



Transforming **Vulcan:**
from
LANDFILL
to
LANDMARK

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Capstone Project, Summer 2024

Instructors: Meg Rushing Coffee and Steven Chavez

CONTENTS

4	PERSONAL STATEMENT
5	ACKNOWLEDGMENT
6	PROJECT STATEMENT
7-11	JUSTIFICATION
12	SITE LOCATION
13	PARCELS
14	TYPES OF LANDFILLS
15	PROJECTS BUILT ON LANDFILLS
16	SITE PHOTOS
17	ADJACENCIES
18	LANDFILLS AND GRAVEL PITS
19	TUJUNGA WASH FLOODS
20 - 21	STONEHURST HISTORIC DISTRICT
22 - 24	GOALS AND OBJECTIVES
25 - 27	CASE STUDIES
28 - 29	DESIGN METHODOLOGY
30 - 31	PROGRAM ACTIVITIES AND PROGRAM ELEMENTS
32	STAKEHOLDERS AND USERS
33	DEMOGRAPHICS

34	SITE ANALYSIS
35	EXISTING CIRCULATION
36	ELEVATION
37	100-YEAR FLOOD
38 - 39	CONSTRAINTS AND OPPORTUNITIES
40	INSPIRATION BOARD
41 - 43	THREE CONCEPTS
44	FINAL CONCEPT
45	MATERIALS PALETTE
46 - 47	PLANT PALETTE
48	MASTER PLAN
49	NEW CIRCULATION
50	BIKE SKILLS PARK PERSPECTIVE
51	BIKE SKILLS PARK SKETCHES
52 - 55	BIKE SKILLS PARK ENLARGEMENTS AND SECTIONS
56	STONEHURST PARK SKETCHES
57 - 59	STONEHURST PARK ENLARGEMENTS AND SECTIONS
60 - 62	STONEHURST PARK PERSPECTIVES
63	CONCLUSION
64 - 65	PHOTO AND WEBSITE REFERENCES

PERSONAL STATEMENT

As a landscape designer with a background in fine arts, I draw inspiration from the natural world and my global experiences. Growing up in Tashkent, Uzbekistan, and living in various countries, I have developed a design philosophy that blends cultural diversity with sustainable practices. My passion for environmentally conscious design deepened during California's 2014 drought when I transformed my yard into a water-efficient landscape, inspiring my community to do the same.

Now, as a graduate of UCLA Extension's Landscape Architecture Program, I am excited to work on public projects that are inclusive, foster community spirit, improve accessibility, and heal the environment by balancing built environments with nature.

ACKNOWLEDGMENTS

This project would not have been possible without the support and guidance of my professors, Meg Rushing Coffee and Steven Chavez, to whom I am deeply grateful. I would also like to thank Stephanie Landregan and Melissa McDonald for their help throughout the program, as well as all the instructors at UCLA Extension Landscape Architecture Program.

I am incredibly thankful to my classmates and our amazing cohort for their creativity and inspiration.

My deepest gratitude goes to my family for their unwavering support and understanding throughout this journey. Their constant encouragement has been a source of strength and inspiration.

STATEMENT

This project envisions how an industrial waste landfill that has reached its capacity can be adaptively reused as a premier outdoor sports, entertainment, and recreation venue. It focuses on creating a bike park and extreme wheeled sports practice grounds, along with a community complex and recreational facilities. The proposed programming will renew the site, heal the environment, and enrich the lives of Northeast San Fernando Valley residents.



JUSTIFICATION

The **Vulcan Landfill** is located in the northeast region of the San Fernando Valley. The site was originally operated by **Vulcan Materials Company**, which was founded in 1909 as the Birmingham Slag Company in Alabama. Over time, the company expanded across the United States, becoming one of the largest suppliers of construction ma-

terials. Vulcan established a presence in Southern California to meet the region's growing demand for construction aggregates during the mid-20th century, particularly during the post-WWII boom, when the construction of freeways, housing developments, and public infrastructure skyrocketed. In **Sun Valley**, Vulcan acquired large tracts of land

rich in natural aggregate materials, such as gravel, sand, and stone, which were essential for producing concrete and asphalt. Before becoming an industrial landfill, the Vulcan site functioned as a gravel pit. It has since been filled with **inert waste, consisting of dry construction and demolition debris**.



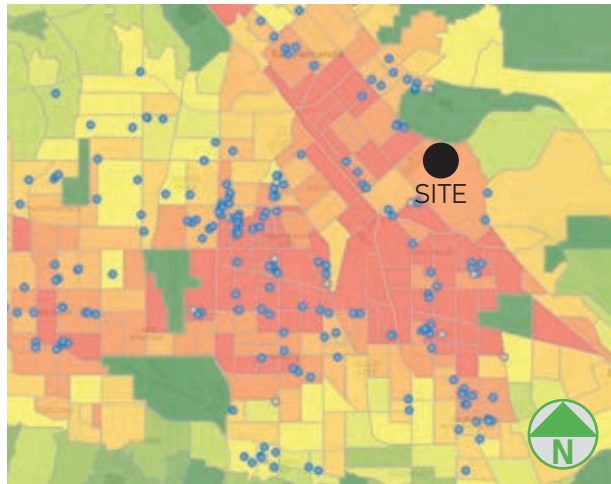
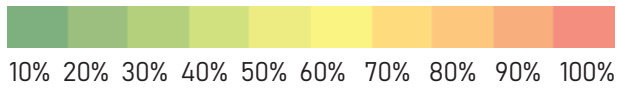
Vulcan Materials Company

<https://filmsac.com/vulcan-materials-company/>

JUSTIFICATION

The reclamation of the Vulcan Landfill is driven by several factors:

1. **California law mandates the proper closure and rehabilitation of landfills**, ensuring they do not pose ongoing environmental hazards. This legal requirement underscores the necessity of transforming the Vulcan Landfill into a safe and functional space.



<https://affordablehomes.chpc.net/>

CalEnviroScreen 4.0 ● Affordable Housing Units

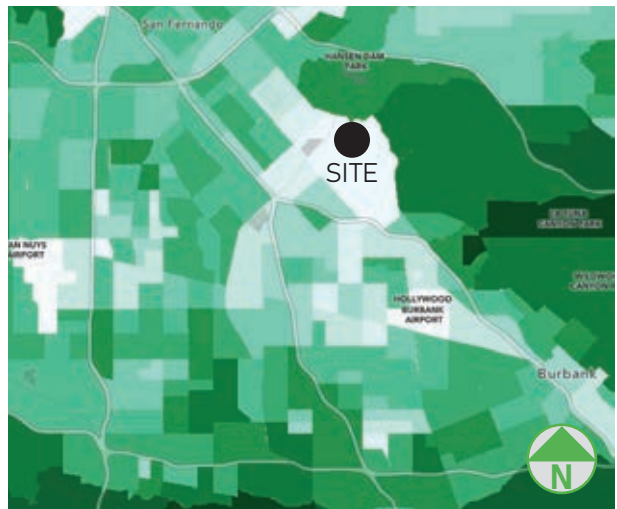
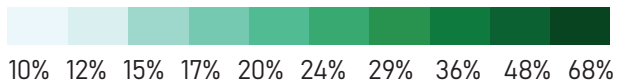
Assessment of the environmental hazards and population vulnerability in Sun Valley, CA. Higher scores indicate greater cumulative impacts and higher levels of disadvantage.

● Residential



2. **The proximity of the Vulcan Landfill to residential areas** poses significant environmental challenges and community health risks. Residents face elevated levels of air pollution, which contribute to adverse health effects such as respiratory issues and other chronic conditions. Addressing these hazards through the landfill's reclamation is crucial for improving public health and ensuring a safer and healthier environment for the area residents.

3. **The lack of green and recreational spaces** in Sun Valley is a pressing concern, particularly for the many families with children who live in the area.

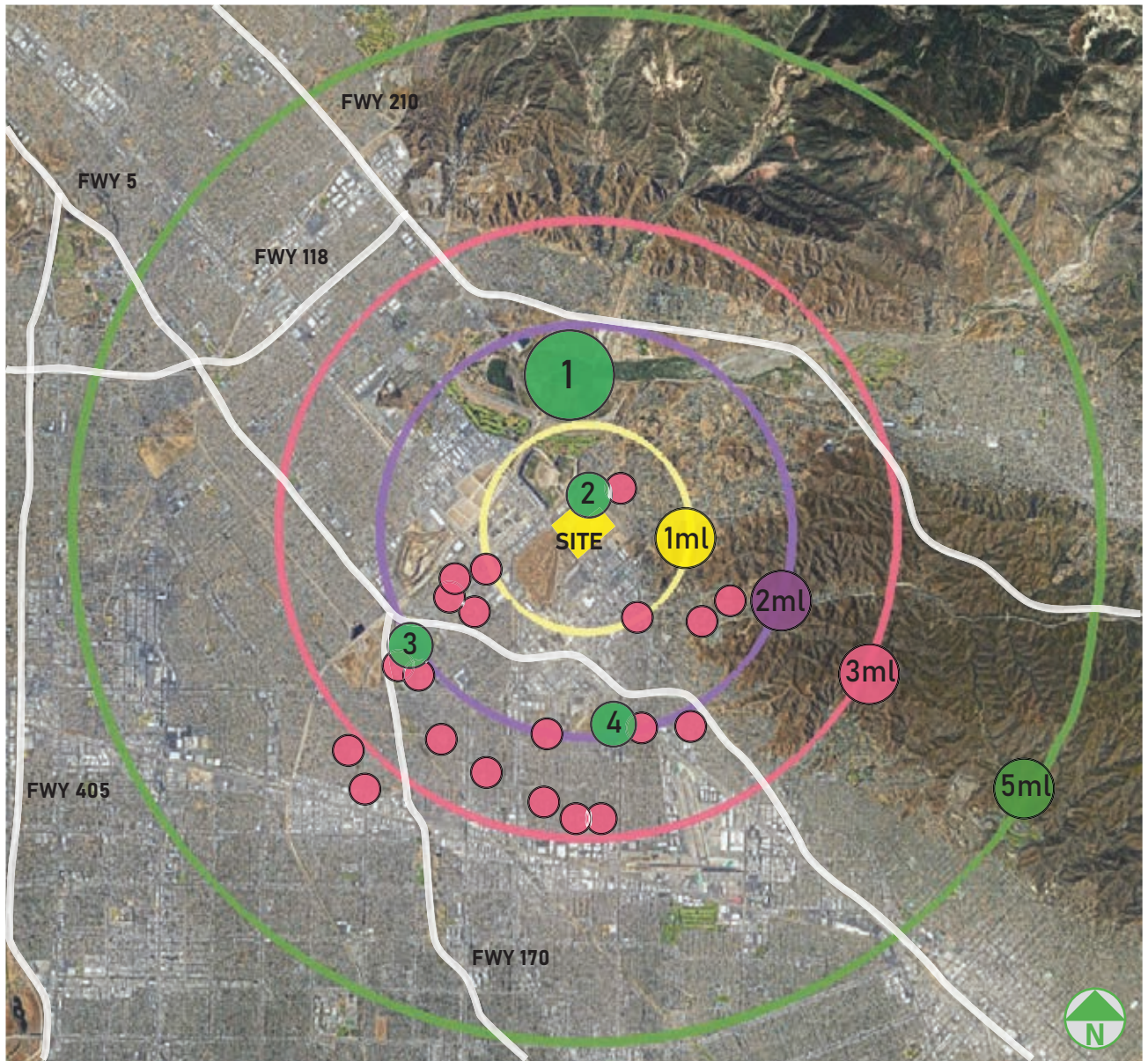


<https://affordablehomes.chpc.net/>

This map represents the existing conditions of the urban forest in Sun Valley, CA.

- 1. Hansen Dam Recreation Center
- 2. Stonehurst Recreation Center

- 3. Fernangeles Recreation Center
- 4. Sun Valley Recreation Center

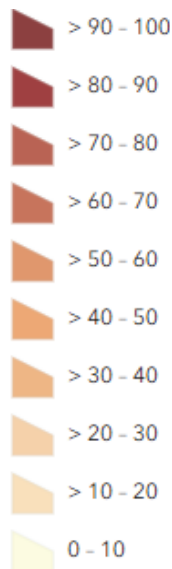


 Schools within the Sun Valley Boundaries

JUSTIFICATION

Solid Waste

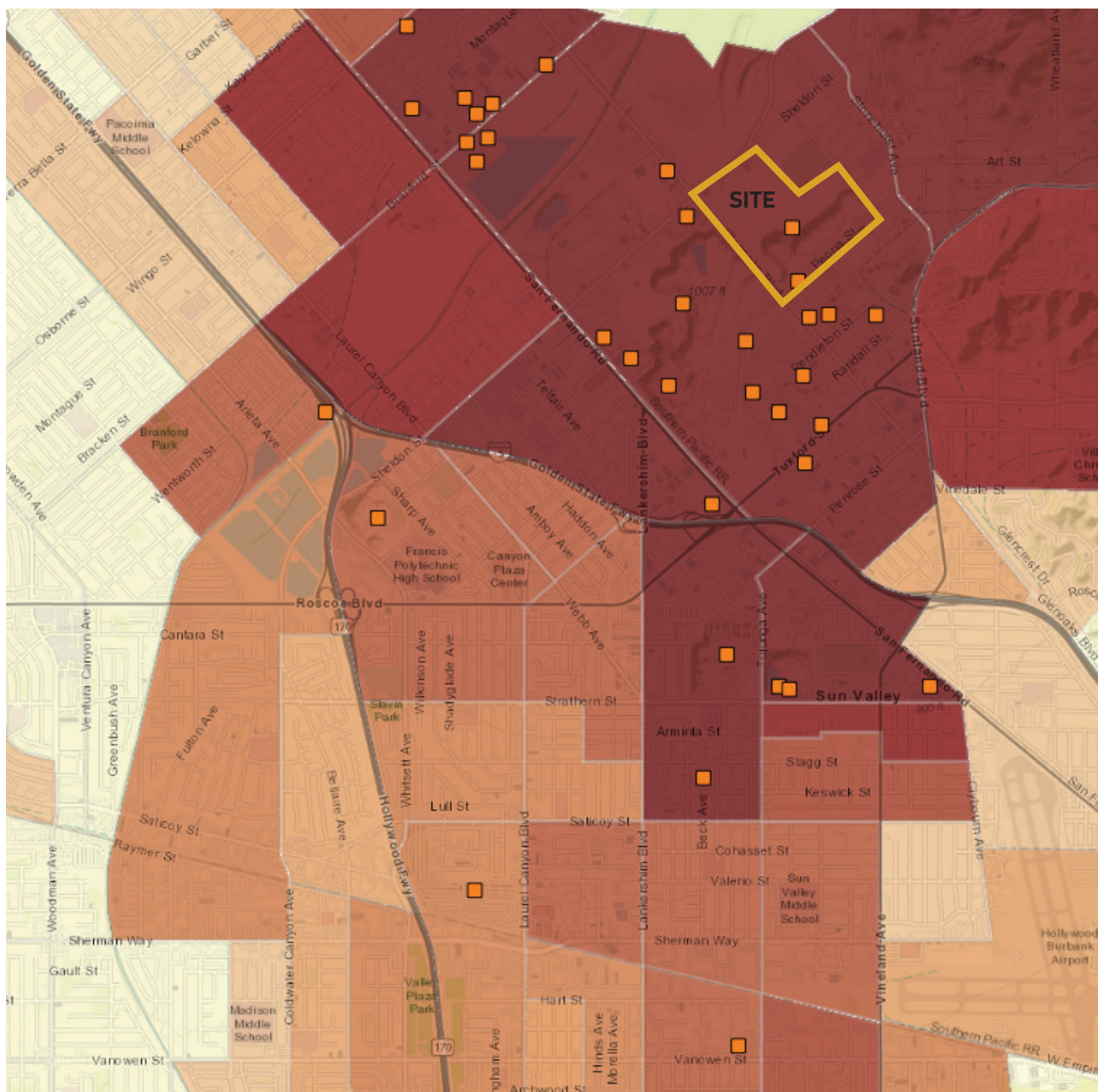
Solid Waste Percentile



Solid Waste Facilities



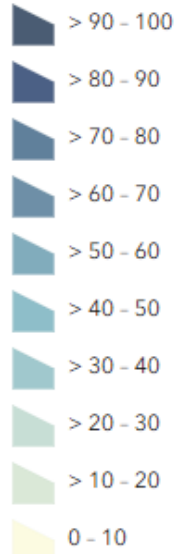
Solid waste facilities are places where household garbage and similar kinds of waste are collected, processed, or stored. These include landfills and composting or recycling facilities. The waste material may come from homes, factories or businesses. Most of these operations require permits. Regulated facilities as well as illegal sites that do not comply with the law can harm the environment and potentially expose people to hazardous substances. Solid waste facilities can also raise concern in a community about odors, insect pests, vermin, and truck traffic. The communities near solid waste facilities are usually home to poor and communities of color.



<https://experience.arcgis.com/experience/ed5953d89038431dbf4f22ab9abfe40d/page/Indicators/?views=Solid-Waste-Sites>

Toxic Releases from Facilities

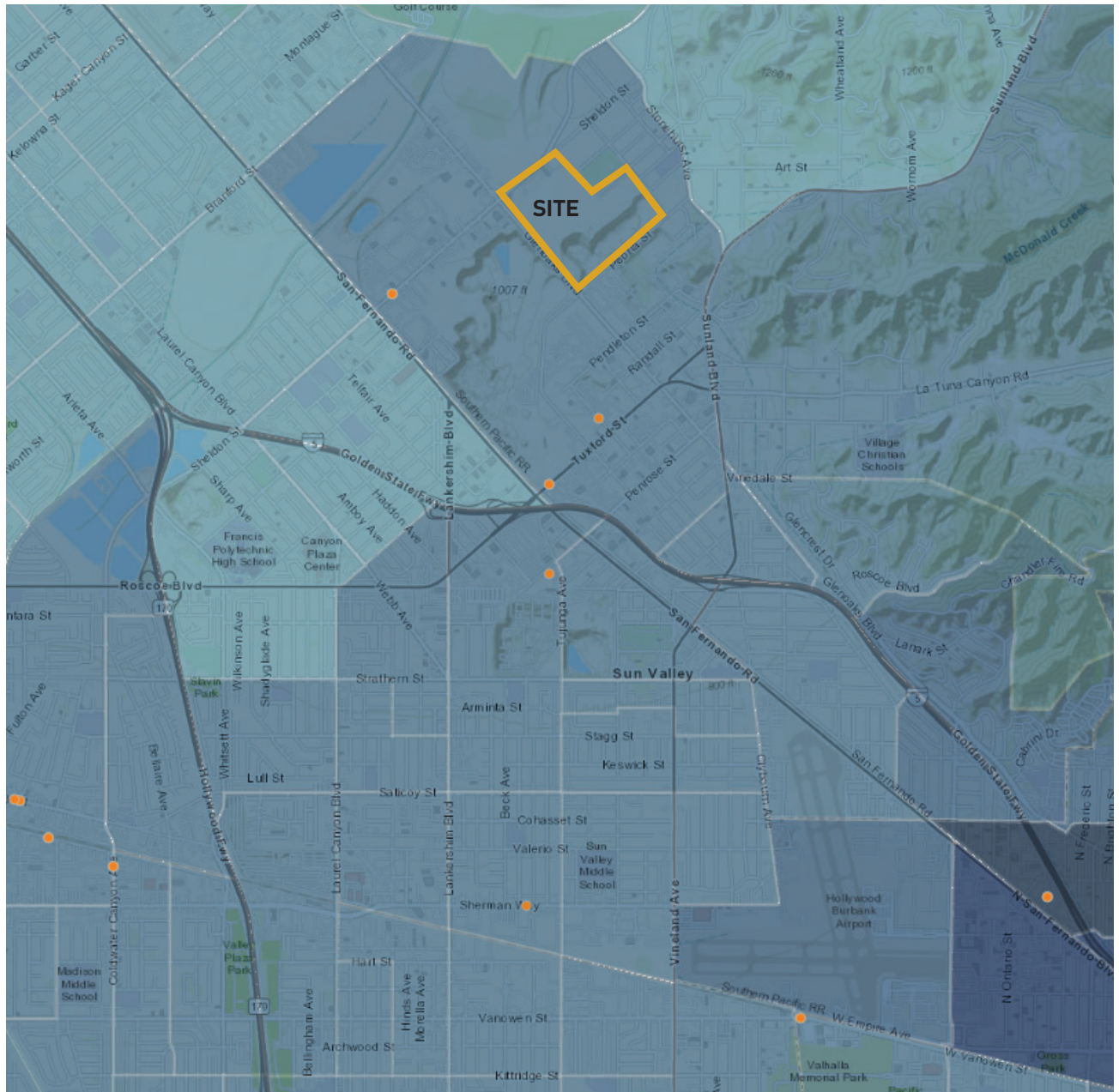
Toxic Releases Percentile



TRI Facilities



Facilities that make or use toxic chemicals can release these chemicals into the air. Information is available on the amount of chemicals released for over 500 chemicals for large facilities in the United States. These chemicals are sometimes detected in the air of communities nearby. People living near facilities may breathe contaminated air regularly or if contaminants are released during an accident.



<https://experience.arcgis.com/experience/ed5953d89038431dbf4f22ab9abfe40d/page/Indicators/?views=Toxic-Releases-from-Facilities>

SITE LOCATION



Location: 11520 Sheldon St., Sun Valley, CA
 Size: 9,859.46 sq ft / 120.19 acres
 Zoning: A1-1XL-G-CUGU ("A1" Agriculture Zone)
 Zoning: RA-1-G-CUGU ("RA" Suburban Zone)

Year Built: 1949
 Parcel/Apn Number: 2538024009,
 2538024010, 2538024011
 Existing Buildings: None

PARCEL MAPS of the SITE

JURISDICTIONAL

Community Plan Area: Sun Valley - La Tuna Canyon

Area Planning Commission: North Valley

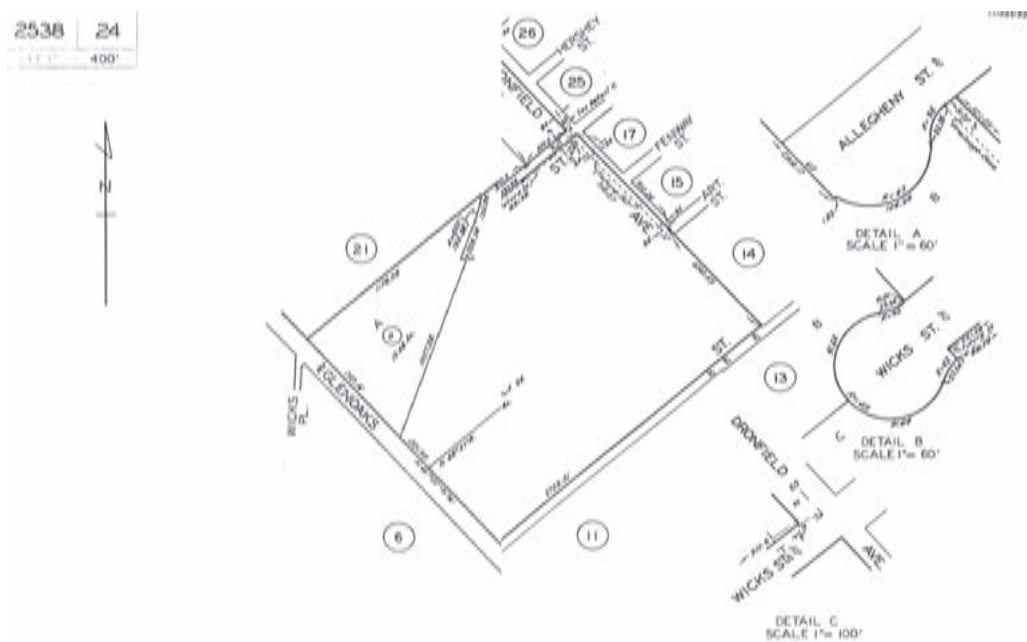
Neighborhood Council: Foothill Trails District

Council District: CD 6 - Imelda Padilla

Census Tract # 1211.02

LADBS District Office: Van Nuys

CalMat Properties is doing business as Vulcan Materials Company, owns and operates the Sun Valley Landfill located at 9436 Glenoaks Boulevard, Sun Valley, California. The Landfill is bounded by Glenoaks Boulevard on the south west, Sheldon Street on the north west, Dronfield Avenue on the north east, and Peoria Street on the south east. The Landfill occupies a former gravel mining pit.

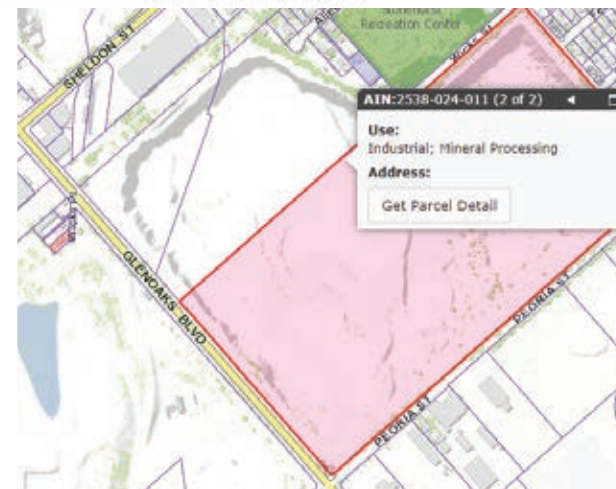
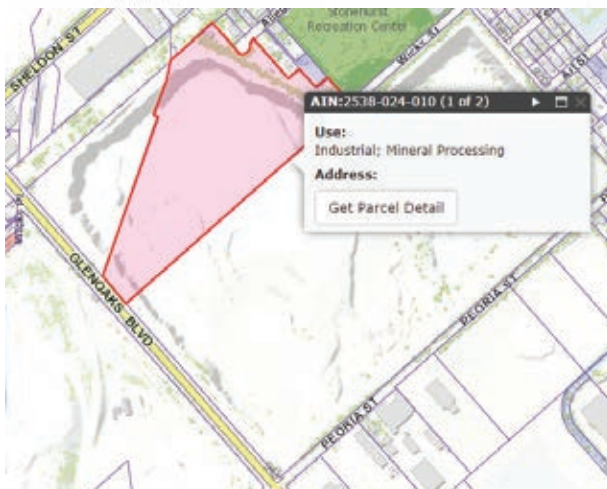
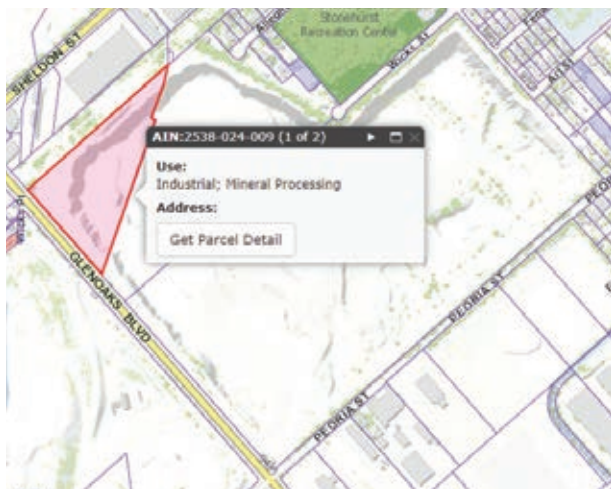


2538 24

LOS ANGELES LAND A1
SUBDIVISION OF A PA
RANCHO

PARCEL_MAP

ASSESSOR'S MAP
COUNTY OF LOS ANGELES, CALIF.



TYPES of LANDFILLS

Industrial Waste Landfill

Former gravel pits, like **Vulcan Landfill**, are often converted into industrial landfills designed to collect inert waste from businesses and institutions. A specific type, **Construction and Demolition (C&D) Debris Landfills**, handle materials from construction, renovation, and demolition projects. Inert waste generally consists of dry construction and demolition debris such as **concrete, asphalt, wood, gypsum (drywall), dirt, clean soil, metal, rock, gravel, and cardboard**. These materials are dry and **non-hazardous**, making them suitable for disposal in this type of landfill.



Municipal Solid Waste Landfill

A Municipal Solid Waste Landfill (MSWLF) is a designated area for household waste, situated in suitable geological locations away from faults, wetlands, and floodplains. These landfills use **composite liners**, which consist of a flexible membrane over two feet of compacted clay, to protect groundwater and soil from leachate. **Leachate collection systems** are placed above the liners to remove and treat the leachate. Operating practices, such as **compacting and covering waste with soil**, help reduce odor, control pests, and protect public health.



Hazardous Waste Landfills

A Hazardous Waste Landfill is designated for the **disposal of hazardous waste**, not solid waste. Hazardous waste management facilities (TSDFs) handle the **treatment, storage, and disposal** of hazardous wastes. Treatment processes, like incineration or oxidation, alter the waste's composition. Storage involves **holding hazardous wastes in compliant containers, tanks, or buildings** until disposal. The most common disposal method is a landfill, where hazardous wastes are placed in units designed to protect groundwater and surface water resources.



WHAT CAN BE BUILT on a LANDFILL?



Commercial or Industrial Development

The Boulevards at South Bay in Carson, CA, is a major redevelopment project on a 168-acre site, previously known as Carson Marketplace. This area includes **a 157-acre former landfill**. After the landfill was closed, the site sat vacant for decades. The redevelopment process has required extensive environmental cleanup and remediation to ensure that it meets safety standards for future use. The project aims to create a vibrant, mixed-use development that integrates **retail, entertainment, hotel, residential, and office spaces**, transforming what was once an industrial landfill into a valuable community resource.



Wildlife Habitats

Freshkills Park is the largest park developed in New York City. It was built on the former **Fresh Kills Landfill**, which opened in 1948 and became one of the world's largest, covering 2,200 acres. Originally intended as a temporary solution for New York City's waste, the landfill remained in operation for over five decades before closing in March 2001. The reclaimed area has become **a haven for wildlife, with restored wetlands and grasslands supporting various species**. Freshkills Park is home to diverse birds, including **osprey, herons, and owls, as well as mammals like deer and foxes**.



Urban Park

Mount Trashmore Park, opened in 1974 in Virginia Beach, Virginia, is the first landfill-to-park project on the East Coast. The park was created by covering a former landfill with layers of soil and vegetation, transforming the site into a public green space. The primary mound, "Mount Trashmore," stands 60 feet tall and stretches 800 feet long, offering scenic views of the surrounding area. Visitors can reach the top via hiking trails or a large staircase. The park also features **two lakes—Lake Windsor and Lake Trashmore—used for fishing and wildlife observation**.

SITE PHOTOS



North West - main entrance to the site on Sheldon Street



West side - Department of Water and Power located on Sheldon Street and Glenoaks Boulevard



North East - view of the residential area that borders with the landfill



North side - Wicks Street cul-de-sac adjacent to Stonehurst Recreation Center



North West - Main entrance / driveway to the site



South side - view out from SunSet Studios on Peoria Street



North side - Vulcan Landfill border on Wicks Street across from Stonehurst Recreation Center

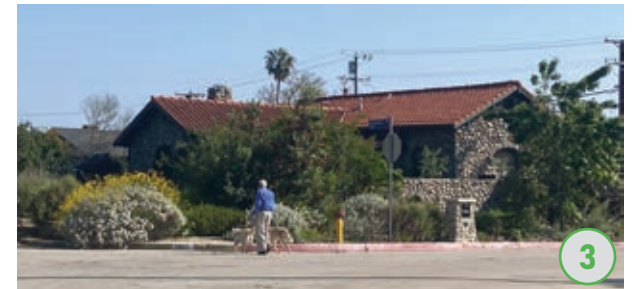
ADJACENCIES



Sheldon Gravel Pit



Stonehurst Recreation Center



Stonehurst Historic District



Bradley Landfill and Recycling Center



SunSet Glenoaks Studios



Stonehurst Avenue Elementary School

GRAVEL PITS and LANDFILLS in SUN VALLEY

● Landfills ● Gravel Pits



Sun Valley is home to numerous gravel pits and quarries due to historic floods from the **Tujuanga Wash**, which deposited extensive gravel and sediment, cre-

ating rich, accessible deposits ideal for extraction. Most of the stone, gravel, and sand used in Los Angeles construction between the 1920s and 1970s came

from these quarries. Although many of these sites have since closed and been repurposed as landfill pits, Sun Valley remains predominantly industrial.

TUJUNGA WASH

1938



Tujunga Wash, a major tributary of the Los Angeles River in Southern California, has a history of significant flooding events.

Tujunga Wash originates in the San Gabriel Mountains, it flows southwest through the San Fernando Valley. The wash continues through the valley and joins the Los Angeles River near Burbank.

1969



In **March 1938**, the Sunland/Tujunga area and the surrounding San Gabriel Mountains were hit by devastating floods. The Big Tujunga Dam filled to capacity, and authorities decided to release the dam waters to prevent an even larger disaster. In **1969**, there was another flood in the Tujunga Wash. Water flowed down a formerly inactive

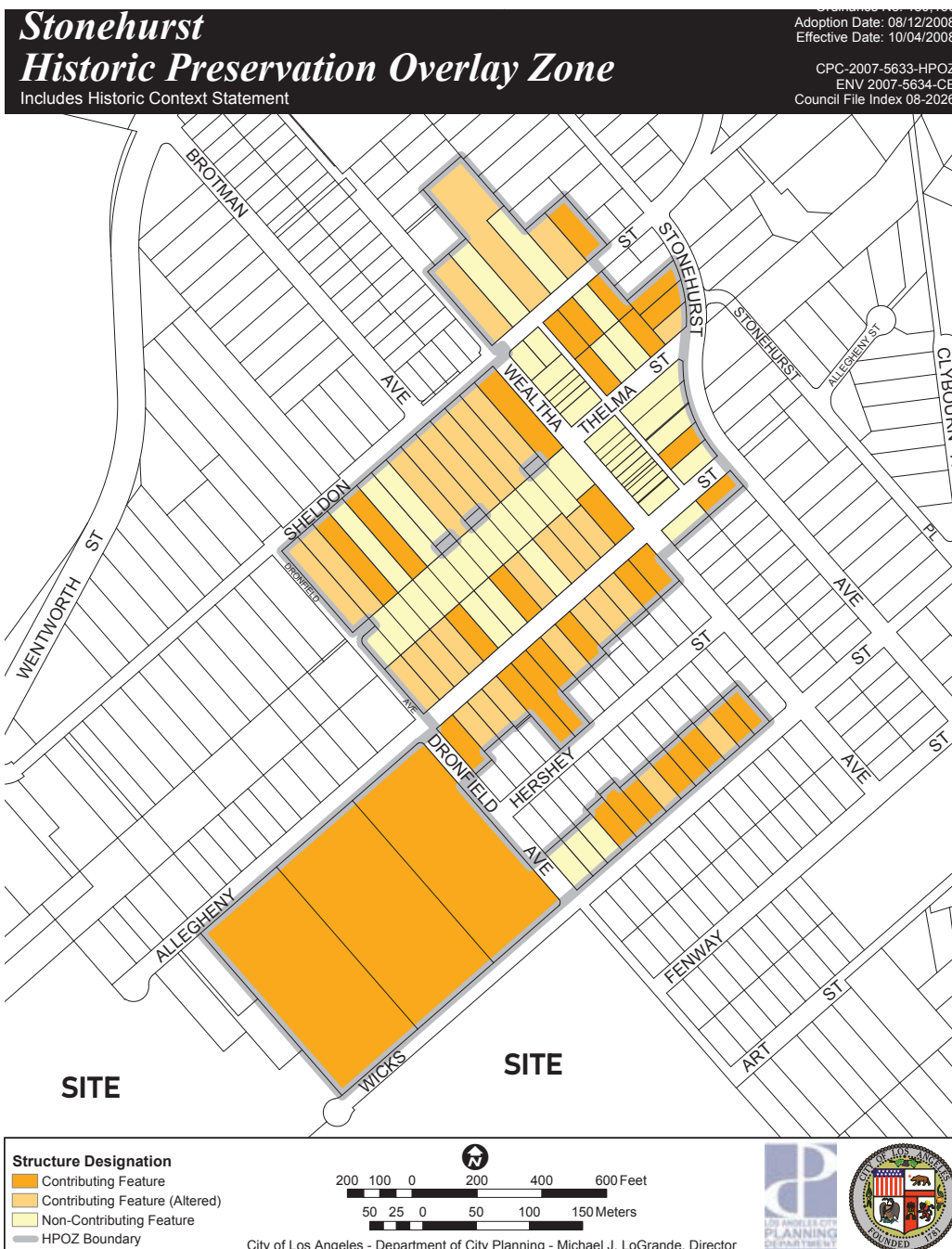
2005



channel and entered a large gravel pit, which was 49 to 75 feet deep. The channel bed degraded, leading to the failure of three highway bridges. In **January 2005**, a series of powerful storms brought significant rainfall to Southern California. Tujunga Wash experienced high water levels, leading to localized flooding.

STONEHURST HISTORIC DISTRICT

The Tujunga Wash's channel shifted in the great flood of 1910, almost a mile to the west, and exposed a large deposit of native rock. This rock was used in the construction of the Stonehurst houses. Other factors influencing the creation of rock houses were the wider availability of Portland Cement and a reliable water supply. 66 structures made of stone still exist in the Stonehurst tract, including a few business structures. The use of native rock in the construction of the buildings throughout the neighborhood makes this area stand out as a singular example of this form of house construction. These houses are constructed differently than most stone structures. They are not flat surfaced stacked but rather the stone is recessed into mortar using smaller stones and rubble for structural support. This creates a natural look, one where the mortar holding the stones in place is not readily visible. This construction method has allowed these houses with their porches, fireplaces and fences, to withstand two major earthquakes: 1971 and 1994. (Stonehurst- A 1920's Stone Neighborhood by Albert Knight, 1999). **California State University Northridge. University Library. Special Collections & Archives.**





The City of Los Angeles Historical-Cultural Monument #172 was constructed around 1930 by Matelango, a Native American stone mason.



GOALS and OBJECTIVES



1. Transform Vulcan Landfill into a Wheeled Sports and Recreation Park

Develop extreme wheeled sports practice grounds and courses for sports enthusiasts

Using recycled dirt, asphalt, and concrete from the site, build pump tracks and dirt jumps suitable for riders of all skill levels

Create dedicated areas for skateboarding and inline skating

Provide walking and hiking trails with varying difficulty levels

Use protective barriers, fencing, and natural buffers to separate areas of the park

Install signage indicating the difficulty level of different sport sections, and safety warnings

Design playgrounds equipped for children

Place restrooms and water stations near sports areas and the community center

Generate revenue through sports events, classes, and competitions

Organize bike races, skateboarding competitions, and X Games practice sessions



2. Make Vulcan Park Accessible for the Community

Build a community complex that offers educational and recreational programs, workshops, classes, and community events

Provide gathering spaces with shade structures for picnicking and resting

Develop trails and pathways for jogging and walking

Provide a performance stage/ amphitheater with a roof or shade structure

Integrate seating suitable for concerts, theater, and community events

Generate revenue utilizing the performance stage/amphitheater for concerts and cultural events

Offer concerts, theater productions, and community festivals

Rent out the space to external event organizers for public events



GOALS and OBJECTIVES



3. Restore the Ecological Health of the Landfill Site

Remove inert waste materials to prepare the site for ecological restoration

Utilize grading techniques to shape the land and create embankments; filling the site with additional dirt to achieve the desired landforms

Use ground stabilization techniques to prevent erosion

Improve air quality by increasing the number of green spaces within the park

Improve soil quality and reduce contamination to support healthy plant growth

Introduce California native plant species, plant native trees, shrubs, and grasses



INDUSTRIAL WASTE LANDFILL RECLAMATION

CASE STUDY: Granite Regional Park

LOCATION: Sacramento, California

SIZE: 252 acres

SITE: Granite Construction Gravel Pit

Granite Regional Park provides the public with a multitude of amenities and attracts tenants to the surrounding office buildings. Granite Construction handed over the 240 acre site of its former gravel mine to the City of Sacramento in the 90's after mining was completed. Granite Regional Park master plan includes, within a Class-A office park, three soccer and rugby fields with grandstands; a 3,500 seat amphitheater; a baseball/softball complex; tennis, basketball and volleyball venues; a community center; dog park; group picnic facilities and concessions; a skate park; and a roller hockey rink.



<https://hlagroup.com/portfolio/parks-recreation/granite-regional-park>

TAKEAWAYS:

- Landfill Remediation
- Water Conservation
- Flood Mitigation
- Habitat Restoration

INDUSTRIAL WASTE LANDFILL RECLAMATION

CASE STUDY: Colorado Springs Bike Park

LOCATION: Colorado Springs, Colorado

SIZE: 100 acres

SITE: Pikeview Quarry

Pikeview Quarry is a former limestone mine overlooking northwest Colorado Springs, Colorado. The mine operated continuously from 1903-2018, providing essential raw materials for the concrete that built the Olympic City. The quarry played a significant role in the development of Colorado Springs, with nearly half of the limestone used in the city's construction coming from Pikeview.

After mining operations ceased, the site underwent reclamation efforts to restore it to its natural state. The City of Colorado Springs plans to construct a world-class mountain bike park and multi-use recreation center on the reclaimed Pikeview Quarry site. The elevation change for the proposed bike park is 700-800 vertical feet, with a southern exposure – ideal for an Olympic City training center site. It is estimated that the bike park could be used for ten months out of each year.



<https://pikeview.org/bike-park/>

TAKEAWAYS:

- Reclaim, Restore, Recreate
- Restoring its original topography
- Creating wildlife habitat and returning the land to its previous state

CASE STUDY: Rory M. Shaw Wetlands Park Project

LOCATION: Sun Valley, California

SIZE: 46 acres

SITE: Penrose Landfill

The **Penrose Landfill** project's objectives are to mitigate flood risk and reduce stormwater pollution while increasing water conservation, recreational opportunities, and wildlife habitat. This will be achieved by converting a 46-acre, engineered inert landfill into a multi-purpose wetlands park. The park will feature a 21-acre detention pond that will provide the capacity to hold runoff collected from the upstream tributary area. The captured stormwater in the detention pond will then enter a 10-acre wetland that will act as a natural water treatment system by removing pollutants from the stormwater. The wetlands will form a sustainable habitat for plant and animal species. The treated stormwater is to be pumped to the existing Sun Valley Park infiltration basins for groundwater re-charge.



<https://dpw.lacounty.gov/wmd/svw/roryshaw>

TAKEAWAYS:

- Landfill Reclamation
- Water Conservation
- Flood Mitigation
- Habitat Restoration

DESIGN METHODOLOGY

Site Analysis

Site Analysis, James A. LaGro Jr.

TOPOGRAPHY

Understanding the site's topography is essential in making good site-planning and design decisions:

- Elevation - changes in elevation affect both drainage patterns and visibility to and from the site.
- Slope - a site's suitability for roads, walkways, and other structures is, in part, a function of the existing slopes on the site.

ASSESSING the SITE'S CULTURAL and HISTORIC CONTEXTS

Building and Neighborhood Character:

- Morphology - cognitive maps aid orientation and movement, or way-finding, in built environments with a strong sense of place. There are five elements of urban form: edges, paths, districts, nodes, and landmarks.
- Typologies - evaluating a site's cultural context can benefit from the analysis of topologies based on character-defining attributes such as building height, style, year of construction, or location within the urban-to-rural continuum. A building typology also can be based on uses for example, residential, commercial, educational, and religious.

Grading

Peter Petschek

LANDSCAPE STABILIZATION

While the word "hill" describes a natural landform, "embankment" refers to an artificial earthwork structure. Regardless of whether it is a part of a hill or an embankment, soil will slip or collapse when the incline of the slope exceeds the shear strength of the soil material.

Soil stabilization construction techniques used to prevent soil slips and erosion: bioengineering construction methods, soil protection techniques, ground stabilization techniques, stabilization using lime and cement, reinforced earth, geotextiles, retaining walls.



Site Engineering for Landscape Architects

Steven Strom, ASLA, and Kurt Nathan, PE

GRADING DESIGN

- Architectonic - the proposed grading creates uniform slopes and forms, which are crisply defined geometric shapes. The lines along which planes intersect are clearly articulated, rather than softened by rounded edges.
- Channeling - landform may be used to direct, funnel, or channel auto and pedestrian circulation. It may also be used to direct and control viewing angles and vistas as well as wind and cold air drainage.

ACCESSIBILITY and UNIVERSAL DESIGN

The basic tenet of universal design is to be inclusive by striving to provide equal choices to and opportunities for people with a wide range of abilities.

STORM WATER MANAGEMENT STRATEGIES

Principles and Techniques:

Wet Ponds - retention (or wet) ponds are basins which contain a permanent pool of water. This control measure, through careful planning and design, can serve multiple purposes including storm water management, pollutant removal, habitat improvement, and aesthetic enhancement.

From Fallow 100 Ideas for Abandoned Urban Landscapes

Jill Desimini

BRING PEOPLE

So much is made of the people who have left any given abandoned city or neighborhood, and yes, in too many cases, tens or even hundreds of thousands have taken flight. Less emphasis is given to those who remain, taken for granted. And those who come, who are brought by the local happenings, are often unmentioned. But people do come by the second, minute, hour, day, month, year, decade, and epoch.

- 53 Light it
- 56 Music Garden
- 57 Art Park
- 59 Mural
- 62 Observation Tower
- 65 Food Truck
- 66 Picnic Ground



How to Turn a Place Around



ACCESS and LINKAGES

A successful public space is easy to get to and get through; it is visible both from a distance and up close. Accessible spaces have a high parking turnover and, ideally, are convenient to public transit.

USES and ACTIVITIES

Activities are the basic building blocks of great places: they are the reasons why people visit in the first place, and why they continue to return. They are also what makes a place special or unique. When there is nothing to do in a place, it will sit empty and unused - a sure sign something needs to change.

Form and Fabric in Landscape Architecture

Catherine Dee

SPACES

For design purposes a space can be thought of as an area defined in three dimensions by:

- the ground plane
- "wall" or vertical planes
- the "sky" plane.

INTERPRETATION of EXISTING SITE FORMS

Design frequently involves the creation of spaces to provide for changed land use such as former industrial site to new recreational facilities. Design of these spaces may involve modification and recycling of existing site forms rather than developing completely new ones.

TOPOGRAPHIC SPACES

- Cut and Fill - the process of taking away and adding earth to change landform is known as "cut and fill". Frequently the landscape architect may seek to balance the "cut" and "fill" within their topographic design to reduce the need for transporting material elsewhere.
- Bowls and Hollows - digging into the ground or raising banks around an area is a fundamental way of creating space within a landscape. Regular and irregular bowls and hollows in the ground plane attract people and events. Bowls form natural theaters, and endless variations on the theatre form provide rich themes for the design of public and collective space.

PROGRAM ACTIVITIES

Dirt Jumping



Swimming



Skateboarding



BMX - Bicycle Motocross Racing



Jogging and Walking



Concerts in the Park



PROGRAM ELEMENTS

Pump Tracks



BMX Tracks



Dirt Jumps Grounds



Community Complex



Shade Structures and Picnic Areas



Performance Stage / Amphitheater



USERS

Extreme Sports Enthusiasts



Bicyclists



Northeast San Fernando Valley Residents



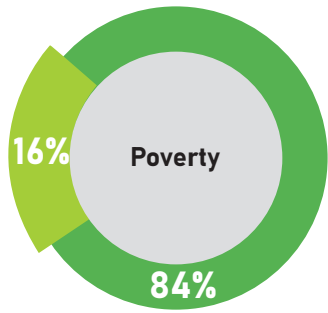
Tourists and Visitors



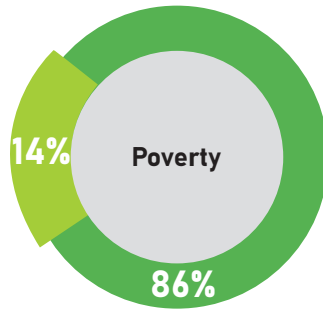
STAKEHOLDERS

- Vulcan Materials Company
- State of California
- Los Angeles County
- Los Angeles Fire Department
- Adjacent Property Owners
- Local Businesses
- Local Residents

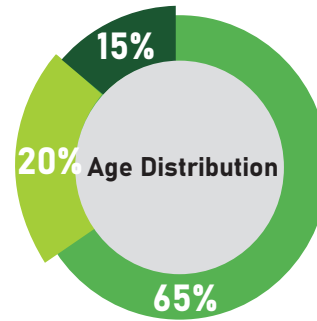
DEMOGRAPHICS



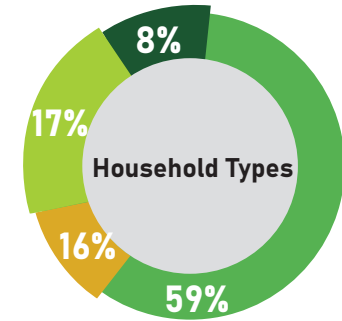
- 84% Non-poverty
- 16% Children under 18



- 86% Non-poverty
- 14% Seniors 65 and over

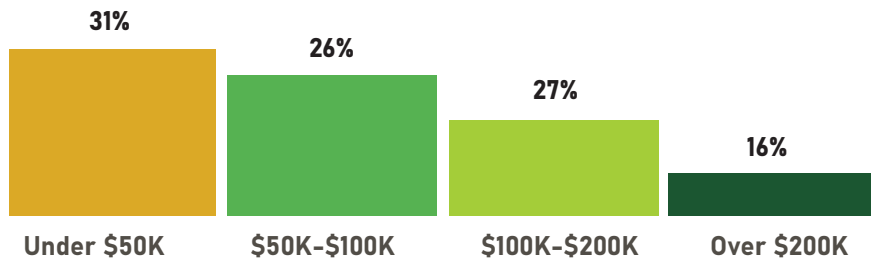


- 65% 18 to 64
- 20% under 18
- 15% 65 and over

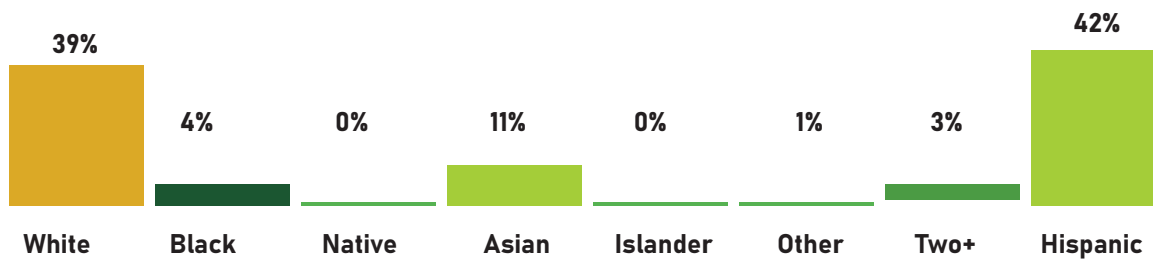


- 59% Married couples
- 17% Female housholder
- 16% Non-family
- 8% Male housholder

Household Income



Race and Ethnicity



San Fernando Valley, Los Angeles County
Population 1,826,028

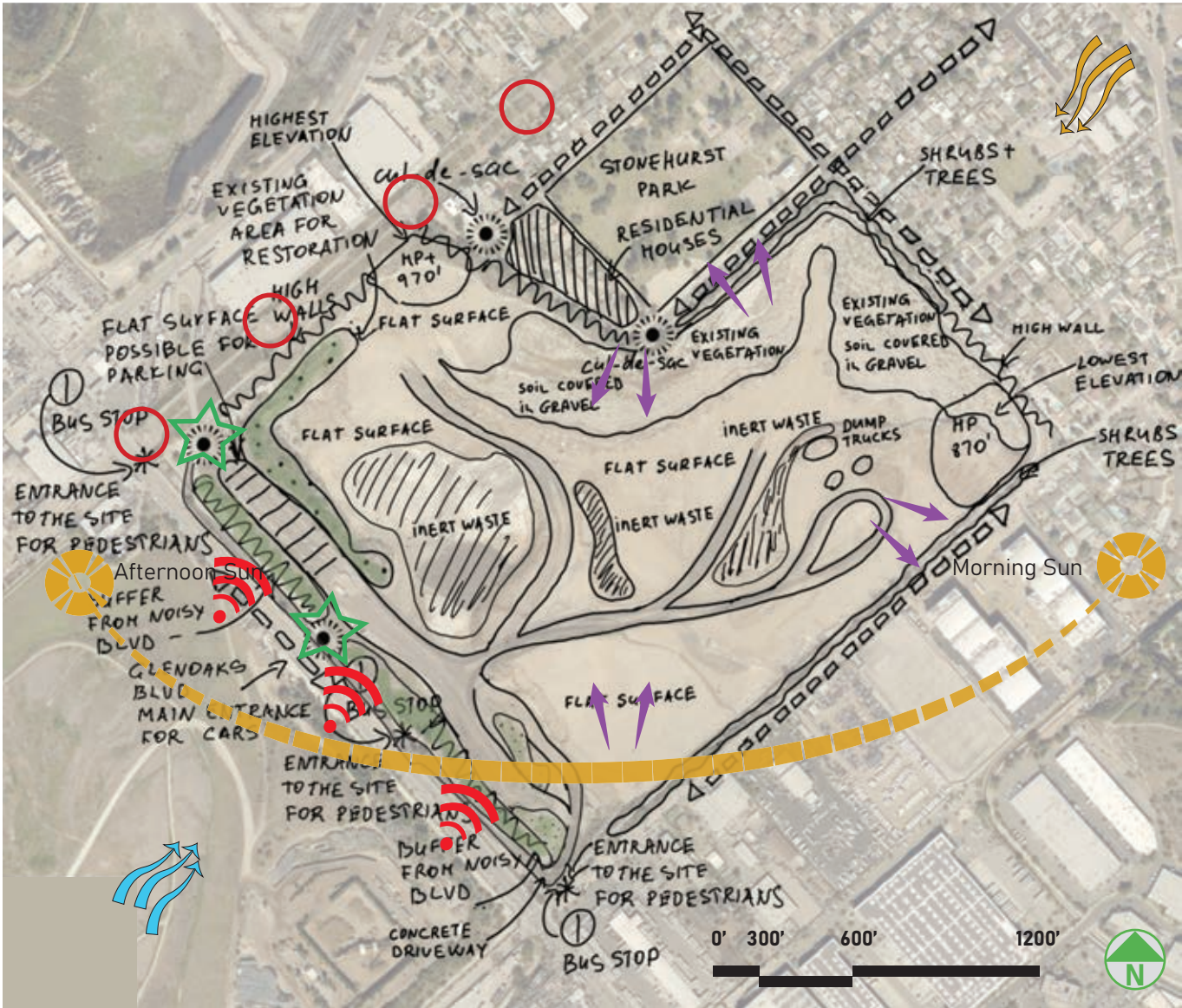
Ethnic Diversity:

The Valley is known for its diverse population. Around 42% of the population is Hispanic, 39% are non-Hispanic Whites, 11% are Asian, and the remaining percentage includes African Americans, Native Americans, and individuals of mixed race.

<https://censusreporter.org/profiles/06000US0603792785-san-fernando-valley-ccd-los-angeles-county-ca/>

SITE ANALYSIS

-  Sun Path
-  Noise
-  Prevailing Winds SE
-  Santa Ana Winds NW
-  Entrance/Exit
-  Electrical Grid Towers
-  Good Views



Existing Circulation

Vehicular Circulation

- Primary
- Secondary

Pedestrian Circulation

-

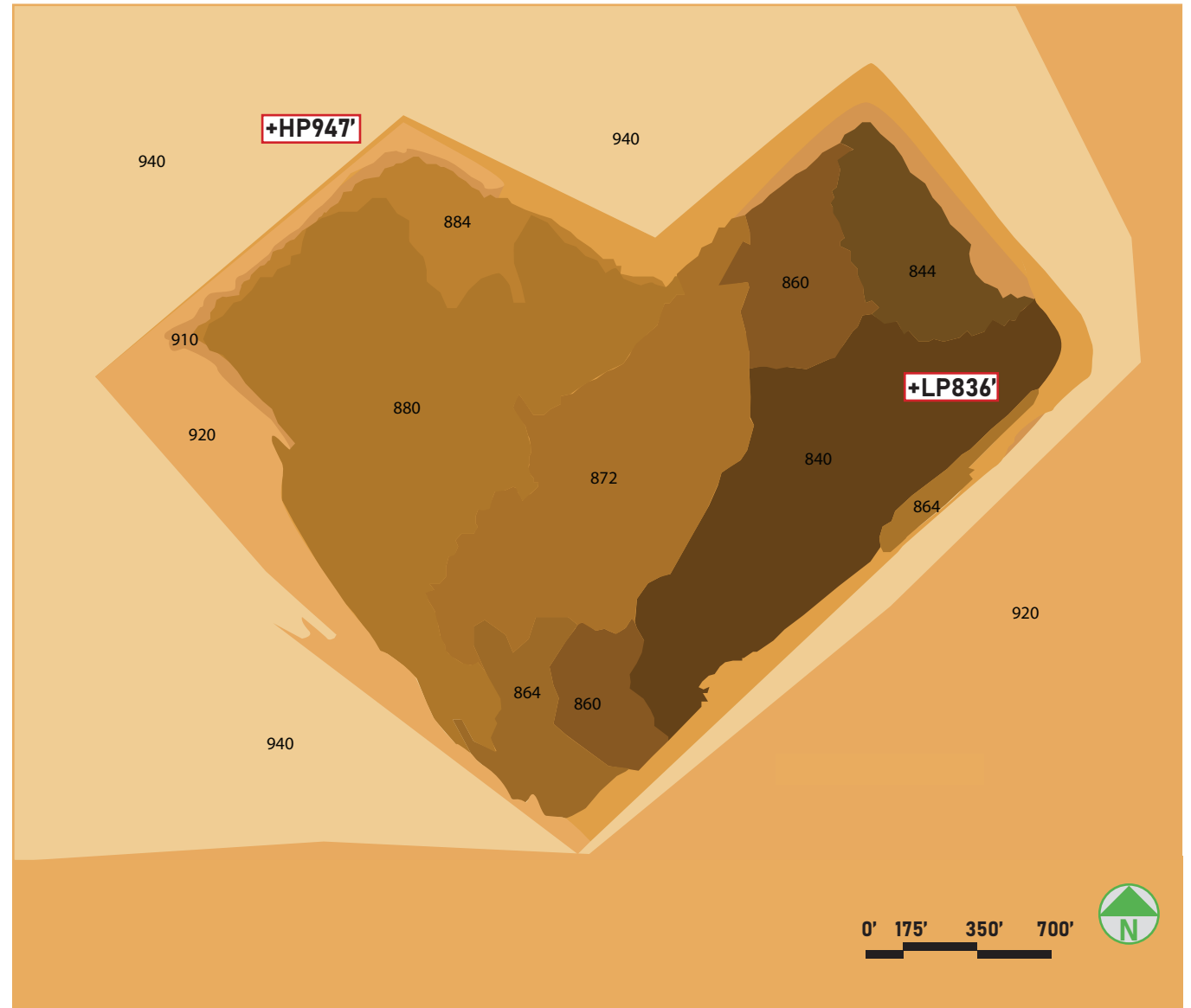
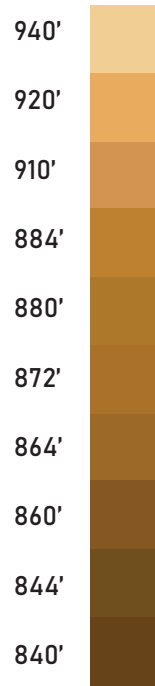
Public Transport

- Bus Line
- Bus Stops

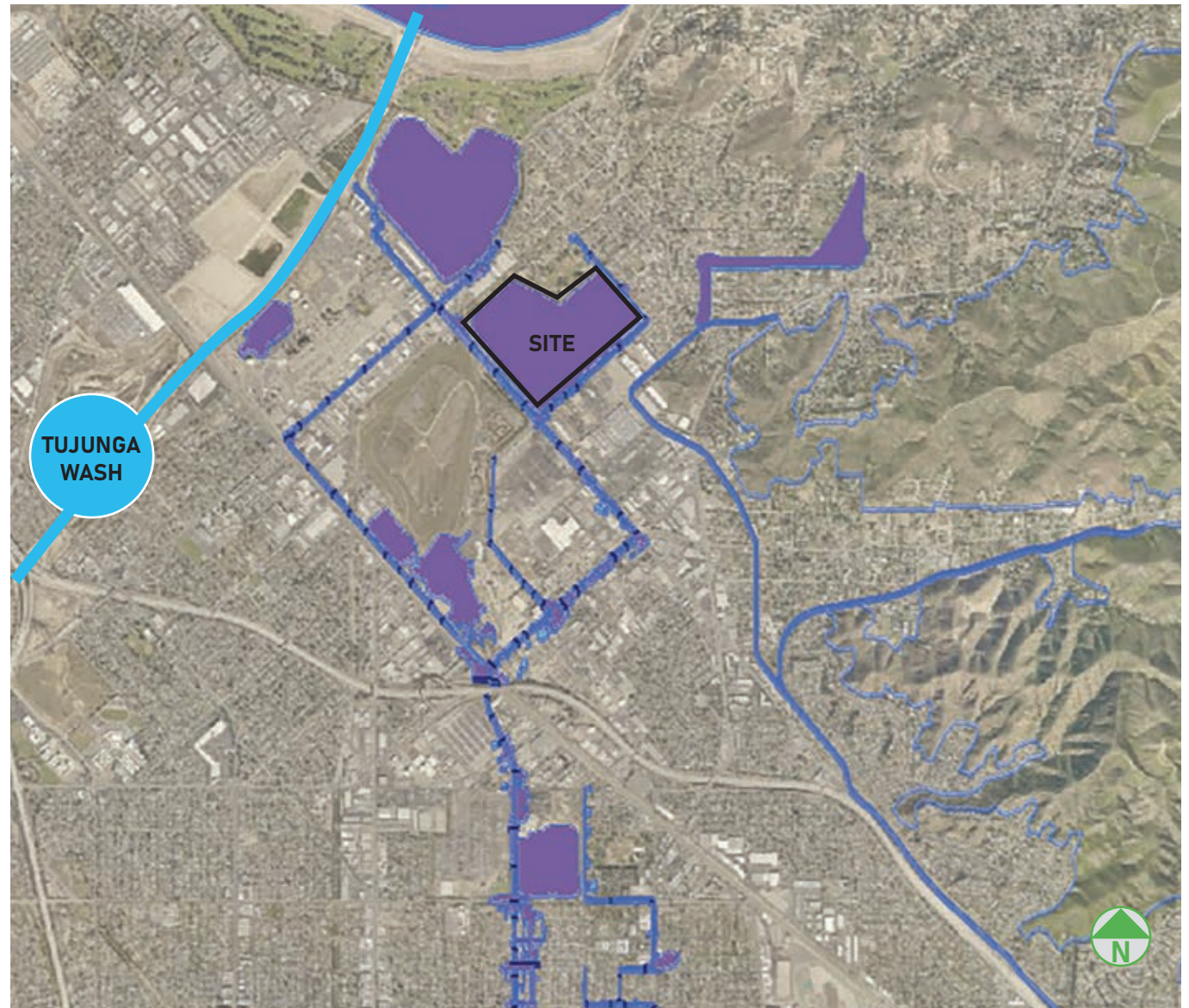
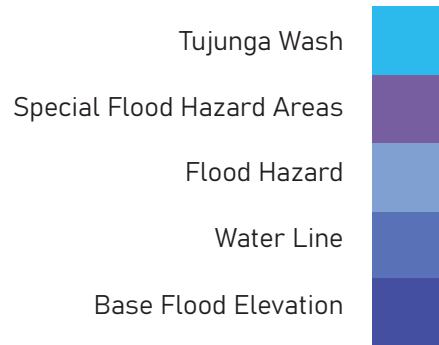


SITE ANALYSIS

Topography

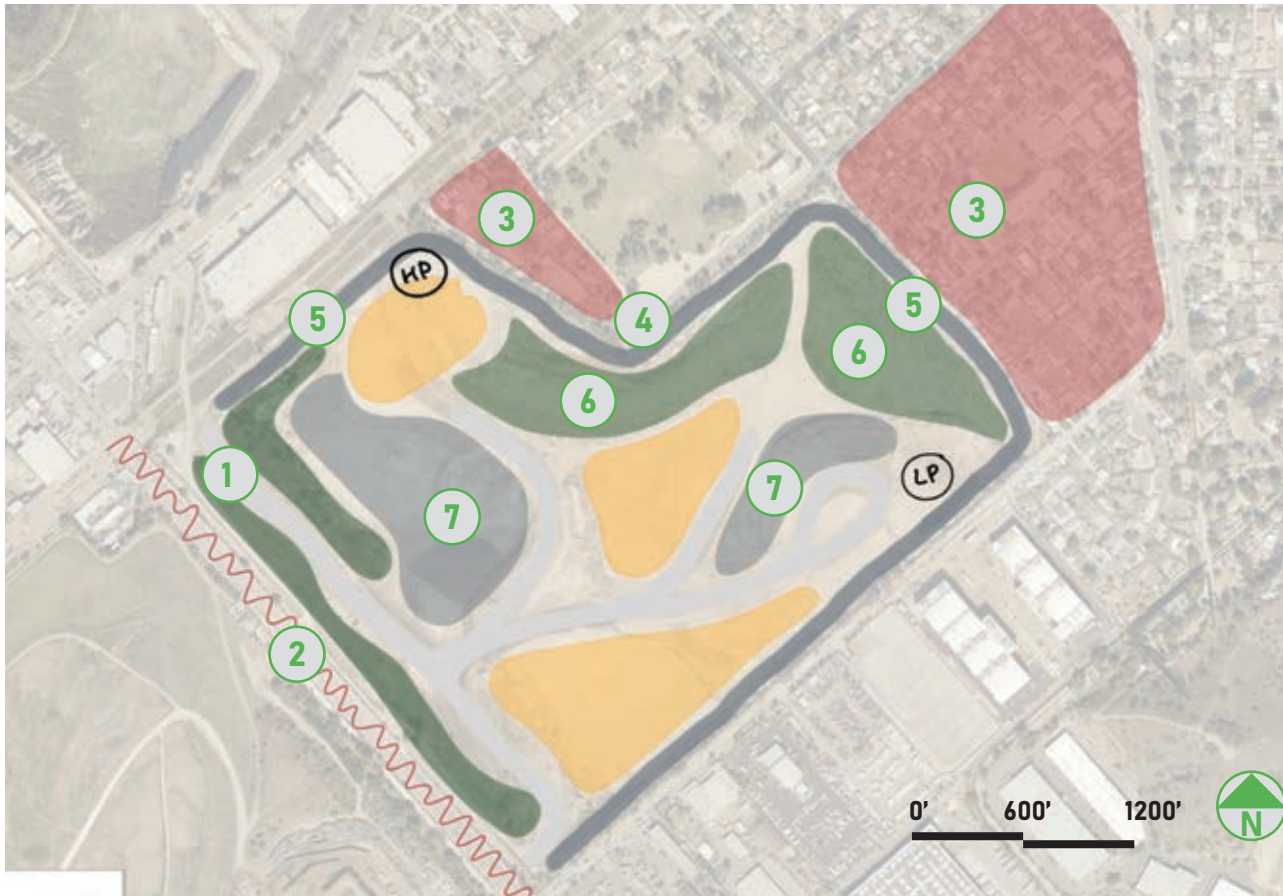


100 - Year Flood



<https://navigatela.lacity.org/navigatela/>

CONSTRAINTS



1. Driveway for dump trucks
2. Glenoaks Blvd - busy and loud road
3. Residential houses adjacent to the site
4. Cul-de-sac streets
5. High pit walls
6. Contaminated soils
7. Construction waste of sand, gravel, asphalt, and cement

Regulatory and Environmental Constraints

Surface Mining and Reclamation Act (SMARA) of 1975:

Requirement: Land affected by surface mining operations, including landfills, must be reclaimed to approximate natural conditions of the surrounding land.

California Code Regulations Title 14, § 18983.1 - Landfill Disposal and Recovery:

Requirement: Ensures closed landfills are managed and restored safely for the environment and public health.

1. **Closure and Postclosure Maintenance Plans:** Detailed plans including cost estimates approved by regulatory agencies.
2. **Financial Assurance:** Operators must provide financial coverage for closure, maintenance, and potential liabilities.
3. **Revegetation and Environmental Restoration:** Guidelines must be followed to restore closed landfills to a usable state.
4. **Permitting Requirements:** Compliance with design and operational standards is mandatory.

OPPORTUNITIES



1. Parking - adjacent to the main vehicular road and easy access to the site
2. Bike Skills Park - this area is away from residential development
3. Opportunity to build a Community Complex closer to the residential development, school, and Stonehurst Recreation Center

4. Pedestrian entrance to the site and a walking path
5. SMARA - reclaim the site to approximate natural conditions. Habitat restoration area: restore existing vegetation and contaminated soil
6. Opportunity for a detention basin - the lowest elevation on the site



Terraced walking hills



Dirt mounds for bicyclists



Community Complex

INSPIRATION

**Simplicity of shape does not necessarily equate with simplicity of experience.
- Robert Morris**



Robert Morris "Johnson Pit #30"



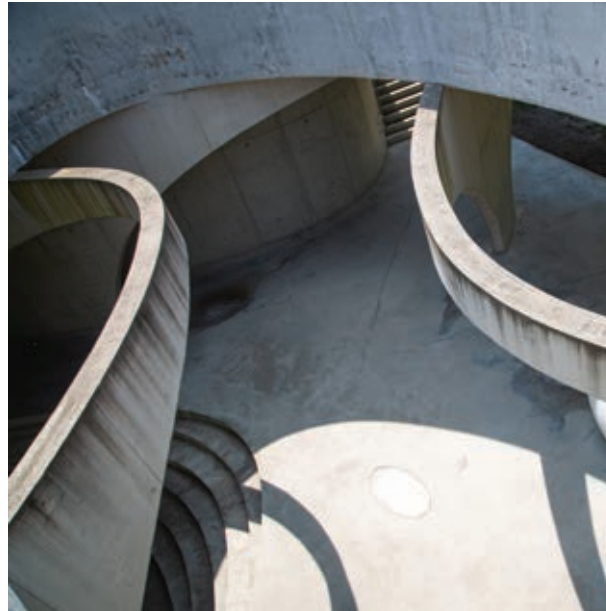
Robert Morris "Observatorium"



Charles Jencks "Cells of Life"



Michael Heizer "City"



LabOvo pavilion at Labiomista



"Stairs" TATE Modern

THREE CONCEPTS

Metaphor : From The Destruction Of Earth To The Inspiration Of Life.

Concept 1

In **Concept #1**, the park is divided into two parts: the west side of the park is extremely active, dedicated to all extreme sports activities, while the east side, adjacent to the Stonehurst Recreation Center and residential development, is a leisurely active, regular park. The amphitheater is located across from the Glenoaks Sunset Studios.



THREE CONCEPTS

Concept 2

In **Concept #2**, the park features a symmetrical design, with a community center and performance stage located at the center of the park. The community center is built on the same level as the Stonehurst Recreation Center and has an overlook above the extreme sports grounds. The bike skills park is located on both the east and west sides of the park.



Concept 3

In **Concept #3**, all the extreme sports practice grounds are clustered together and located in the same area, closer to the parking and away from the Stonehurst residential area. The amphitheater is situated in the west of the park, alongside the sports grounds. The community center and picnic area are adjacent to the Stonehurst residential development.



FINAL CONCEPT

Transformation

The design for the final concept represents the transformation of the Vulcan Landfill into a vibrant community space, much like a **caterpillar's metamorphosis into a beautiful BUTTERFLY**. The "body" of the butterfly symbolizes the heart of the project—the community program—where social, educational, and cultural activities bring people together. The "wings" of the butterfly extend into the sports and nature activity areas, providing spaces for recreation, exploration, and connection with the environment.

Just as a butterfly emerges from its cocoon, this design envisions the site's transformation from an "ugly caterpillar" (the landfill) into a "beautiful butterfly," embodying renewal, growth, and the flourishing of new life.



Park Uses

- Active
- Passive

MATERIALS PALETTE

Recycled Concrete Aggregate (RCA)



Recycled Asphalt (RAP)



Reclaimed Wood



Recycled Steel



California Gold Decomposed Granite



California Gold Gravel



PLANT PALETTE

Trees



Quercus agrifolia



Platanus racemosa



Juglans californica

Shrubs



Ceanothus oliganthus



Fremontodendron californicum



Eriogonum fasciculatum 'Warriner Lytle'

Perennials



Salvia munzii 'Emerald Cascade'



Achillea millefolium



Trichostema lanatum

Riparian Plants



Isolepis cernua



Bolboschoenus maritimus



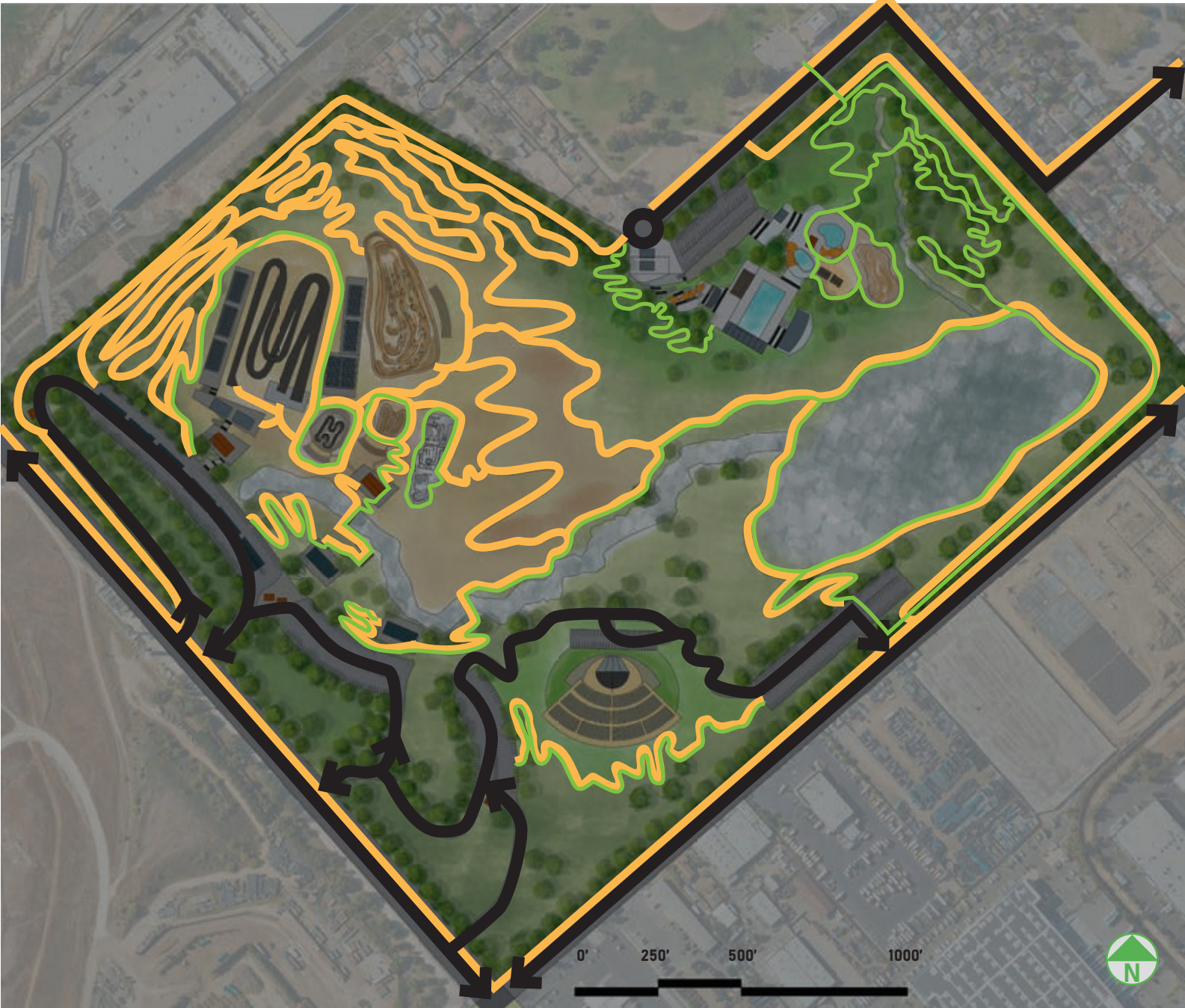
Juncus acutus

MASTER PLAN



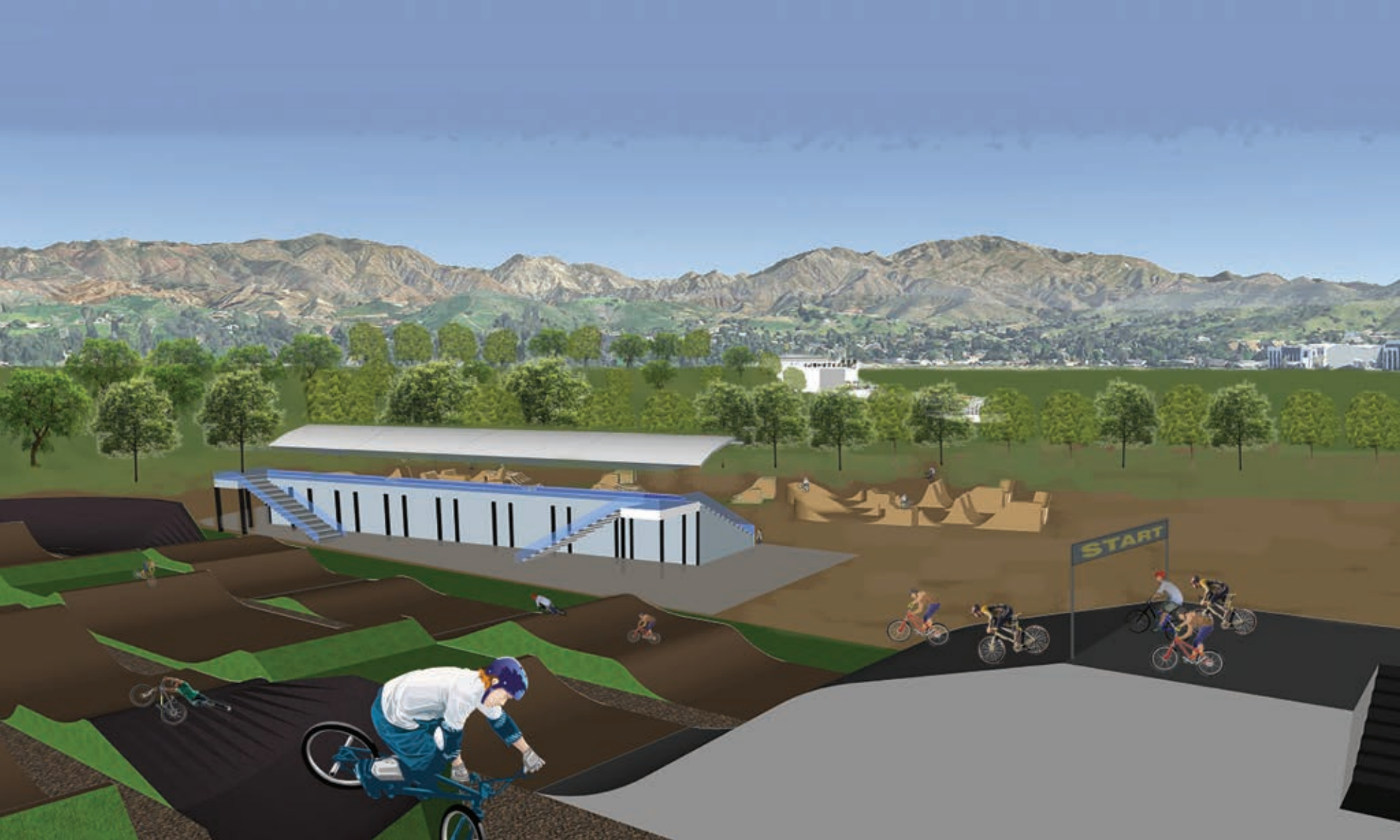
Circulation

- Vehicular
- Bicycle
- Pedestrian



BIKE SKILLS PARK

BMX Pump Track Perspective



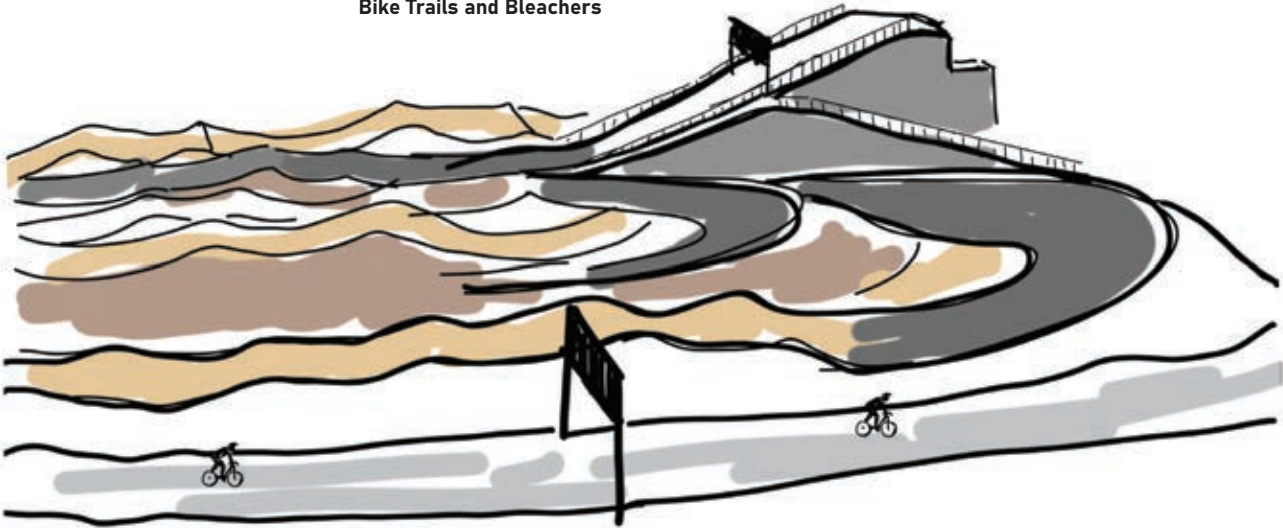
Sketches



Bike Trails and Bleachers



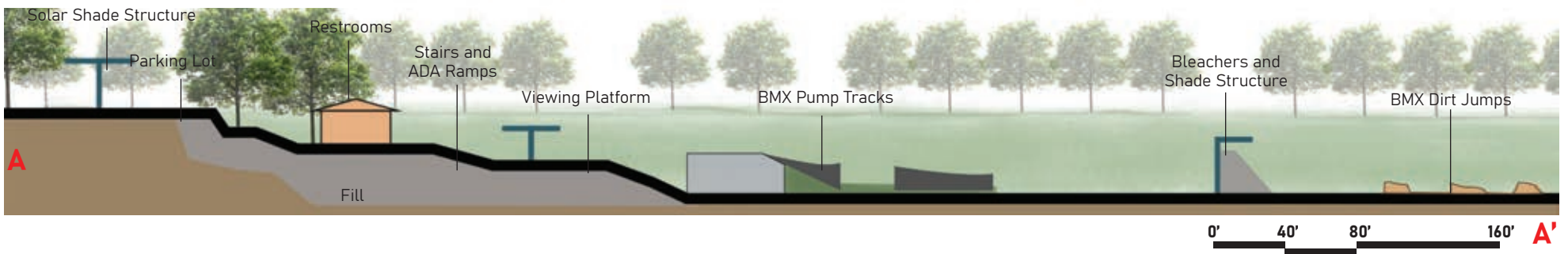
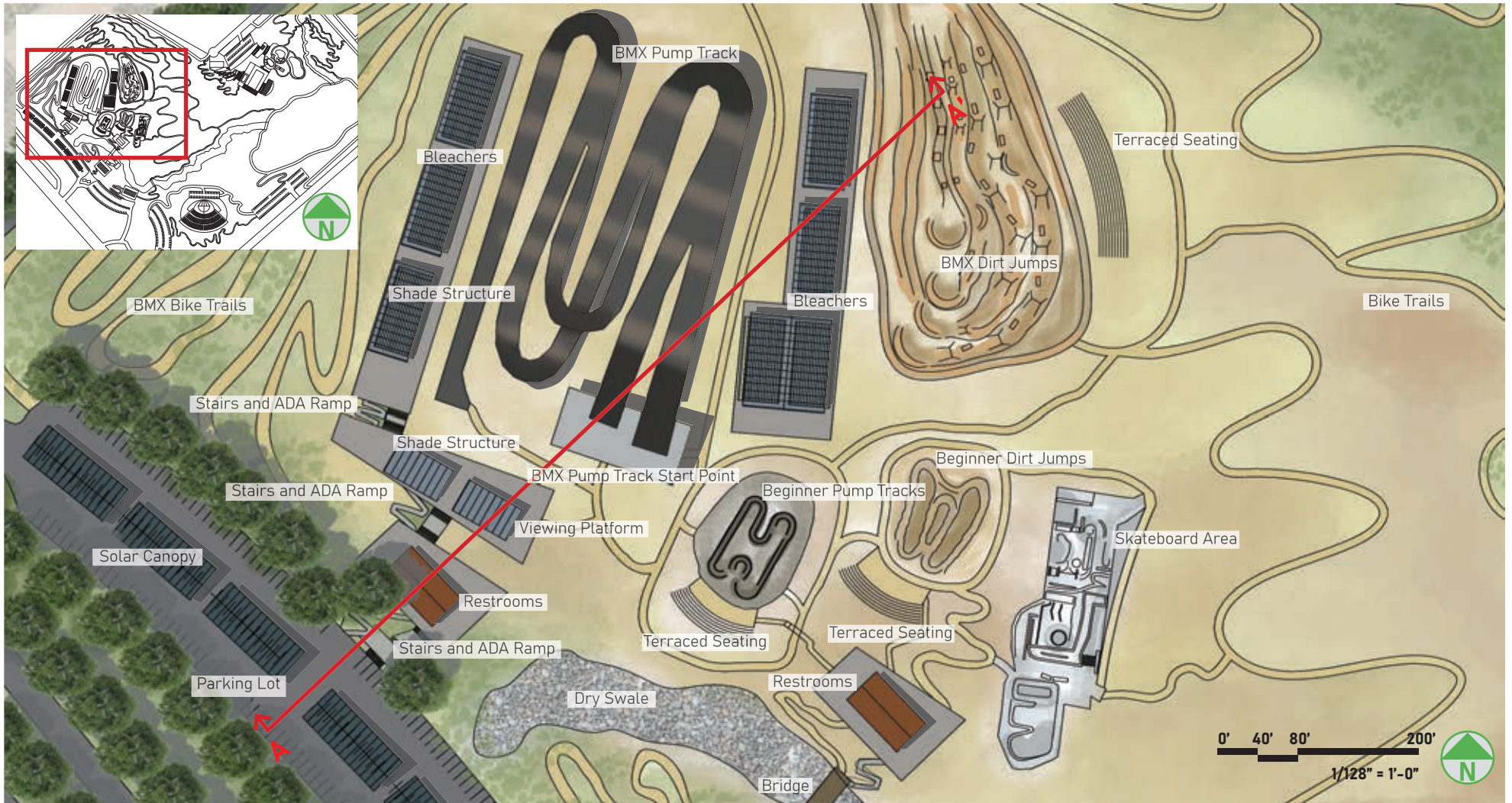
Dirt Jumps



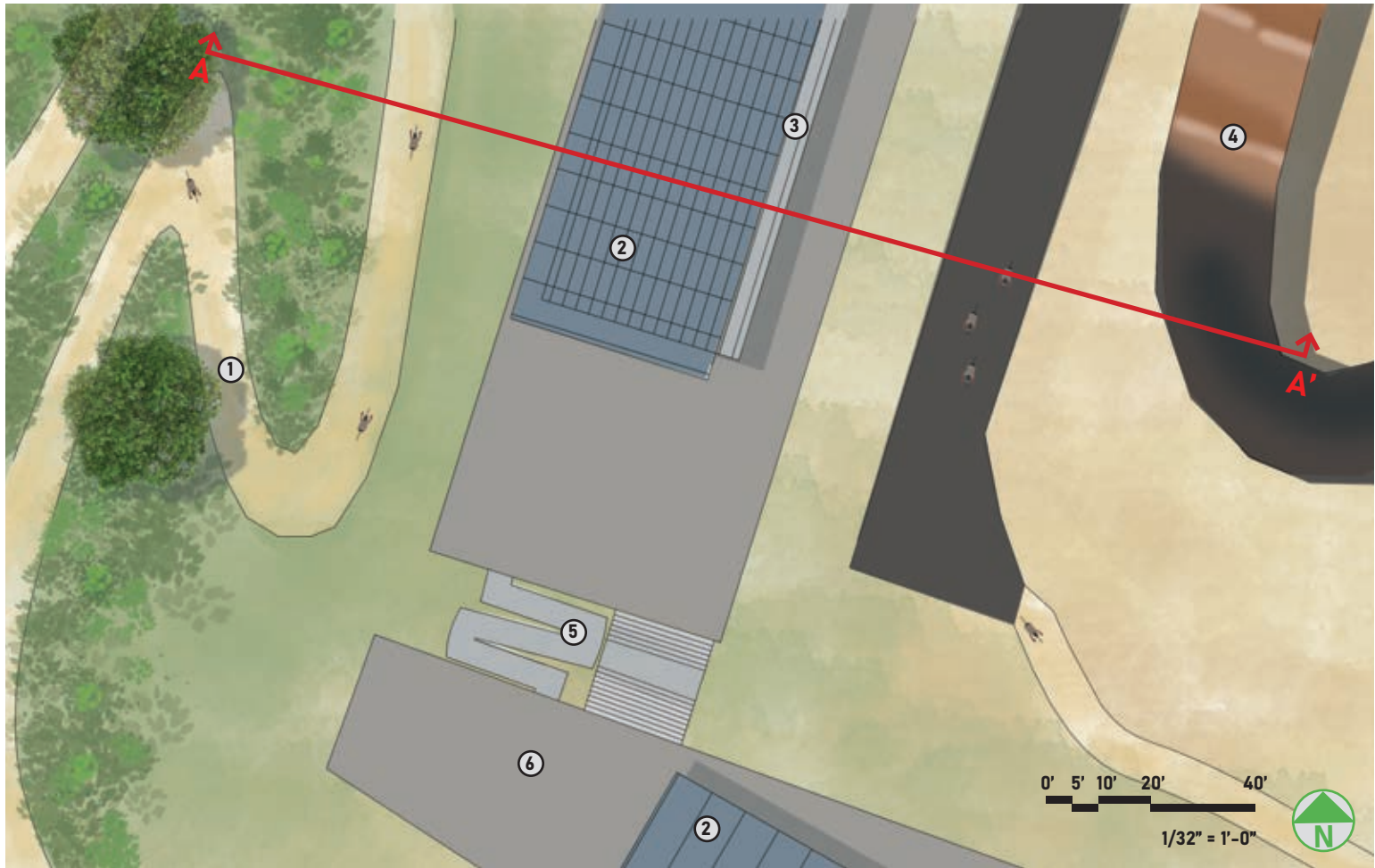
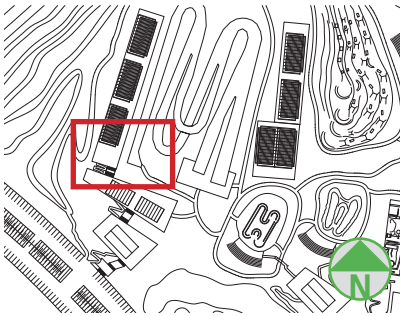
Pump Tracks

BIKE SKILLS PARK

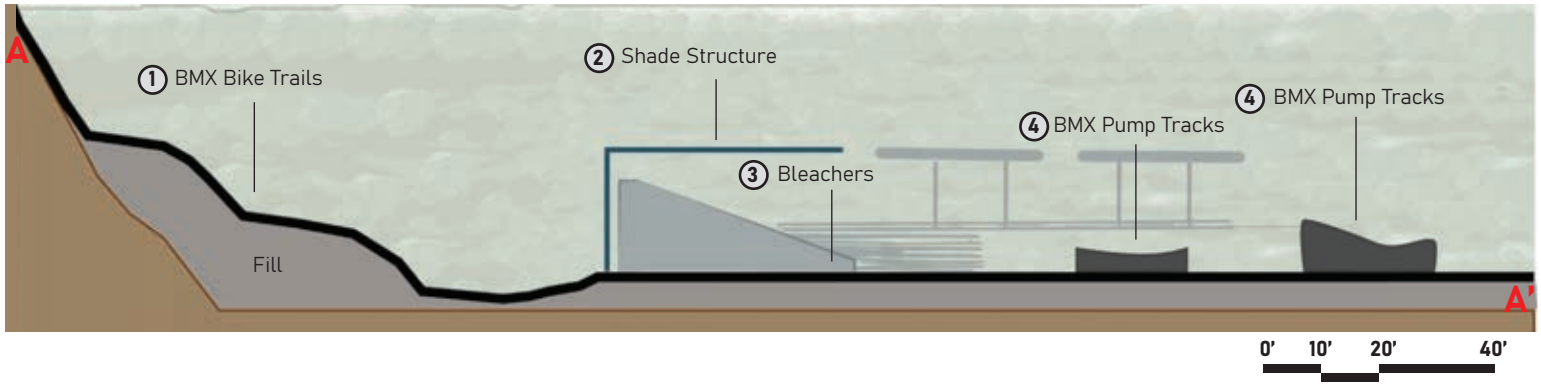
Enlargement and Section 1



Enlargement and Section 2

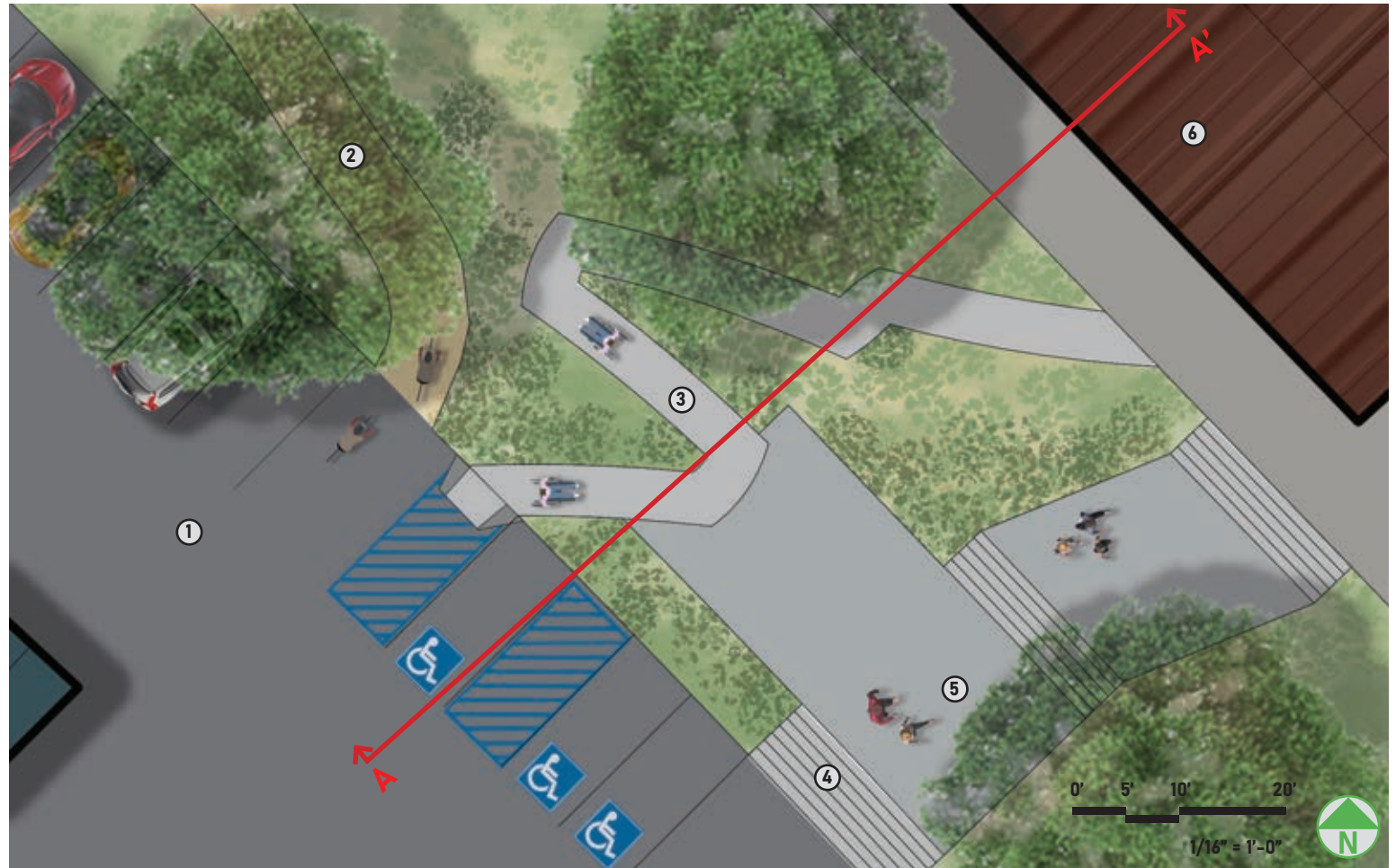
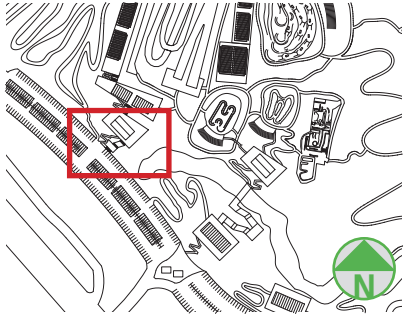


- ① BMX Bike Trails
- ② Shade Structure
- ③ Bleachers
- ④ BMX Pump Tracks
- ⑤ Stairs and ADA Ramp
- ⑥ Viewing Platform

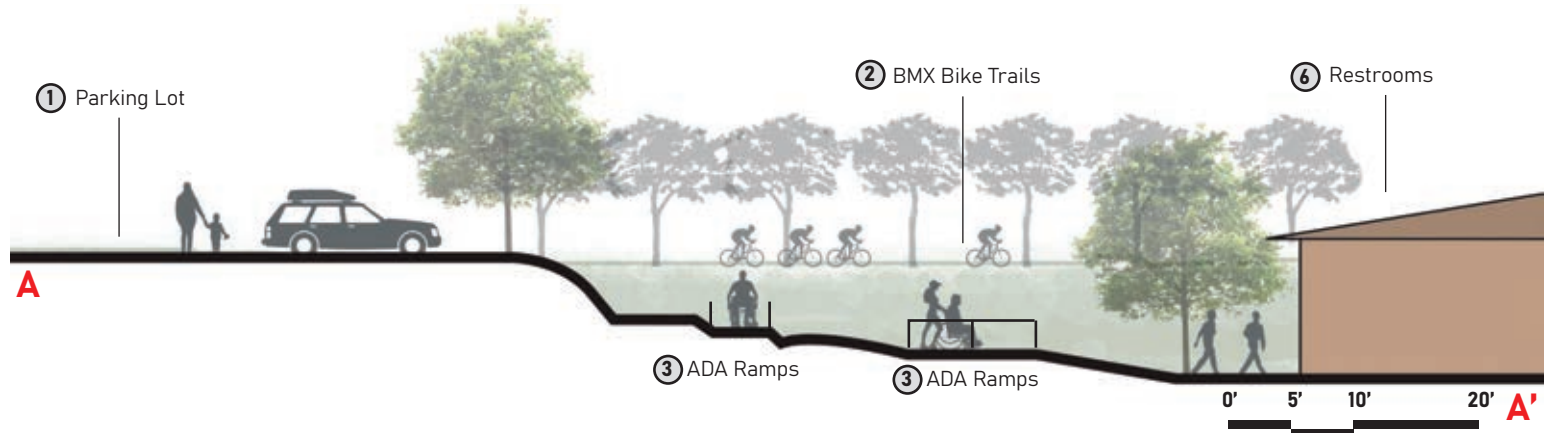


BIKE SKILLS PARK

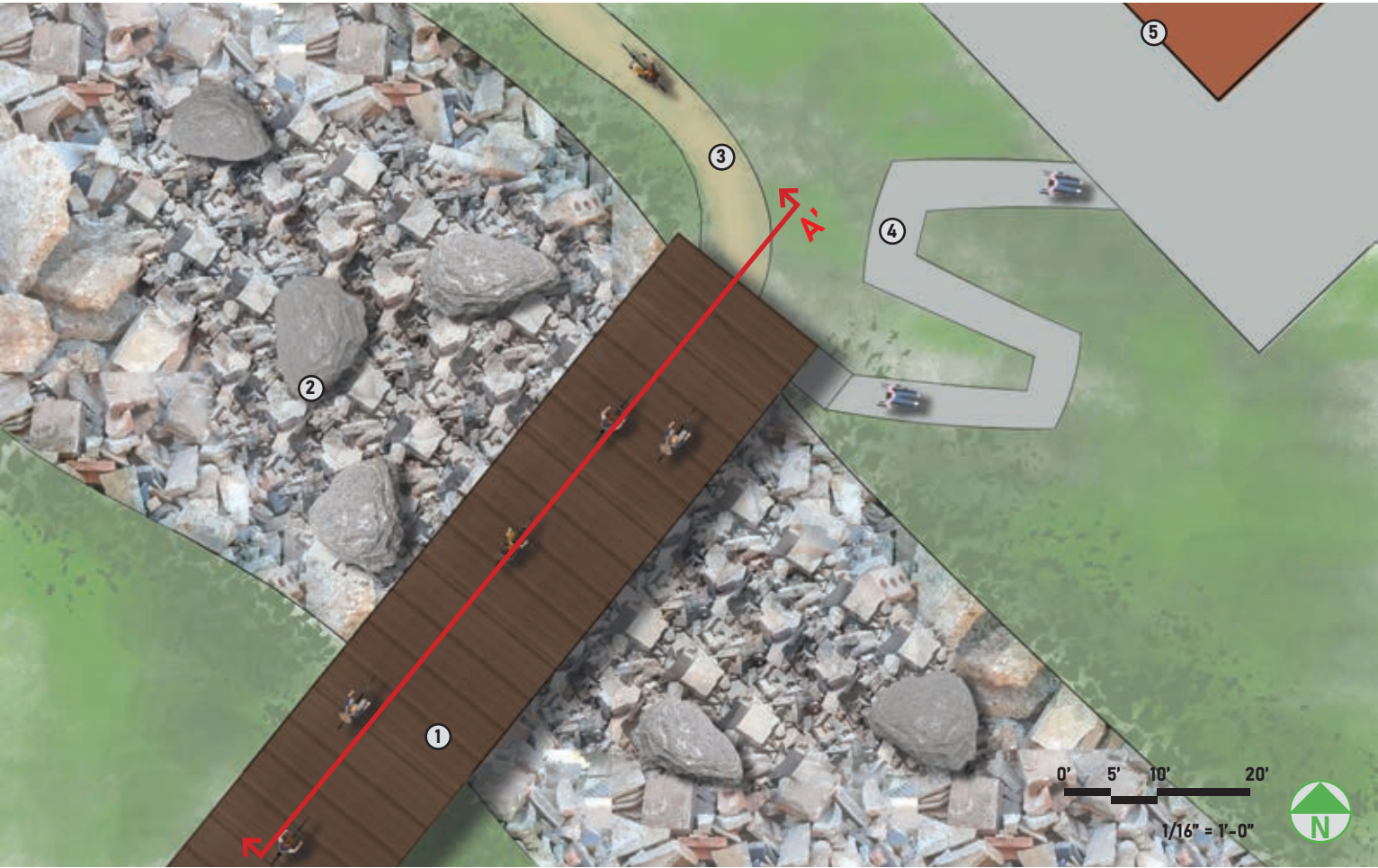
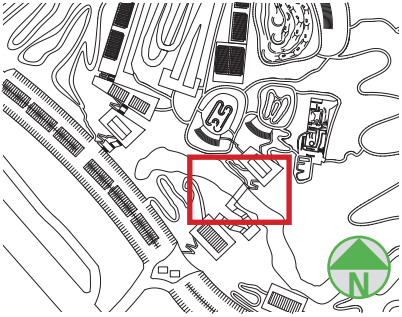
Enlargement and Section 3



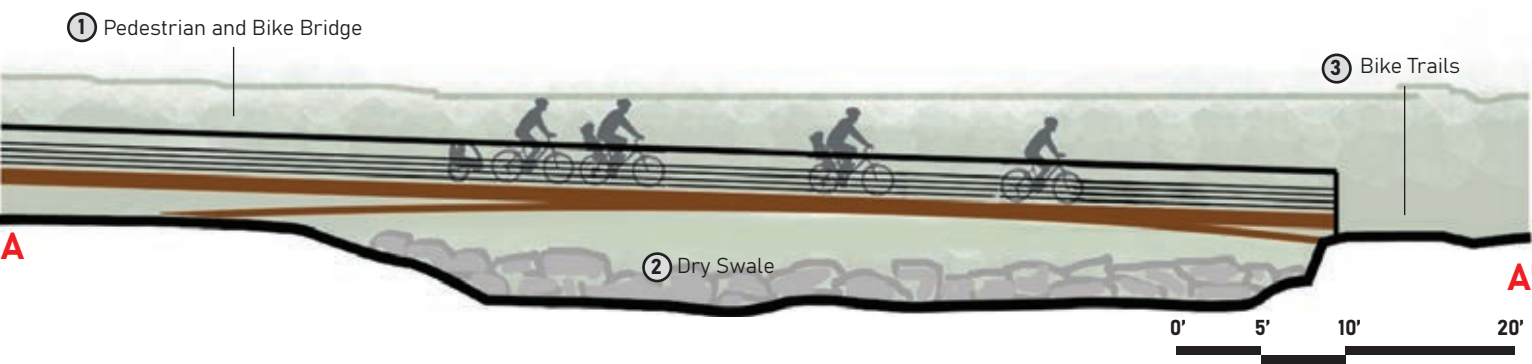
- ① Parking Lot
- ② BMX Bike Trails
- ③ ADA Ramps
- ④ Stairs
- ⑤ Stairs Landing
- ⑥ Restrooms



Enlargement and Section 4

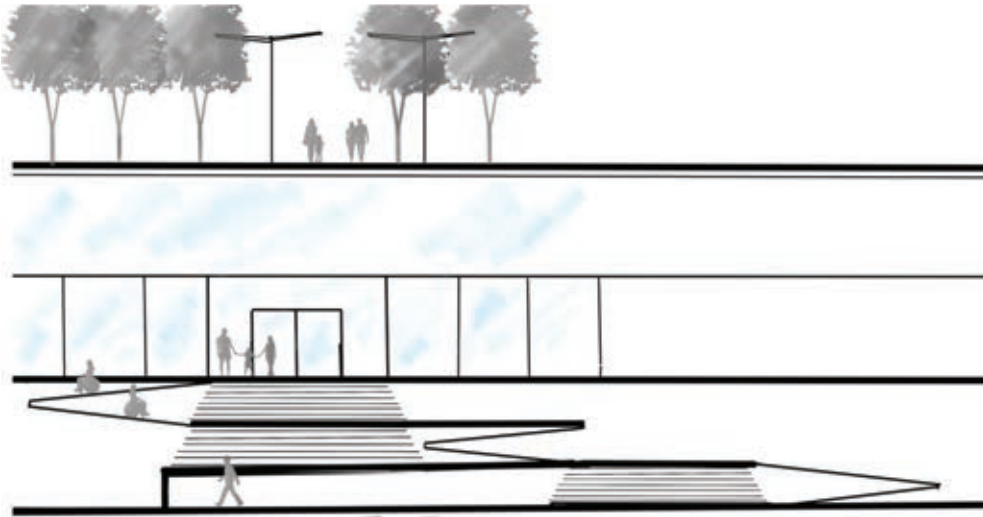


- ① Pedestrian and Bike Bridge
- ② Dry Swale
- ③ Bike Trails
- ④ ADA Ramps
- ⑤ Restrooms

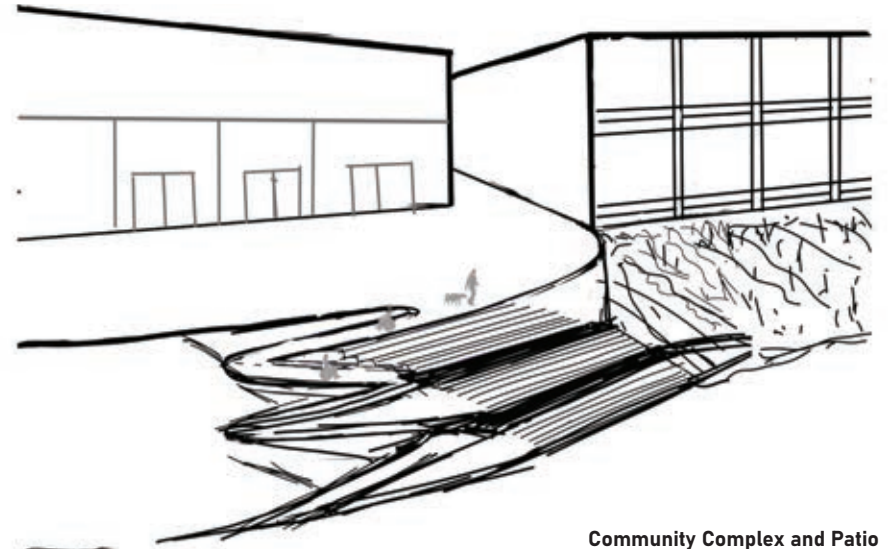


STONEHURST PARK

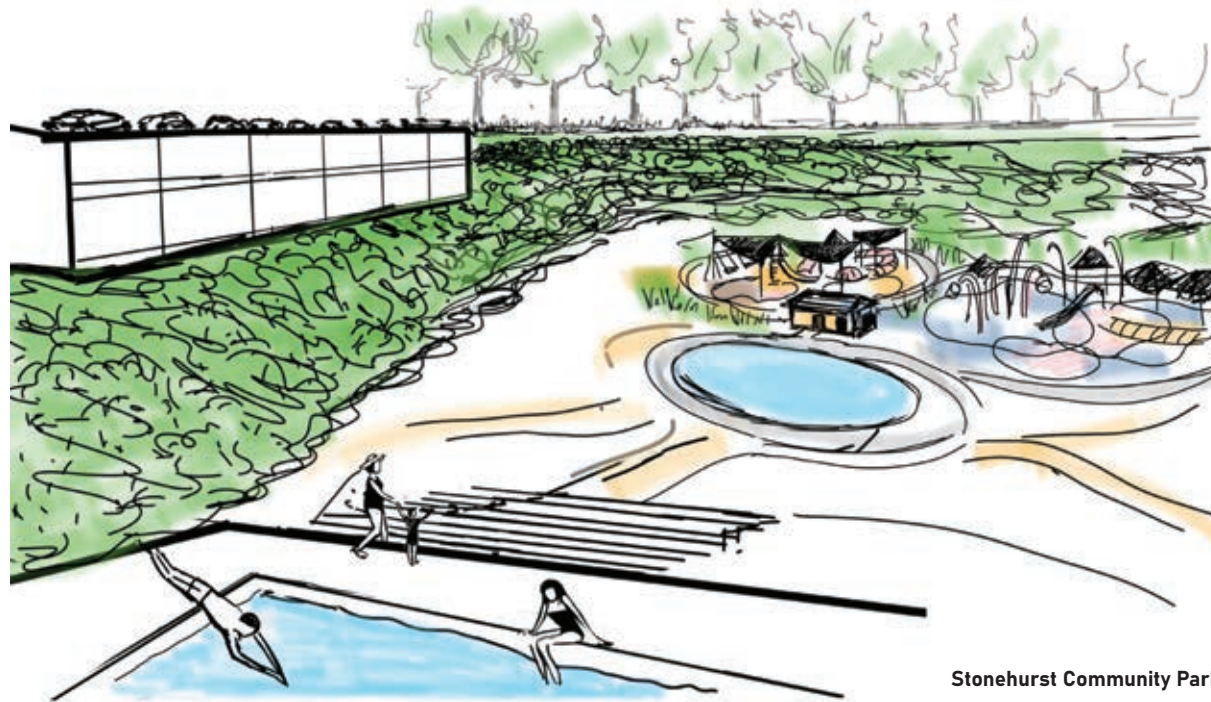
Sketches



Rooftop Plaza and Community Complex

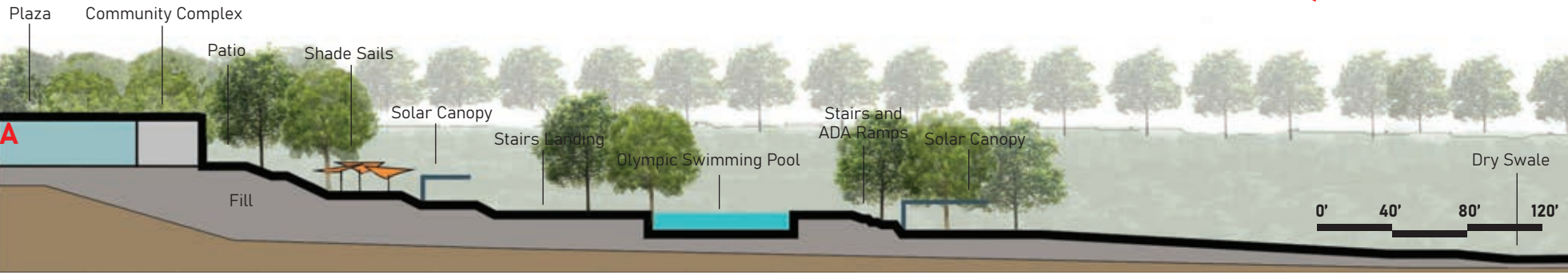
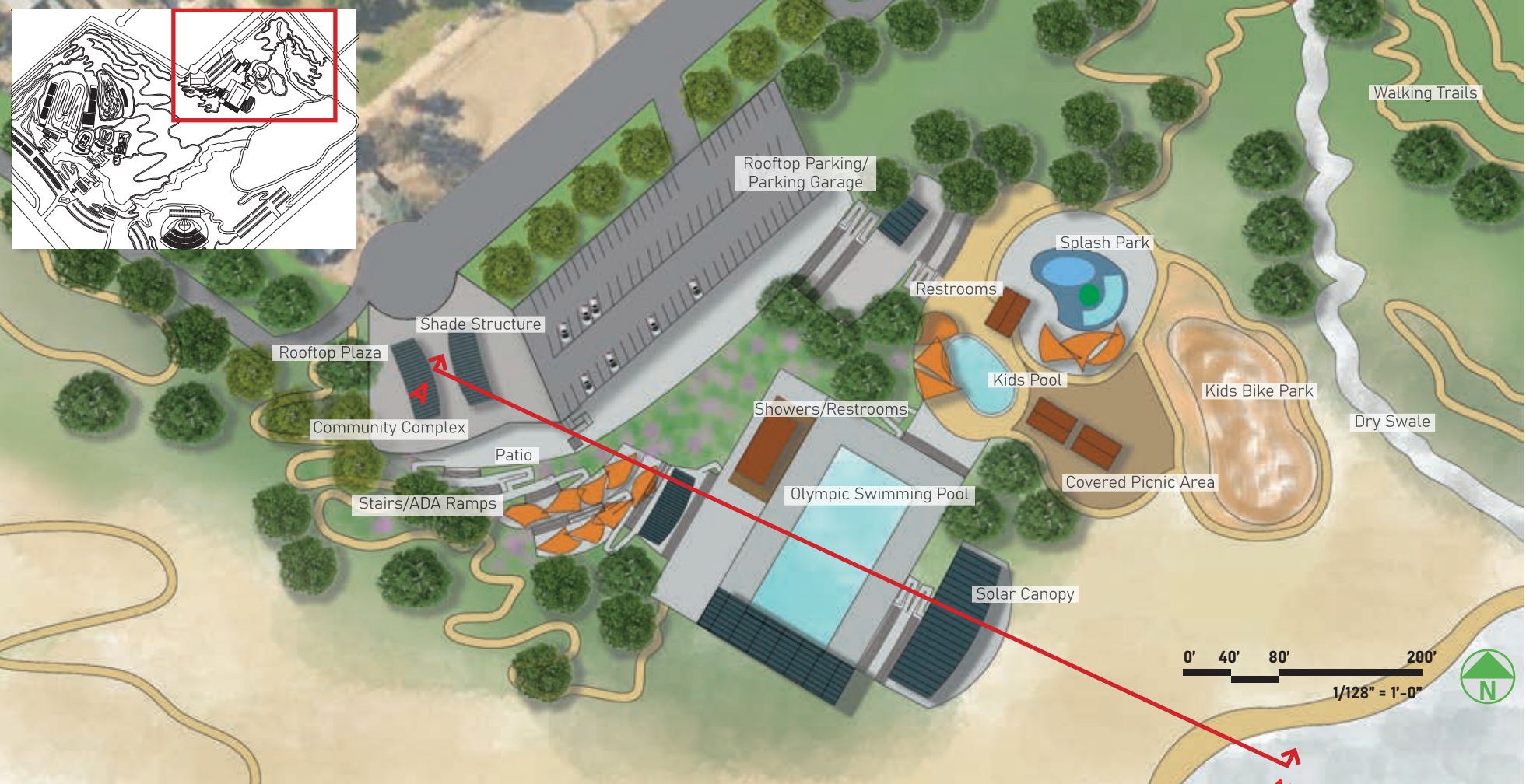


Community Complex and Patio



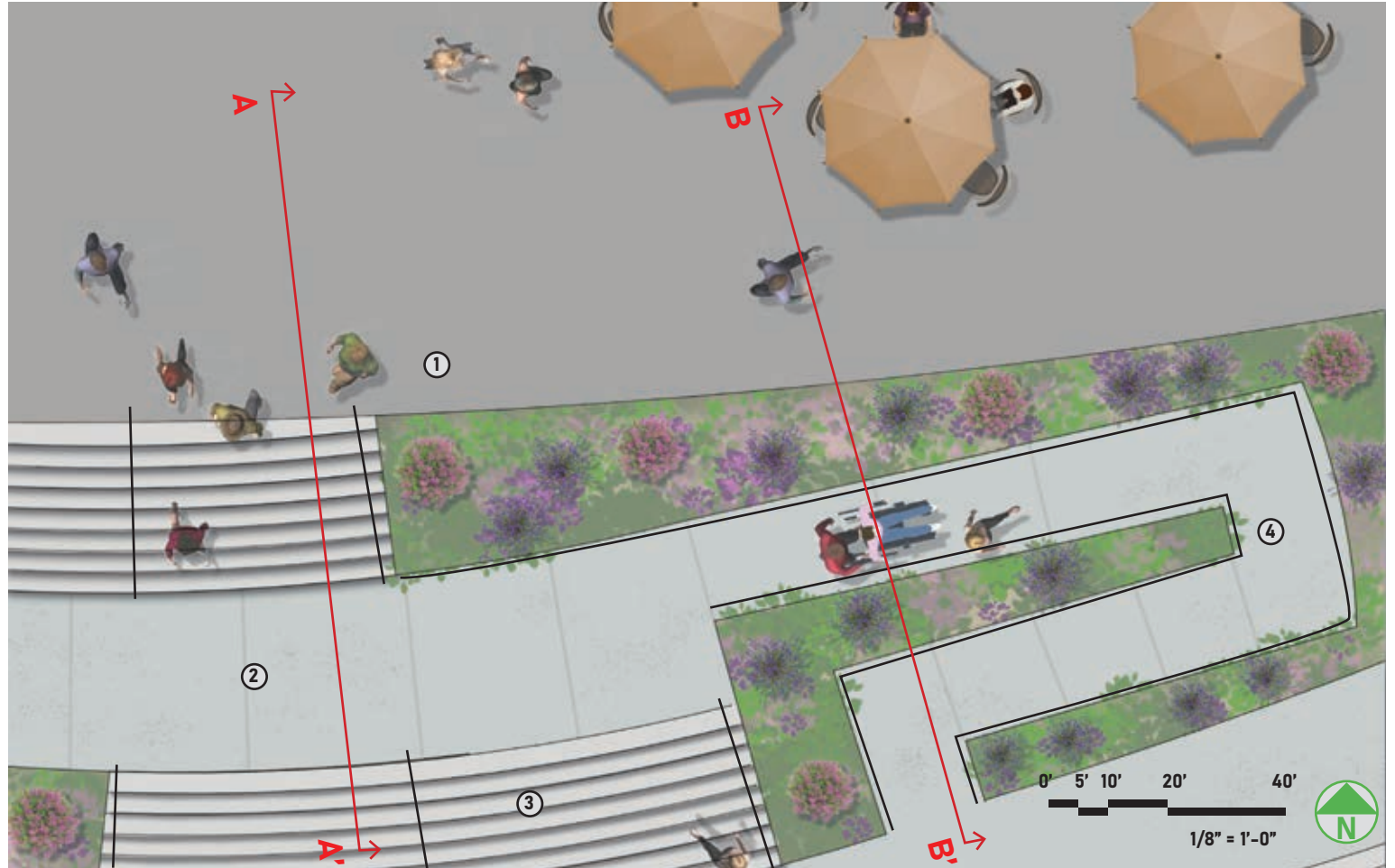
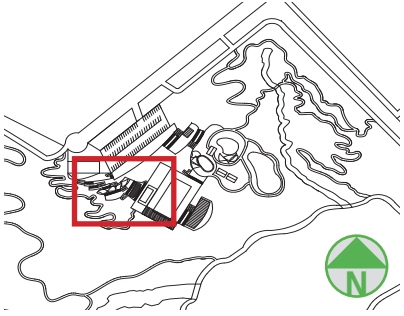
Stonehurst Community Park

Enlargement and Section 1

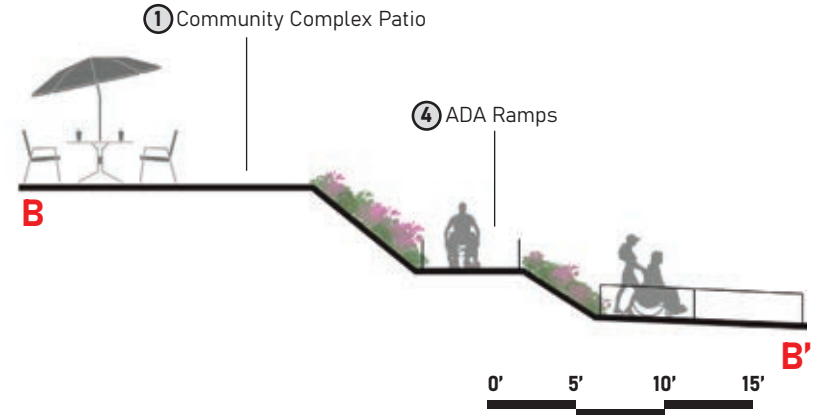
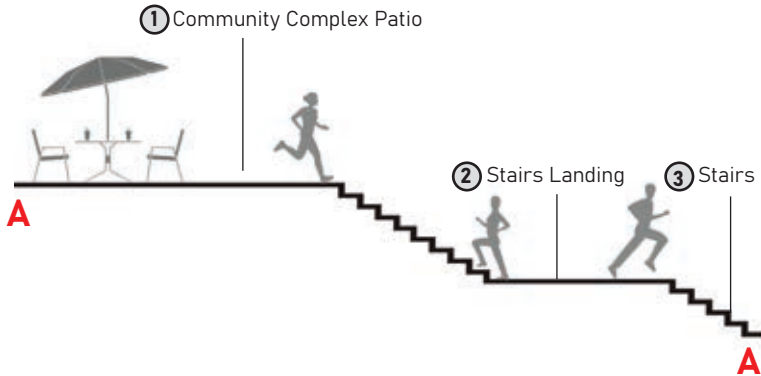


STONEHURST PARK

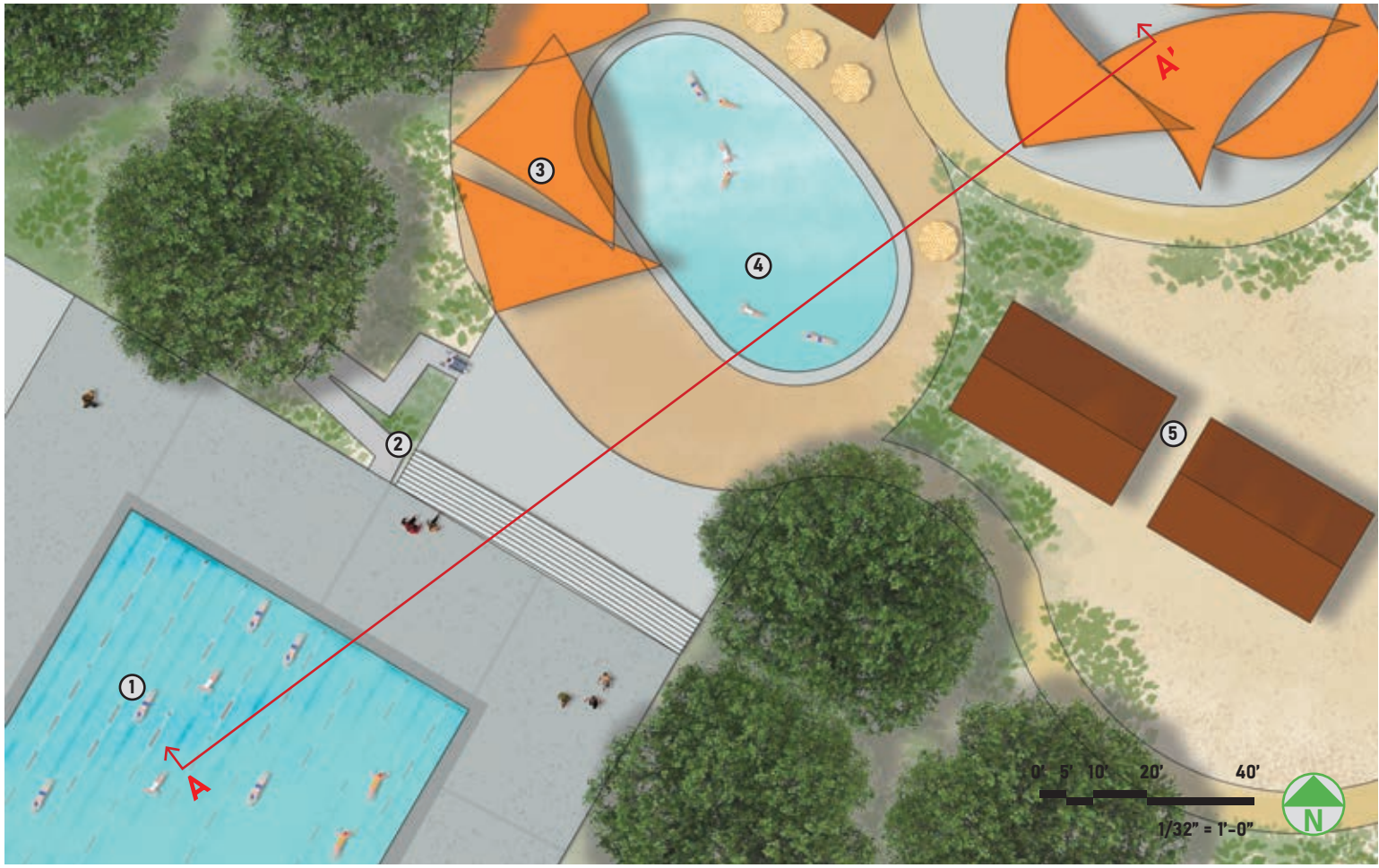
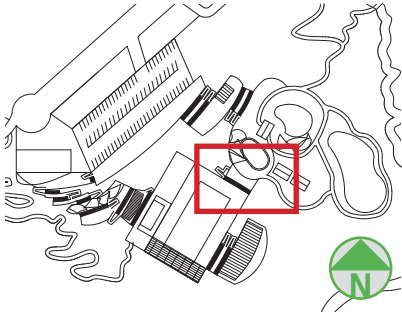
Enlargement and Section 2



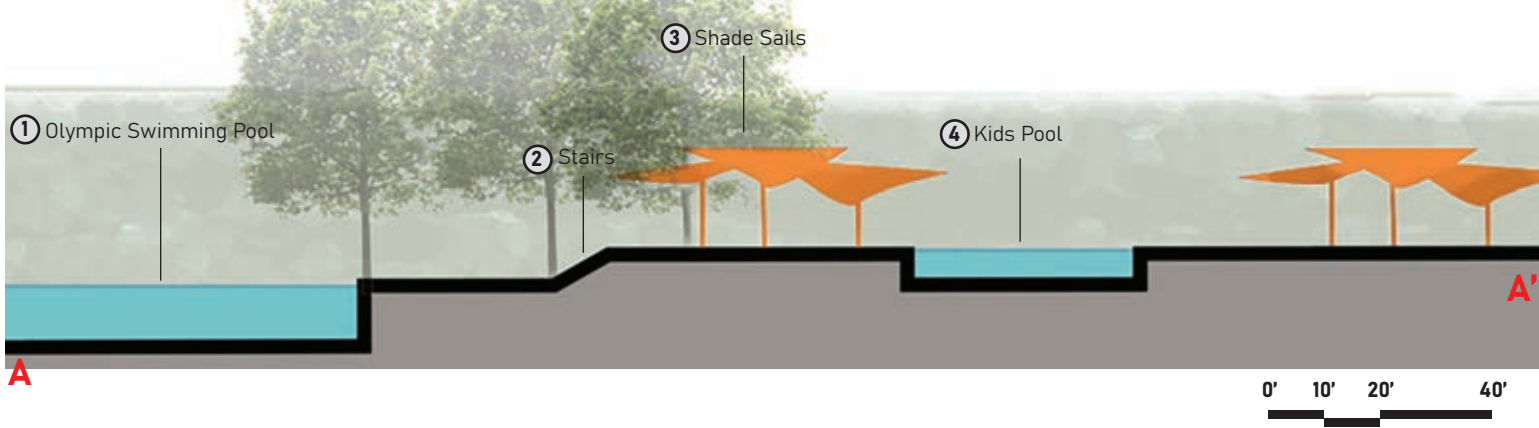
- ① Community Complex Patio
- ② Stairs Landing
- ③ Stairs
- ④ ADA Ramps



Enlargement and Section 3



- ① Olympic Swimming Pool
- ② Stairs and ADA Ramp
- ③ Shade Sails
- ④ Kids Swimming Pool
- ⑤ Covered Picnic Area



STONEHURST PARK

Community Complex Perspective 1



Community Complex Perspective 2



STONEHURST PARK

Community Complex Perspective 3



CONCLUSION

The transformation of the Vulcan Landfill into a green space that balances extreme sports, recreation, and ecological restoration makes the Vulcan Sports and Recreation Park essential for the immediate community and the San Fernando Valley.

The proposed design includes outdoor parking with solar panel canopies for 316 cars, along with an additional parking garage for Stonehurst residents and visitors to the community complex. The 40,000 sq ft bike park features pump tracks, dirt jumps, and a skateboard area for various skill levels, along with approximately 14,000 feet of bike trails and 7,000 feet of walking trails of varying difficulty. Additionally, the park includes a 12,250 sq ft Olympic-sized swimming pool.

This project will restore the health of the air, water, and soil, enhancing the overall quality of life for residents. The new park not only revitalizes the former landfill but also creates lasting value for the community and the ecosystem.



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