



UCI NATURESCAPE

A VISION FOR CAMPUS CONNECTIONS & ALDRICH PARK BOTANICAL GARDEN

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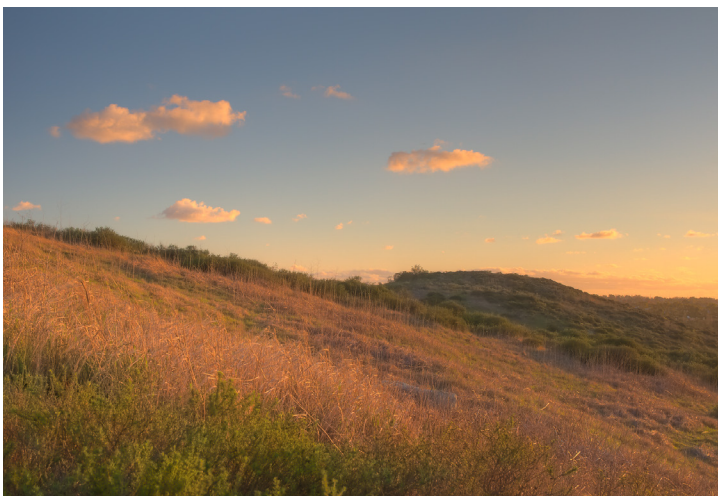
UCI NATURESCAPE VISION STATEMENT

UCI's "Naturescape" is the interconnected open space enveloping the buildings and built structures of our campus. At UCI, Naturescape serves campus life & community activities, art & culture, habitat & watershed management, recreation, wellness and especially interdisciplinary teaching and research. Our Naturescape allows us to use the campus as a living laboratory and put to practice what we learn and value. UCI's Naturescape includes parks, greenbelts, community & botanical gardens, trails & pathways, teaching pavilions, field research sites, upland and wetland habitat, and urban outdoor spaces.

Visioning the future of UCI's Naturescape is a once-in-a-generation opportunity to develop a campus asset with the potential to distinguish our institution among universities world-wide. UCI's Naturescape can bring significant value to our campus in the same fashion as high-tech high performance buildings and other core facilities. A collaboratively planned, managed, and preserved Naturescape will fundamentally advance UCI's mission in unique and transformative ways.

Overarching Goal

Optimize UCI's Naturescape to serve campus research, teaching, community engagement, wellness, and sustainability needs through program, physical planning, infrastructure, and land improvements that reflect and capitalize on the unique human and biological heritage of our region.



UCI'S NATURESCAPE HERITAGE

University of California, Irvine was established in the public land grant university tradition of community engagement, service, and economic mobility. Establishing an environment conducive to interdisciplinary research and engaging in the cultural, educational, and economic life of the region were identified as key priorities. These values were reflected in the collaborative 1962 land use plan developed by the University and community that emphasized the importance of open space in community life, including greenbelts as connections between communities.

Consistent with this vision, UCI's founding 1963 LRDP (Long Range Development Plan) identified a greenbelt and trail system to link campus neighborhoods to the North Campus, surrounding communities in Irvine and Newport Beach, and to ocean and aquatic resources. These greenbelts would enhance the natural features and character of the site emanating from a large central park. UCI's natural areas, parks, and a campus wide botanical garden program would support student wellness, research, and outdoor learning.

Aldrich Park would serve as UCI's central open space, reflecting the great urban parks of the time. A key goal was balancing the need for respite and passive recreation with the interest in serving campus events and activities. The initial vision for the park reflected this balance of passive open space areas, preserving natural rock outcroppings and a streambed, while developing activity spaces at the perimeter and a central terrace overlooking a water feature. A trail system would support recreation, link the park's use areas, and provide connections to the academic quads in the central campus.

UCI's Naturescape vision builds on these founding principles regarding the role of open space in serving campus and community needs. Program implementation will allow UCI to fully realize these long term campus goals and to expand this vision to serve current strategic priorities.



Campus Greenbelt Plan 1962



Conceptual Aldrich Park rendering 1965

REGIONAL CONNECTIONS

UCI's Naturescape Vision is to build a unique sense of place by building campus wide and regional linkages that become more than the sum of their parts. This includes completing "missing links" in existing campus trail systems and working with community partners to build effective connections to regional trails.

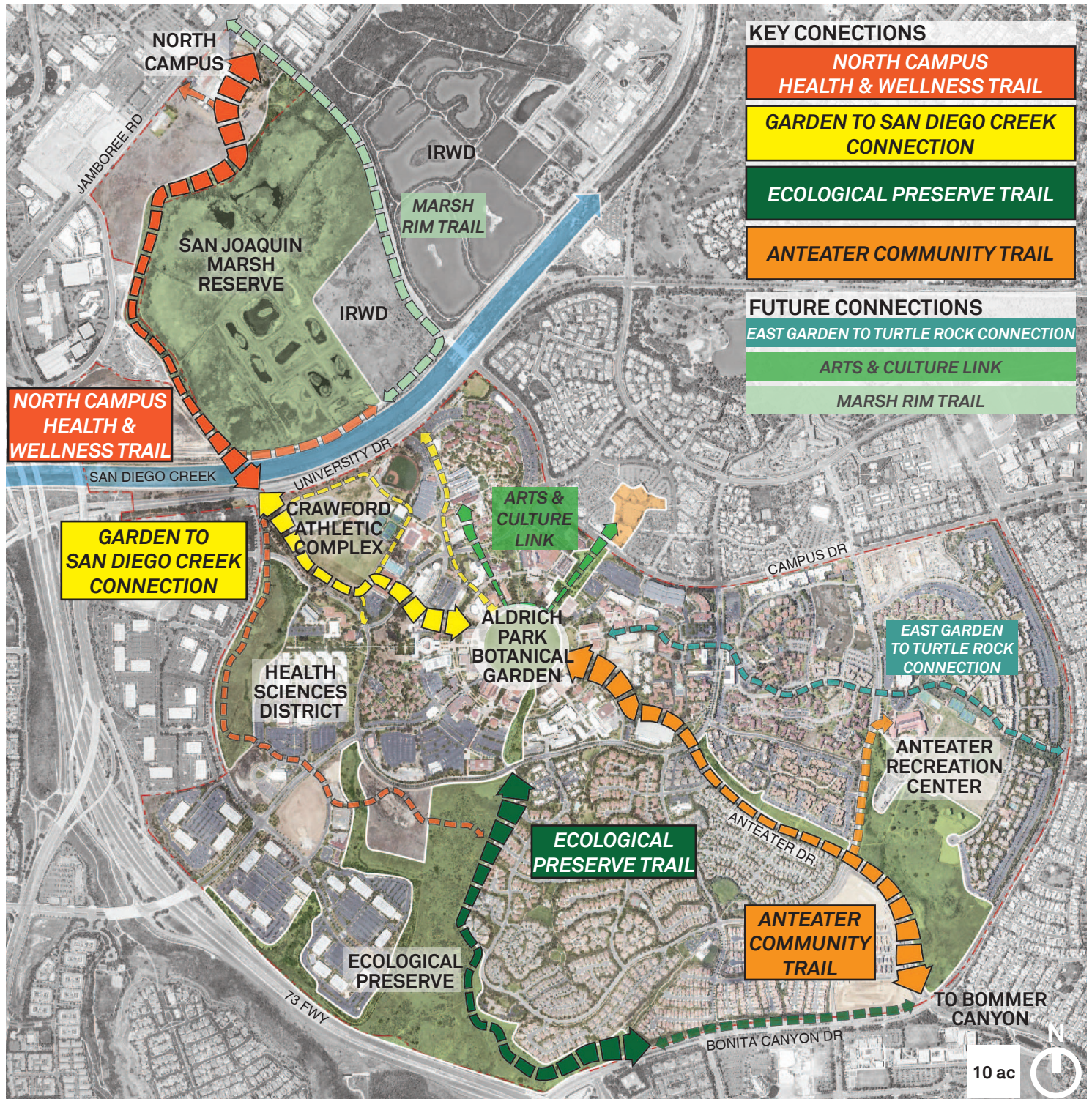
Enhancing these community connections will provide improved links to regional open space resources including San Diego Creek, Newport Bay and to the Pacific Ocean at Crystal Cove. These connections will provide access to natural areas and wellness activities including walking, biking, and wildlife viewing.

Existing relationships with regional partners such as the Natural Communities Coalition, the Irvine Ranch Water District, Cities of Irvine and Newport Beach, and Orange County & State Parks can be strengthened and new relationships established to support collaborative funding opportunities.



CAMPUS CONNECTIONS

UCI's Naturescape Vision includes creating stronger connections throughout the campus to unite different core goals and functions including research, teaching, wellness, sustainability and community engagement. Fully implementing the vision includes enhancing key Campus Connections. The following pages outline these important open space connections: the North Campus Health & Wellness Trail, the Garden to San Diego Creek Trail, the Ecological Preserve Trail, and the Anteater Community Trail.



NORTH CAMPUS HEALTH & WELLNESS TRAIL

The North Campus Health & Wellness Trail links the Campus Core to the North Campus starting at the San Diego Creek Bridge and following the edge of the San Joaquin Marsh Reserve.

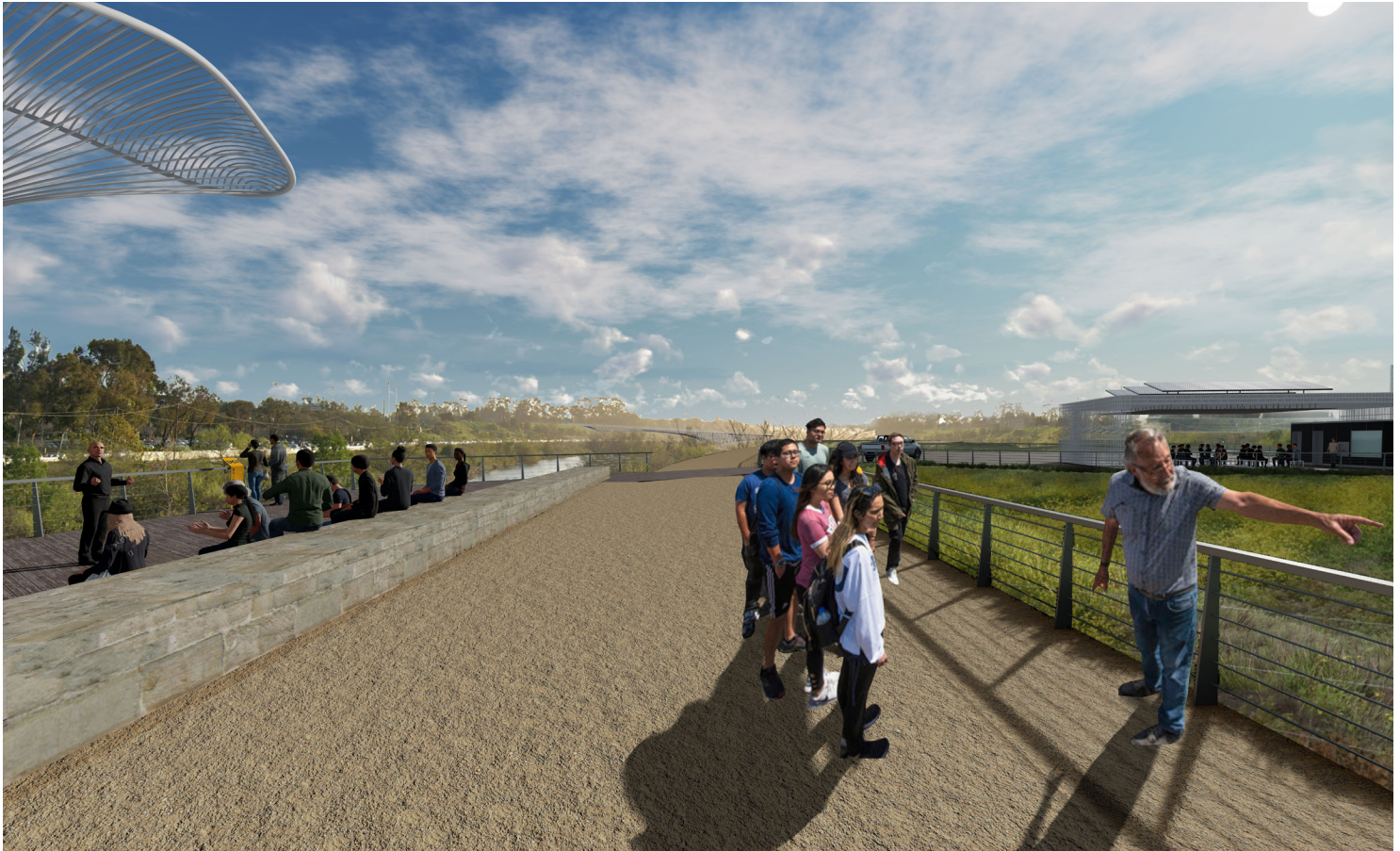
This one-mile bicycle and pedestrian trail creates a biological, physical, and resource linkage between the main campus and associated wildlands, bringing nature into the day-to-day lives of the campus community.

Along the trail, boardwalks and overlooks provide views of the wetlands while safely protecting sensitive habitat. Classrooms, research plots, interpretive signage, and shaded gathering areas are interspersed along the trail.





San Joaquin Marsh Trail with Shaded Overlook



Classroom and Shaded Overlook

UCI NATURESCAPE VISION

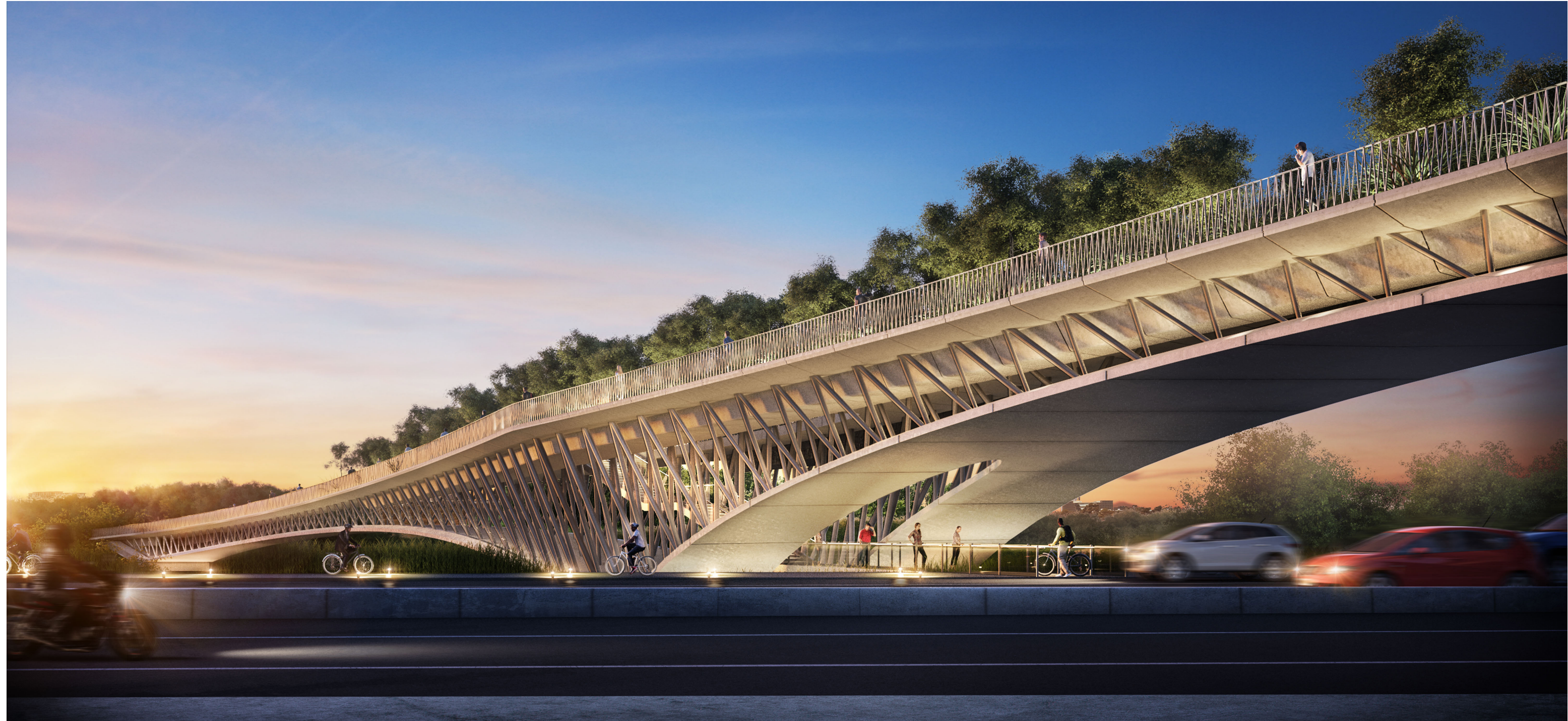
SAN DIEGO CREEK BRIDGE

The San Diego Creek Bridge will create a new seamless connection from the Campus Core, Health Sciences District, and UCI Research Park to San Joaquin Marsh, and onward to the UCI North Campus. The bridge will further connect with the existing San Diego Creek bike path. Spanning University Drive and San Diego Creek, the bridge will extend the concept of "Naturescape" by including native landscaping to promote green space and potential habitat.

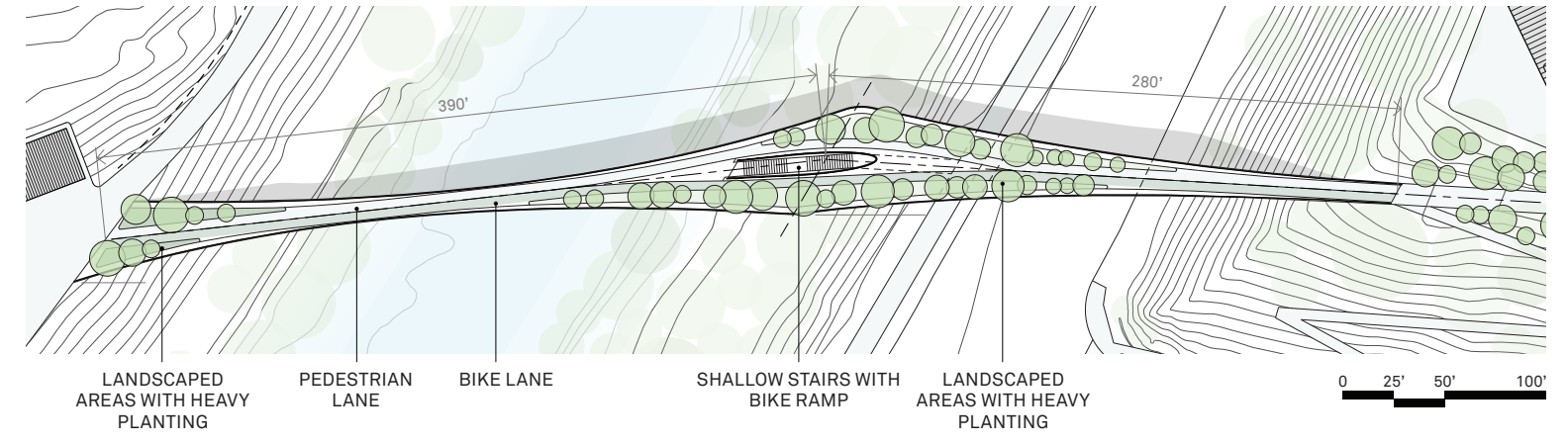
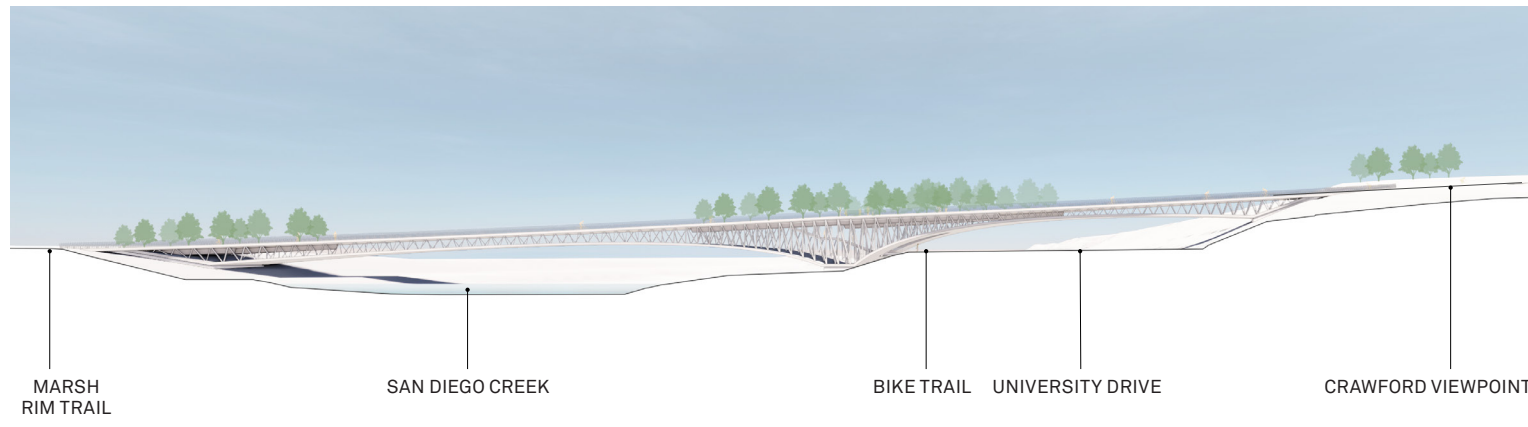
Envisioned as two elegant, interconnected arched spans, San Diego Creek Bridge is supported by a graceful steel structure allowing visual permeability and a striking display when framed by the surrounding wetlands. San Diego Creek Bridge will become an iconic feature to the UCI campus and a new architectural landmark to the region.



Existing view of Marsh from Crawford Athletic Complex



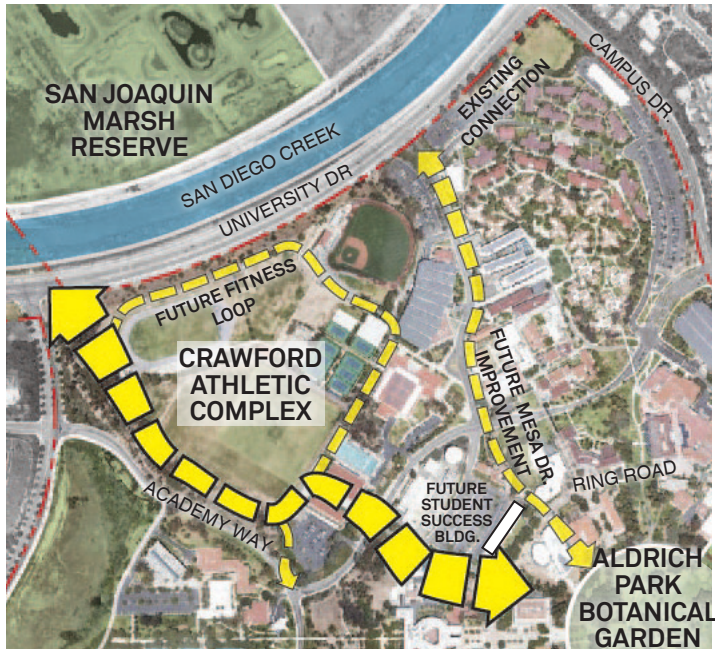
View from University Drive



View on bridge towards Crawford Viewpoint
UCI NATURESCAPE VISION

GARDEN TO SAN DIEGO CREEK CONNECTION

The Garden to San Diego Creek Connection extends the North Campus Health and Wellness Trail from the San Diego Creek Bridge to the Campus Core. Starting at Aldrich Park and continuing past the future Student Success Building the path will entice the UCI community and visitors alike with opportunities for wellness including short walks along the edge of Crawford Athletic Complex, panoramic views to the San Joaquin Marsh, and ultimately connecting to the San Joaquin Marsh and future North Campus amenities.



Existing trail adjacent to Anteater Stadium



Trail to San Diego Creek Bridge

ECOLOGICAL PRESERVE TRAIL

The Ecological Preserve Trail links the heart of campus to adjacent wildlands bringing the campus community into contact with our local biological heritage. This link presents a unique opportunity to express UCI's commitment to protecting that heritage for future generations and to strengthen regional connections including Bommer Canyon and Crystal Cove. Along this pedestrian trail, shaded overlooks showcase views to the Campus Core, local mountains, and the Pacific Ocean while strategically placed outdoor classrooms for research, learning, collaboration, and respite are placed lightly within the landscape.



Existing view from Ecological Preserve Trail



Shaded Overlook and regraded trail

UCI NATURESCAPE VISION

ANTEATER COMMUNITY TRAIL

The Anteater Community Trail highlights UCI's commitment to sustainability between the botanical garden and the residential communities within the East Campus. A joint-use trail extending from West Peltason Drive to Culver Drive promotes sustainable modes of transportation while a classroom and gathering area (Harvest, Community, & Sustainability Classroom) adjacent to the Anthill Community Garden provides opportunities for research, education, and engagement of important stakeholders and supporters of UCI's programs and mission.



Anthill Village Community Garden



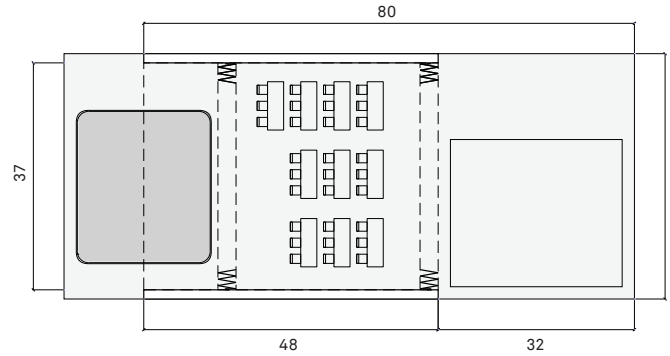
Classroom and gathering area adjacent to Anthill Village Community Garden

CLASSROOMS

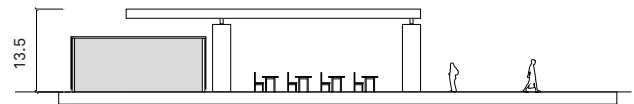
As part of the Naturescape Vision a series of outdoor classrooms will be distributed throughout the UC Irvine campus. These spaces will provide new opportunities for faculty and students to gather, learn and collaborate in an environment outside of the traditional classroom. The outdoor classrooms will be equipped to perform as high amenity teaching spaces and will be flexible enough to host events or act as informal meeting spaces.

The Naturescape outdoor classrooms have been conceived as an adaptable kit of parts. Each structure will consist of an elegant, lightweight open frame that can support any combination of planting, screening, weather protection, photovoltaic solar panels, and collapsible doors. Each of the outdoor classrooms will be similar in their appearance but tailored to the specific requirements of their location and will take on the character of adjacent trail connections.

CLASSROOM PLAN



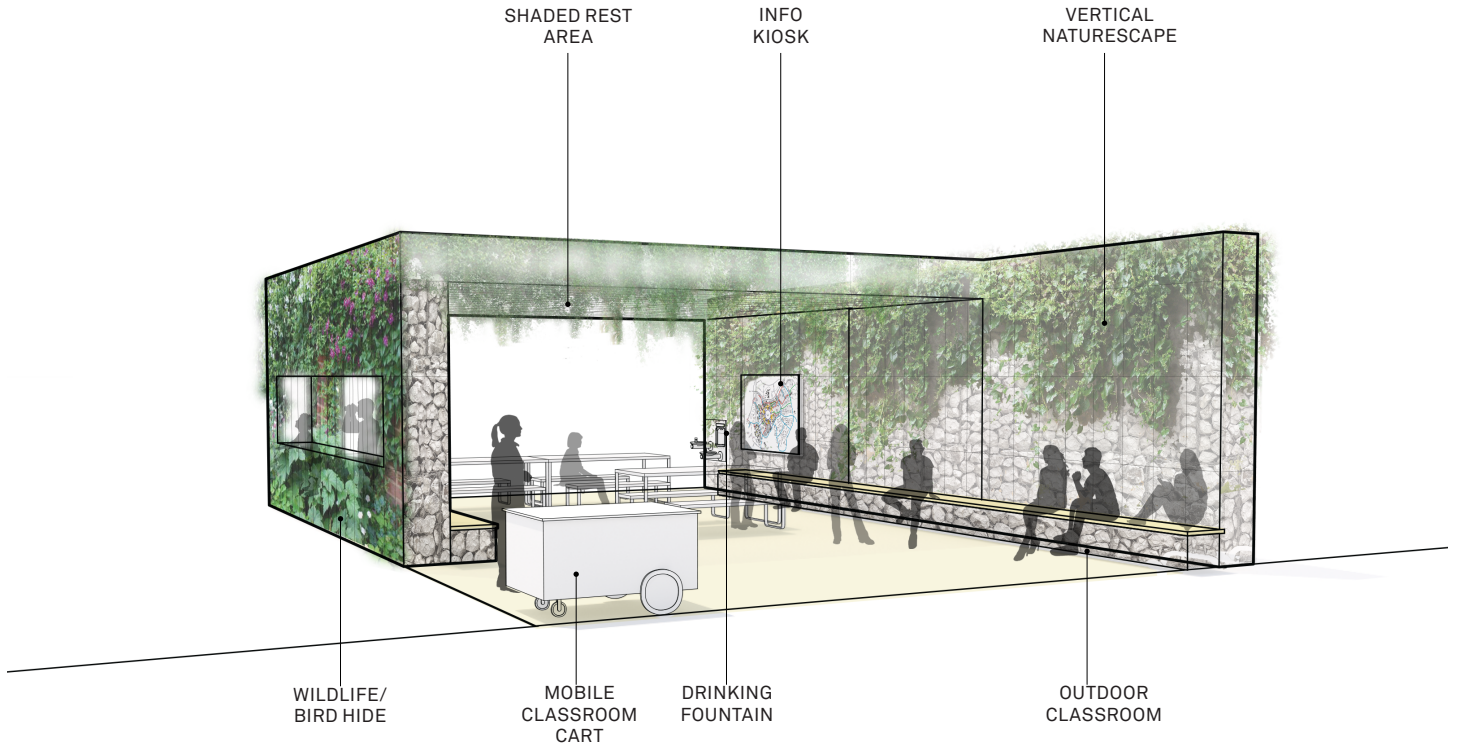
CLASSROOM SECTION



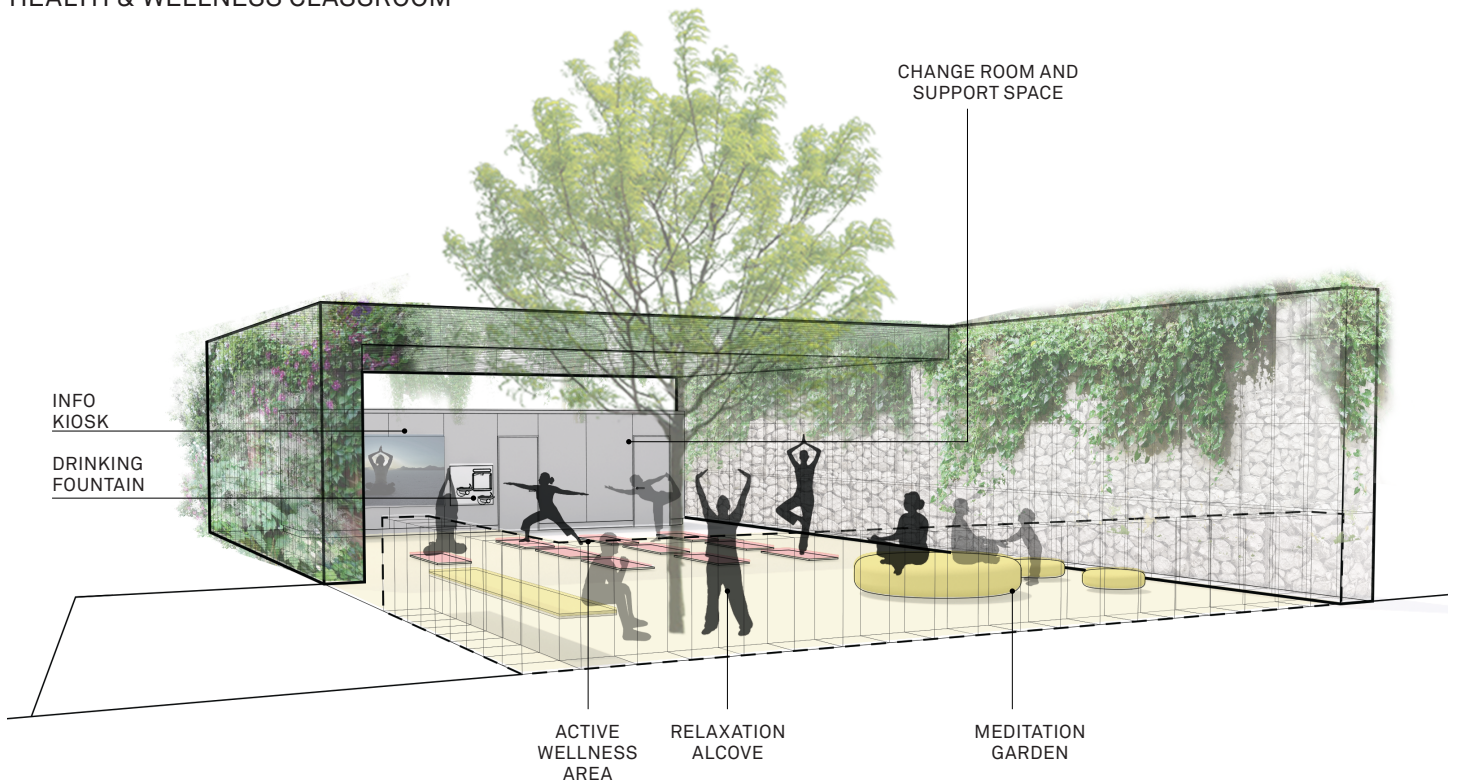
Approach View

CLASSROOMS TYPOLOGIES

ECOLOGICAL PRESERVE CLASSROOM

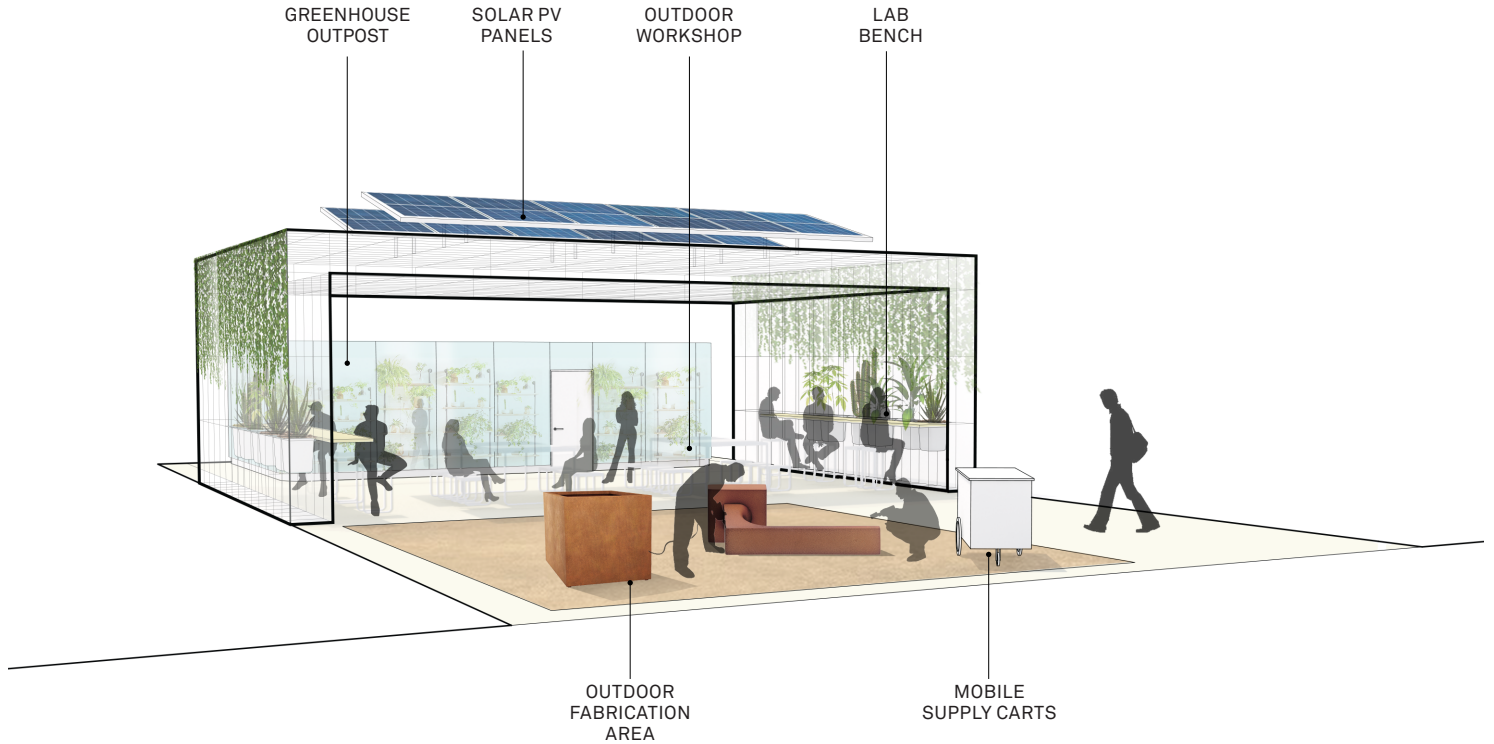


HEALTH & WELLNESS CLASSROOM

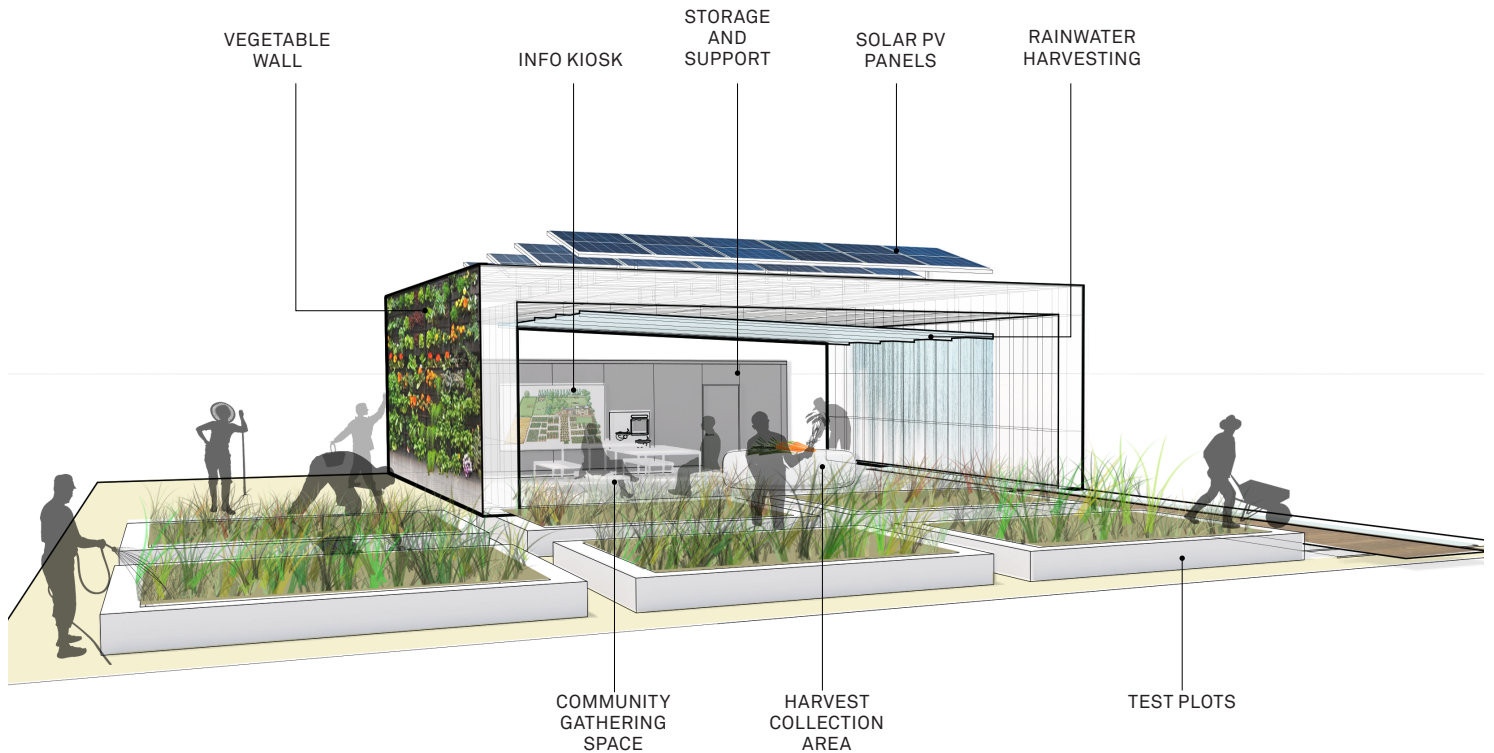


CLASSROOMS TYPOLOGIES

INNOVATION & CULTIVATION CLASSROOM



HARVEST, COMMUNITY & SUSTAINABILITY CLASSROOM

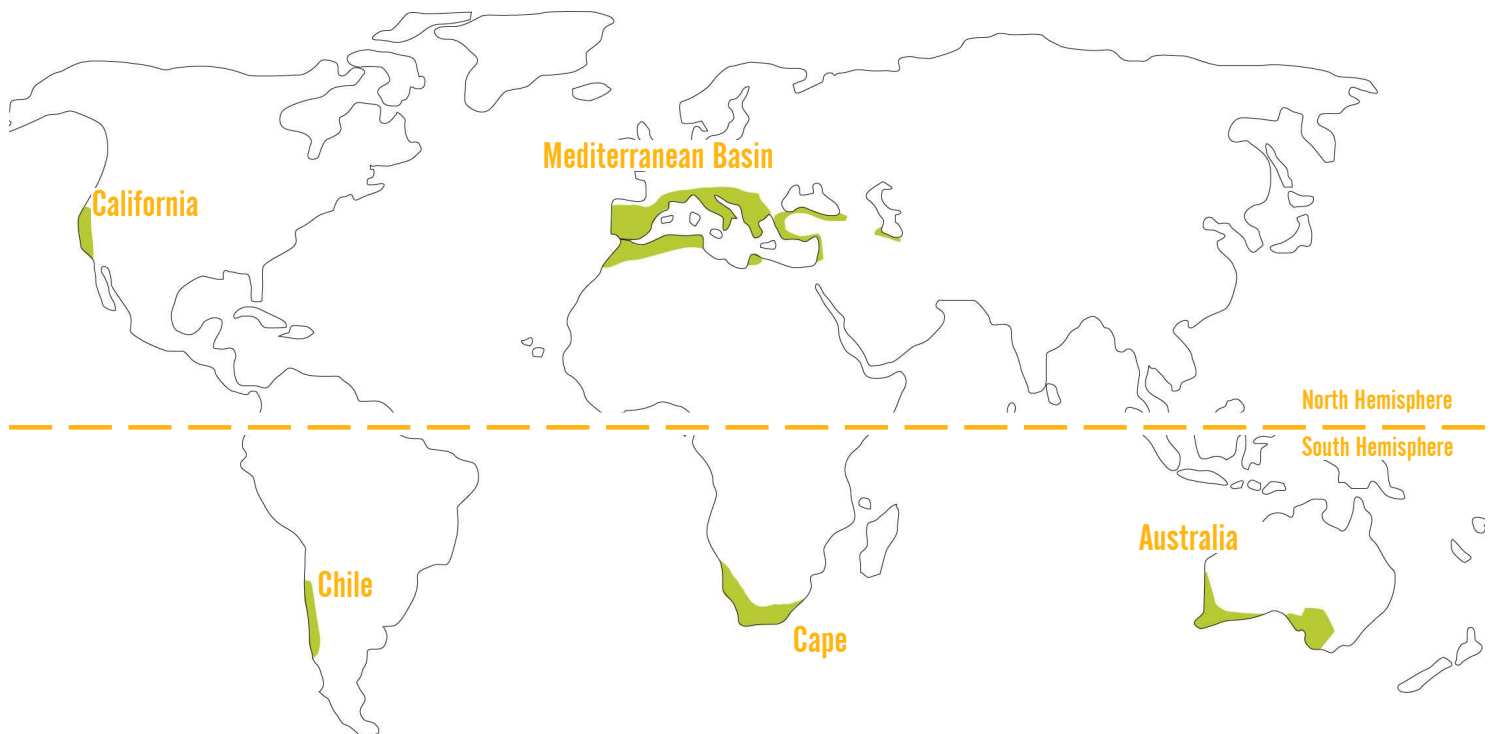
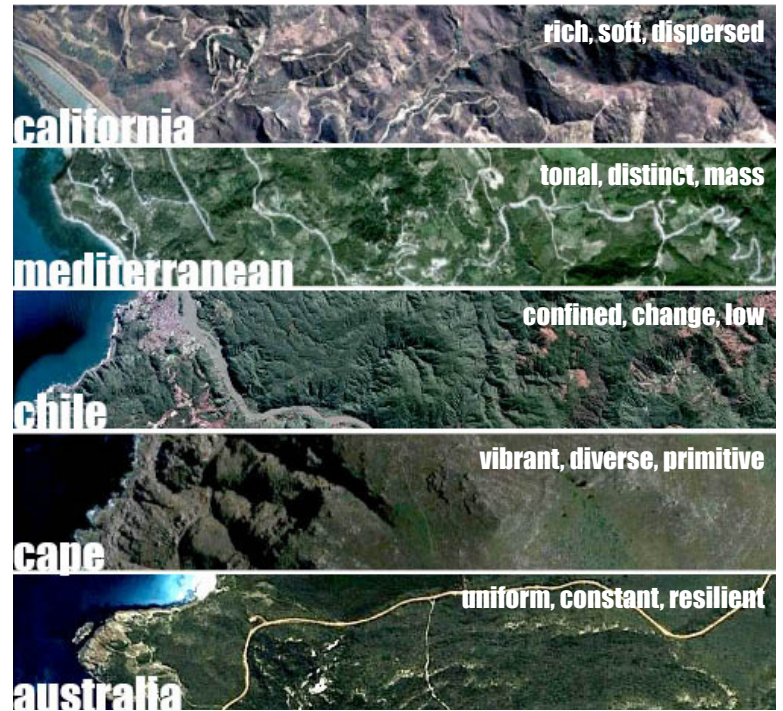


ALDRICH PARK BOTANICAL GARDEN

Celebrating the Mediterranean Biome

The Gardens on campus are the physical paths by which we transition from location to location and, metaphorically, from discipline to discipline, from teacher to student, and from research to application. These Gardens in turn celebrate a biome that is itself defined by transitions; these biomes are characterized by transitions from land to the sea, from warm dry summers to cool wet winters, and – because of human settlement in these idyllic conditions – from urban centers to wildlands.

Mediterranean climate only occurs between 30° and 45° latitude on the west coasts of continents with offshore cold ocean currents. Globally there are only five regions with Mediterranean climates. Each of these shrubland and woodland regions supports unique plant and animal species that occur nowhere else, and comparative studies of this biomes reveal interesting examples of convergent evolution in form, function, and ecology of plant and animal families on different continents. The combined effects of human settlement and climate change make these some of the earth's most endangered ecosystems.

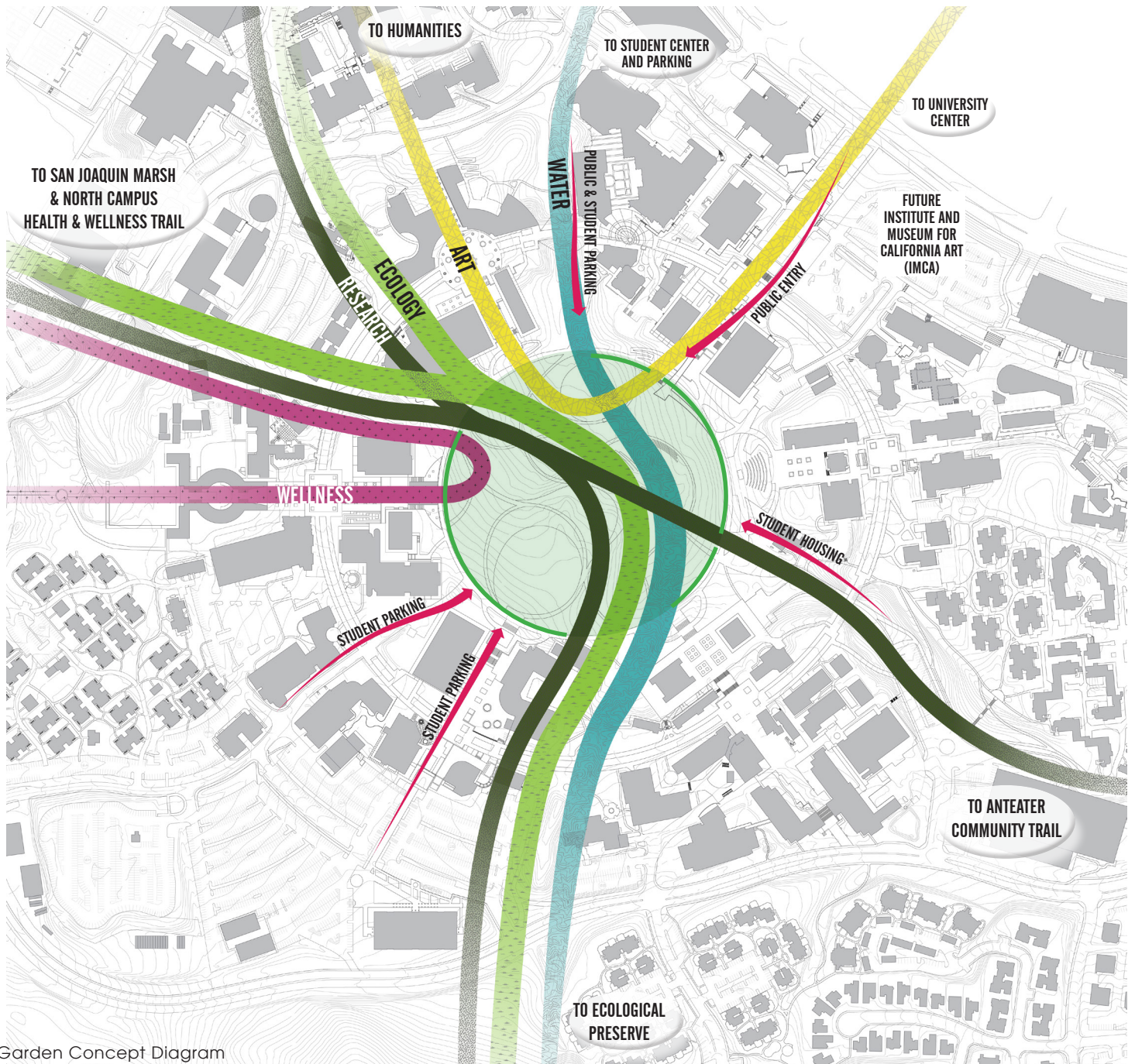


ALDRICH PARK BOTANICAL GARDEN

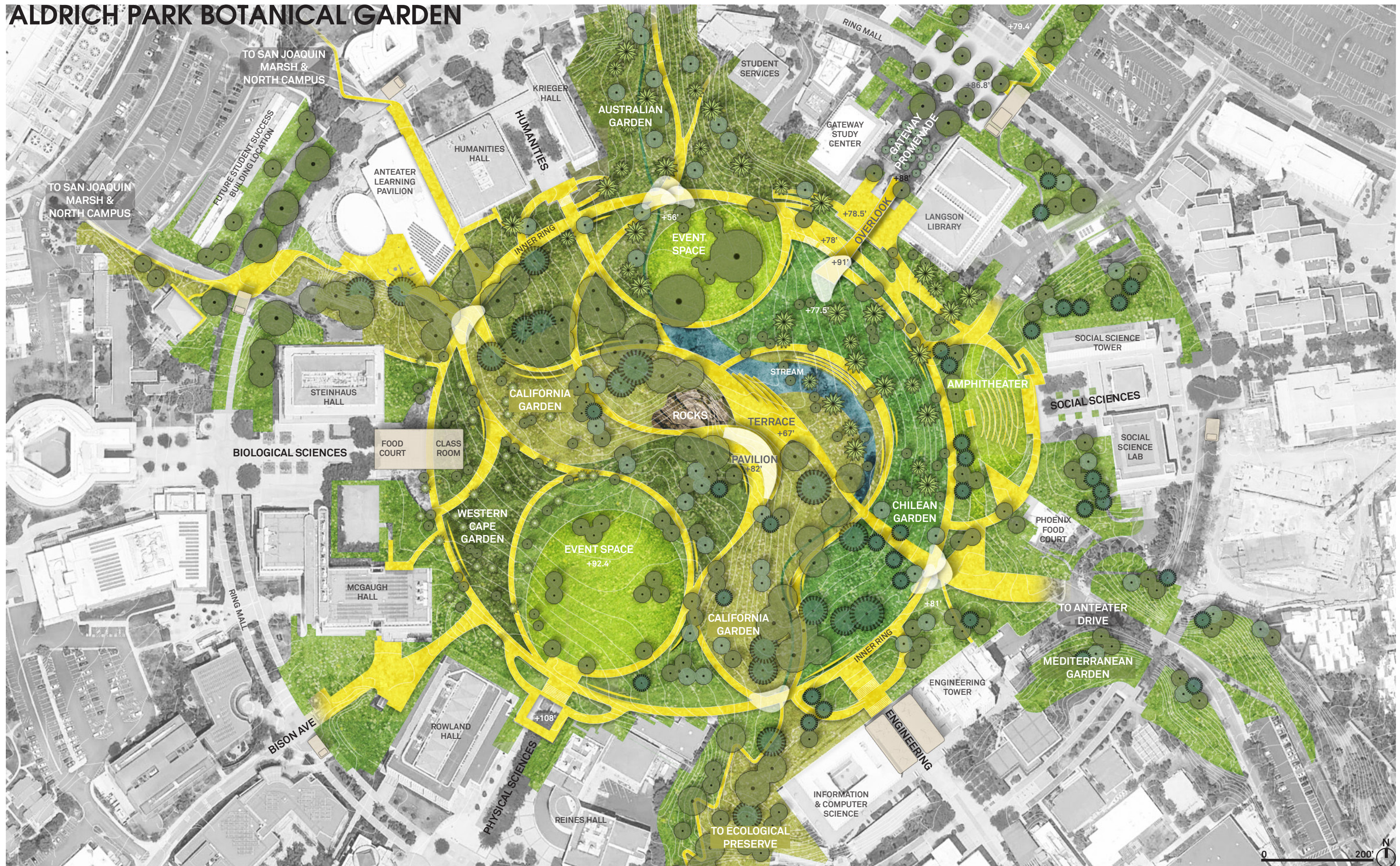
Establishing a main campus botanical garden, centered in Aldrich Park is a main focus of UCI's Naturescape Vision. The garden would enhance existing landscape areas to support academic and cultural uses, wellness and recreation, and community engagement. The botanical garden collections would include adjoining areas of the campus including ring mall, academic malls and plazas, greenbelts and campus linkages. The Garden will serve as the center between the ecological and research linkages: The San Joaquin Marsh, Ecological Preserve, and Anteater Community Trail systems. The garden will celebrate the Mediterranean Biome and focus on ecosystem-based, geographically-based, and culturally-based collections.



1962 Pereira sketch of UCI



ALDRICH PARK BOTANICAL GARDEN

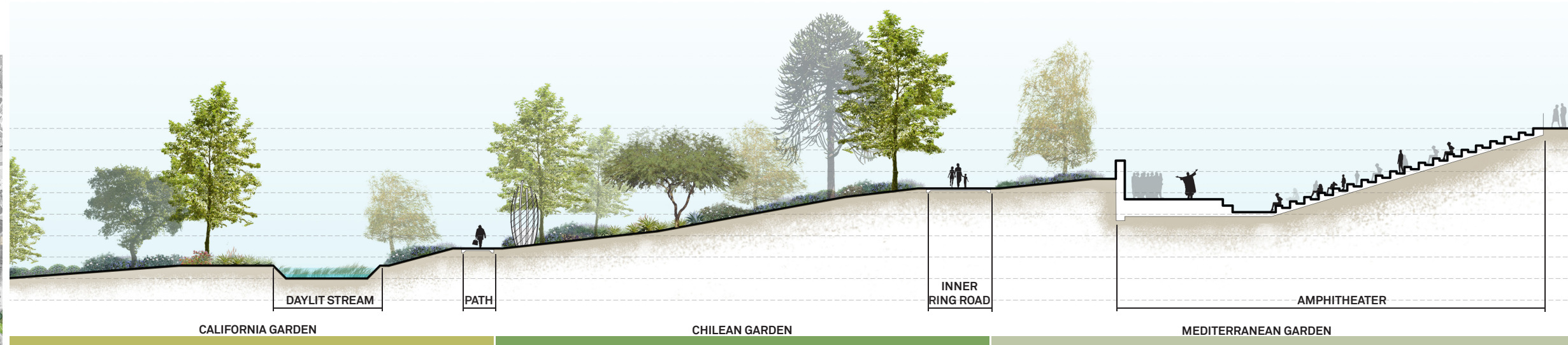
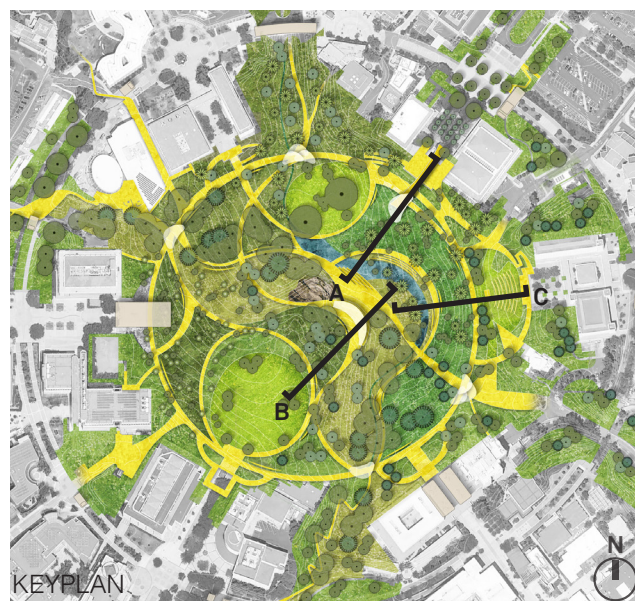
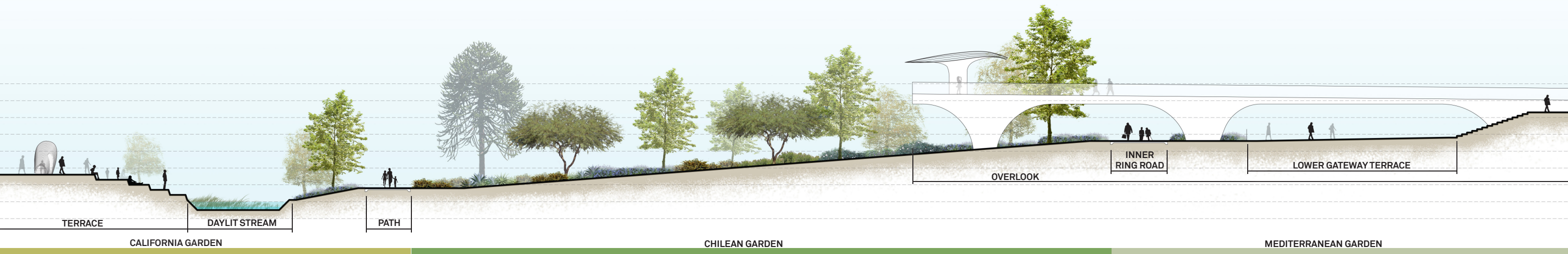




View from the Overlook Bridge towards the Terrace Cafe and Pavilion
UCI NATURESCAPE VISION



View of the Stream and Overlook Bridge from the Chilean Garden path



ALDRICH PARK BOTANICAL GARDEN

California Floristic Garden

The California Floristic Garden sits at the heart of Aldrich Park and includes the corridor linking the San Joaquin Marsh to the Ecological Preserve. It surrounds most of the daylight stream and celebrates California's unique biodiversity in the center of our campus. This garden will include coastal prairie, coastal scrub, chaparral, oak woodland, and riparian plant communities.



Platanus racemosa
California Sycamore



Pinus radiata
Monterey Pine



Sequoia sempervirens
Coast Redwood



Quercus agrifolia
Coast Live Oak



Washingtonia filifera
California Fan Palm



Arctostaphylos Pacific Mist
Manzanita



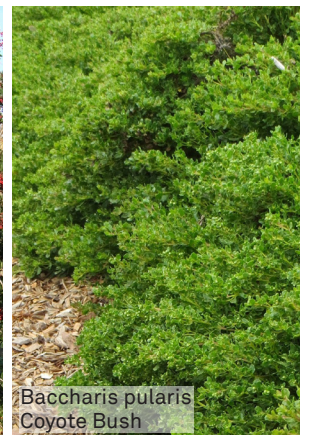
Opuntia littoralis
Coast Prickly Pear



Adenostoma fasciculatum
Chamise



Heteromeles arbutifolia
Toyon



Baccharis pularis
Coyote Bush

ALDRICH PARK BOTANICAL GARDEN

Australian Garden

Australian Garden is characterized by resilient and noteworthy plants that have evolved strategies to thrive through drought, fire, and some of the Earth's oldest and most infertile soils. This Garden surrounds visitors strolling through the North entry with diverse and colorful flora and unique plant form that transitions carefully from the surrounding urban landscaped environment.



Callistemon citrinus
Bottlebrush Tree



Eucalyptus globulus
Tasmanian Blue Gum



Acacia cognata
River Wattle



Northofagus cunninghamii
Myrtle Beech



Hakea laurina
Sea Urchin



Xanthorrhoea preissii
Grass Tree



Grevillea spp.
Grevillea



Eremophila maculata
Emu bush



Correa 'Dusky Bells'
Red Australian Fuchsia



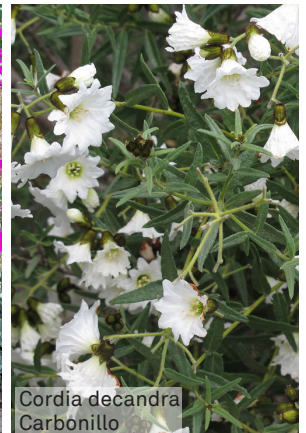
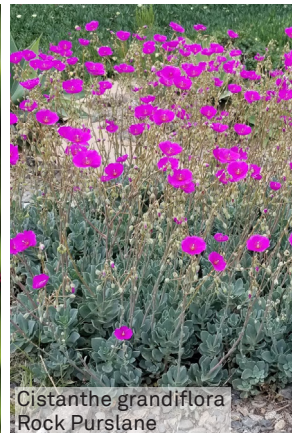
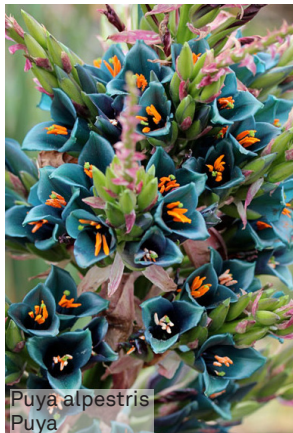
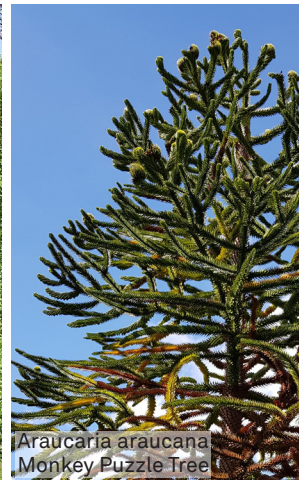
Dianella tasmanica 'Variegata'
White Striped Tasman Flax Lily

ALDRICH PARK BOTANICAL GARDEN

Chilean Garden

Situated on the Eastern side of the Garden, the Chilean Garden will showcase this regions ever-changing landscape with seasonal variation and a large number of drought-deciduous shrubs.

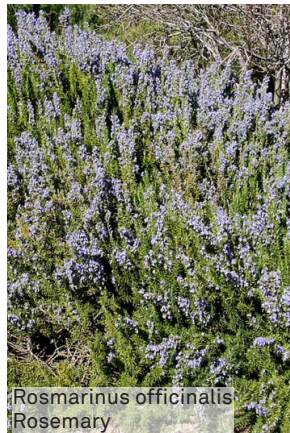
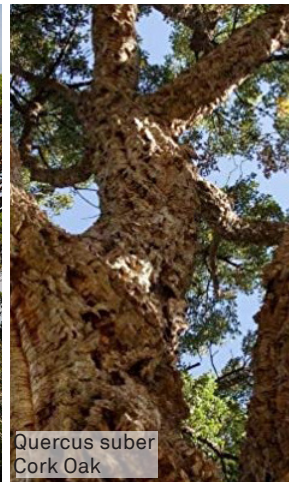
This Garden will exhibit the Chilean regions similarities to the California Floristic zone. A large area will be dedicated to the matorral plant community, which is similar to California's chaparral. Chile also has a coastal matorral analogous to California's coastal scrub. High elevation species and systems will also be illustrated to demonstrate convergent form and function.



ALDRICH PARK BOTANICAL GARDEN

Mediterranean Garden

The Mediterranean Garden region is famous for dramatic massing of shrubs, dense evergreens and low trees. The formality of this landscape lends itself to the structured planting design surrounding Aldrich Park. This will be a garden of sensory delight with many herbs and flowering shrubs. Highly manicured and managed, it also demonstrates the legacy of human impact and interaction with these systems and the need for caution, clarity, and compassion in preserving these systems into the future.



ALDRICH PARK BOTANICAL GARDEN

Cape Garden

The Southern Cape Garden will exhibit a dazzling array of vibrant plants. Characterized by long surviving, ancient plants with whimsically odd forms, this garden will be an exquisite place to wander through or viewed from the Overlook Bridge. This Garden provides a means to connect to our founding faculty at UCI, who's scholarship provided the foundation of the UCI Arboretum through collections associated with the African continent.



Aloe ferox
Cape Aloe



Maytenus acuminata
Symbas



Cyathea capensis
Forest Tree Fern



Adenium obesum
Desert Rose



Brabejum stellatifolium
Wild Almond



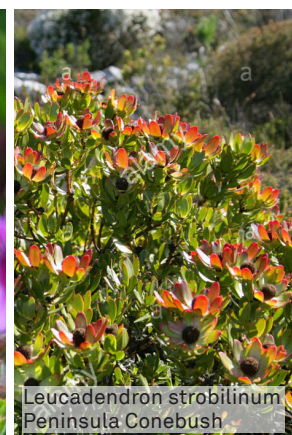
Elegia tectorum
Cape rush



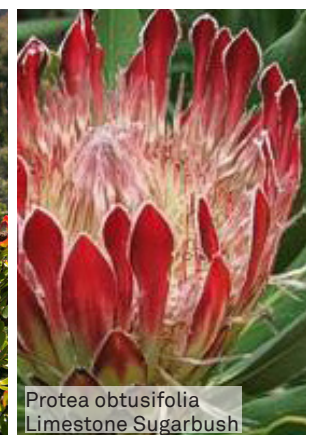
Encephalartos lehmannii
Karoo Cycad



Pelargonium culallatum
Wilde Malva



Leucadendron strobilinum
Peninsula Conebush



Protea obtusifolia
Limestone Sugarbush

ALDRICH PARK BOTANICAL GARDEN

The Stream & Water Feature

The Stream is an incredible opportunity to restore the natural hydrologic function to the heart of the Campus through daylighting an historic drainage that once ran through what is now Aldrich Park. This perennial stream will emulate natural conditions, enabling endless research and learning opportunities in a setting that promotes reflection and wellness.

The Water Feature will give the botanical garden an active water feature year around. It will be a recirculating and shallow water element providing cooling benefits via evaporation, noise benefits via ripples, habitat value for birds and pollinators, and an area of enjoyment for students, faculty, staff and visitors.



A-Stream Gathering Areas at Terrace

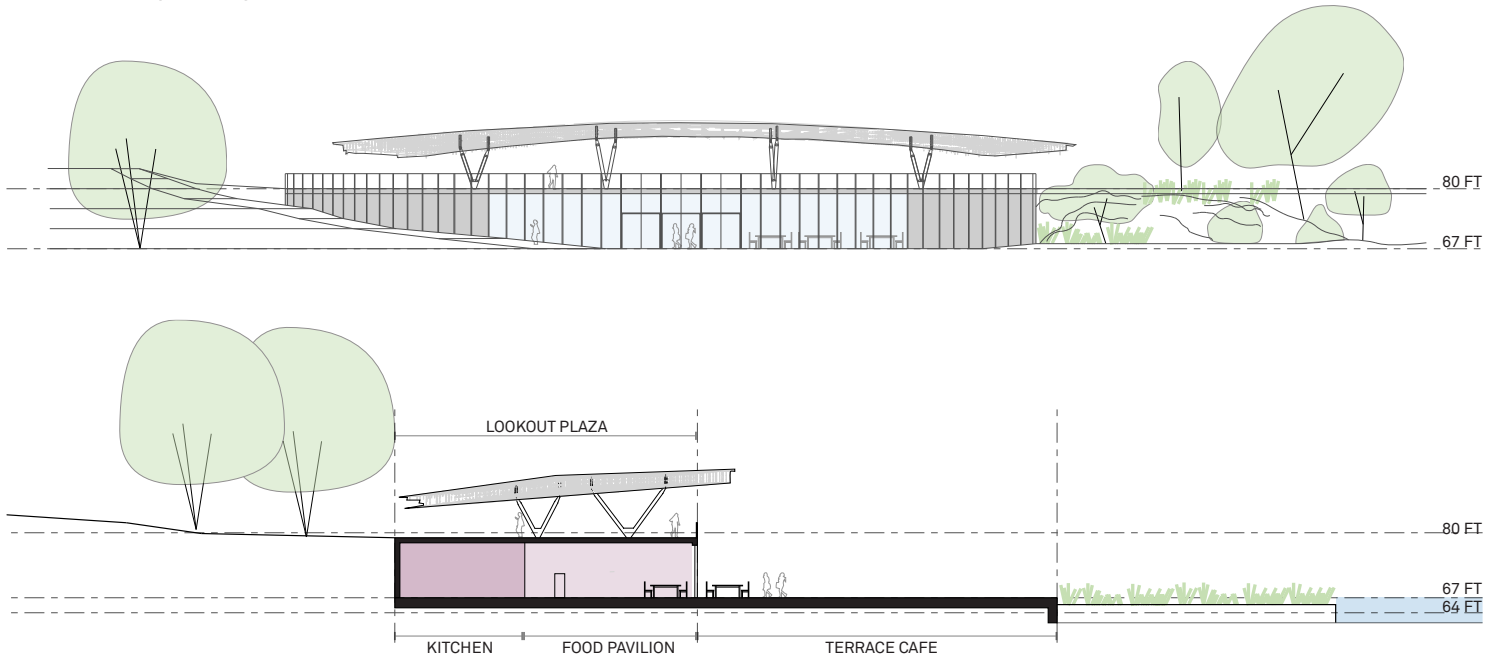


B-Daylit Stream

TERRACE CAFE & PAVILION

The Terrace Café and Pavilion are the central elements of the Botanical Garden with an architectural character that integrates the color and texture of the natural rock outcropping in Aldrich Park. The Terrace Café, offering food and beverage service, is a new central gathering hub within the campus core.

The Pavilion sits atop the Terrace Café providing views to the Gateway Plaza, Chilean, Australian, and California Gardens and the stream and water feature below. This shaded plaza provides space for an intimate gathering, class meeting, or large event.



View from the Gateway Overlook

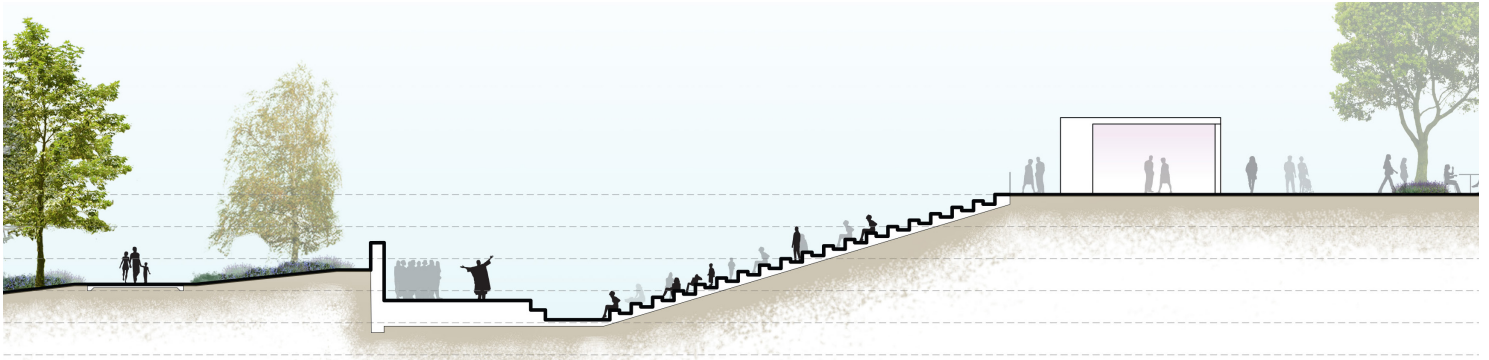
ALDRICH PARK BOTANICAL GARDEN

Amphitheater

Situated on an existing sloped knoll along the Inner Ring, the Garden Amphitheater transforms an under-utilized space into a dynamic area for small classes, large lectures, or dance shows during the day and then transitions to theater or musical performances under the stars at night.



Moderated panel at the Amphitheater

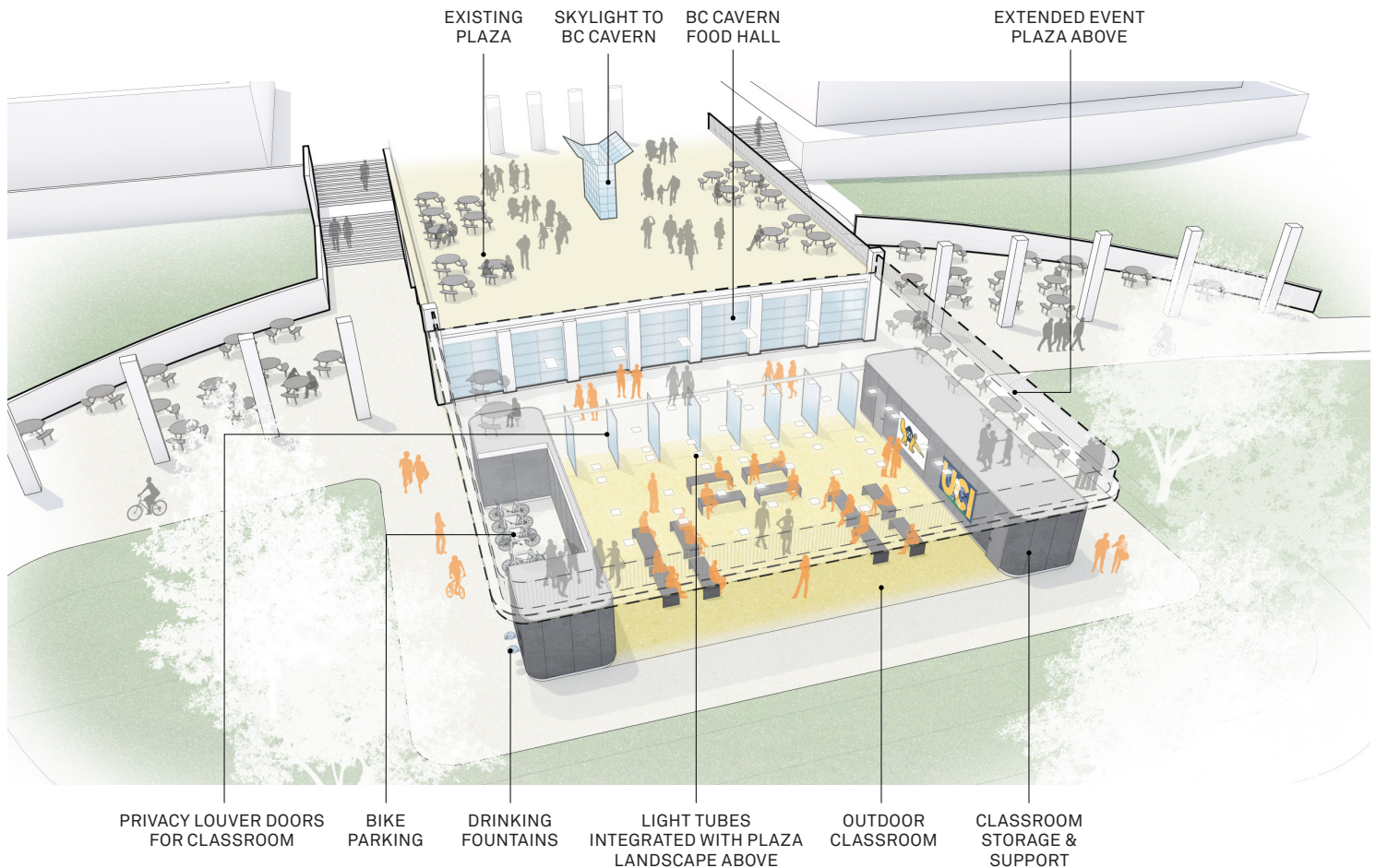
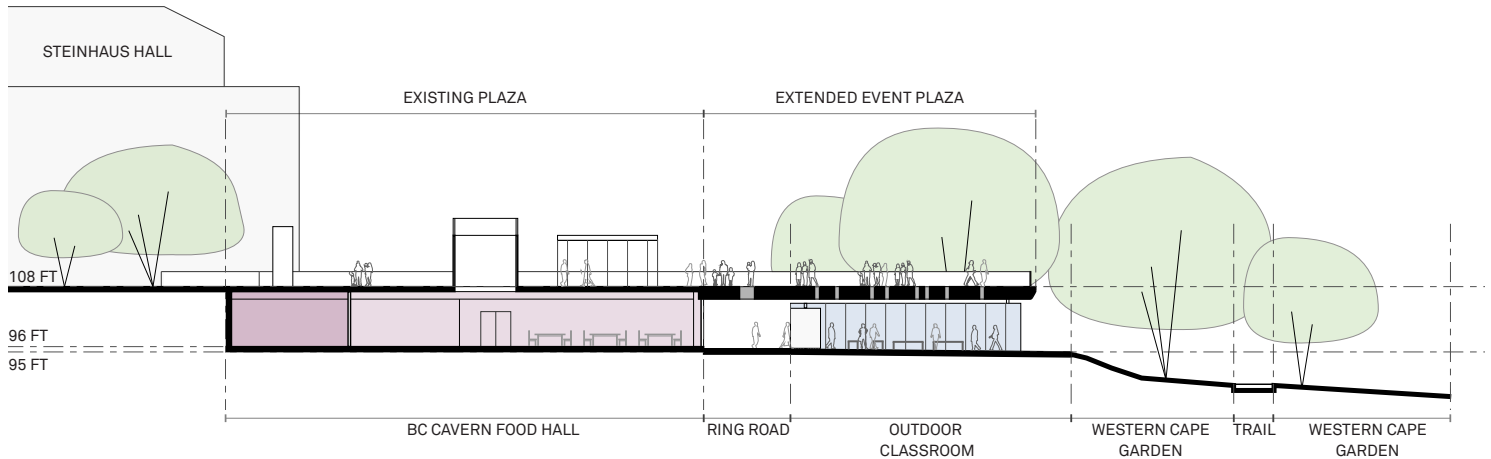


Shakespeare in the Round performance at night

ALDRICH PARK BOTANICAL GARDEN

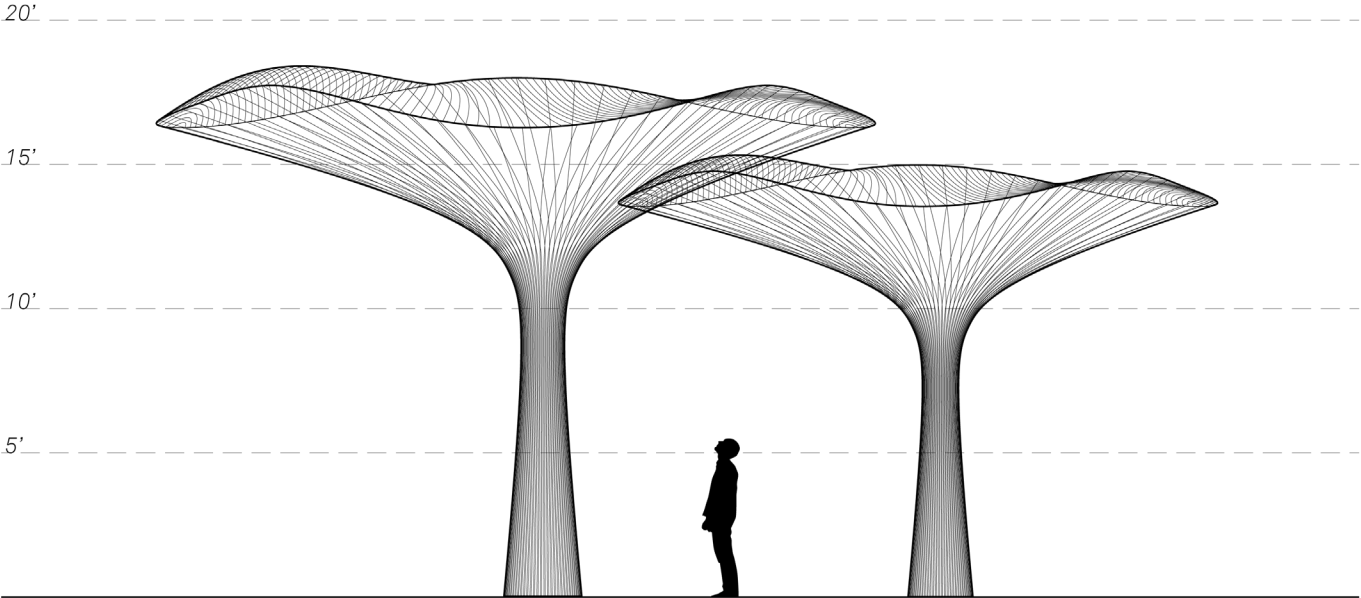
Overlook and Learning Center

Situated on the edge of Aldrich Park Botanical Garden, at the arrival of the Biological Sciences Mall overlooking Aldrich Park, an outdoor classroom will provide a unique setting for learning and social gathering. The new learning center will place students and faculty amongst the garden in a sheltered setting at the lower level. The plaza above will reach out into the botanic garden and provide an overlook as well as additional gathering space for small campus events.

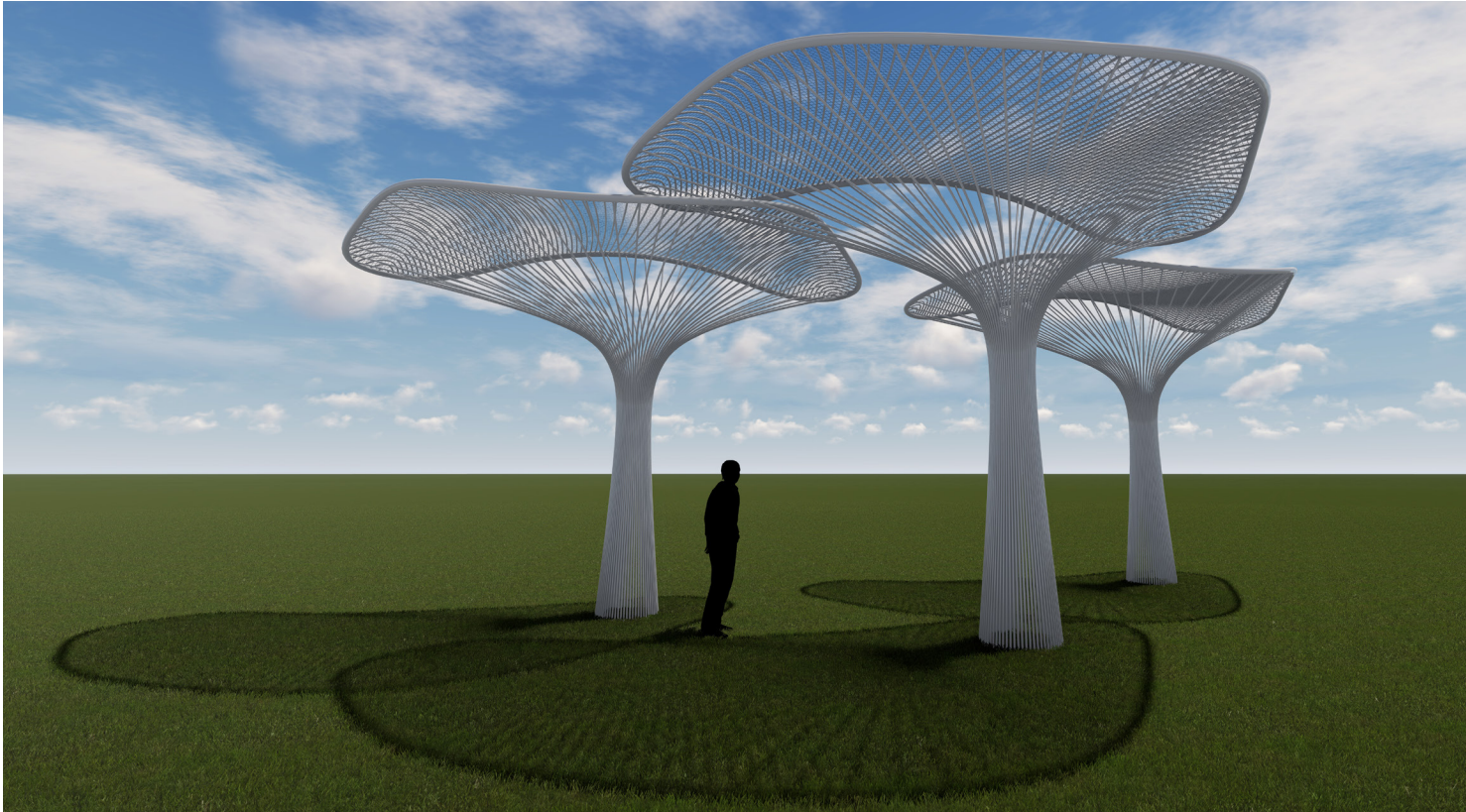


SHADE STRUCTURES

The Shade Structures are iconic elements that dot the Naturescape connections, the Ring Mall, and Botanical Garden entries along the Inner Ring. Harmonizing nature and art, these unique elements take the form of abstracted mushrooms, rising from ground and sometimes clustering to form larger areas to meet beneath.



Section



Cluster of Shade Structures

GLOBAL CHANGE RESEARCH FACILITIES

A network of interdisciplinary field research sites will be established to investigate and educate on the consequences of global change for our region's ecosystems. These sites will be distributed along each Naturescape corridor, providing access to faculty, students and the public in all areas of campus. The sites will vary in size and configuration from approximately 0.1-acre to 1-acre in size depending on location and program needs.

Each site would include infrastructure to alter rainfall and temperature to simulate future climates on experimental plots instrumented to measure both above- and below-ground ecosystem responses, as well as protected research support space and infrastructure service. This network of field research sites will allow scientist and students to predict the effects of future climate change, develop and test land management strategies to mitigate these effects, and provide opportunities for authentic research experiences on global change for both students and the public.



Drought Manipulation Experiment Example



Field Research Site Example

