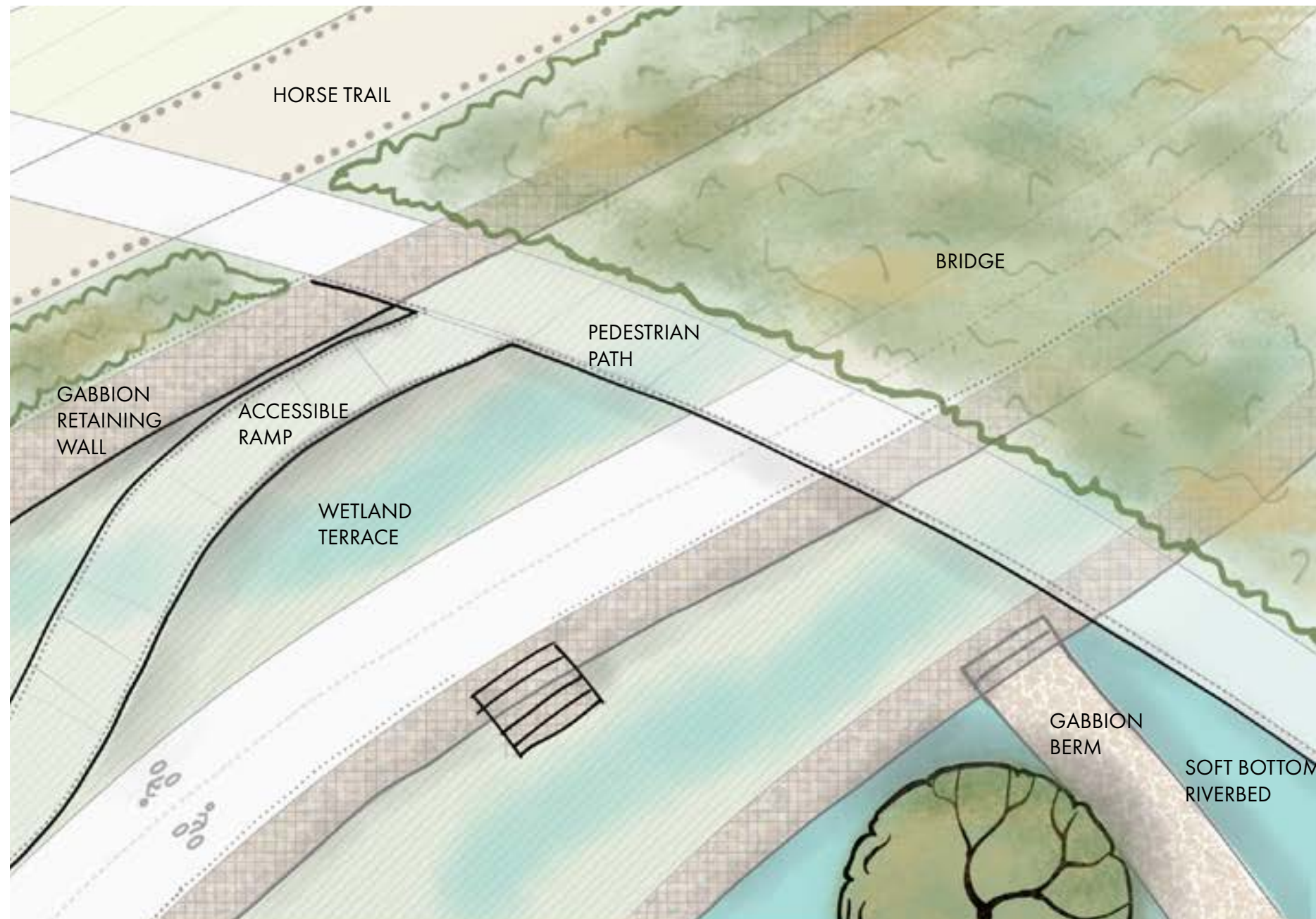
ZONE 3



KEY PLAN



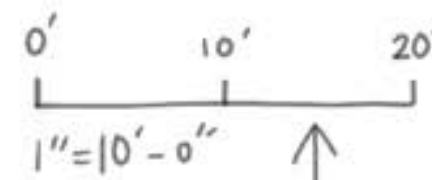
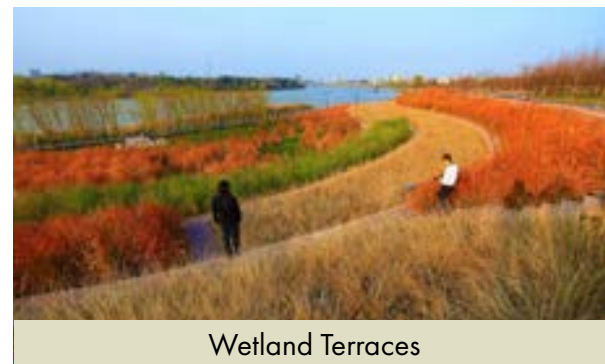
ZONE 4



This area connects visitors and restores the critically important riparian woodland habitat. This design supports wildlife by providing food, water, shelter and connection to neighboring habitats. The soft bottom river bed equipped with gabbion berms configured to cause low flow LA river water to bend and slow for more infiltration, filter pollutants, and support the local ecosystem.

The terraces act as a wetland to help slow down water, allow water to infiltrate, and filter pollutants. With locally native plants known to remove toxins, chemicals and metals, we are able to clean the storm drain water as it flows through the site and head toward the ocean. Gabbions are proven to have higher strength than concrete, keeping the terraces secure during high water flow events.

This bridge acts as a connection for all visitors including equestrian riders, bike riders, pedestrians, river-goers, wildlife and more.



# NEW OPPORTUNITIES FOR CONNECTION

## PEOPLE

### Spaces to gather

Educational signage in English and Tongva/Gabrieleno with images

### Wooden structures for play and exercise

Addition of bike path and public transit

Healing garden

Coffee and refreshment kiosks

## LAND

### Wildlife bridge for safe passage

Pollinator garden

### Protect existing native trees

Liberal use of local native trees and plants

Minimal disturbance of soil and existing landforms

Increase wildlife and wetland habitat

## WATER

### Terraces to restore riverbanks

Create and reinforce bioswales to maximize infiltration

### Widen and restore the existing natural swale

Using plants to clean the water

Install clean drinking water stations

Put a bend back in the river

