

The Bowtie Parcel Master Plan

UCLA LD6: Concept Development / Instructor: Steven Chavez

Summer 2022

Christina Eldredge

TABLE OF CONTENTS

Pre Design

Overview and History.....2

Site History Timeline.....3

Site Inventory.....4

Site Analysis.....5

Site Constraints.....6

Site Opportunities.....7

Precedent Case Study 1.....8

Precedent Case Study 2.....9

Precedent Case Study 3.....10

Design Development

Design Alternative 1.....11

Design Alternative 2.....12

Design Alternative 3.....13

Final Design

Master Plan Statement.....14

Master Plan.....15

Site Section 1.....16

Site Section 2.....17

Perspective 1.....18

Perspective 2.....19

HISTORY



Pre 1750s

Tongva occupies the region for centuries



1769

Portola Expedition records first written record of LA, including the LA river. San Gabriel Mission is completed (1771)



1781

El Pueblo de Los Angeles is established. Settlers build a willowpole dam across the Los Angeles river



1847

The Treaty of Guadalupe Hidalgo is signed and the Mexican-American War ends. California is ceded over to the U.S. and Stephen Clark Foster is appointed first American mayor of Los Angeles. Southern Pacific Railroad is completed (1876)



1877-1908

Taylor family settles on east bank of the LA River and sells farm equipment as well as raises oats, barley, hogs, and pigeons. Employing over 5,000 and known as 'Taylor Yard' Becomes a major rail yard facility (1925)



1938

The LA River floods during a 4-day storm. As a response, the Army Corps of Engineers channelizes the river into the concrete storm drain that we see today. Its course was straightened and flora removed.



1985

Taylor Yard closes its long standing purpose as a freight switching facility. Several hundred jobs are lost. The area gets developed for warehouses and is zoned for mixed use.



1990s

By the 1990s over half of the rails are vacated. Fedex and Metrolink are developed nearby which was not favored by the community. The first Taylor Yard Area Planning and Urban Design Workshop is held.



2014

California State Parks & Clockshop partner to activate parcel with art & cultural programming & name it The Bowtie Project



2019

The City of LA, California State Parks, & The Mountains & Reation & Conservation Authority sign a letter of intene to form the '100-Acre Partnership at Taylor Yard'



2020

The Nature Conservancy & California State Parks sign an agreemen to collaborate on 2.5 acre Bowtie Demonstration Project.



PRESENT

SITE INVENTORY

FAUNA



Osprey



Heron



Long-Necked Stilts



Ground Squirrel



Coyote



Side-blotched Lizard



FLORA



Eriogonum fasciculatum



Bacharis salicifolia



Eriodictyon californicum



Datura wrightii



Pennisetum setaceum



Washingtonia robusta

NATIVE

INVASIVE

CLOCKWORK ART PROJECTS



1- HATCH- Jesse Harrod
2019



2- ACE DESIGN STUDIO
2016



3- FIRE PIT
N/A

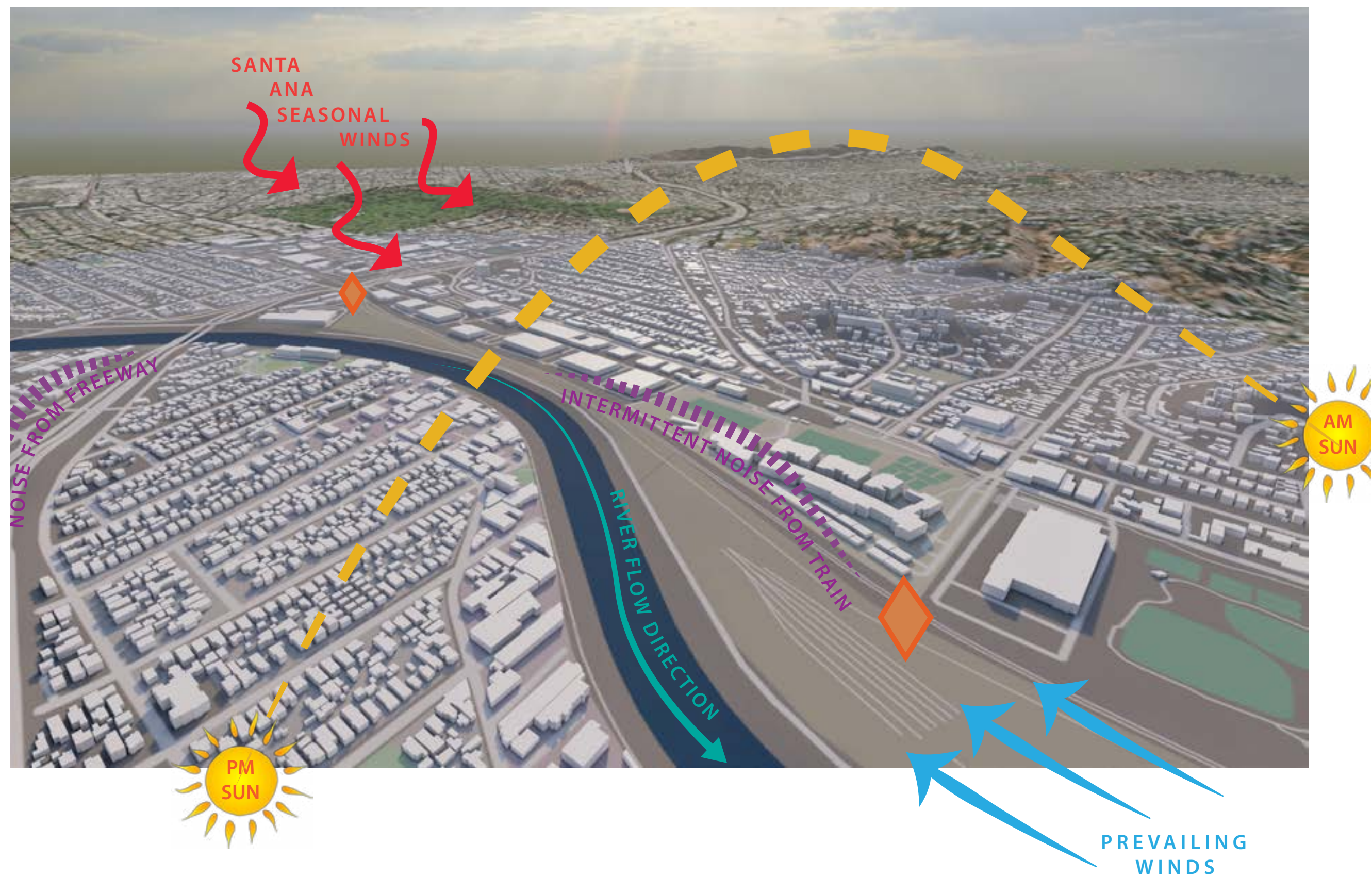


4- ACE DESIGN STUDIO
2016

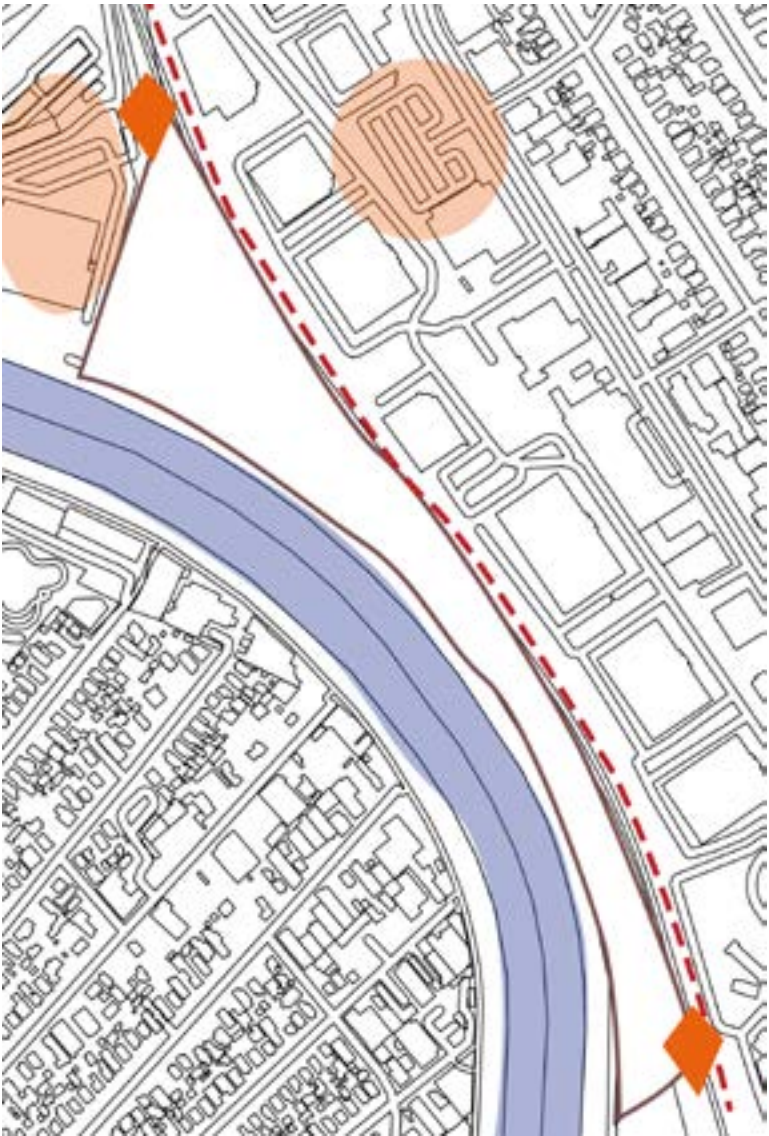


5- RAILCAR TURNAROUND
N/A

SITE ANALYSIS



SITE CONSTRAINTS



LIMITED ACCESS POINTS & PARKING

- AVAILABLE PARKING
 - MAIN ACCESS POINTS
- South entry way is a locked maintenance gate. Only limited street parking available, none that is site specific.



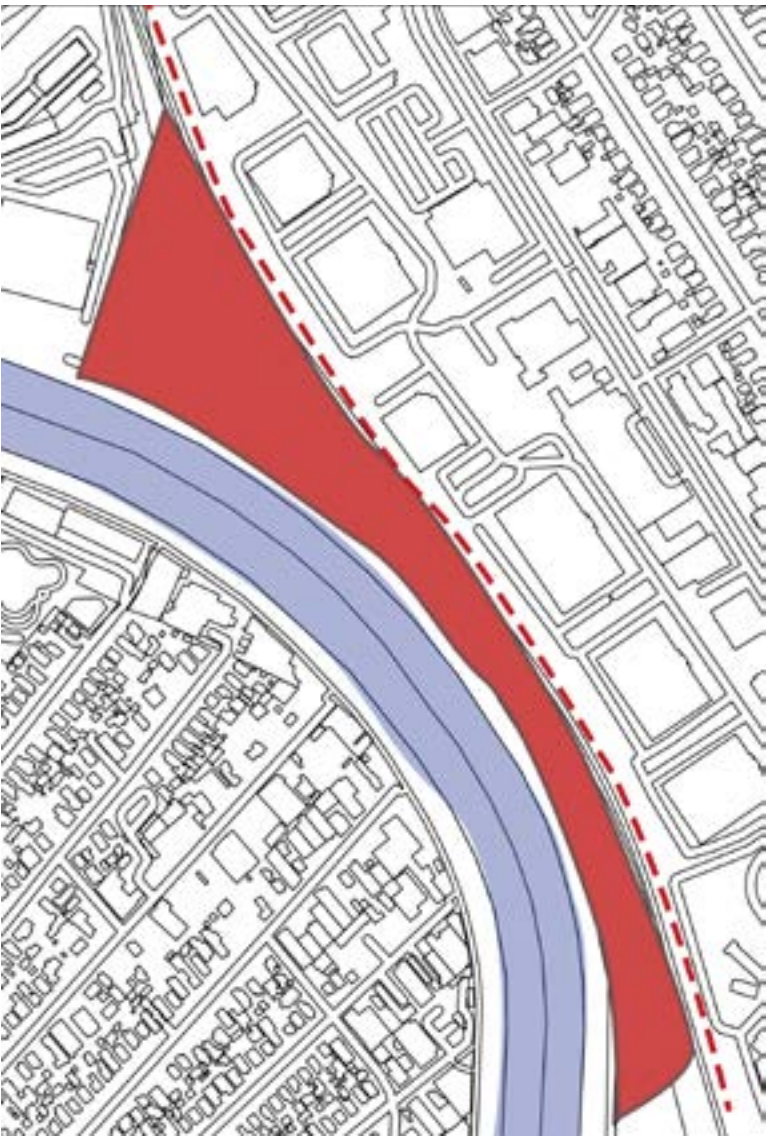
FLOODING

- NORMAL WATER LEVEL
 - CEMENT CHANNEL LEVEL
- Water travels fast at certain curves & during floods which can be a hazard. Upstream floodgates release water when needed.



AIR POLLUTION & HIGH TENSION LINES

- HIGH AIR POLLUTION
 - HIGH TENSION LINES
- Compromised air quality from the surrounding freeways. High tension lines could potentially cause health hazards and are unsightly with an irritable hum.

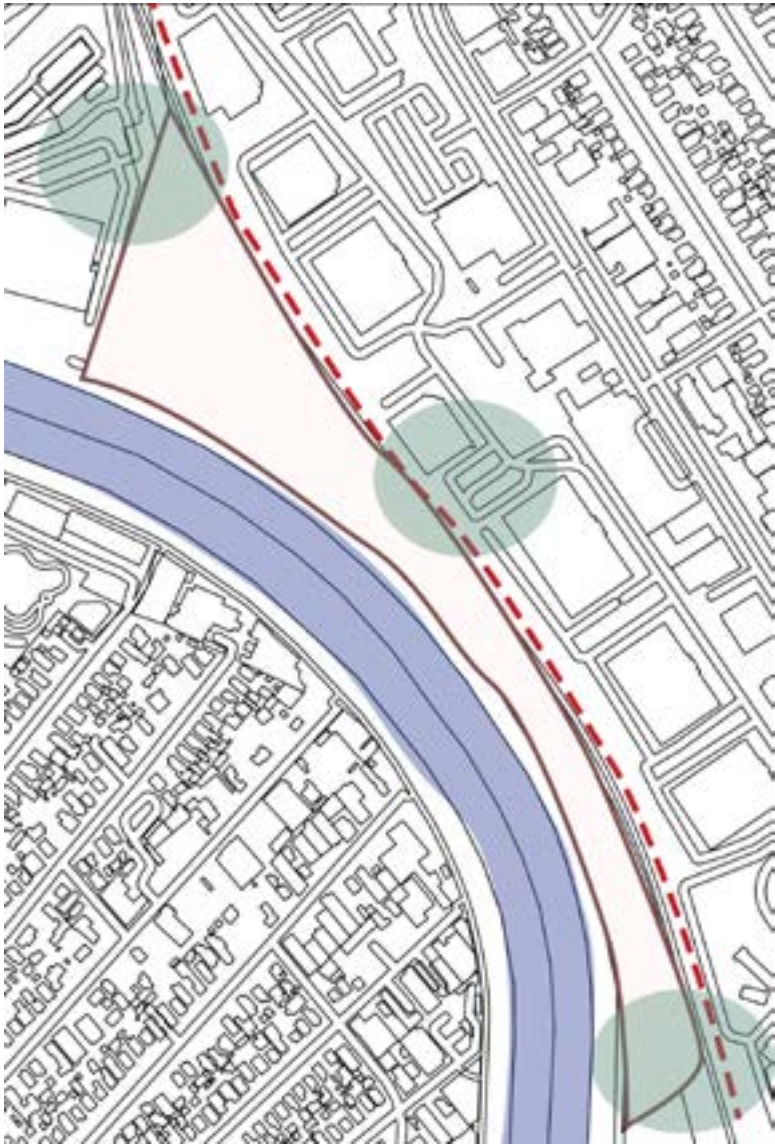


INVASIVE PLANTS & CONTAMINATED SOILS

- HIGH LEVELS OF INVASIVE PLANTS & SOIL CONTAMINATION
- Fountain grass, *Cenchrus setaceus*, covers the entire site. Due to the sites heavy railroad machinery the soil is compacted. Toxins are at a level that require mitigation.



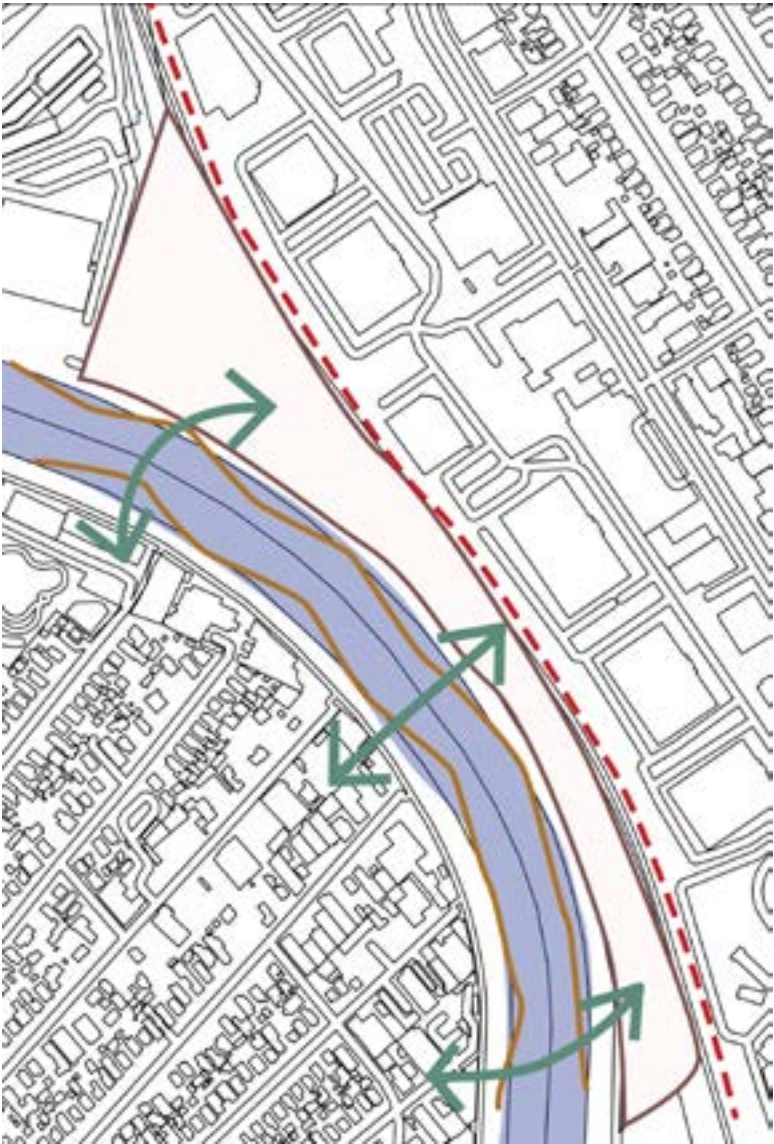
SITE OPPORTUNITIES



DESIGNATED PARKING



DESIGNATED PARKING LOTS
South entry way is a locked maintenance gate. Only limited street parking available, none that is site specific.



RIVER BRIDGES & TERRACING



RIVER BRIDGES
South entry way is a locked maintenance gate. Only limited street parking available, none that is site specific.



RIVER TERRACING



SOIL REMEDIATION, SHADE TREES, HABITAT ISLANDS



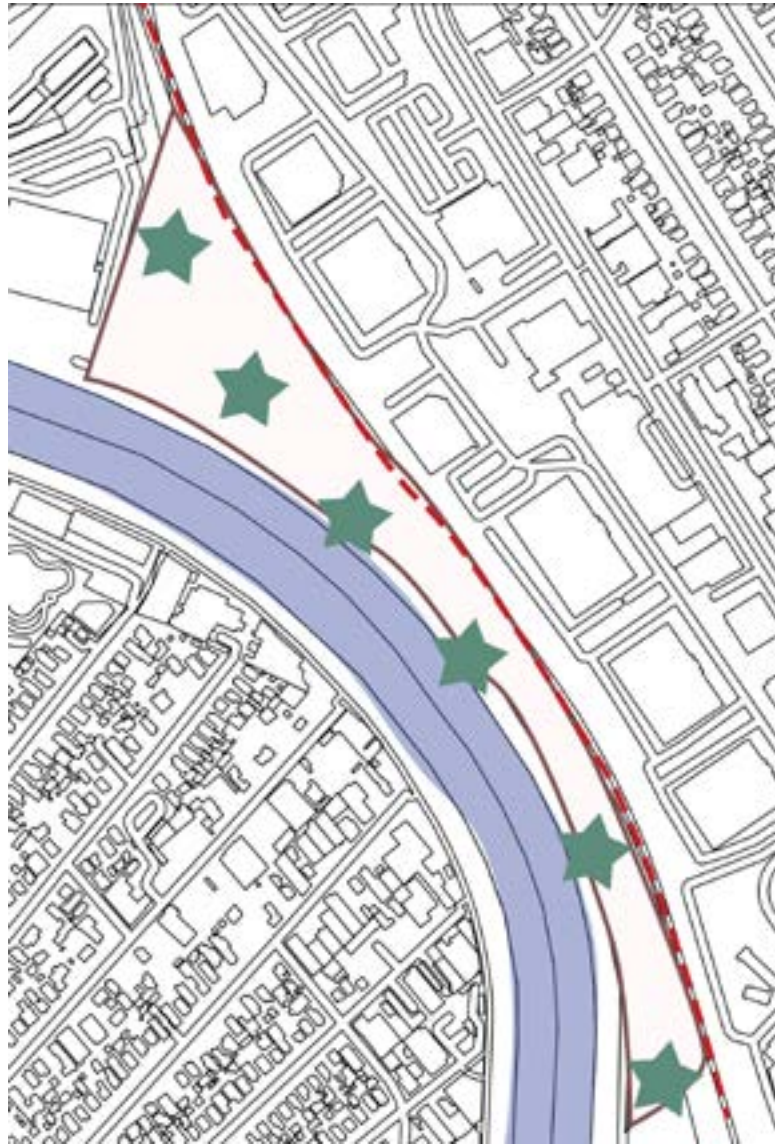
SOIL REMEDIATION/NATIVE PLANTS
South entry way is a locked maintenance gate. Only limited street parking available, none that is site specific.



SHADE TREES



HABITAT ISLANDS



ART/PLAY INSTALLATION RIVER WALK



ART/PLAY INSTALLATIONS
South entry way is a locked maintenance gate. Only limited street parking available, none that is site specific.



BUFFALO BAYOU PARK

HOUSTON, TEXAS
DESIGNED BY SWA GROUP
COMPLETED 2015

OVERVIEW

A revitalized **160 acre greenspace** along a 2.3 mile long stretch of the Buffalo Bayou, the city’s main drainage basin. Includes difficult conditions such as steep slopes, overhead freeways and utilities, limited access, and flood prone banks. The site also suffered from a damaged ecological and riparian system.

SUCESSES:

Native landscaping, hike & bike trails, the go-to dog park in the city, public art, a creative play area, 4 new bridges that **connect surrounding neighborhoods**, floodbenches, two visitor centers, gathering places for visitors to picnic, relax, and enjoy. It has been reengineered to **thrive in flooding conditions** (Hurricane Harvey).

AREAS FOR IMPROVMENT:

13% average increase in the median property tax revenue due to gentrification, Much of the existing trees and vegetation was removed.



DOG PARK photo via: archpaper.com



FREEWAY OVERPASSES photo via: swagroup.com



POLICE MEMORIAL & BRIDGE photo via: swagroup.com



COMMUNITY GATHERING photo via: swagroup.com



SITE OVERVIEW: photo via swagroup.com

SHANGHAI HOUTAN PARK

SHANGHAI, CHINA

DESIGNED BY TURENSCAPE

COMPLETED 2010

OVERVIEW:

Built on a former 34.5 acre industrial site. It was previously owned by a steel factory and a shipyard and was largely used as a landfill and lay-down yard for industrial materials. Ran alongside a very polluted river (Grade V – unsuitable for human contact) that was subject to flooding.

SUCESSES:

The new design changed the water quality from Grade V to Grade II (suitable for landscape irrigation) using only biological processes. Dramatically **increased biodiversity** on the site with 93 species of plants and over 200 species of animals observed. Includes **recreational and educational experiences** for visitors. **Reused** almost all of the steel and bricks found on the site – celebrating the industrial spirit of the site.



SITE OVERVIEW photo via: archdaily.com



ART photo via: archpaper.com



FLOATING GARDEN photo via: archdaily.com



WALKWAY photo via: archdaily.com



PLAY AREA photo via: swagroup.com

QUZHOU LUMING PARK

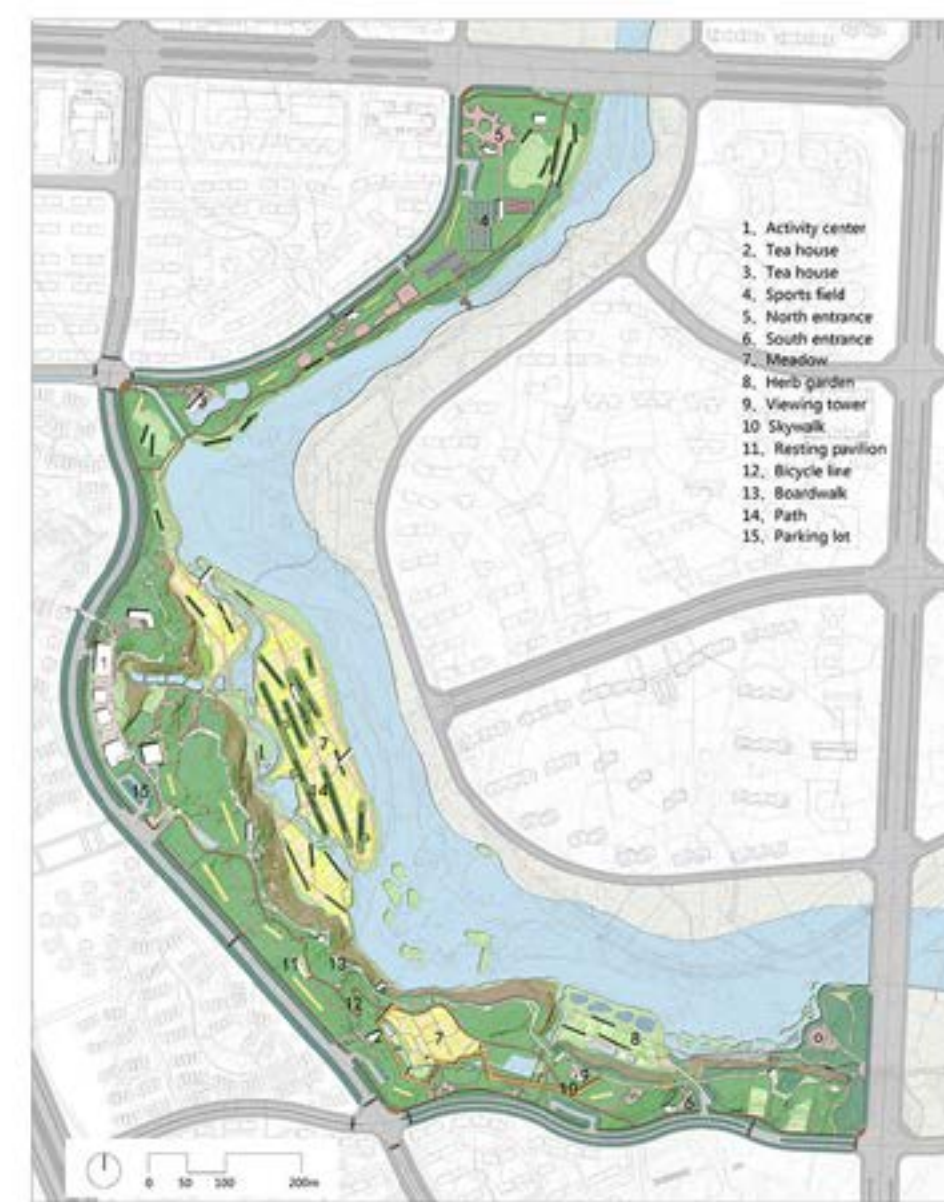
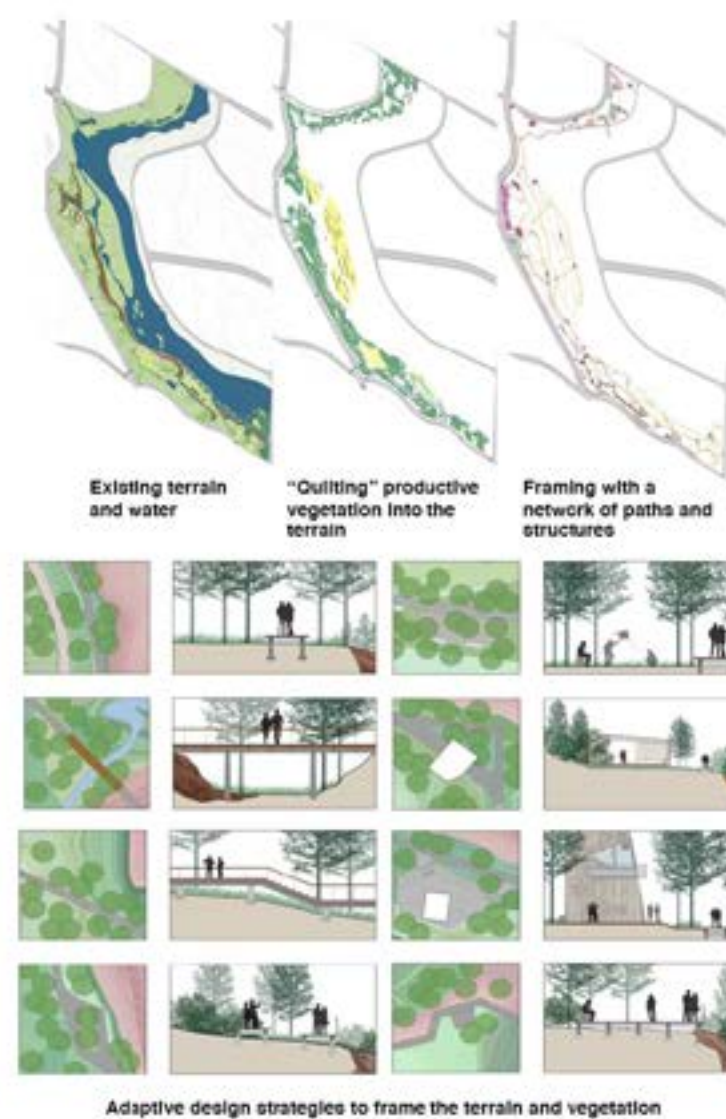
QUZHOU CITY, CHINA
DESIGNED BY TURENSCAPE
COMPLETED 2015

OVERVIEW:

This project is located at the west bank of the Shiliang Creek in the Zhejiang Province in China. The site is 90 acres and is completely surrounded by intensive development. The topography of the site was difficult with red sandstone hills and a large floodplain in the lower area. The client's request was that the park be a multifunctional green space that provides recreational opportunities for the citizens.

SUCESSES:

This park addresses the big picture issues and beautifully a productive urban oasis. The design includes food and energy security, **water resilience**, ideas such as **'befriending the flood'**, agricultural urbanism (productive crops were introduced to the abandoned fields), and **minimum intervention**. The mosaic landscape patterns and its natural processes are kept basically unchanged. The cultural aspects of the park were also recognized and maintained, such as the village trails and the old pavillion.



SITE OVERVIEW photo via: turenscape.com



PEDESTRIAN WALK photo via: turenscape.com



WALKING BRIDGE photo via: turenscape.com



RIVER PAVILLION photo via: turenscape.com

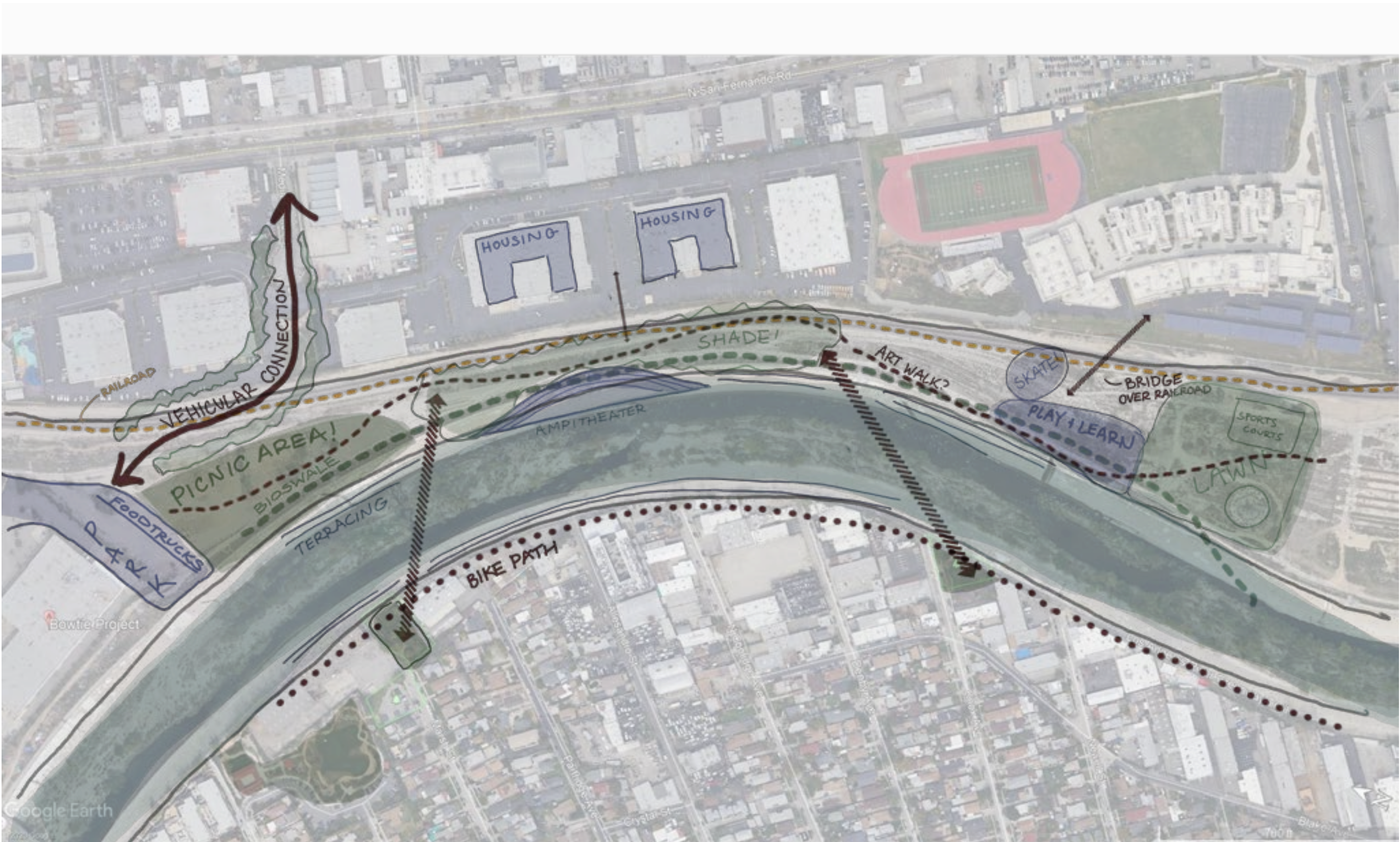


ADAPTIVE DESIGN WALKWAY photo via: turenscape.com

DESIGN ALTERNATIVE 1



DESIGN ALTERNATIVE 2



DESIGN ALTERNATIVE 3



MASTER PLAN STATEMENT

The Bowtie Project

This design connects the people and places around the Bowtie with two bridges over the Los Angeles River and to Frogtown and the Elysian Park neighborhoods. The railroad has also been sunk underground to allow for easy access to & from the high school on the east side and vehicles coming from San Fernando Road.

The site has terraces along the river, some vegetated with native plants and some encouraging visitors to venture down to the waters edge. The Bowtie also contains a stage with ampitheater seating, two cafes, a dog park, a childrens play area, and an educational plaza with different learning opportunities.

INSPIRATION



EDUCATIONAL CENTER



CONSTRUCTED WETLAND

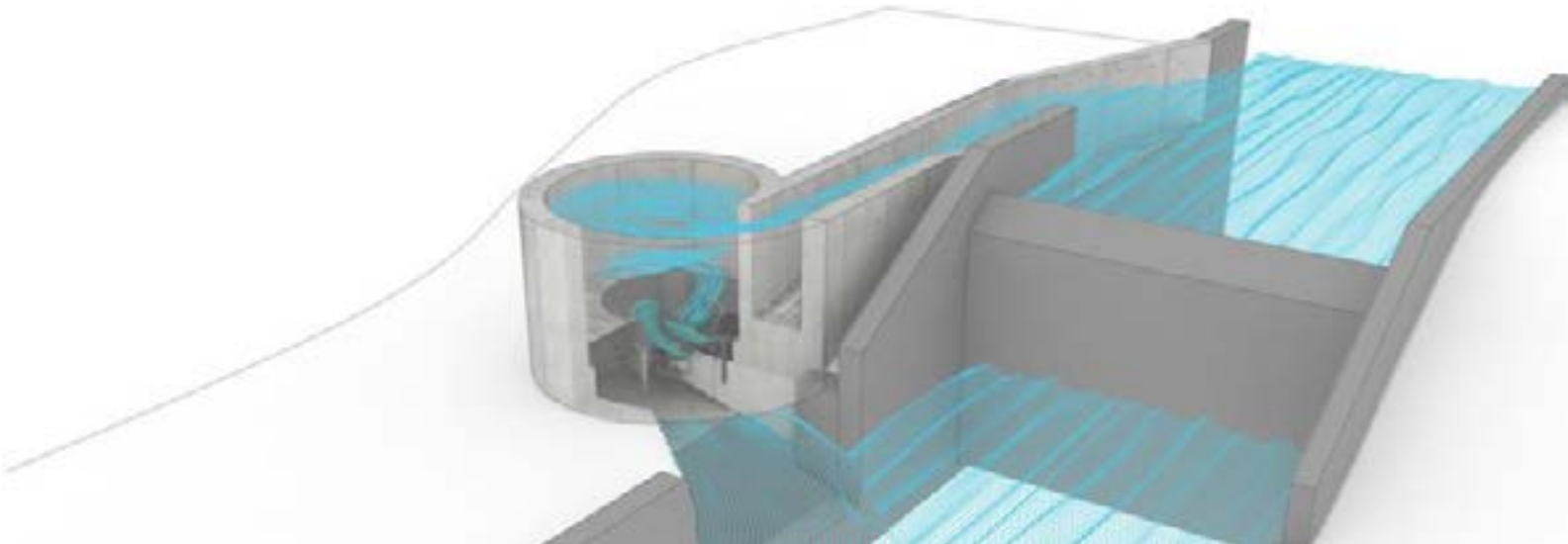
Constructed wetlands are engineered systems that use natural functions of vegetation, soil, and organisms to treat different water streams.



COMMUNITY BOCCE BALL COURT



BIOSWALE WITH BRIDGE



RIVER TURBINE

Each vortex turbine delivers 3-100kW, and can operate efficiently with a low height difference. Turbulent generates electricity with a single turbine or multiple turbines, allowing the device to generate as much electricity as if it was on a dam.



OUTDOOR AMPITHEATER

MASTER PLAN



- | | | | | |
|-----------------------|----------------------|-------------------------|------------------------|----------------------------|
| 1 AMPITHEATER | 5 VISITORS CENTER | 9 HOUSING & RESTAURANTS | 13 DOG PARK | 17 CAFE/RESTROOM |
| 2 CONSTRUCTED WETLAND | 6 BRIDGE TO FROGTOWN | 10 HABITAT ISLANDS | 14 KIDS PLAY AREA | 18 EDUCATIONAL OBSERVATORY |
| 3 CAFE | 7 TERRACING | 11 RIVER TURBINE | 15 NATIVE PLANT GARDEN | 19 RIVER-LEVEL WALWAY |
| 4 SERVICE ROAD | 8 PARKING | 12 BIOSWALE | 16 SPORTS COURTS | 20 MAINTENANCE BUILDING |

SITE SECTION 1 – THE LEARNING PLAZA



SITE SECTION 2 - THE RIVER AMPITHEATER



STAGE (50 FEET)

AMPITHEATER
SEATING

PATHWAY (5 FEET)

THE GREAT LAWN

PROMENADE (10 FEET)

PLANTED TERRACES

CONSTRUCTED WETLAND



PERSPECTIVE 1 - THE RIVER AMPITHEATER



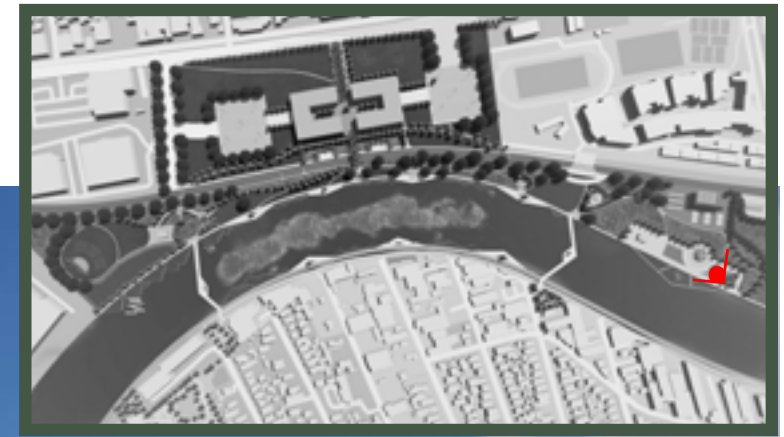
At night the River Ampitheater is illuminated by lights



PERSPECTIVE 2 – BIOSWALE



PERSPECTIVE 3 - THE LEARNING PLAZA



WALKTHROUGH VIDEO

<https://youtu.be/Vc-tmZOmpJE>

