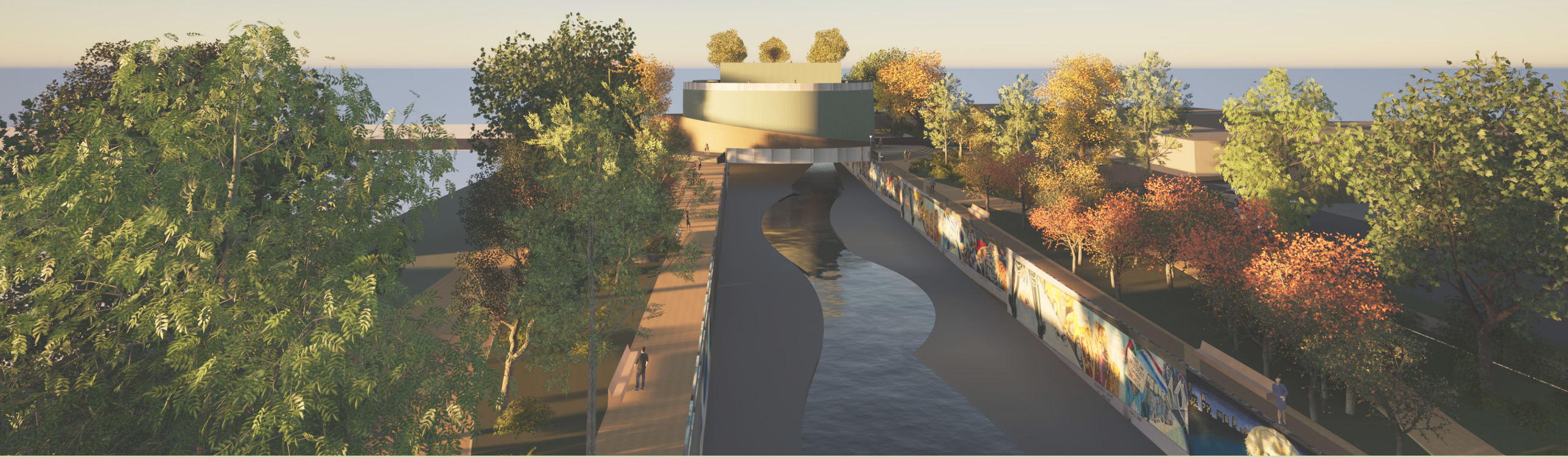
The Great Wall of Los Angeles Park
Master Plan



UCLAx LD6: Concept Development / Instructor: Steven Chavez, PLA

Student: Amy White

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LAND ACKNOWLEDGEMENT

We recognize and acknowledge that The Great Wall of Los Angeles Park sits on the traditional lands of the first people of this ancestral and unceded territory near Suitcanga, Vijanga and Achoichominga villages; we honor their elders, past and present, and the descendants who are citizens of the Fernandeño Tataviam Band of Mission Indians. We recognize that the Tribe is still here and we are committed to lifting up their stories, culture, and community.

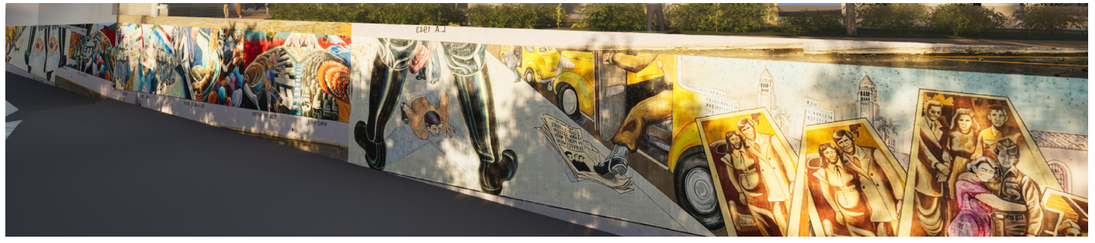
SITE OVERVIEW AND HISTORY

“A tattoo on the scar where the river once ran.” Dr. Judith F. Baca

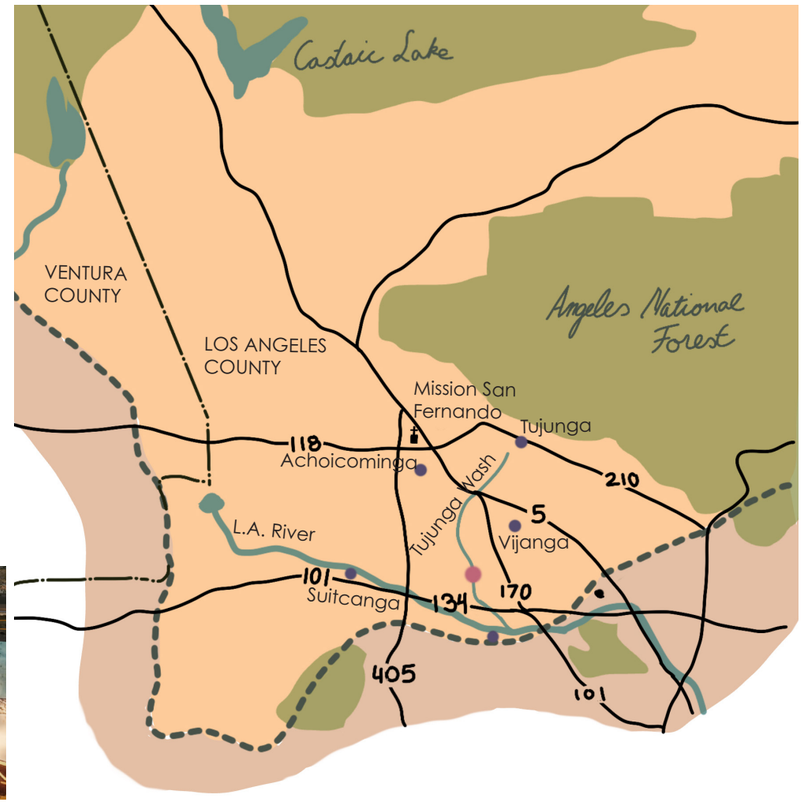
The Great Wall of Los Angeles Park, currently named the Tujunga Greenbelt, is located in the **San Fernando Valley** community of **Valley Glen** (12900 Oxnard St, Valley Glen, CA, 91606). The site envelopes the **Tujunga Wash flood channel**, where the **national historical landmark**, The Great Wall of Los Angeles, is displayed on the western wall of the channel. Plans for a mural on the eastern wall are underway.

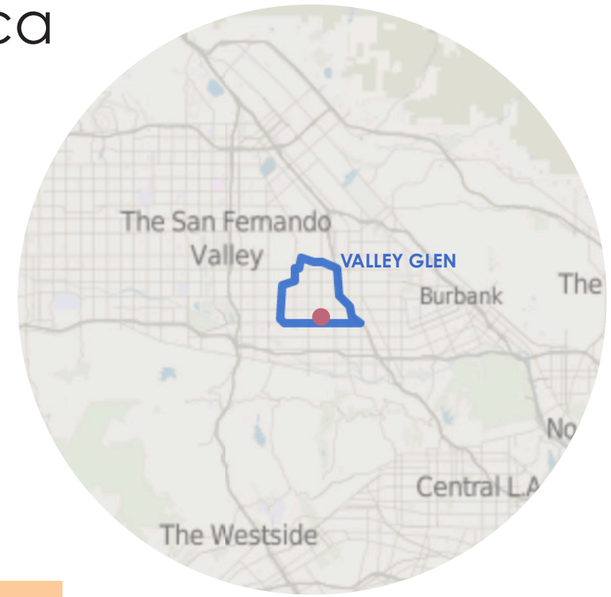
The **Tujunga Wash** is a **13-mile long stream** originating in the San Gabriel Mountains, that remains mostly dry except during or after a storm (November - April). Disappearance of the river and the people who lived along it is part of the inspiration of Judy Baca’s public art project.

At **13.5 feet tall** and **2,754 feet long,** the **Great Wall of Los Angeles** is one of the largest murals in the world. Tasked by the Army Corps of Engineers in 1974, **Judith F. Baca**, one of Ameria’s leading visual artists, created an epic mural of 41 slides of California’s history, based on research and lived experiences not readily available in history books at the time (this pre-dated ethnic studies in schools). It was important for Baca to work with young people from **various ethnic backgrounds** (400 youth, including 80 young people from the juvenile justice system were employed). She taught them how to work together, empowering them with a sense of ownership and purpose.



The site sits on **Fernandeño Tataviam Band of Mission Indians** territory, where the people of northern Los Angeles County lived for thousands of years before European colonization. Native Americans were enslaved at the Mission San Fernando around 1797, giving them the Spanish name *Fernandeño*.





Valley Glen is 4.81 square miles with 51,264 residents as of the 2021 US Census Bureau release.

Tujunga or *Tuxunga* means **old woman’s place** in the Fernandeño and Tongva language.

LEGEND:

- Fernandeño Tataviam Band of Mission Indians Boundary
- LA County border
- Site
- Indigenous Villages
- Valley Glen Boundary

NTS

SITE HISTORY TIMELINE

Several springs and tributaries of what is now known as the L.A. River nourished people, plants, and animals for thousands of years. The Native Americans revered and respected the river's contracting and expanding tendencies.

1846-47
Governor Pio Pico sold what is now the S.F. Valley to Don Eugolio de Celis for $14,000

1849
Cattle ranches boomed throughout the valley during the Gold Rush

1900s
San Fernando Valley is fertile with agricultural fields. **Peach orchards** dominated the Tujunga Wash.

1913
Water from the **Sierra Nevada**, via the **Los Angeles Aqueduct**, reaches the San Fernando Valley

1931
Big **Tujunga Dam** built

1938
Big Flood. Army Corps of Engineers begins largest build project in the United States; concretizing the L.A. River and tributaries. The project took 40 years to complete.

1940
Hansen Reservoir built by Army Corps of Engineers

1952
Oxnard St. built

1959
Highway US 101 built; Ulysses S. Grant High School opens.

1962 Interstate 5 & California 170 built

1969
Flood in Tujunga Wash – channel bed degraded by 13 feet causing failure in 3 highway bridges

2011
Tujunga Dam seismic retrofit.

2012
Tujunga Wash Greenway opens to the pulic, creating groundwater recharge and restoring habitat.

PHYSICAL

CULTURAL

5000 B.C.
Ancestors of the **Fernandeño Tataviam Band of Mission Indians** originally inhabited villages in the Simi, San Fernando, Santa Clarita and Antelope Valleys.

1769
Gaspar de Portolá land expedition marks beginning of **Spanish** colonization.

1797
Mission San Fernando Rey de España founded. **Enslavement of Native American**s and their exposure to Old World diseases lead to the clollapse of the Tongva and Tatavian society,

1821
Mexico gained independence from Spain, leaving **California** under jurisdiction of the first **Mexican** Empire.

1848
California ceded to the **United States** after the **Mexican-American War**

1900s
Mass **land evictions** left most of the Indigenous peoples without homes.

1915
Annexation of the San Fernando Valley to the city of Los Angeles

1945-50s
Post-World War II housing boom in the San Fernando Valley

1951
L.A. Valley College moved from Van Nuys to its current 105-acre campus.

1960
Over 800,000 people living in the S. F. Valley

1976-1984
Judith Baca's The Great Wall of Los Angeles is painted on the Tujunga Flood Channel

2011
The Great Wall of Los Angeles is restored

2017
The Great Wall of Los Angeles is listed on the National Register of Historic Places.

2024
Work on a bridge and mural for the eastern wall has begun.

SITE INVENTORY

SIZE: 8.4 acres includindg the Tujunga Wash Flood Channel that flows north to south.

The Great Wall of Los Angeles mural is on the western wall of the channel. Access to the mural is limited by a chain link fence on both sides of the channel.

There are four fenced-in sculptured stone benches facing the mural on the east bank of the Wash. A significanly large **water pipe** crosses the channel in the northern section of the site. A pedestrian bridge, currently under construction, will cross the channel near the center of the site.

NATIVE SPECIES ON SITE:

Heteromeles arbutifolia, Toyon
Platanus racemosa, Western Sycamore
Quercus agrifolia, Coast Live Oak
Sambucus mexicana, Bue Elderberry

LEGEND

- Large pipe/irrigation components
- Channel water flow
- The Great Wall of Los Angeles Mural; 2,750 feet long
- Sculptural benches
- Signage
- Picnic tables
- Single & Multi-family Residential
- Schools
- Commercial
- Tujunga Wash Greenway

MATURE TREE SPECIES ON SITE:

Cedrus deodora, Himalayan Cedar
Eucalylptus sideroxylon, Red Ironbark Eucalyptus
Fraxinus uhdei, Tropical Ash
Koelreuteria bipinnata, Chinese Flame Tree
Melaleuca linariifolia, Snow-In-Summer Tree
Pinus halepensis, Aleppo Pine
Platanus racemosa, Western Sycamore
Schinus terebinthifolia, Brazilian Pepper Tree (invasive species)
Ulmus parvifolia, Chinese Elm
Washingtonia robusta, Mexican Fan Palm (invasive species)

DEMOGRAPHICS:

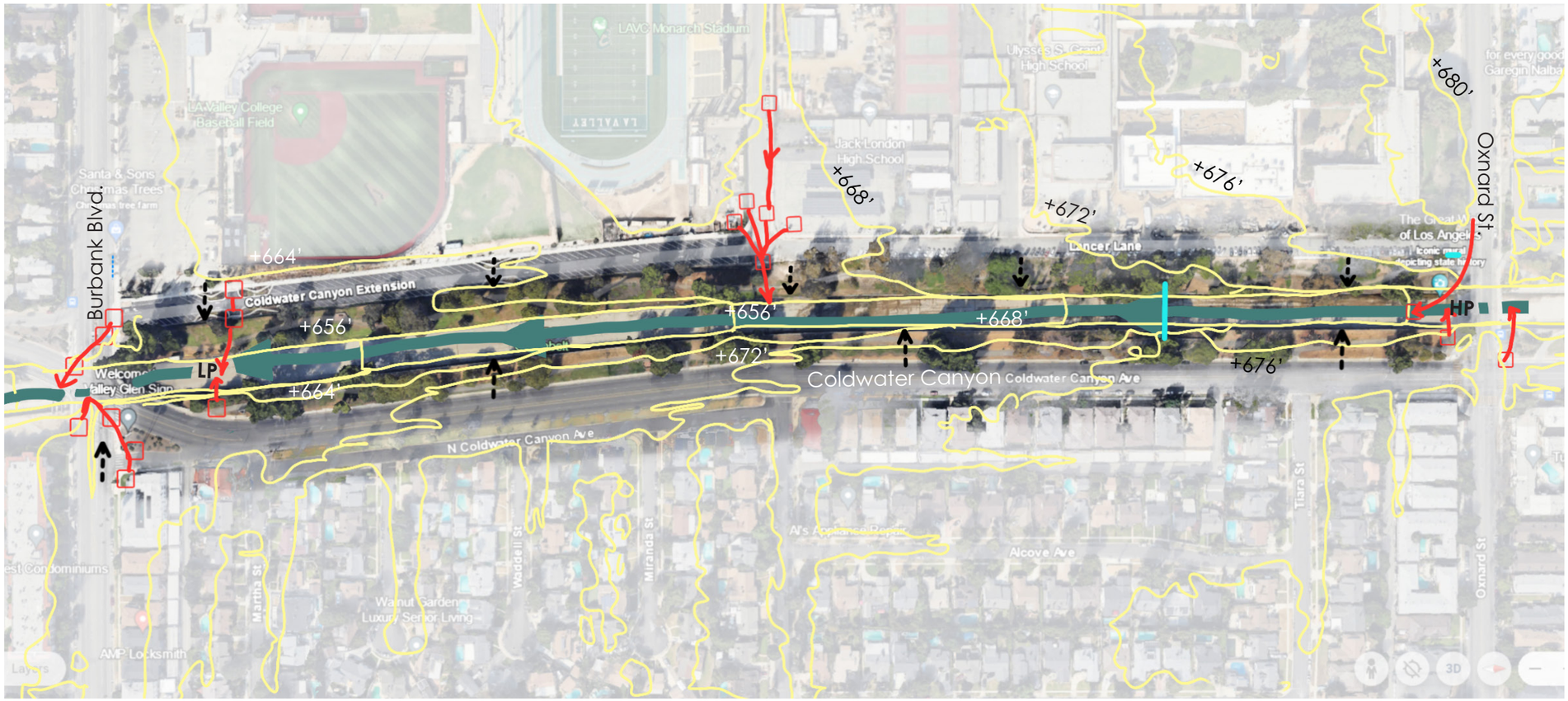
LAVC: 2,887 full time students;
12,150 part-time undergraduates.
Ulysses S. Grant High School:
1,784 students (grades 9-12))
Jack London High School: < 100 students

LAVC was named **Tree Campus USA in 2012**. The college created an Urban Forest Master Plan in 2010, that is largely run and maintained by the student body.

The median income is $88,800 per household and the majority of the population (21%) is between the ages 25-35, followed by 35-44 years at 18%, and 65+ at 14%.

0’ 250’ 500’ N

SITE INVENTORY
WATER & TOPOGRAPHY



Beginning in the San Gabriel Mountains, The Tujunga Wash **carries 1/5 of the L.A. River's flow** southward, until it joins the L.A. River at mile marker 38 in Studio City.

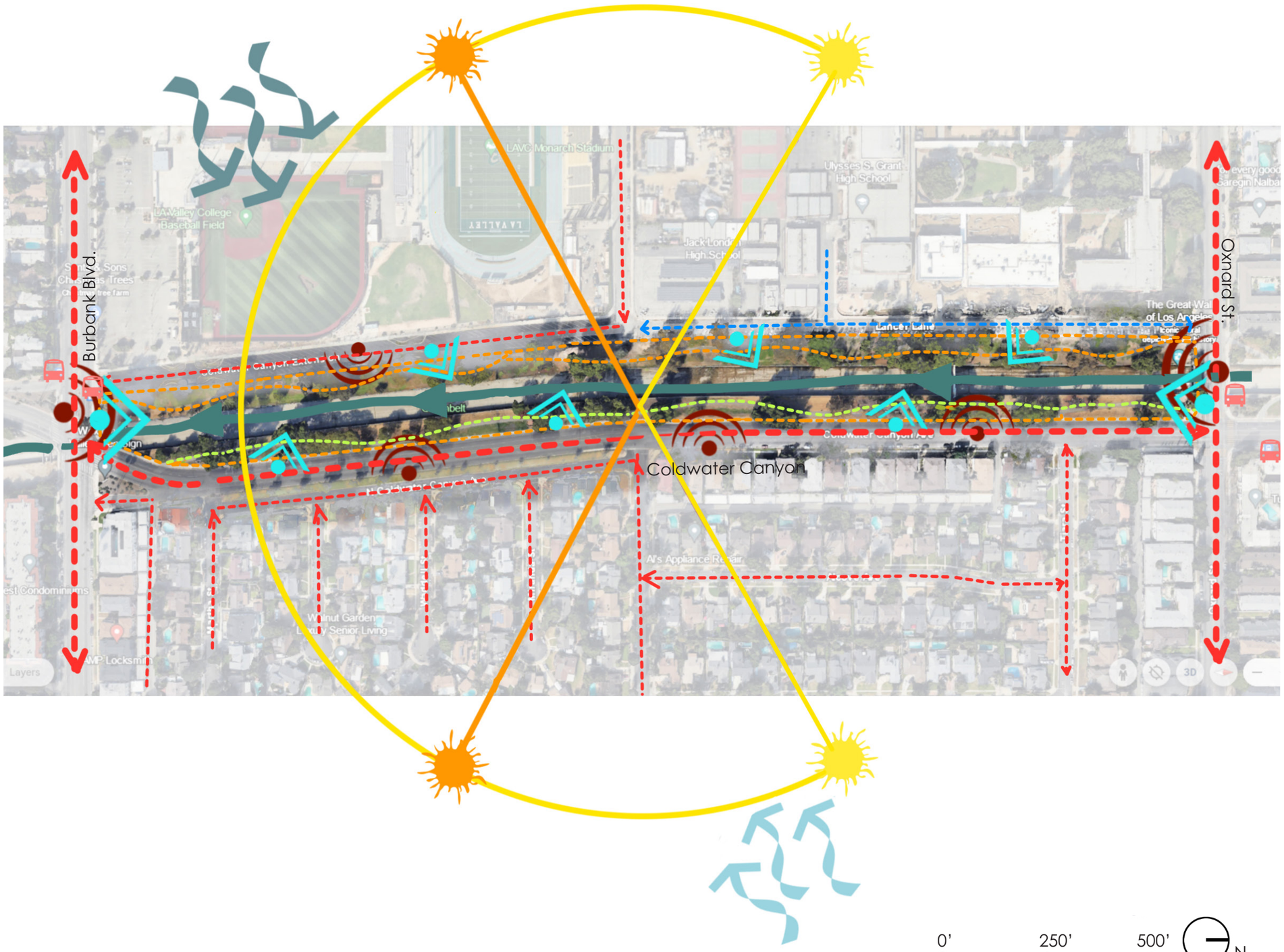
It **drains 225 square miles of stormwater**, with most of it ending up in the ocean due to the concretizing of the channel.

The Greenway slopes down towards the channel on the eastern side of the site. The channel is 13.5' deep, 70' wide, and about a 1/2 mile long.

LEGEND

- Large potable water pipe
- Channel water flow
- Slope direction
- Storm Drain
- Stormwater conveyance
- 4' contours

SITE ANALYSIS



AVERAGE TEMPERATURES (NOT INCLUDING HEAT WAVES):

WINTER: High: 66 °F; Low: 52 °F

SPRING: High: 75 °F; Low: 53 °F

SUMMER: High: 94 °F; Low: 61 °F

FALL: High: 80 °F; Low: 527 °F

RAINFALL:
November -April (13.3" per year)

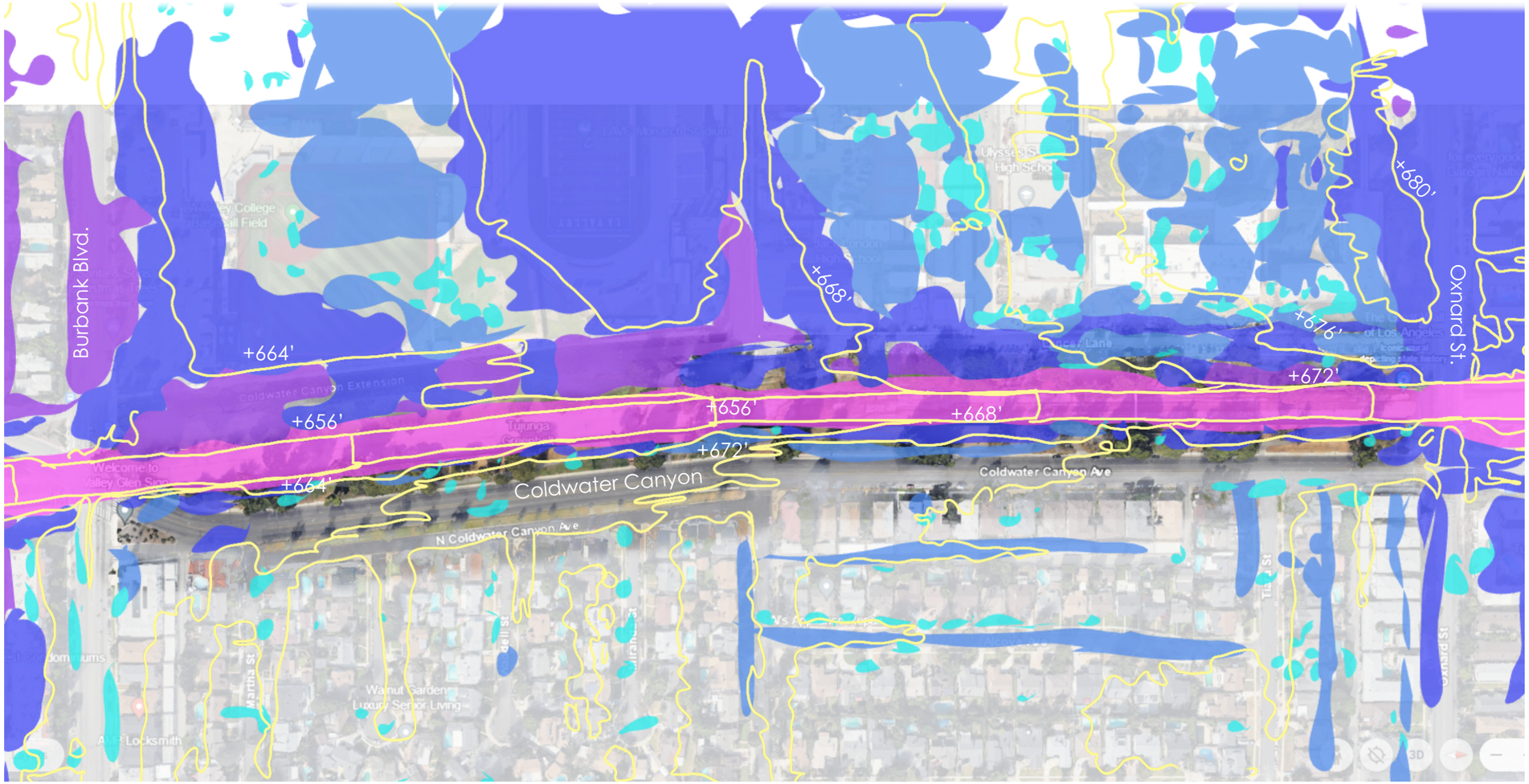
Air quality average for Los Angeles is Moderate.

USDA CIMATE ZONE 10a

LEGEND

- Channel water flow
- Primary Vehicular Circulation
- Secondary Vehicular Circulation
- LAUSD Circulation and parking
- Cyclist Circulation
- Pedestrian Circulation
- Bus Stop
- Noise from traffic
- Great Views

SITE ANALYSIS
100 YR FLOOD RISK

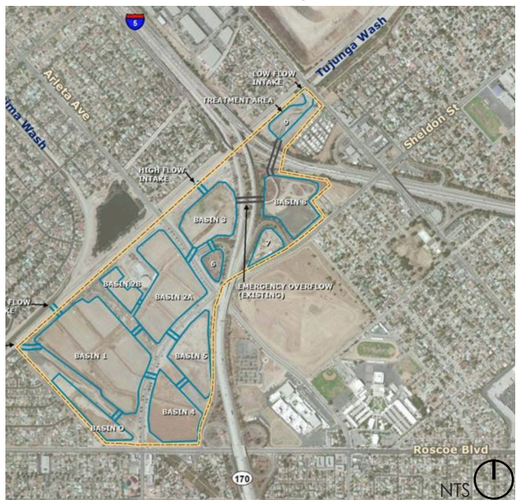


Prior to channelization in the 50s, The Tujunga Wash was an important zone for groundwater recharge.

The Tujunga Wash Greenway, just north of the site, infiltrates 118 million gallons of water from the channel every year.

Note: As part of the **Tujunga Spreading grounds Enhancement Project**, two new rubber diversion gates and intake structures will be constructed in the Tujunga Wash Channel, allowing the spreading grounds to capture flows from the Tujunga Wash Channel. In the future, this will mean a lower flow in the Tujunga Wash Channel.

Tujunga Spreading Grounds Enhancement Project Scope

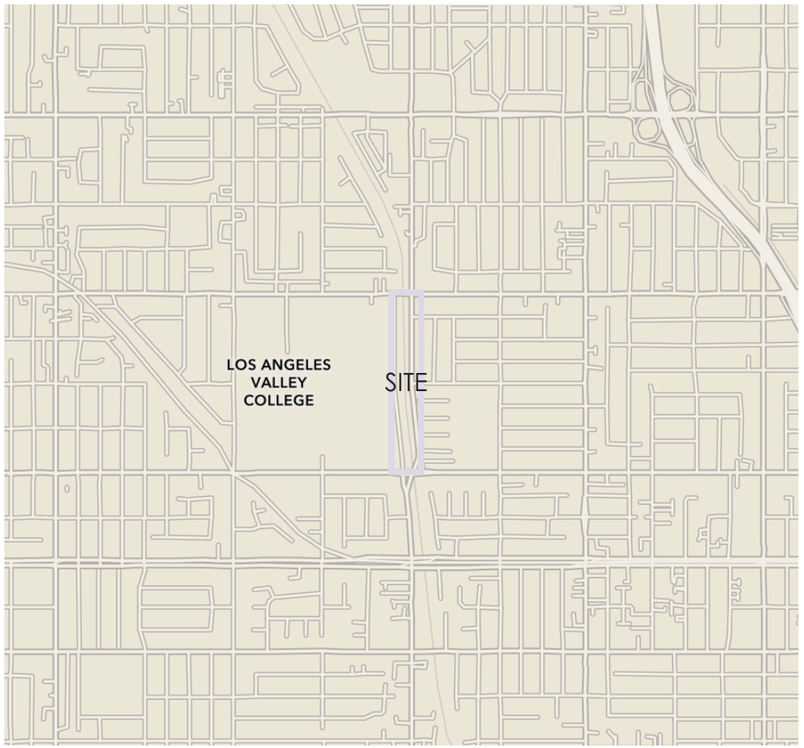


LEGEND

- Water Over Head (> 1.7 m)
- Water Waist-Head (1 - 1.7 m)
- Water Knee - Waist(.45 - 1.7 m)
- Water Ankle - Knee (.11 - .45 m)
- Water < Ankle (.03 - .11 m)
- 4' contours

SITE ANALYSIS

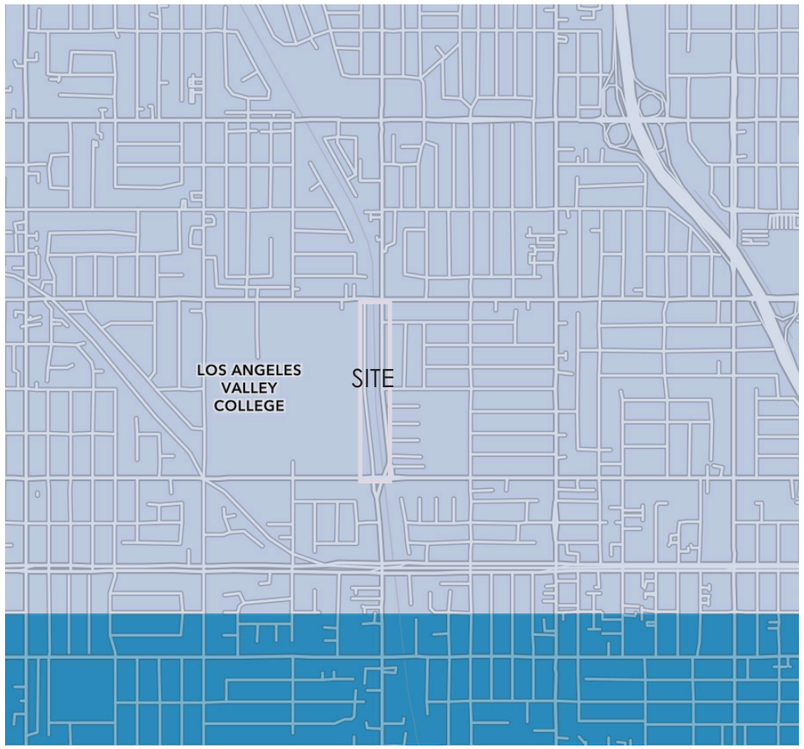
GEOLOGICAL MAP



Alluvium soil is made up of deposits of eroding materials (like gravel, sand, silt, or clay) that were moved by water fror higher to lower ground. Most of Los Angeles is dominated by Alluvium.

- Igneous
- Metamorphic
- Sedimentary
- Unconsolidated material
- Alluvium
- Water

BREEDING BIRD DIVERSITY MAP

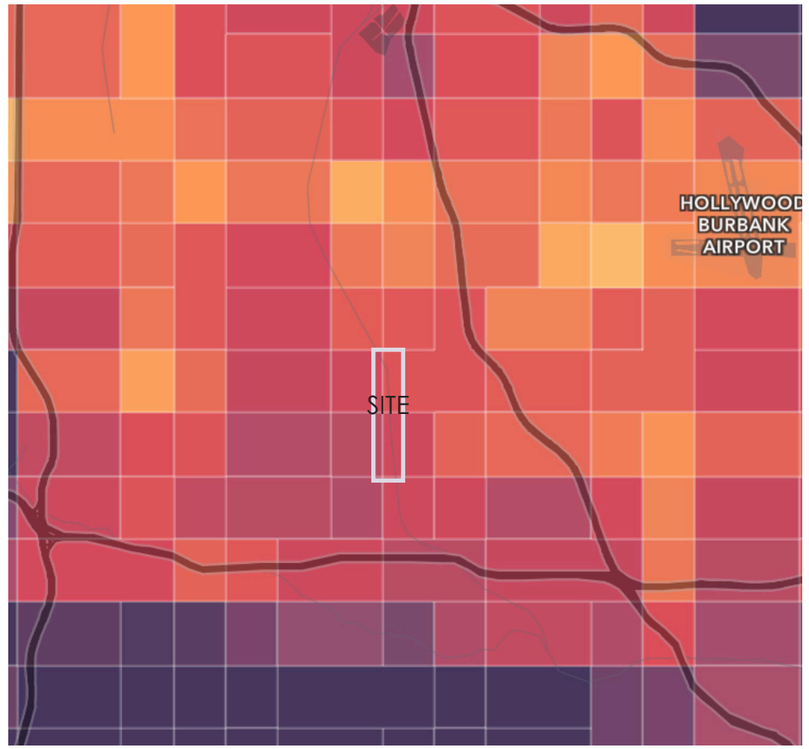


21 Breeding bird species found in the site. Estimate based on the Los Angeles County Breeding Bird Survey © LA Audubon 2016.

Species

- > 60
- 46 - 60
- 31 - 45
- 16 - 30
- 0 - 15

IMPERVIOUS SURFACE MAP



The amount of concrete and other impervious surfaces through which water cannot filter. Survey from 2019.

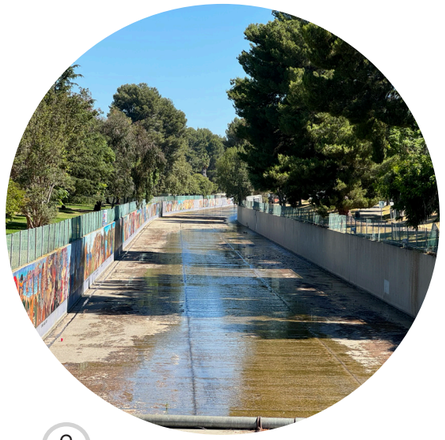
Developed Surface [%]

- > 90
- 60
- < 30

NTS

SITE CONSTRAINTS

1 The Great Wall of Los Angeles exists on a vertical concrete wall of the flood channel that cannot be moved.



2 There is no direct access to the mural.

3 Chain link fence around the mural/channel is an eyesore.

4 Large conveyance pipe crosses the channel into both banks.

5 Pipe conveyance enclosure on western side of the channel. On the eastern side, the pipe is buried underground, creating an elevation change over the pipe.

6 No main entrance or clear access points to the park. Limited signage.

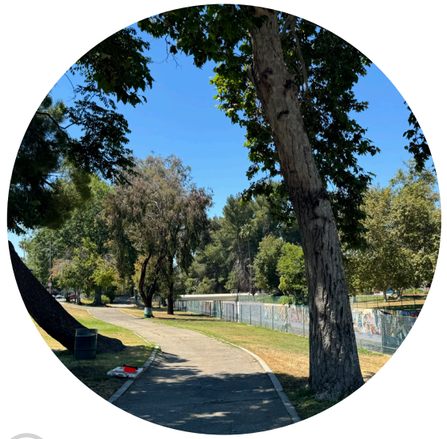
7 Exposed infrastructure.

8 Lighting is limited and not aesthetic.

9 Mature trees provide shade, but more shade is needed. Very few native plants are growing in the park.

10 Heavy traffic on Burbank Blvd., Coldwater Canyon & Oxnard St. contribute to air and noise pollution.

SITE OPPORTUNITIES

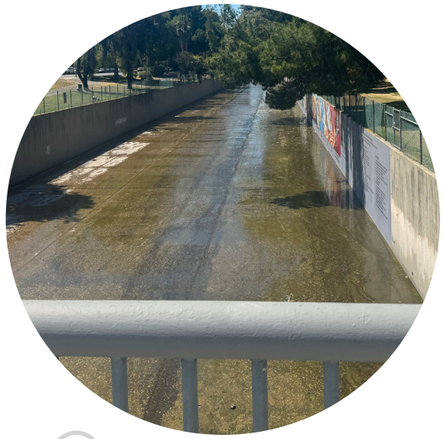


1 Permeable pedestrian pathways with clear access points and view to the mural. A separate and protected path for cyclists on Coldwater Canyon.

2 Calming traffic by narrowing Coldwater Canyon, adding crosswalks, and creating a bermed buffer for cyclists.

3 Bioswales, curb cuts, rain gardens, and cisterns will minimize the stormwater runoff, clean runoff from neighboring streets, increase groundwater absorption. and cut irrigation costs.

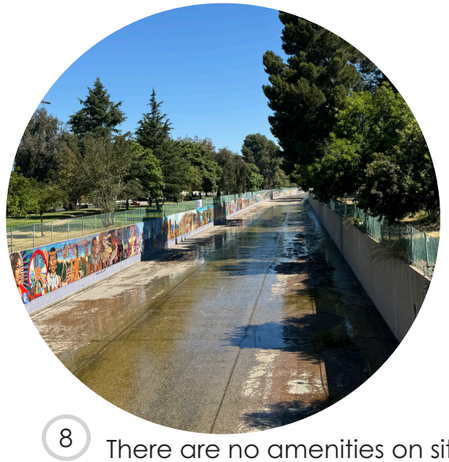
4 Opportunity to restore habitat to the area, increase biodiversity and improve the urban ecology with California native plant species.



5 There are two bridges on busy streets that don't necessarily connect with the park itself. More bridges bring accessibility and interaction with the mural. Opportunity to connect the Tujunga Greenway.

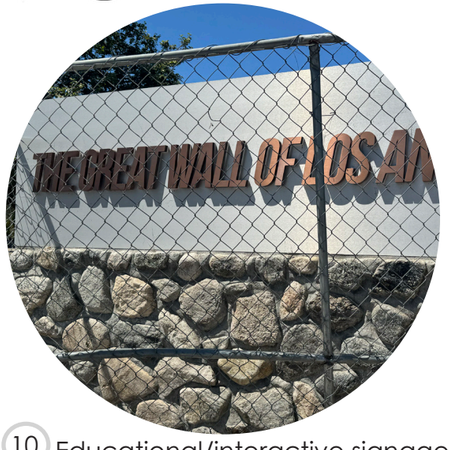
6 Outdoor classrooms will provide a valuable enhancement to the campuses as well as other visiting groups.

7 More seating, picnic areas and drinking fountains to create outdoor rooms for rest and gathering.



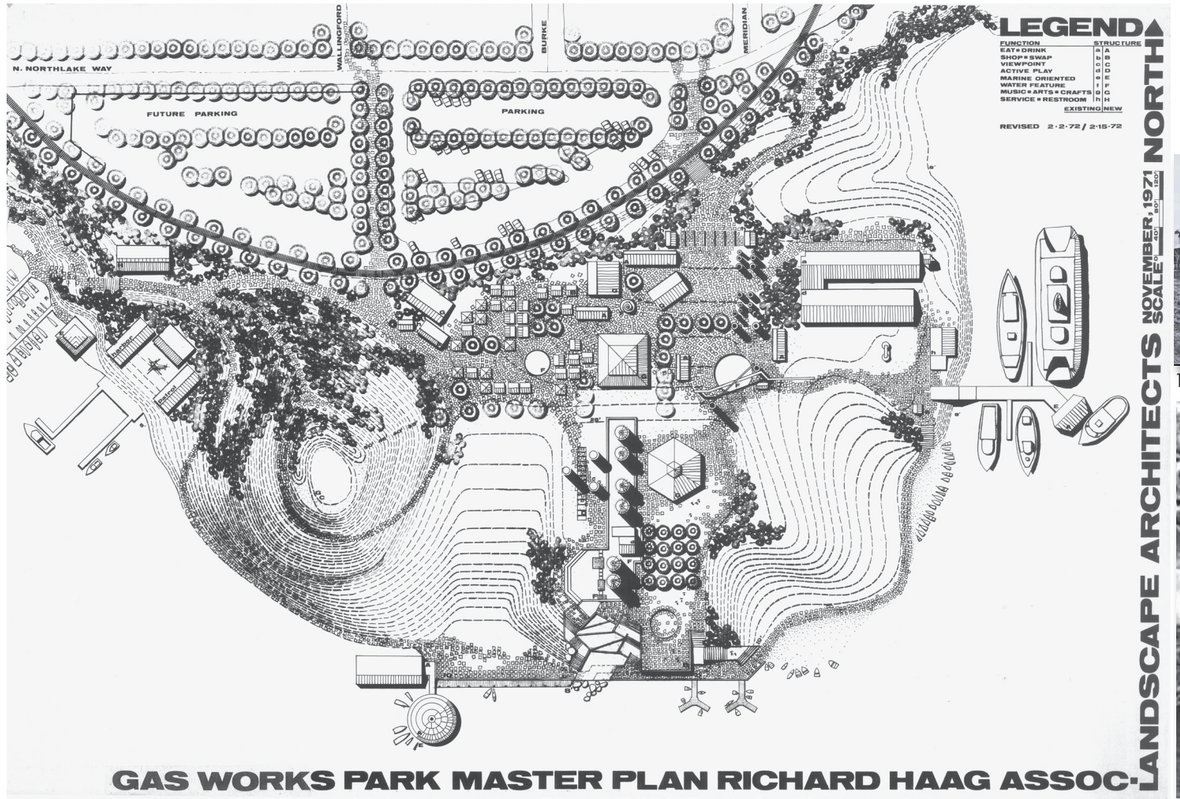
8 There are no amenities on site. Restrooms and a cafe would be a social and economic benefit to the community.

9 A solar-powered lighting design will enhance the murals on both sides, allowing the park to be used at night.



10 Educational/interactive signage about the art, design and ecological history of the site would engage the community.

CASE STUDY PRECEDENT 1
GAS WORKS PARK, SEATTLE, WA




1966 Photo before Park construction


1965 Aerial Photo shows the extent of polluted area

SIZE: 20-acre public park on the Northern shore of Lake Union; 1900 feet of shoreline.

LANDSCAPE ARCHITECT: Richard Haag
Rirchard Haag Associates (1971-1975)

NOTABLE SITE FEATURES:
-Existing industrial plant structures reclaimed as part of design
-various hills and earthworks created to bioremediate soil and create breathtaking views
-The "Great Mound": a natural amphitheater and high point for viewing the city
- Kite Hill: 45' high earthwork with a spiraling path with a sundial built at its summmit.
-Lakeside access and viewing platform
-Forest and green lawns

AWARDS: National Register of Historic Places (2013)
ASLA's Presidents Award for Design Excellence, among others

ENVIRONMENTAL IMPACT: Bioremediation of polluted soils (revolutionary at the time); re-use of materials (industrial towers turned into jungle gyms, the boiler house into a picnic shelter, the sun & moon dial salavaged from a crashed police helipcopter), etc.

ECONOMIC IMPACT: The park is a city landmark wiht 100k+ users visiting every year. It hosts large events like Nike's Naked Bike Ride, electronic music festival Anujunadeep's Open Air Seattle, and Idependence Day Fireworks.

SOCIAL IMPACT: Haag's initial plans were strongly disliked by the community at first. Now the site is an important part of Seattle's historic fabric, and is praised for its experimentation.

LIMITATIONS/CRITIQUES: Clean-up of soil, groundwater and lake contamination continues, presenting on-going challenges. Construction for a major sediment cleanup starts in 2027. A larger tree canopy and native plantings could restore habitat loss and increase biodiversity.

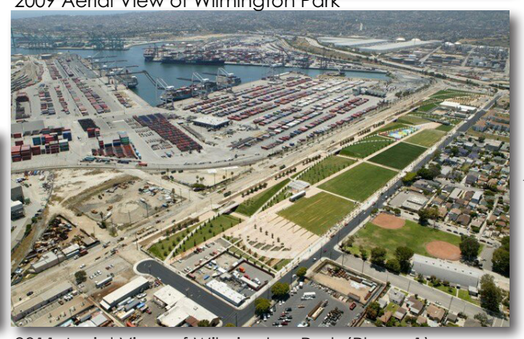

2022 Aerial view of Gas Works Park

Winding path up Kite Hill. The mounds were created from contanminated soil, using phyto-bioremediation (a process that uses oxygen and organic matter, i.e. bacteria, to clean the soil of pollutants).

CASE STUDY PRECEDENT 2
WILMINGTON WATERFRONT, LOS ANGELES

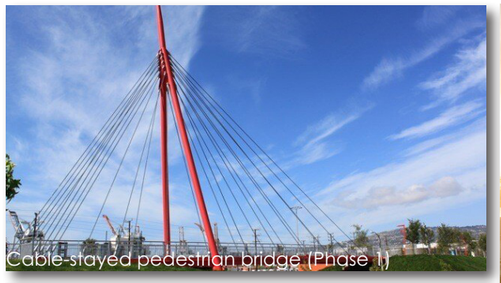
Plan view of 2 sections

2009 Aerial View of Wilmington Park



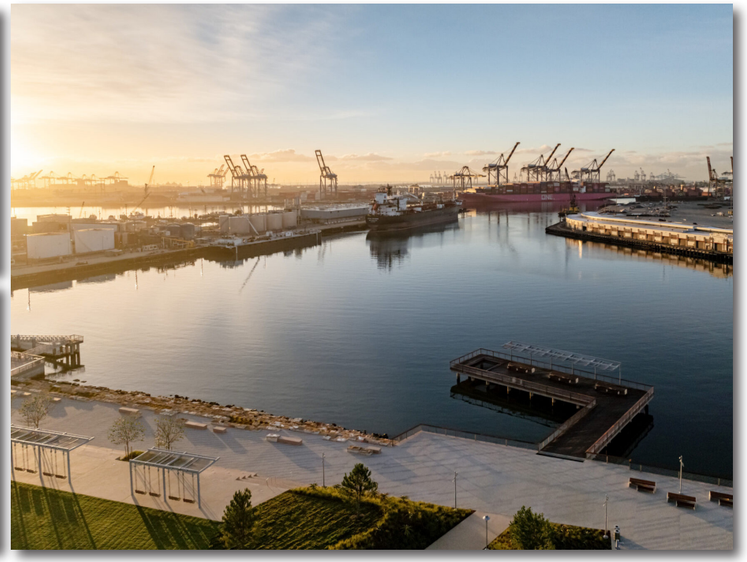
2011 Aerial View of Wilmington Park (Phase 1)

All photos courtesy of Sasaki.com



Cable-stayed pedestrian bridge (Phase 1)

Onyx arranged to showcase tides (Phase 2)



New harbor access seating area (Phase 2)

SIZE: Wilmington waterfront park (Phase 1): 30-acre former brownfield, now urban park (completed in 2011).
Waterfront Promenade (Phase 2): 9-acre waterfront access (completed in 2024). $17.8M

LANDSCAPE ARCHITECT: Sasaki

NOTABLE SITE FEATURES (Phase 1):
-Elevated landform with views of the park
-California's first cable-stayed pedestrian bridge
-Notable sound and air pollution reduction for neighborhoods

Phase 2:
-Onyx blocks on waterfront arranged to show changing tides
-Green roof public restrooms
-Public pier, dock & play areas

AWARDS: 11 awards including Urban land Institute, Open Space Award Finalist

ENVIRONMENTAL IMPACT (Phase 1):
-Reduces potential irrigation by 40% by using drought tolerant plantings and modern irrigation design.
-Successfully removes nitrogine oxides from the air that pass along test panel that is coated with titanium dioxide.
-Tree plantings sequester 17,500 lbs of carbon and reduce stormwater runoff by 90,300 gallons / yr.

ECONOMIC IMPACT (Phase 1):
-the park increases property value from 653 newly planted trees + $4,600 environmental benefits.
-$7,600/yr savings in energy and CO2 reduction
-Re-used 11,700 cubic yards of crushed cement and asphalt saving $97,500 in hauling costs.
-Creation of 2,210 one-year full-time equivalent jobs during consgtruction & 5 full-time maintenance positions at the park.

SOCIAL IMPACT (Phase1):
-Elevated landform reduces noise and pollution for local residents.
-Over 100 family events/year, including Cars & Stripes Forever and LA Fleet Week.

LIMITATIONS/CRITIQUES: Artificial turf is proven to be carcinogenic and leeches microplastics into the soil.

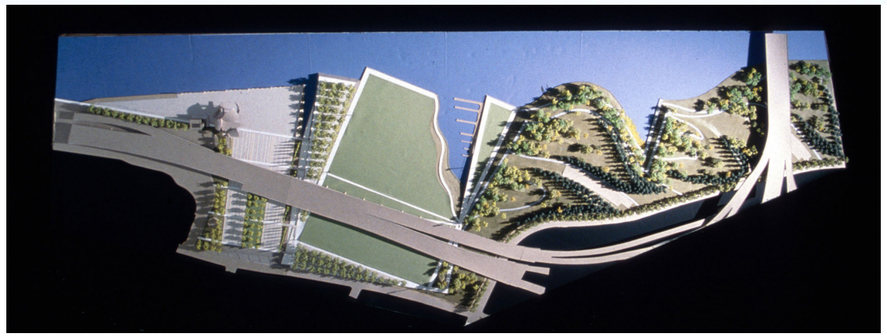
CASE STUDY PRECEDENT 3

LOUISVILLE WATERFRONT PARK (PHASE I & II), KY

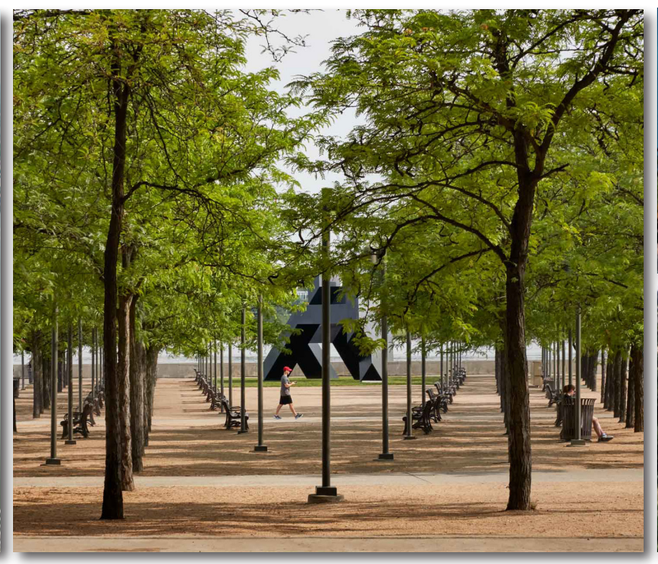
LOUISVILLE WATERFRONT PARK PHASE II DEVELOPMENT
Louisville Waterfront Development Corporation, Louisville, Kentucky
March, 2001
Hargreaves Associates

ILLUSTRATIVE PLAN

Aerial view of the Louisville Waterfront before construction



Model for Phase I



All photos courtesy of Hargreaves.com

SIZE: 85-acre riverfront public park on the Ohio River (formerly a scrap yard with abandoned industrial buildings).

LANDSCAPE ARCHITECT: Hargreaves Jones Architects (1990-2004)

NOTABLE SITE FEATURES (Phase I):
-30' high overlook above the Ohio river
-The Great Lawn 12 acres of open lawn for events
-Wharf with riverboat docking
-Festival plaza
-Rising landorms with great views and various intimate spaces

Phase II:
-New café terrace, marina, recreation fields, splash pad
-Amphitheatre and boathouse for the Univ. of Louisville Rowing Club
-Repurposed railway bridge for pedestrian and cyclist use

AWARDS:
Rudy Bruner Award for Excellence; Annual National Design Award for Landscape Architecture 2016

ENVIRONMENTAL IMPACT:
-Reclaimed brownfield
-Sloping lawn designed to mitigate flooding, built on piles partially over the river
-Restored riparian edge

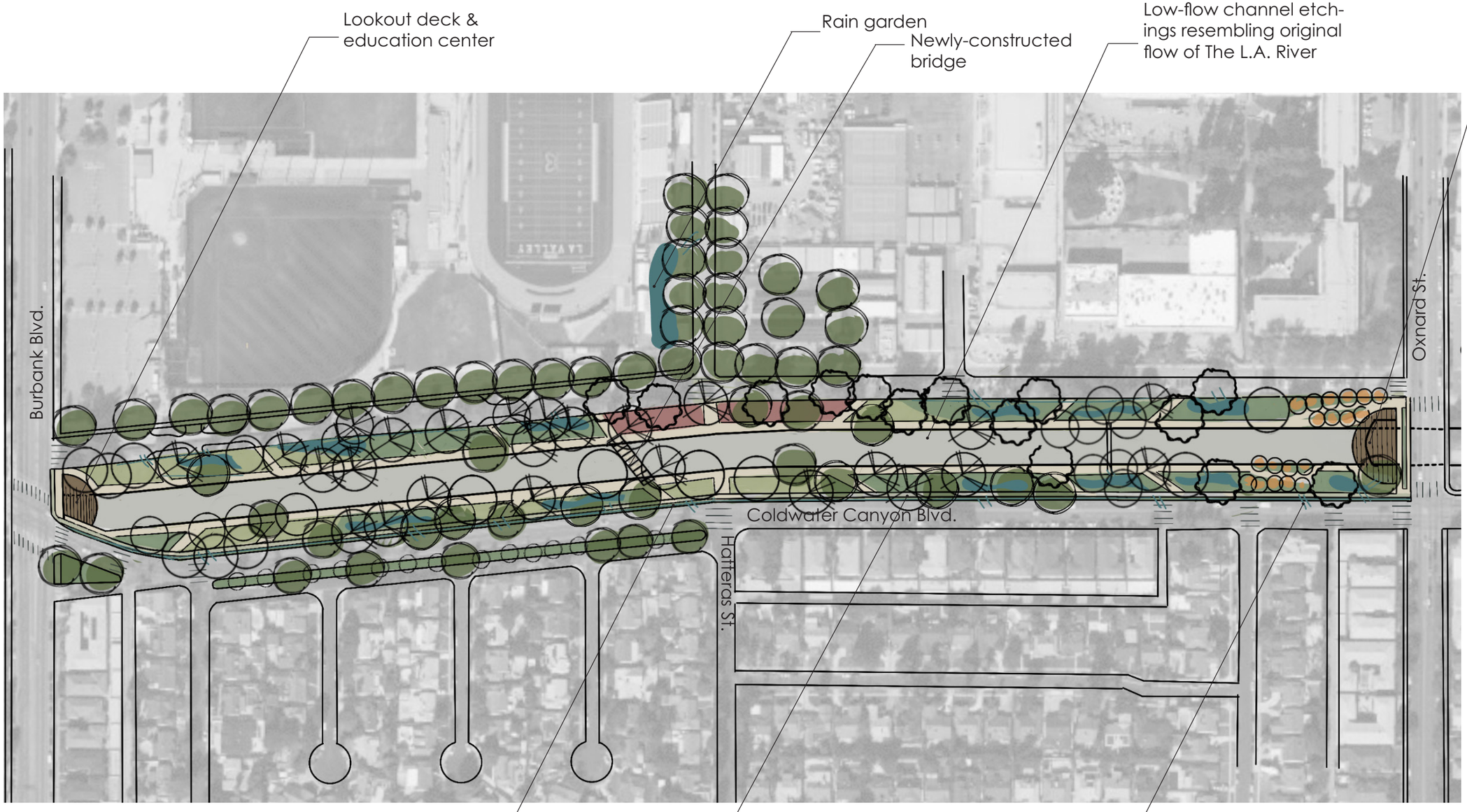
ECONOMIC IMPACT:
-2.2 million visitors annually
-Rebirth of Louisville's waterfront and catalyst for new development, including baseball stadium and residential towers. Also spurred redevelopment of adjacent historic district.
-Working on 22-acre expansion on the east

SOCIAL IMPACT:
-Renaissance for the city's pubilc life
-Reconnection to the river and nature
-More opportunities for fitness, health & play
-Entertainment with 150 events/year (air shows, music shows, riverboat events)
-Access to the river creates respect for its recreational and conservation values and improves physical and mental health

LIMITATIONS/CRITIQUES:
Not enough efforts for habitat restoration and biodiveristy. Expensive maintenance (park lost 30% of funding due to budget cuts).

1. "LIGHT ON THE LAND"

A low budget design using existing features that is light on the land. Strong focus on water conservation, biodiversity, and habitat restoration.

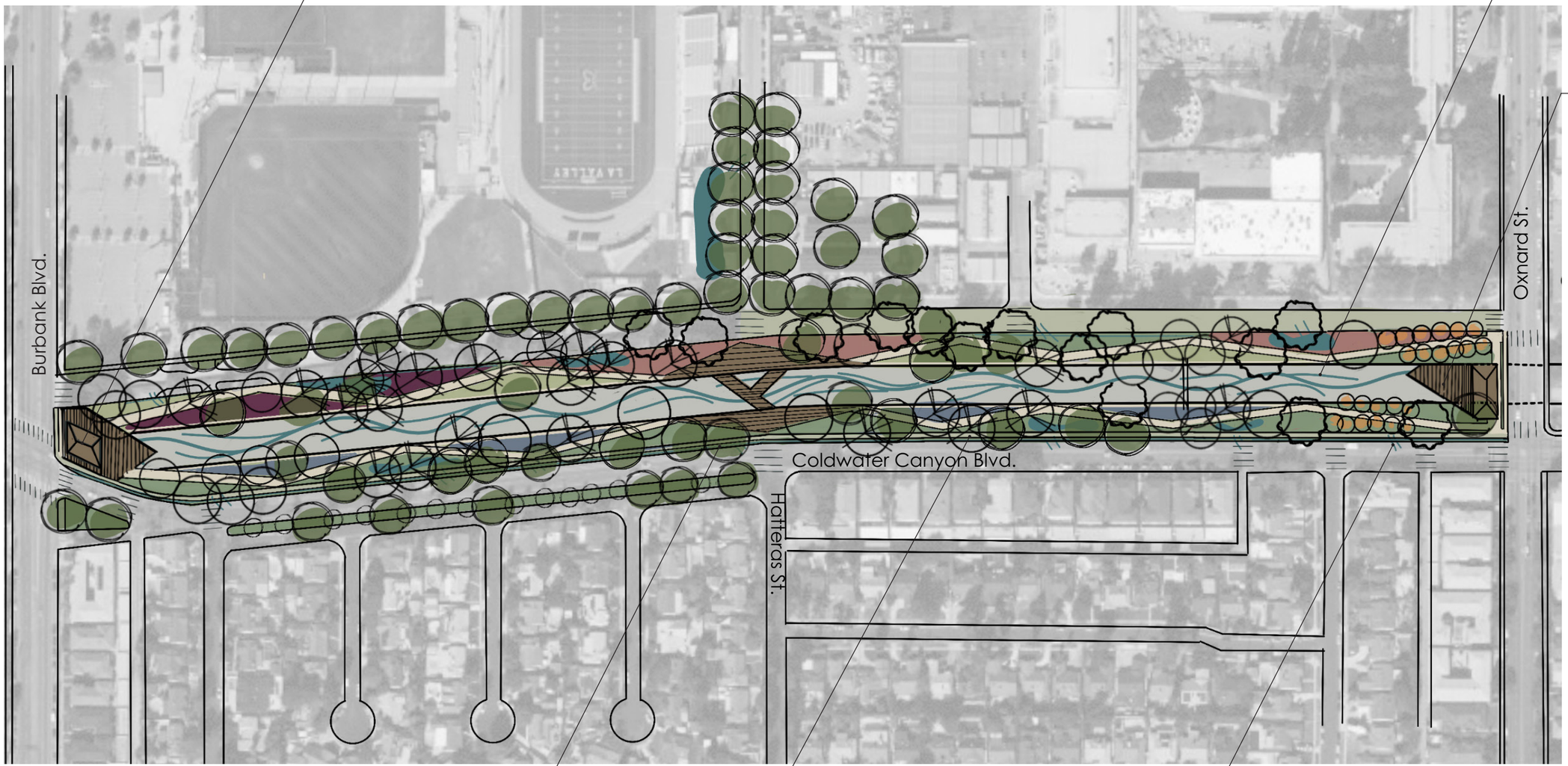


LEGEND

- Play/outdoor classrooms
- Permeable paths
- CA Native Riparian meadow
- CA Native preserve (med-high plantings)
- Bioswales, raingardens & dry rock gardens
- Fruit tree orchard
- New climate-adaptive shade trees
- Existing Sycamore trees to keep
- Existing Pines to keep
- Other existing trees to keep

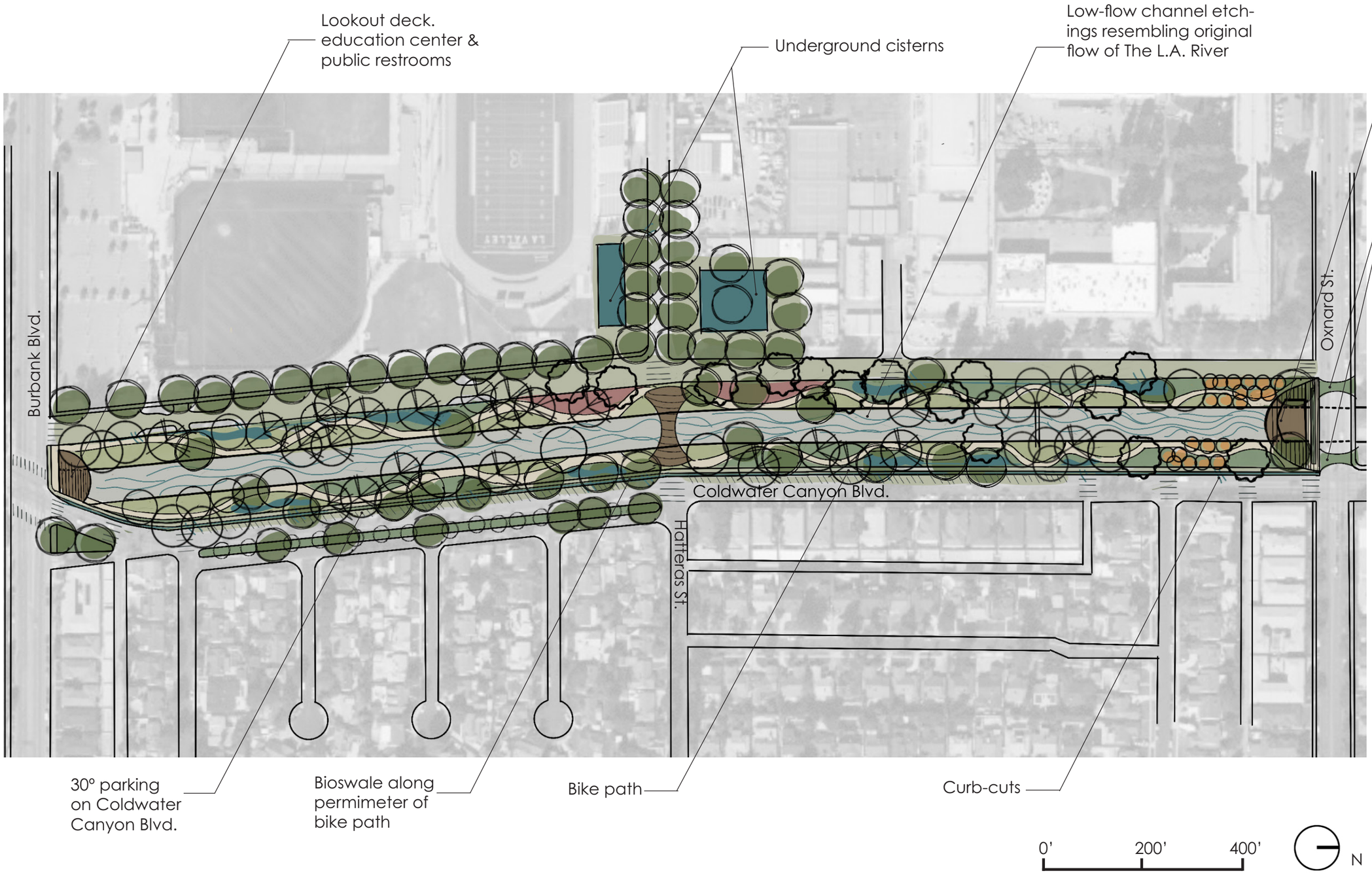
2. "ART IN THE LANDSCAPE"

Mid-budget design centered around **public art**, play, **education**, history, human connection and biodiversity.



3."DESIGN FOR THE FUTURE"

Highest budget design alternative connecting to the Tujunga Greenway, with a focus on **human connection,** sustainability, art, play, climate adaptability, habitat restoration and water conservation.



ART PARK FOR THE FUTURE

A Dialogue Between Art and the Landscape

With a focus on **sustainability**, **art**, and **education**, The Great Wall of Los Angeles Park has transformed into a world class destination for **connection**, **play** and **learning**. A permanent museum with multi-level observation decks will become a beacon of culture for the area, while also connecting pedestrians to the Tujunga Greenway. The site invites creative and educational opportunities not only to the three schools adjacent to the park, but to the world at large via the museum, sculpture gardens, bioswales, native rain gardens, and of course, Judy Baca's world-reknown mural.

Sitting above Oxnard St., the museum **connects** the two parks with a pedestrian **observation deck**, allowing for one-of-a-kind views of the mural, Tujunga Wash, the San Fernando Valley, and Griffith Park in the distance. The museum will house permanent and temporary art in all forms that extends to the sculpture garden. The building will be fully solar-powered and have stormwater capture collection features. Interactive **sculptures** and **science-based play structures** allow for the young and old to **engage** and play while being in **nature**. Educational signage throughout the site will offer important cultural and ecological data on the area.

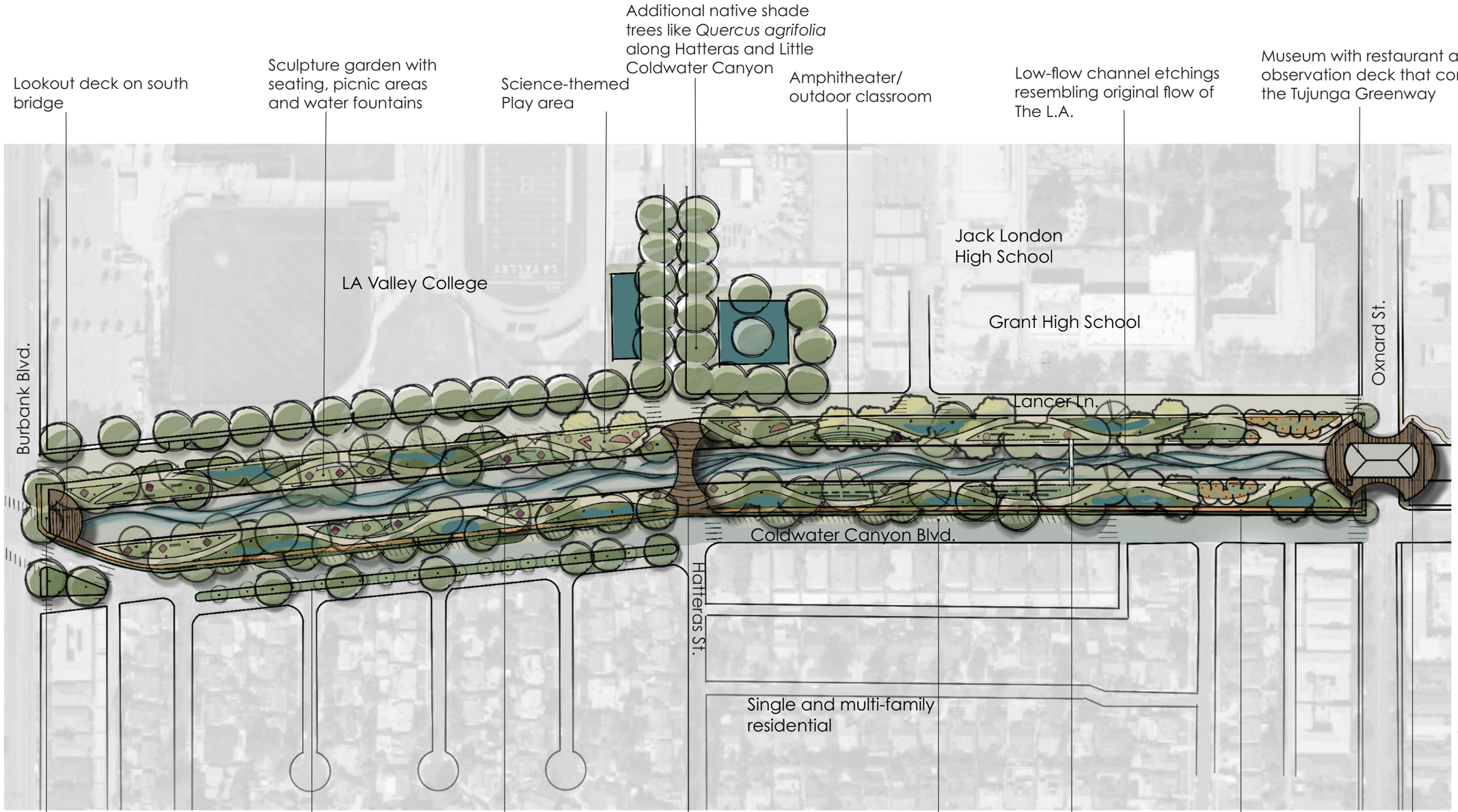
The park holds a few pockets of **nature preserves** that are planted exclusively to **restore habitat** and **biodiversity** to the area, while capturing and filtering stormwater before it enters the river. Native **riparian plants** will fill the rain gardens and clean stormwater through bioremediation as it passes through the bioswales throughout the site. Two underground water **cisterns** will capture, filter and store stormwater runofff from streets and buildings around the schools. This recycled water will be used to irrigate the site. **68 new climate-adaptive trees** were planted, along with a **stone fruit orchard**, echoing the valley's land history.

In the spirit of Judy Baca's legacy, the park holds an area that encourages artistic expression in the form of **graffiti**.

The site tries to uphold Judy Baca's artistic vision by weaving together history, restoration, creativity, sustainability, and engagement with the community.

THE GREAT WALL OF LOS ANGELES PARK "The Land has a memory" Dr. Judy Baca

MASTER PLAN

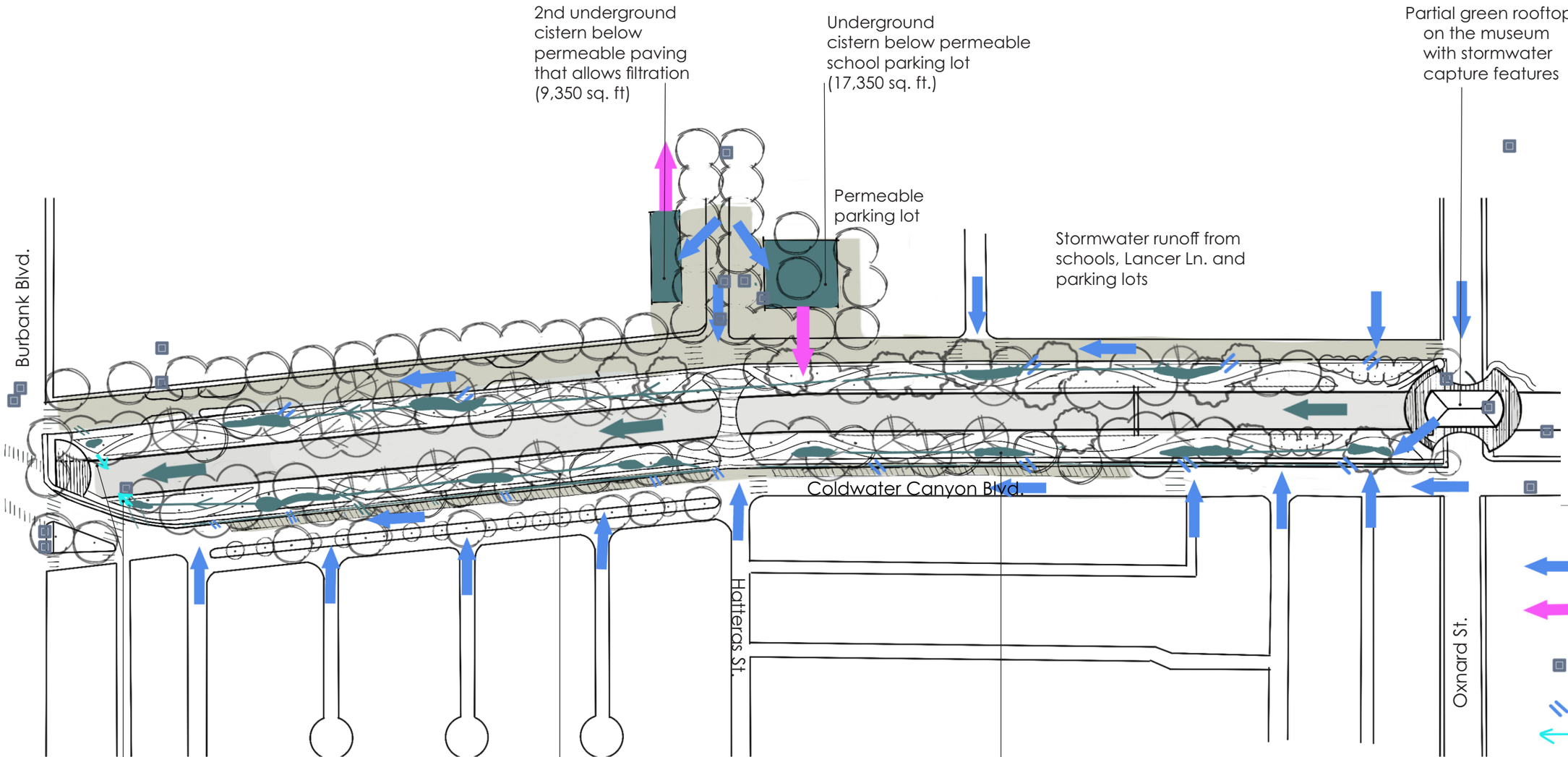


LEGEND

- Educational play structures
- Interactive sculpture pieces
- Permeable vehicular paving
- Permeable pedestrian circulation
- CA Native Riparian meadow
- CA Native preserve and bioswale plantings
- Bioswales, rain gardens and cisterns
- Stone fruit tree orchard
- Existing Sycamore trees
- Existing Pines
- Other existing shade trees
- New climate-adaptive and native shade trees

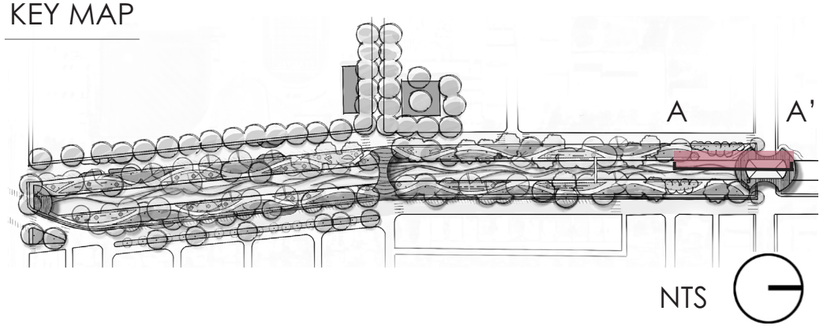
WATER FLOW DIAGRAM

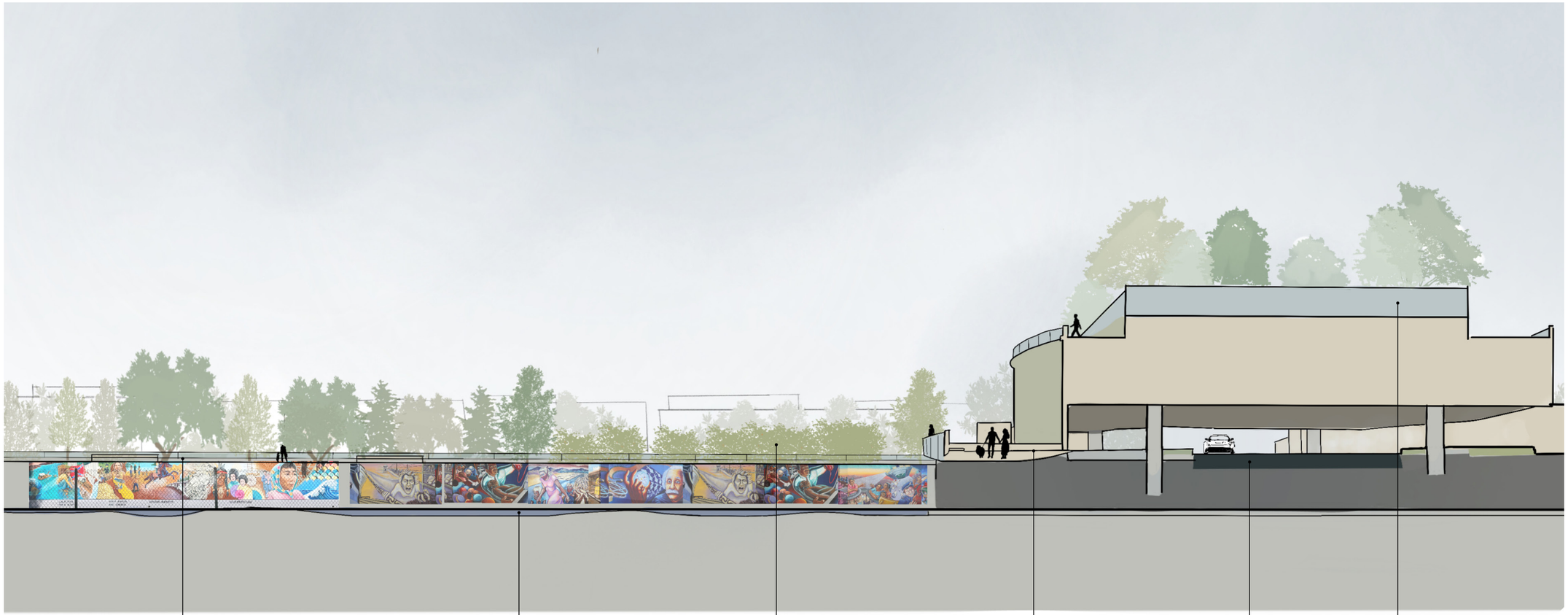
Curb-cuts, bioswales, rain gardens, dry rock gardens, berms/swales, and underground cisterns are used to capture up to 80% of the rainwater that falls on site, as well as stormwater from surrounding streets off of Coldwater Canyon, Lancer Ln. and Hatteras St. Park irrigation will use exclusively recycled water after plan establishment (2 years). The museum and light fixtures will also be powered by solar energy. Educational signage and demonstrations throughout the park will inform the public about various water conservation methods and other sustainable practices used in the park.



SECTION 1

KEY MAP

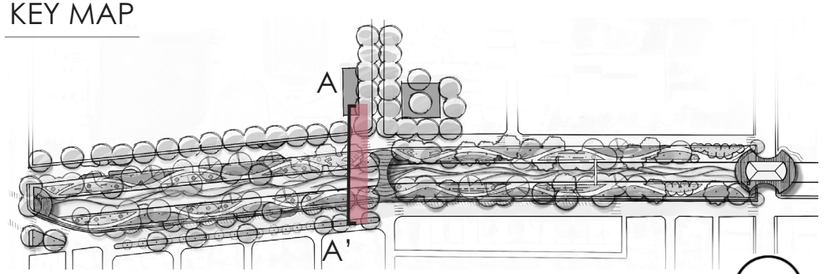




0' 20' 40' 80'

SECTION 2

KEY MAP



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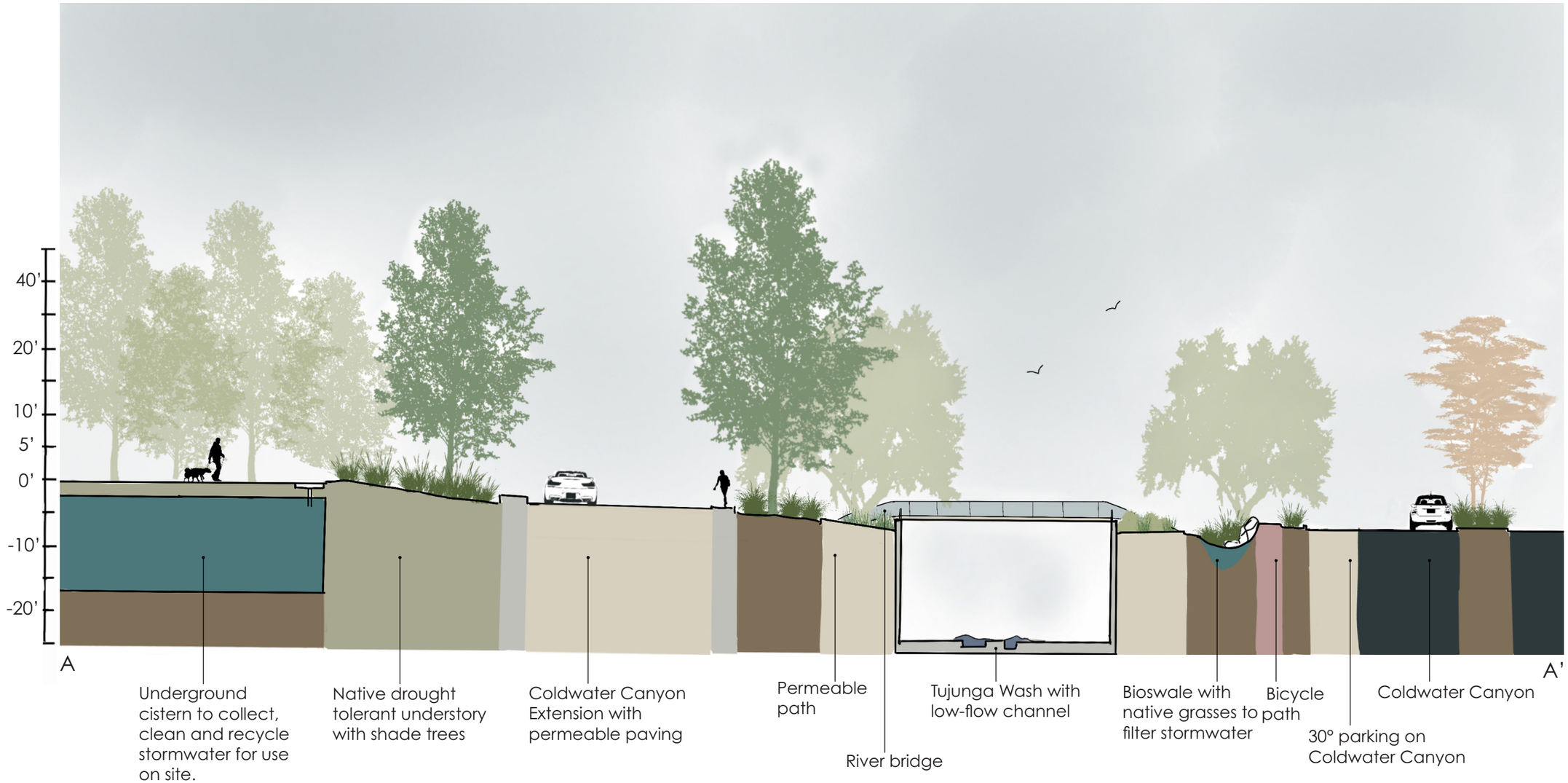
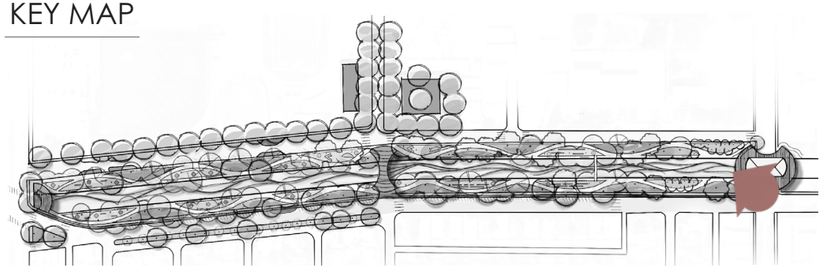


0' 20' 40' 80'

PERSPECTIVE 1

KEY MAP



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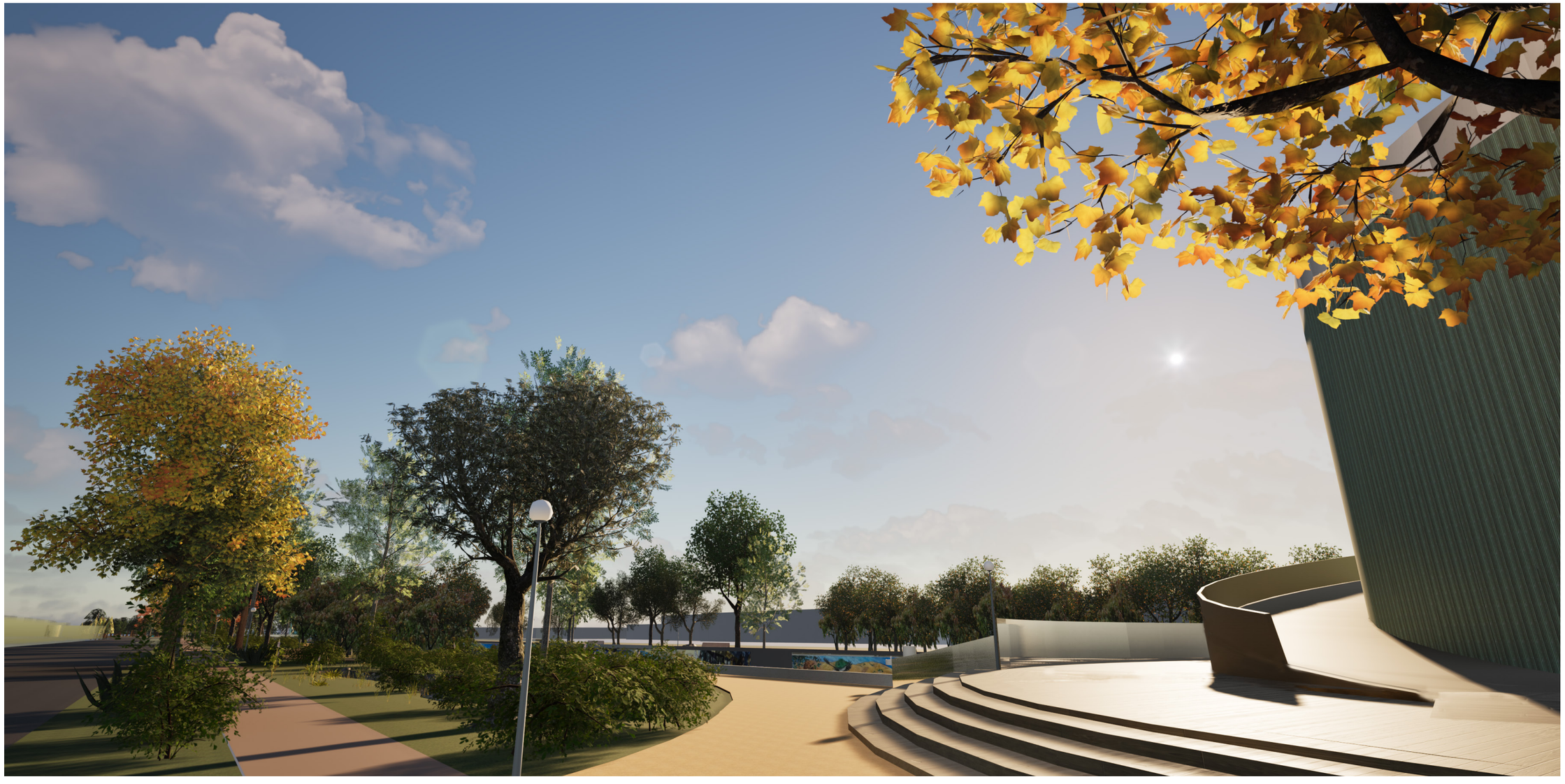
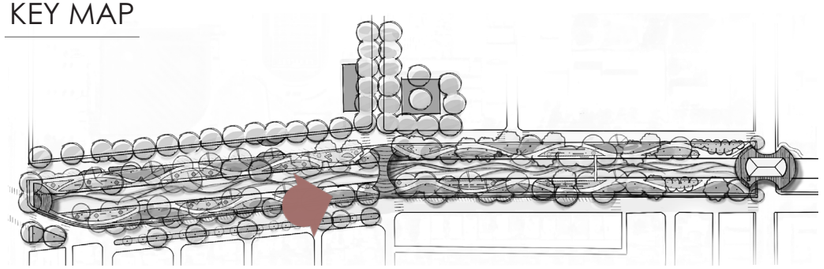


PERSPECTIVE 2

KEY MAP



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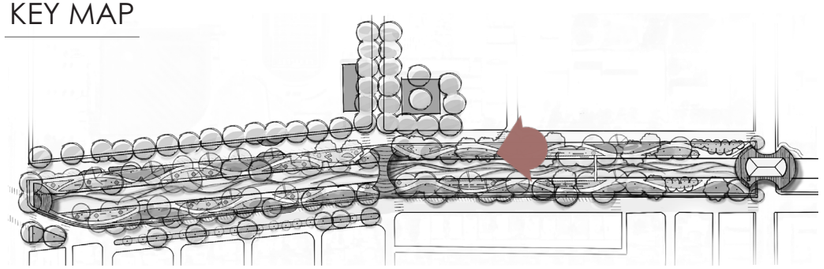
PERSPECTIVE 3

KEY MAP



NTS

3D WALKTHROUGH VIDEO LINK

THANK YOU!

ACKNOWLEDGEMENTS

Page 5: Historical Photos (left to right): Illustration from www.tatvianbandofmissionindians.org; 1938 Flood, Army Corps of Engineers; 1976 Judy Baca photograph before the mural; “Mission San Gabriel” 1899 wikipedia.org; pbssocal.org; 1978 Judy Baca, www.sparcinla.org

Page 9: Tujunga Spreading Ground map & info: https://pw.lacounty.gov/wrd/Projects/TujungaSG/index.cfm

Page 10: Site Analysis graphs: https://biodiversityla.org/

Page 13: Gas Works Case Study: https://www.geoengineers.com/gasworks/
https://apps.ecology.wa.gov/cleanupsearch/site/2876

Page 14: Wilmington Case Study:
https://www.landscapeperformance.org/case-study-briefs/port-of-los-angeles-wilmington-waterfront-park
https://www.sasaki.com/projects/wilmington-waterfront-promenade/

Page 15: Louisvile Case Study: https://ourwaterfront.org/; https://www.hargreaves.com/work/louisville-waterfront-park/

Page 19: Inspirational Images:
Cold Hollow Sculpture Park, https://www.coldhollowsculpturepark.com/sculpture.html
Neanderthal Museum, Mettmann, Germany
Beckets Park Bridge, www.landezine.com
“Tree Map” Lyon Rhône Riverbanks by In Situ Paysages et Urbanisme from “Waterfront Promenade Design” by Thorbjörn Andersson, Images Publishing, 2017