



**LANDSCAPE
AND OPEN SPACE**

4 LANDSCAPE AND OPEN SPACE

The UC Riverside campus identity is strongly linked to its natural setting, including arroyos descending from the steep hillsides of the Box Spring Mountains above campus, and on-campus hillsides to the southeast. The campus was developed as a green oasis in a semi-arid setting. UC Riverside is also proud of its legacy of citrus research and cultivation. Campus growth and redevelopment should strive to respect and integrate the natural beauty and agricultural legacy of the region in an enduring way. The Master Plan Study supports strengthening and protecting the character of campus by enhancing connections to its environmental context while improving the public realm.

Glossary of Terms

Permeable Building - a building that facilitates pedestrian movement through its ground floor

Plant Palette - a combination of plants selected for a landscape area

Public Realm - pathways, open spaces, courtyards, and other public and pedestrian-oriented areas

Structural Landscape - landscape areas that define circulation and interstitial spaces around buildings

Swale - a low, planted basin that receives and filters runoff from surrounding area

Stormwater - precipitation that infiltrates into the soil, evaporates, or drains to nearby water bodies

STRATEGIC PRIORITIES

- Strengthen UC Riverside's distinct sense of place by integrating the campus public realm and its natural setting (e.g., the arroyos and views to the mountains)
- Strengthen and expand the framework of open spaces to embrace new campus opportunity sites through a cohesive and vibrant network of outdoor malls, courtyards, gathering spaces, and pathways
- Creatively shape campus open spaces and the spaces between buildings to promote collaboration, interaction, and shared experiences
- Visually reinforce campus edges to strengthen the identity of the institution and to communicate campus character
- Increase appropriate plantings throughout campus to provide shade and enhance campus identity and the quality of a user's experience
- Identify a campus plant palette that is responsive and adapted to the local climate, reinforces regional identity, and conserves water
- Integrate stormwater management into the open space framework to satisfy regulatory requirements through innovative, attractive, and cost-efficient solutions



The Belltower stands over the Carillon Mall

4.1

Integrate Natural Surroundings

The Master Plan Study embraces the regional landscape and climate within the UC Riverside campus public realm in a variety of ways. The campus abuts the rugged Box Springs Mountains and is transected by arroyos draining the steep slopes of this mountainous area, which includes regionally-significant habitat, protected areas, and connections to other natural surroundings. The contrast between UC Riverside's semi-arid mountainous setting and the managed, park-like campus is striking. Where possible, the natural arroyos that flow westward and downhill from the Box Springs Mountains are protected and enhanced to ensure continuous flow across campus.

Native or non-invasive, climate-adapted landscape features, similar to the successful plantings at Glen Mor Housing, will be incorporated in targeted parts of campus green spaces, including transitional edges, to help attain sustainability goals and blend the campus with the surrounding natural landscape of open space reserves, while helping to prevent wildfires from spreading to the campus.

Respect for UC Riverside's natural setting extends to the placement and scale of future buildings. The overall vision is to maintain the elegant, low-impact presence of the campus in its stunning natural setting, thus ensuring that new construction continues to build on the theme of "simple buildings in a dramatic landscape." Dramatic views of sharply-defined rocky peaks provide stark visual reminders of the campus setting and a strong sense of place. These view corridors, many of which are maintained by virtue of their location at the terminus of campus streets and open spaces, will continue to be protected with new campus growth including siting future buildings to take advantage of their elevation and locations to provide views over the tree canopy to hillsides beyond.



View of San Gabriel Mountains from Box Springs Mountain Park, east of campus



View towards Box Springs Mountains from arroyo at Glen Mor Housing



View of UC Riverside campus from the south

4.2

Create a Vibrant Campus Open Space Network

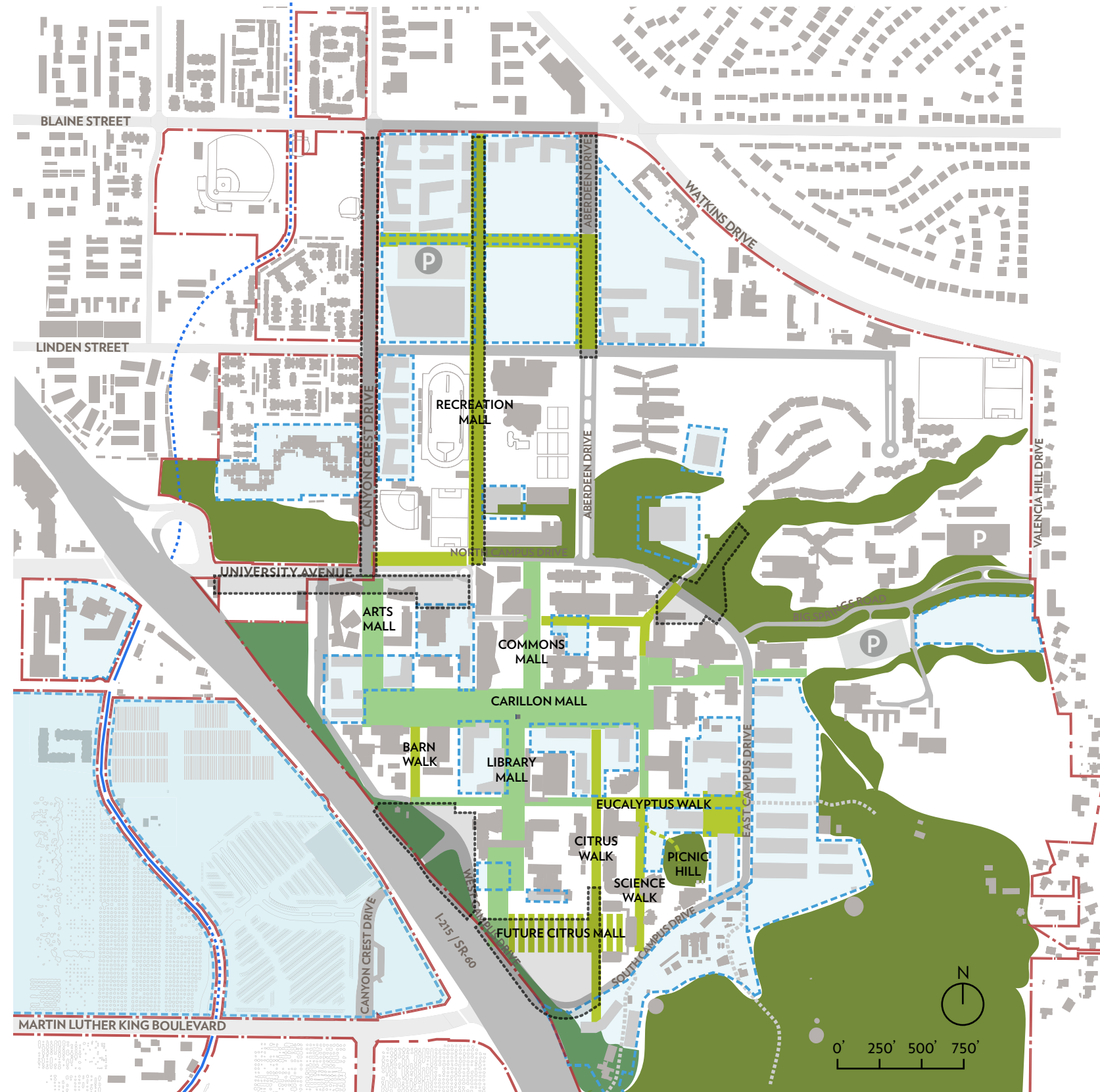
Open space on the campus plays a vital role in fostering a spirit of intellectual exchange, contemplation and community. The quality of open space is important in attracting faculty, staff, and students, providing memorable, evocative first impressions, and framing their daily lives on campus as they move between offices, labs, classrooms, and gathering spaces.

The heart of the UC Riverside campus is defined by a series of orthogonal, interconnected malls. Campus buildings feature primary entrances on these open spaces. Courtyards and plazas, often adjacent to building entrances, provide places for seating and interaction. Arcades reinforce the pedestrian walk system, especially along major malls, by providing vertical structure and shade.

The fabric of outdoor malls, courtyards, gathering spaces, and pathways weaves together the different areas of the campus. The hot and dry climate encourages some aspects of campus life to occur outdoors (except in summer months), lending a dynamic, active spirit to open spaces. Classrooms, corridors, and gathering spaces directly open up to and are integrated with the campus grounds.

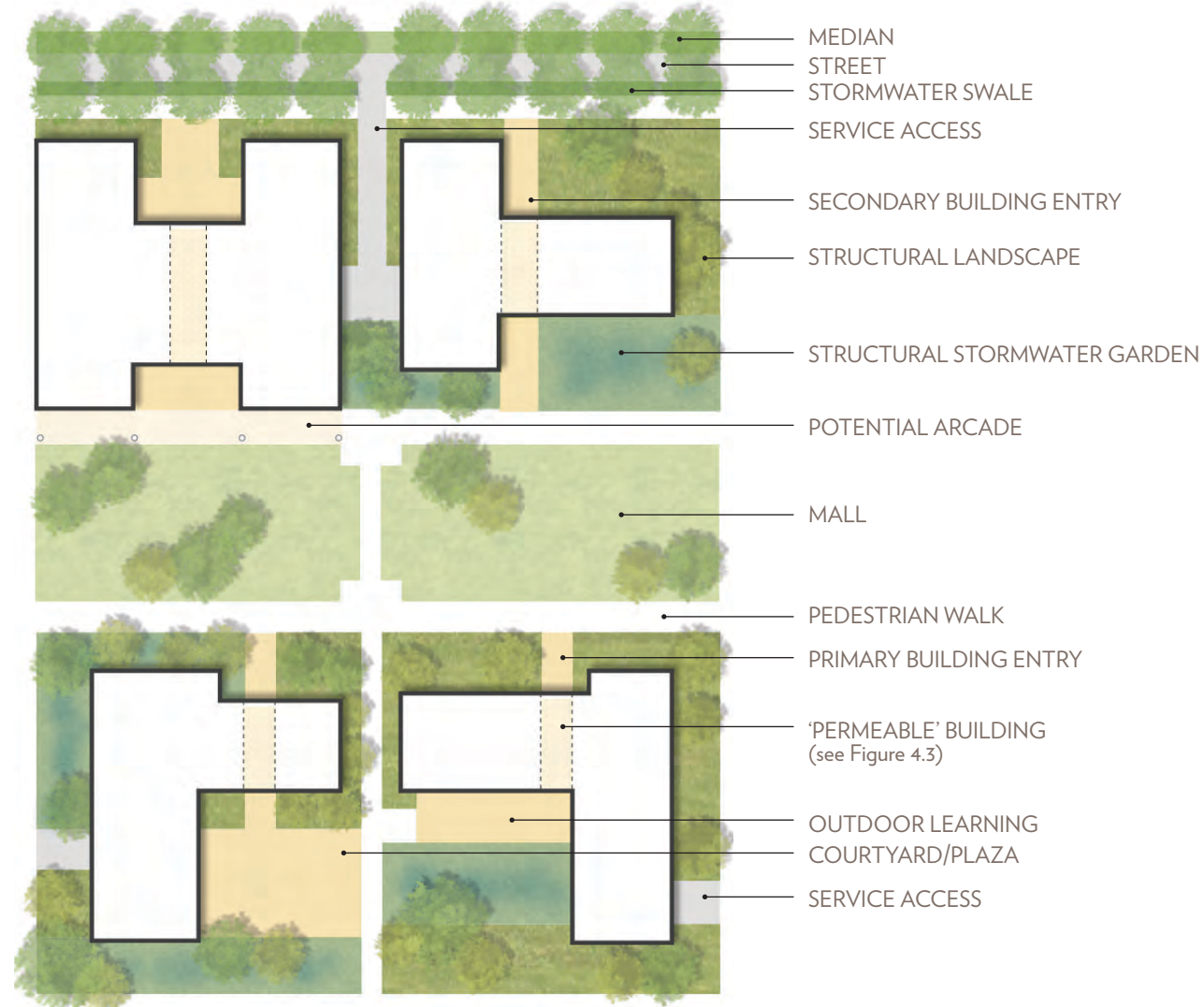
There are also intangible but distinctive elements that derive from the lush nature of UC Riverside’s open space. The scent and color of plants, cascading birdsong, dappled shade, and the sound of carillon bells are all cited as memorable to UC Riverside’s identity and sense of place. This pattern of buildings, open space, and circulation will continue and be strengthened through future campus development. The Master Plan Study addresses several strategies to protect and enhance the campus open space network.

Figure 4.1 PROPOSED CAMPUS OPEN SPACE FRAMEWORK



LEGEND	UC Riverside Property Line	Existing Open Space Framework	Hillside and Arroyos	Public Realm Opportunity Sites
	Opportunity Site	Proposed Open Space Framework Extensions	Proposed Freeway Buffer	

Figure 4.2 TYPICAL CAMPUS LANDSCAPE ORGANIZATION



Existing buildings do not present a positive edge to the Carillon Mall



The Science Walk currently ends at a wall and will be extended north in future.

CONNECT MALLS AND WALKS

Malls and walks provide an interconnected system of linked open spaces throughout the developed areas of the campus. The campus's malls, which consist primarily of park-like lawns and large shade trees framed by academic buildings, provide pleasant and inviting spaces and a welcome contrast to surrounding busy streets and adjacent arid natural areas. Existing malls, including the Carillon Mall and Library Mall, will be preserved and strengthened while new linear open spaces will incorporate their essential design principles. Large shade trees and defined landscape beds will reinforce malls, contributing to the existing recognizable sense of place. The malls are intended to be high-use flexible areas for informal recreational activities or formal events (such as graduation.)

In the future, as the campus grows, additional and improved pedestrian and bicycle connections will be required to allow convenient and efficient movement throughout campus, particularly from outlying residential areas to the inner Core Campus. These will be accommodated on converted service drives as well as along key corridors such as the Arts Mall and the proposed Science, Barn, and Eucalyptus Walks. Existing campus walks are undersized and will be widened to accommodate increased pedestrian circulation.

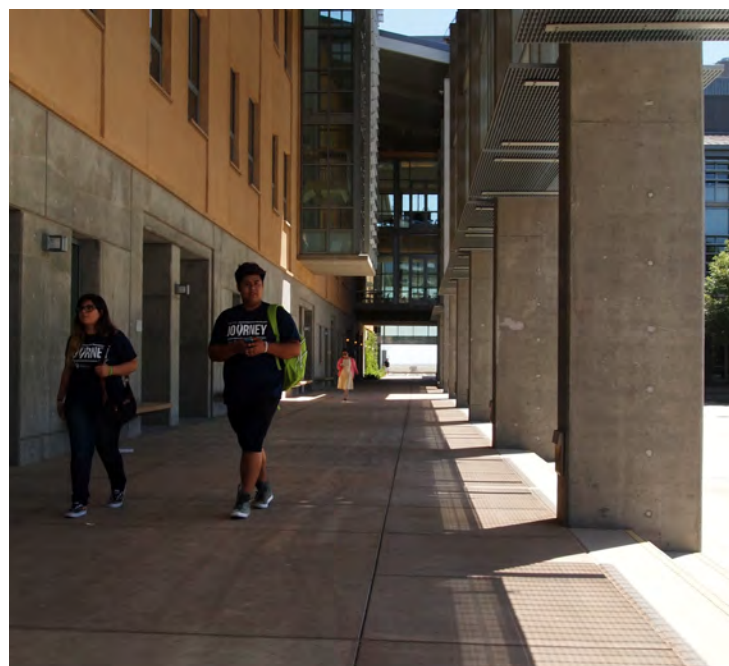


Campus malls lined with mature trees provide a pleasant pedestrian experience

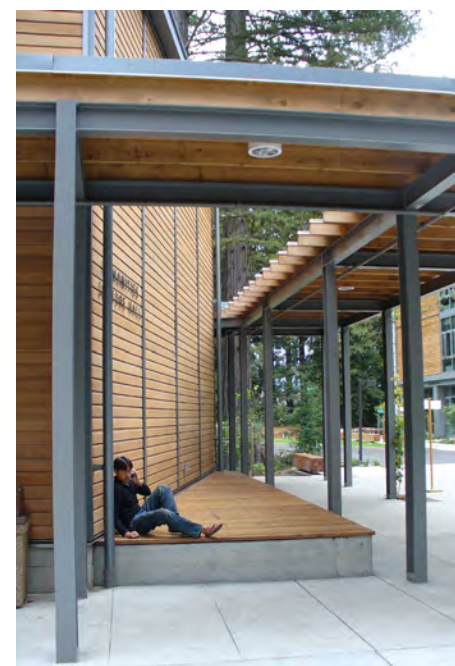
CREATE A NETWORK OF SHADED WALKWAYS

Some entries to campus buildings are shaded by arcades. These arcades create informal gathering spaces, identify the entries, and provide sheltered outdoor circulation. This strategy of marking entries reinforces a quality of informality on the campus. Exterior connections between buildings are an integral part of the campus circulation system and also create visual links. Where possible, the system of arcades will be expanded, prioritizing key pedestrian corridors, campus malls, and walks. These new arcades will actively engage buildings, provide shade and create spaces for interaction.

Existing walks will be widened where possible to safely accommodate increased pedestrian and bicycle traffic. Walks of a minimum 12 feet in width are suggested for busy campus routes. As adjacent building projects are funded, campus walkways will be upgraded. Shade trees will be added where possible to increase pedestrian comfort.



Shaded walkway, UC Merced

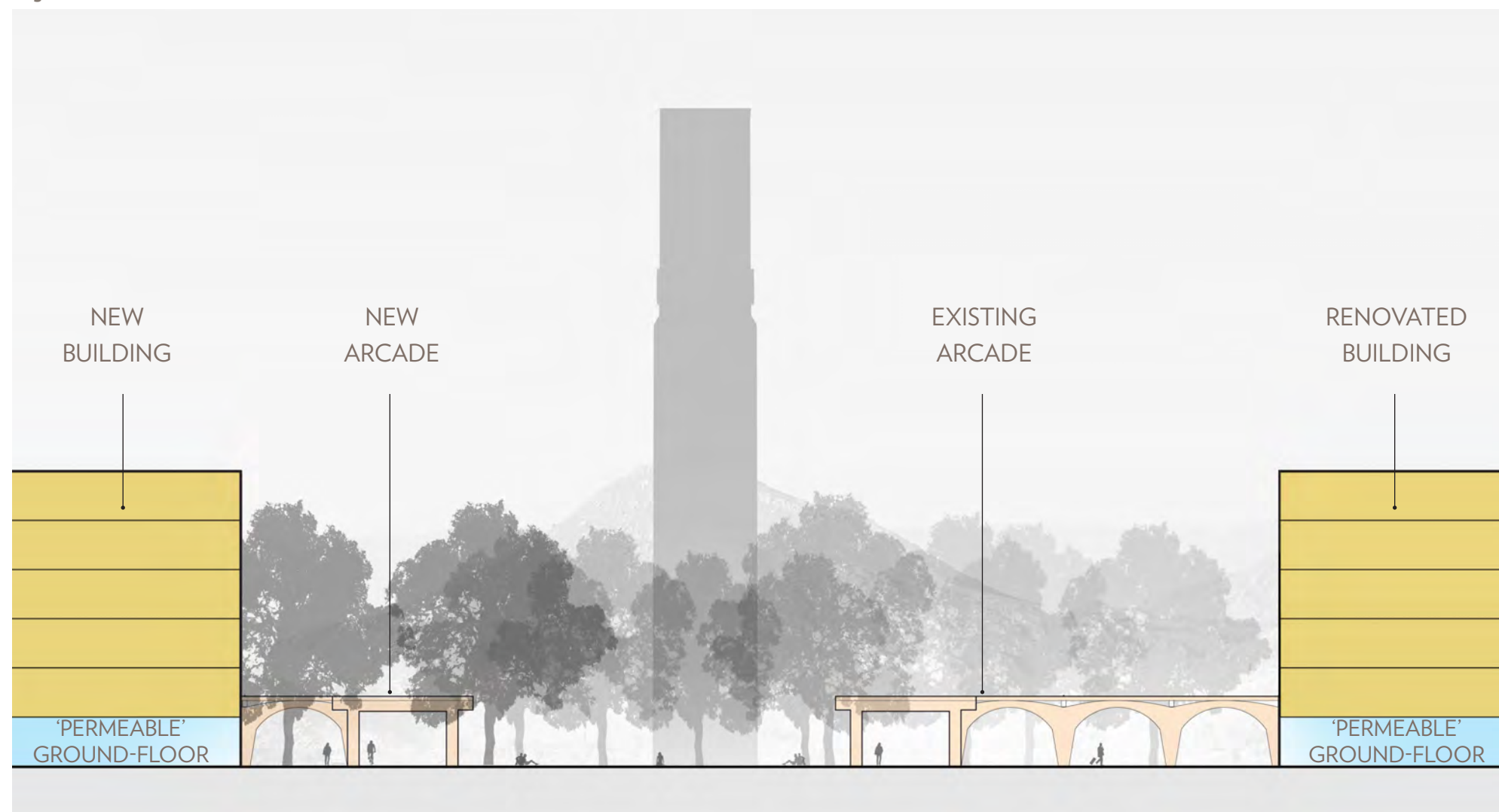


Shaded walkway, UC Santa Cruz



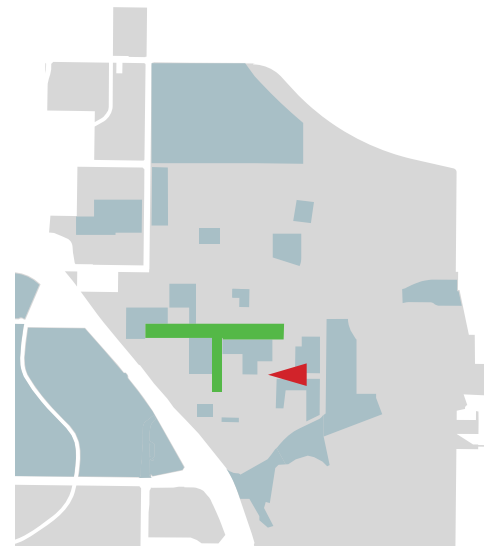
Rivera Library arcade, UC Riverside

Figure 4.3 PROPOSED LIBRARY MALL CROSS-SECTION



Solar panels create a canopy over public space outside Arizona State University's Memorial Union

Figure 4.4 PROPOSED EUCALYPTUS DRIVE ENHANCEMENTS



Key Plan
 ■ Carillon Mall & Library Mall
 ■ Opportunity Site
 ▶ Direction of View



Existing Eucalyptus Drive

GIVE PRIORITY TO THE PEDESTRIAN

The campus open space framework reinforces the campus’s north-south and east-west connections. Pathways framed by trees will be an important part of the campus structure and circulation, providing view corridors to the mountains, integrating stormwater management, wayfinding elements, and spaces for social gathering. The framework will connect a variety of spaces, including gardens, courtyards, sports fields and performance venues as well as major gathering places on campus.

The Carillon Mall and nearby proposed Opportunity Sites reinforce the campus “heart”, connected to other campus areas to the north and south via new pedestrian paths. Service access to the center of campus is essential but sometimes holds undue priority over pedestrian circulation, particularly on Eucalyptus Drive, Citrus Drive, and Science Walk, as well as on the section of North Campus Drive between the Materials Science & Engineering Building and University Lecture Hall.

Several service drives are currently gated and limited to service and other permitted vehicles only. These drives will be redesigned as integrated limited-access campus walkways. Gates will be replaced with automated bollards to encourage pedestrian use. These routes will be curbsless pedestrian and bicycle-friendly walks. They will be designed as safe mixing zones, where service vehicles travel slowly on their infrequent trips into the heart of campus. Pomona College’s 4th Avenue redesign project is a good example of similar transformation. It is important to note that the design of these walkways needs to support the weight of large service vehicles.

Future studies should explore the possibility of limiting service access at one notable vehicle-pedestrian conflict point - the junction of the Commons Mall and the service drive that runs east-west between the Bookstore and the Highlander Union Building (HUB). Service access across the Commons Mall could potentially be limited to the Pierce Hall loading area. Service vehicles would then be able to access the HUB and Café from a redesigned access area at the future extension of University Avenue into campus.



4th Avenue, Pomona College: 2014



4th Avenue, Pomona College: 2015



Mammoth Lakes Road, UC Merced

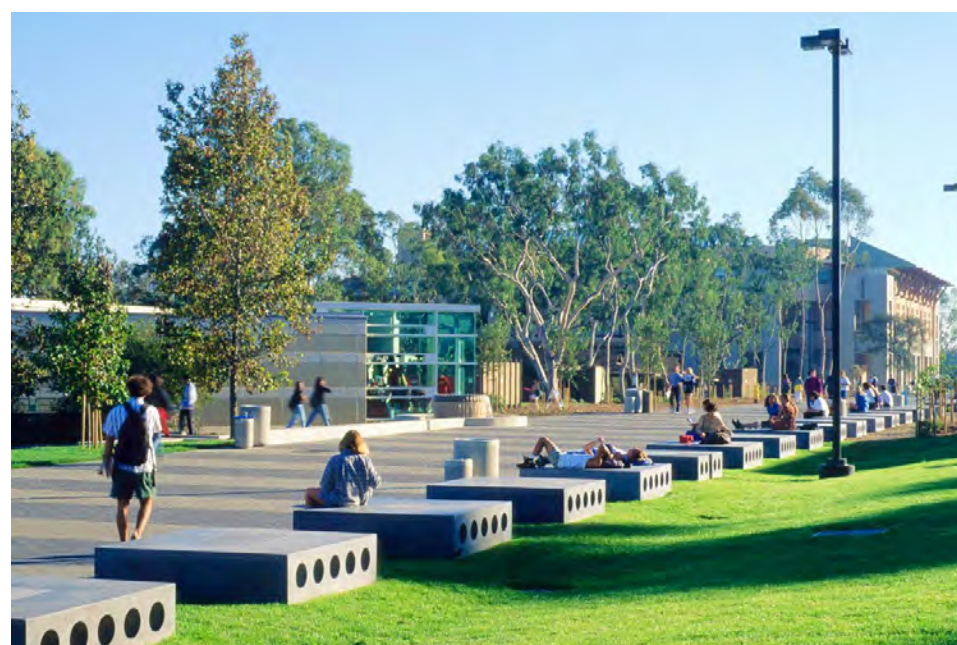
IMPROVE LINKS TO CORE CAMPUS

The addition of significant new programs and activities north of Linden Street will require new connections with the Core Campus to ensure that the campus feels cohesive. Pedestrian and bike improvements to Canyon Crest Drive and Aberdeen Drive are important components of this connectivity. A new Recreation Mall is proposed to run parallel to these two streets, between Blaine Street and the west edge of the Materials Science & Engineering Building. This mall will connect to proposed new student residential areas. It will be designed to be shared with bicycles and will be approximately 68'-86' feet wide, with a substantial central paved walkway. Pedestrian amenities such as benches and lighting will be placed along its edge. On either side of the central walkway, generous landscaped zones will facilitate transitions between the walkway and adjacent building entries and provide shade trees for pedestrian comfort. Trees along the walk will also provide linear wayfinding and campus identity for walkway users. Stormwater treatment will be provided by linear swales in these zones, treating building runoff as well as runoff from the central walkway.

The naturalistic hillsides on the southern and eastern edges of UC Riverside's campus offer a strong sense of regional identity and a stunning natural backdrop to daily life on campus. The hillsides are important habitat connectors and popular hiking destinations that provide an expansive view of the campus. Some campus research occurs and might expand in test plots in these areas. The campus adjacent to these areas accommodates diverse uses, such as the Botanic Gardens, groves of avocado, citrus and almond trees, and greenhouses. There are also several building Opportunity Sites on the south and east sides of Campus Drive. Development of these sites must respect the character and environmental sensitivity of the hillsides, while recognizing the unique challenges of building on such steep topography.

The connection to existing student housing areas to the northeast of the Core Campus will be improved (P-2). Pedestrians and bicycles will be given priority where the existing steep Health Center access road meets Campus Drive. The existing curb-tight sidewalk will be replaced with a wider sidewalk and a bike lane and the actual roadway crossing will be enhanced, possibly with a raised crosswalk, subject to future study.

Figure 4.5 PROPOSED RECREATION MALL CROSS-SECTION (P-4)

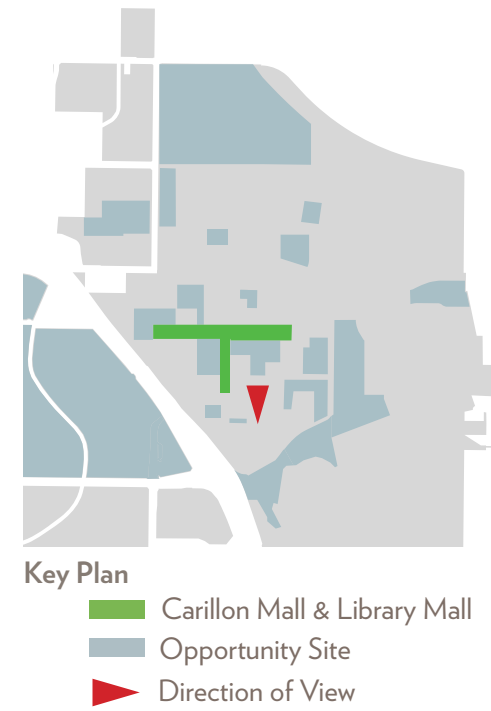


Library Walk, UC San Diego



Raised Crosswalk (proposed at P-2), Oregon State University

Figure 4.6 PROPOSED CITRUS WALK CROSS-SECTION



A key new connection will lead to Site 6: Core Campus South Extension, an Opportunity Site south of Anderson Hall at the visual terminus of Martin Luther King Boulevard with a prominent location overlooking the campus. The existing Citrus Drive will be transformed from a regular campus street, to a curbsless pedestrian and bicycle pathway - Citrus Walk - connecting the Carillon Mall to the new Opportunity Sites on the south edge of campus.

From the west facade of Anderson Hall, a new Citrus Mall is proposed, extending west from this historic building, integrating with Citrus Walk and creating a new campus space through the existing Lot 6. This new Mall will be intercepted by the southward extension of Library Mall, after it passes underneath Olmsted Hall's arches.



Shared Mall, University of Southern California



Existing Citrus Drive



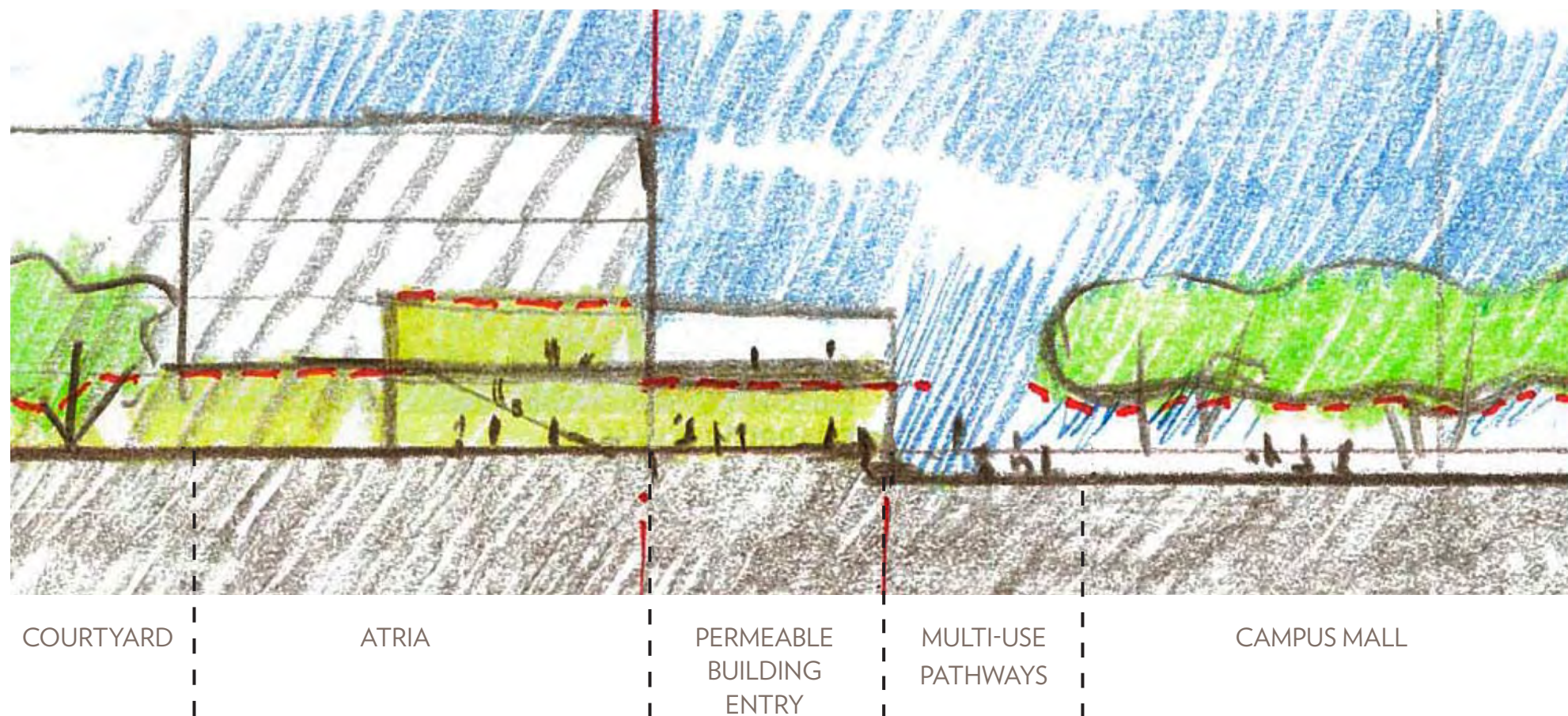
Conceptual alignment of future Citrus Mall from Anderson Hall

CONNECT OPEN SPACES AND PRIMARY BUILDING ENTRANCES

A successful campus relies on a positive relationship between its buildings and adjacent exterior spaces, creating opportunities for social engagement and impromptu communication. One of the key strengths of the UC Riverside campus is the way buildings are oriented to help define and differentiate adjacent open spaces. The integration of a building with outdoor space also establishes a hierarchy that is a critical part of the campus wayfinding system. The careful siting of new buildings will help further define open spaces, creating varied experiences across the campus, from naturalistic open spaces to formal malls to courtyards, allowing for chance meetings, informal group study and unstructured relaxation between classes.

Buildings should both define open spaces and actively engage them. It is important that ground floor levels of buildings maintain a permeable human scale and encourage activity in and around themselves. It is at the ground floor where people interact most directly with a building, so the scale of elements should be more attuned to human dimensions and perception. As Figure 4.7 demonstrates, in some locations buildings can also step down to meet important campus open spaces, softening the visual impact of greater density and increased heights.

Figure 4.7 PROPOSED RELATIONSHIP BETWEEN NEW CAMPUS BUILDINGS AND OPEN SPACE



Pierce Hall opens to the Carillon Mall



Webber Hall terminates the Carillon Mall with a prominent arcade



Highlander Plaza, UC Riverside



Courtyard seating, Claremont College

Identifiable building entrances are important campus elements that help orient users, so these entrances must be clearly marked and visible from a distance. Courtyards and plazas can create clear entry points to buildings and provide special places for both interaction and solitude. When effectively designed, courtyard spaces contribute directly to intellectual pursuit and dialogue within the community. The most successful courtyards are those that have a sense of enclosure, provide a variety of seating configurations, and provide shade and comfort to the users. Courtyards and gardens should be the most lushly planted areas on campus with plants especially chosen for their thematic, aesthetic, and aromatic qualities, as well as shade to provide a 'garden oasis.'

At key building entrances and crossroads on campus, courtyards and plazas provide a broad mixing zone for pedestrians. The areas around the Highlander Union Building are a good example of a successful paved plaza on campus, integrated with seating areas and planting beds to add shade and visual interest. New building projects adjacent to campus malls and major walks should include generous plaza spaces to allow for unencumbered circulation, especially at times of heavy pedestrian traffic, such as class changes. Within plazas, outdoor spaces will be activated with the help of furnishings, provision of wi-fi, and shade, which are all low-cost investments to support outdoor learning, collaboration, and a sense of community.



Outdoor Learning



Courtyard at Spieth Hall

4.3

Landscape Character

CLIMATE-ADAPTIVE LANDSCAPE

The campus will express its regional identity with climate-appropriate landscapes, including drought-tolerant planting that reduces the need for irrigation. Plants selected will be both native and climate-adaptive hardy species from other arid zones around the world. Recent campus projects such as Glen Mor have employed a mixed Mediterranean-desert plant palette that is highly effective for this region and climate. Broad-canopy shade trees are essential to the function and identity of campus malls, to increase shading and nearby building comfort. On campus streets and parking lots, shade trees provide needed evaporative cooling and reduce heat generated by asphalt and concrete paving.

Given UC Riverside's strength in agricultural research and botany, campus open spaces could include future demonstrations of permaculture in a variety of ways, such as by integrating edible landscapes. The campus presently has several examples of permaculture, including the use of citrus near the Humanities Building, herb gardens at Glen Mor and Watkins Hall, the Avocado and Macadamia Tree Collection and the Medicinal Herb Garden. Such spaces strengthen the campus's sense of place, remind the entire campus community of the University's research origins and provide inspiration for sustainable landscapes. The campus has a goal of reducing the use of herbicides and fertilizer. These reductions should be balanced with consideration of the amount of physical labor required for maintenance.



Examples of climate-adaptive planting



Examples of climate-adaptive planting, UC Riverside



Desert and Mediterranean plants, San Diego



Desert and Mediterranean plants, San Diego



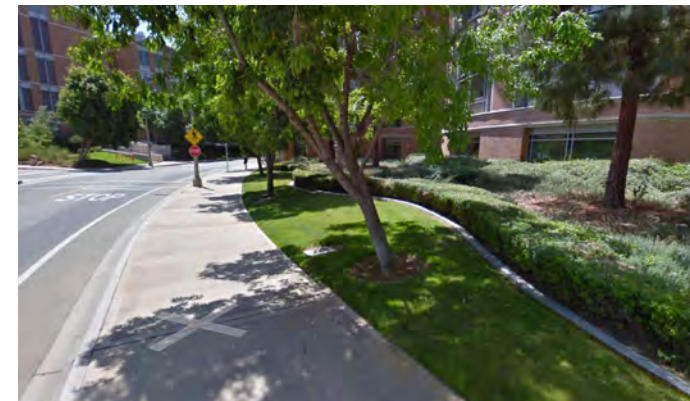
UC Riverside campus median, Big Springs Drive



Drought-tolerant median, University of Redlands



Mediterranean plants on campus



Turf irrigation often also supports trees



In places like the Carillon Mall, turf is valued for daily activities.



UC Riverside will continue to seek efficiencies in the campus irrigation system.

TURF REPLACEMENT

The UC Riverside campus character is defined by modern buildings framing a core of open grassy malls. The turf on these malls is resilient, allowing for a variety of activities, from informal studying and sports to graduation ceremonies.

New state conservation mandates require reductions in water use. Irrigated turf areas are obvious targets for these reductions. However, campus landscape staff have found that transforming turf areas with planting beds does not necessarily save water or meet conservation targets. The costs of removing turf and irrigation systems exceed the current financial benefits resulting from reducing the watering needs. At the time of publication of this Master Plan Study, campus domestic water is inexpensive due to water rights associated with the Gage Canal. As the cost of water increases over time, this benefit may not always apply.

Removing turf and associated irrigation without carefully considering how campus trees are dependent on the existing irrigation regime could also result in some shade trees dying due to lack of accustomed water. Irrigation is still generally needed when planting beds replace turf in order for the plants to get established. Through targeted turf removal, irrigation efficiency, computerized monitoring, and the use of graywater, UC Riverside will make advancements to meet the UC Policy on Sustainable Practices and state regulations.

Plant selection for future buildings will consider open space functions, including retention of turf in high-use areas such as courtyards and malls. A strategic approach to minimizing turf use on campus could include removal of turf in low-use areas as is successfully shown at Glen Mor. Future projects will be strategic about where to install new turf.

INTEGRATED STORMWATER TREATMENT

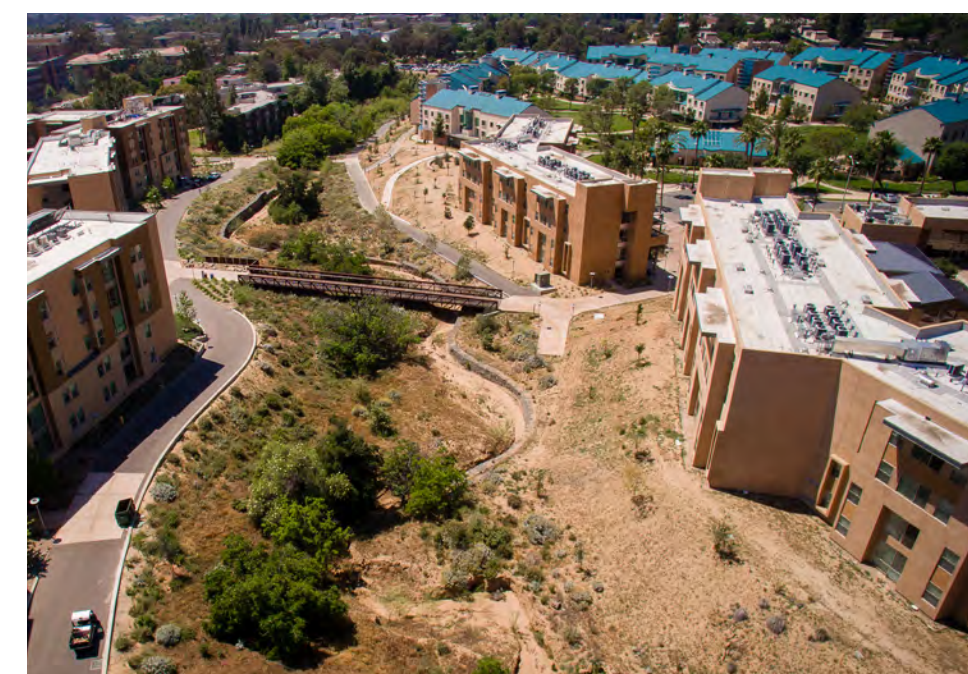
Steep, rocky, and undeveloped hillsides rise almost 2,000 feet east of campus. Natural drainages incise this terrain with arroyos which drain westwards into the Gage Basin and eventually into the Santa Ana River. The general flow of runoff on campus is in a northwesterly direction. To date, few low-impact stormwater treatment and control features have been built on campus but new state regulations require and encourage on-site absorption and treatment of campus stormwater drainage. As the campus grows and new hard surfaces are added, the additional runoff that is generated will need to be managed and treated to conform to these new state requirements.

These new regulations provide an opportunity to develop sustainable campus open spaces that outwardly and visibly express stormwater treatment functions in an integrated way. Such low-impact stormwater facilities are cost-effective and inherently sustainable. They replicate natural drainage patterns and allow plants to filter pollutants out of runoff before it flows into sensitive waterways.

Figure 4.8 UC RIVERSIDE WATERSHED

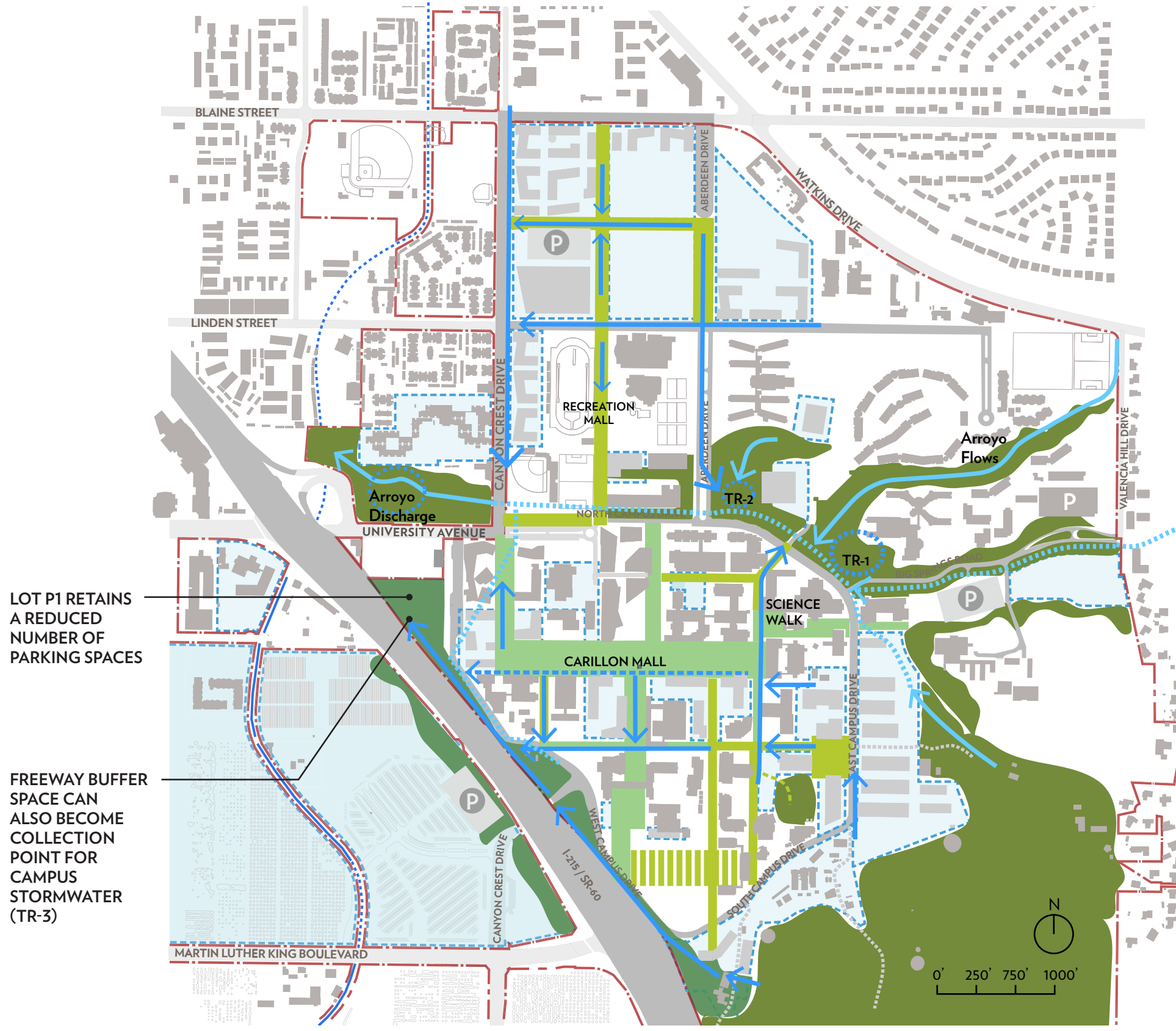


Arroyo on the slopes of Box Springs Mountains



Arroyo through Glen Mor

Figure 4.9 LOW-IMPACT STORMWATER TREATMENT FRAMEWORK



LOT P1 RETAINS A REDUCED NUMBER OF PARKING SPACES

FREWAY BUFFER SPACE CAN ALSO BECOME COLLECTION POINT FOR CAMPUS STORMWATER (TR-3)

Fig. 4.9 describes an overall strategy for integrating stormwater treatment with the campus landscape. This includes daylighting stormwater treatment in targeted places such as the Recreation Mall and Canyon Crest Drive, with the objective of generally directing treated water towards three primary treatment areas and ultimately the Gage Basin, while allowing some water to infiltrate, where soil types allow. This display of dynamic stormwater treatment complements the conveyance of runoff in large pipes underneath West Campus Drive and the arroyo on the northeast edge of the Core Campus, and south of the Materials Science & Engineering Building.

- LEGEND
- Street/Mall/Walk Stormwater Facilities
 - Primary Treatment Area
 - Existing Open Space Framework
 - Hillside and Arroyos
 - Drainage in Arroyos
 - Proposed Open Space Framework Extensions
 - Proposed Freeway Buffer

There are a number of low-impact methods to accomplish the strategy of integrated stormwater treatment. Infrastructure plans will emphasize natural infiltration and evaporation where possible to reduce water run-off during storm events. Campus paving will move towards using materials that allow rainwater infiltration where feasible, particularly for secondary paths and roads. Stormwater run-off from roofs and paving will be filtered by bio-swales, filter strips, and stormwater planters. Surface parking lots will be designed with stormwater drainage detention swales for runoff interception, filtration and storage. There are strategic locations on campus where new naturalistic stormwater treatment swales will add visually interesting spaces for contemplation that evoke the character of nearby natural areas. However, stormwater treatment within the central malls will be avoided, in recognition of the important role these spaces play in providing flexible, programmable space for a range of student activities.



Stormwater facility in roadway median, Paso Robles, CA



Stormwater swale, UC Merced



Stormwater planter integrated with sidewalk, Portland State University



Stormwater swale adjacent to campus building, Claremont McKenna College



ART IN THE LANDSCAPE

Campus art can express the intellectual inquiry, exploration, and creativity found at UC Riverside. New art and sculpture can relate to associated academic programs to enhance and highlight the learning experience. UC Riverside's Advisory Committee on Campus Art (ACCA) is tasked with creating and updating a Three Year Public Art Plan that is approved by the Chancellor and defines a vision and priorities for Public Art. ACCA members consider and make recommendations on the placement of public art on campus, and with the approval of the Chancellor engage in the solicitation and acquisition of public art.

The Master Plan Study includes recommendations for the placement of an art piece, how it will relate to its immediate surroundings and integrate with the campus context. Priority locations include focal points and pedestrian gathering areas. Placement of each art piece will relate to its immediate surroundings and integrate with its campus context, with priority locations at focal points and pedestrian gathering areas. Art can also reflect the academic focus of adjacent buildings, particularly when located within courtyards. The campus nodes identified in Chapter 3 are good locations for art to act as gateway and wayfinding elements to welcome the campus community and enhance identity.

The UC San Diego Stuart Collection of public art pieces creates focal points in the public realm.



Art at Humanities and Social Sciences Building, evokes UC Riverside's agricultural legacy



Art at Olmsted Hall, UC Riverside

4.4

Beautify and Activate Campus Edges

The UC Riverside campus edges are important elements in establishing the identity and character of the institution. They communicate the campus location and identity to the surrounding communities, visitors, and students, while reminding the campus community, as they arrive, of the memorable setting for their education and work. The edges of campus also serve to buffer the campus from adjacent noise and incompatible uses. The study proposes the following specific improvements to campus edges.

IMPROVE CAMPUS IDENTITY AND WAYFINDING

There are ways that the campus landscape will also become part of wayfinding, by ensuring that key malls and walks into the Core Campus are visible and identifiable from the campus perimeter. The Arts Mall and proposed Recreation Mall, Citrus Walk, Science Walk and Eucalyptus Walk are important campus open spaces that extend to the campus perimeter and will provide a legibility that helps users to understand the structure of campus. Wayfinding is also assisted through the use of distinctive plantings that signify important places utilizing larger trees, allées or specimen plantings that provide seasonal color.

The Campus Sign Program, originally developed in 2008, has only been partially implemented. The program's recommendation to implement parking lot signs has been highly effective in directing vehicular movement. However, only a limited set of recommendations specific to pedestrian wayfinding have been implemented. The monument signs proposed at primary campus entrances have not been introduced. The recommendations of the Campus Sign Program should be reviewed for continued relevance and adjusted where needed, to fit the planning framework of the Master Plan Study.



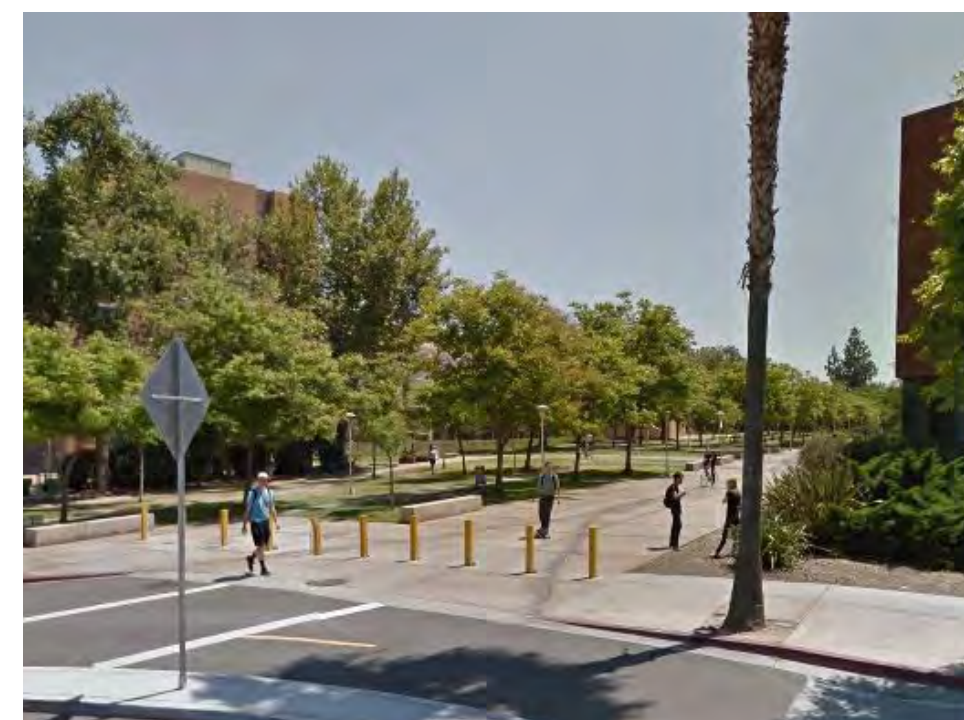
Well-planted campus street, Claremont McKenna College



Campus monument integrated with landscape

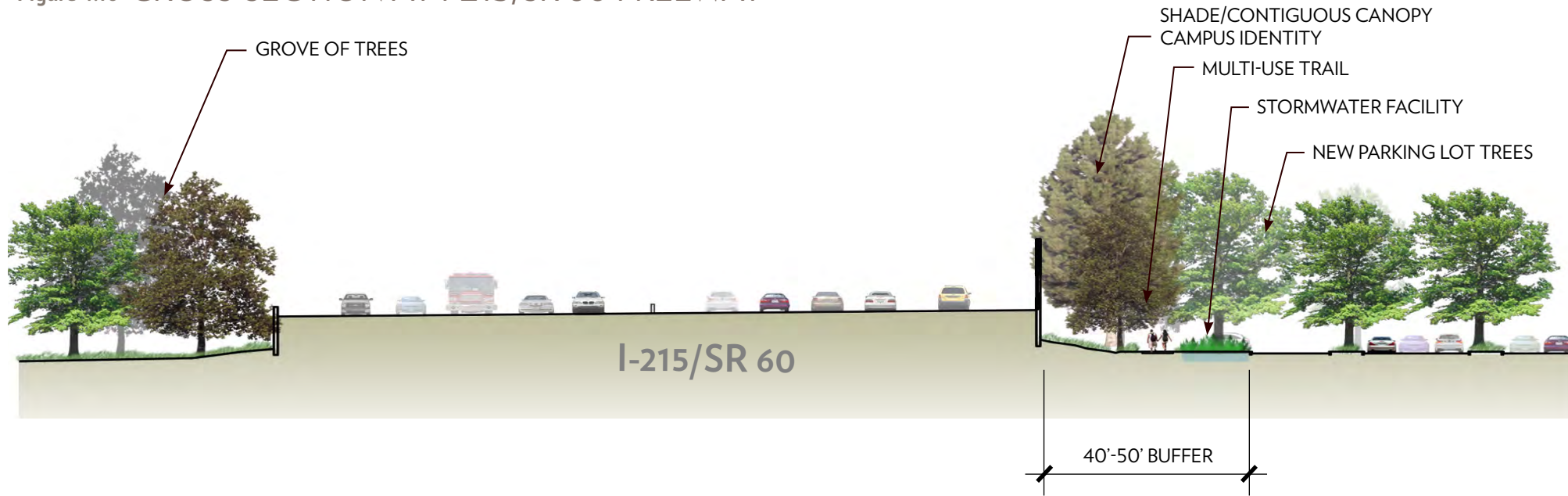


Large specimen trees, such as this Stone Pine next to Anderson Hall, help provide identity



The Arts Mall at University Avenue provides a view into the heart of campus

Figure 4.10 CROSS-SECTION AT I-215/SR 60 FREEWAY



CREATE LANDSCAPED FREEWAY AND PARKING BUFFER

The Planning Team proposes mitigating noise and visual impacts from the I-215/ SR-60 freeway that bisects campus through a landscaped buffer that will serve a variety of functions. In addition to providing a verdant, shaded area to help mask the sound wall and filter freeway pollutants, this buffer will also aid in enhancing the campus identity to passersby who currently see only glimpses of the Belltower and the Humanities and Social Sciences Building tower. A new green, landscaped transition zone adjacent to the freeway will convey the sense of the campus as an oasis beyond the sound wall. This landscaped transition zone is intended to be extended along the entire freeway edge, resulting in a connected tree canopy to the hillside open space south of the Core Campus. On the west side of the freeway, a grove of trees will be planted, further improving campus identity.

Figure 4.11 PLAN OF PROPOSED CAMPUS BUFFER AT LOT 1



Parking Lot 1, currently



Parking Lot 1 with new landscape

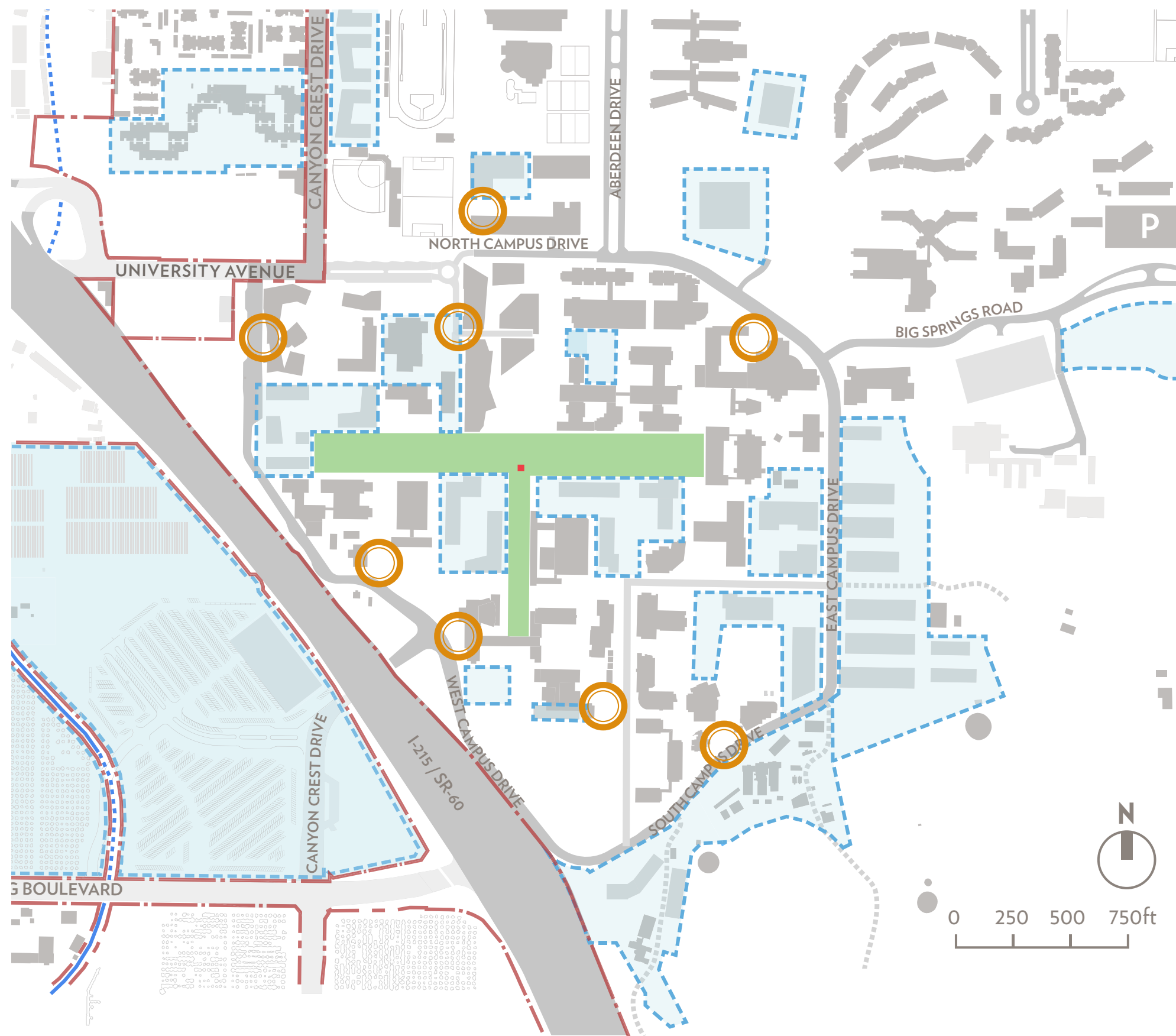
The transition zone will be a broad swath of naturalistic landscape, including space for a linear stormwater detention facility and a multi-use path serving as an off-street link along the west edge of the campus. Portions of existing Parking Lot 1 will be planted with new trees and shrubs to mitigate heat-island effects and improve the appearance of this campus gateway. (See Figs. 4.10 and 4.11)

The new landscaped transition zone, stormwater facility, and parking lot plantings would require removal of up to 200 parking spaces from Lot 1 and associated parking to the south such as Lots 4 and 5. A wider perceived buffer will be accomplished by upgrading adjacent surface parking lots and by adding shade trees, which will capture rainwater, reduce the reflectivity of lot surfaces, and thus make the pedestrian experience within the lots more comfortable. Final dimensions will be determined though future detailed design studies.

SCREEN SERVICE FUNCTIONS

Views of loading docks at several locations, including at the Lothian Residence Halls along Big Springs Road and at the Arts Building on West Campus Drive, negatively affect visual perceptions of campus. Future buildings on the campus perimeter will be designed to place service access away from highly visible campus gateways and pedestrian walks. Existing loading docks, such as the University Theater, will be screened with additional landscape or decorative walls. The campus should also study ways to screen outdoor equipment such as transformers and generators as well as trash and recycling dumpsters, and consider standards and guidelines for future building projects that encourage careful placement of this equipment. See Section 5.3 in Chapter 5 for more detail on loading and service.

Figure 4.12 CORE CAMPUS PERIMETER SERVICE AREAS TO BE SCREENED





Fenced service yard, UCLA



Landscape edge to service yard, UCLA



Landscape edge to loading dock, Claremont College



Brick screen wall, UC Davis



Landscape serves to disguise sunken service access, University of Washington



Brick wall screening service yard at Chung Hall, UC Riverside

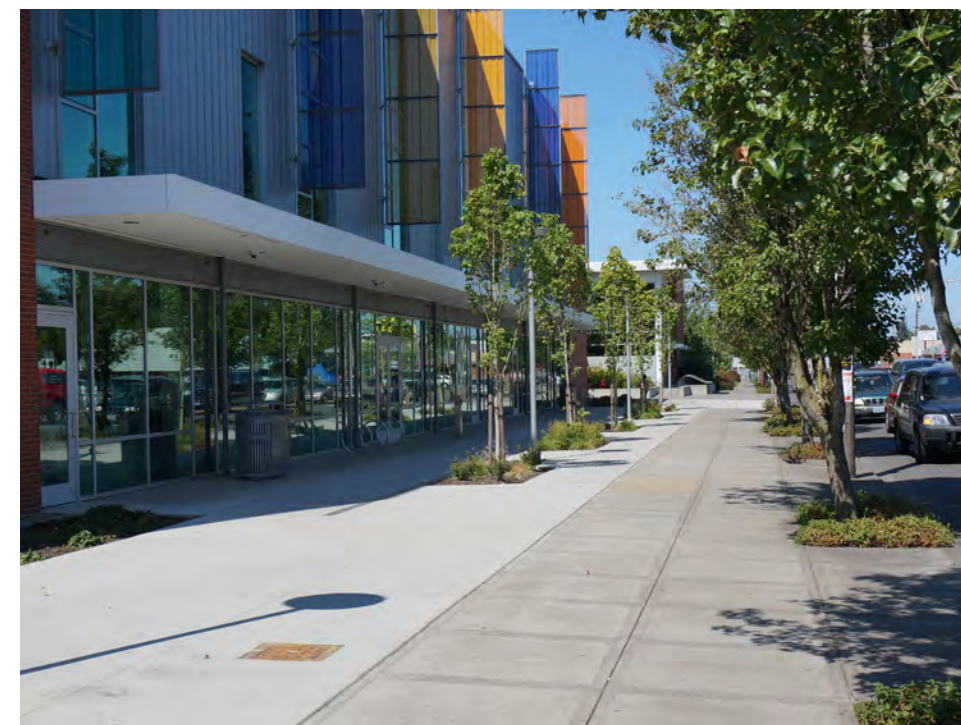
4.5

Create Complete and Pedestrian-Friendly Campus Streets

Equally important to creating an inviting and legible edge to campus is the need to improve streets leading to campus and along its perimeter, particularly University Avenue, Canyon Crest Drive, Blaine Street, Linden Street, and Campus Drive. The streets should be ‘complete’, meaning carefully designed for transit, pedestrians, and bicycles, instead of only private automobiles. These streets have been improved in recent years, with wider sidewalks and a protected bicycle lane on Canyon Crest Drive, but they can still be further reconfigured to provide a more welcoming identity. With UC Riverside occupying space in the University Village area and on the west side of Canyon Crest Drive, it is essential to provide pedestrian and bicycle-friendly streets that are safe to traverse. These improvements should occur through partnerships with CalTrans and the City of Riverside. These streets will also be integrated with the campus stormwater treatment system, with open vegetated planters serving as a linear conduit for stormwater in some places, such as along the east edge of Canyon Crest Drive.



On-street parking, bike corrals, and planter boxes create a protected two-way cycle track, Vancouver B.C.



Walkable street and retail frontage on campus edge, Portland Community College

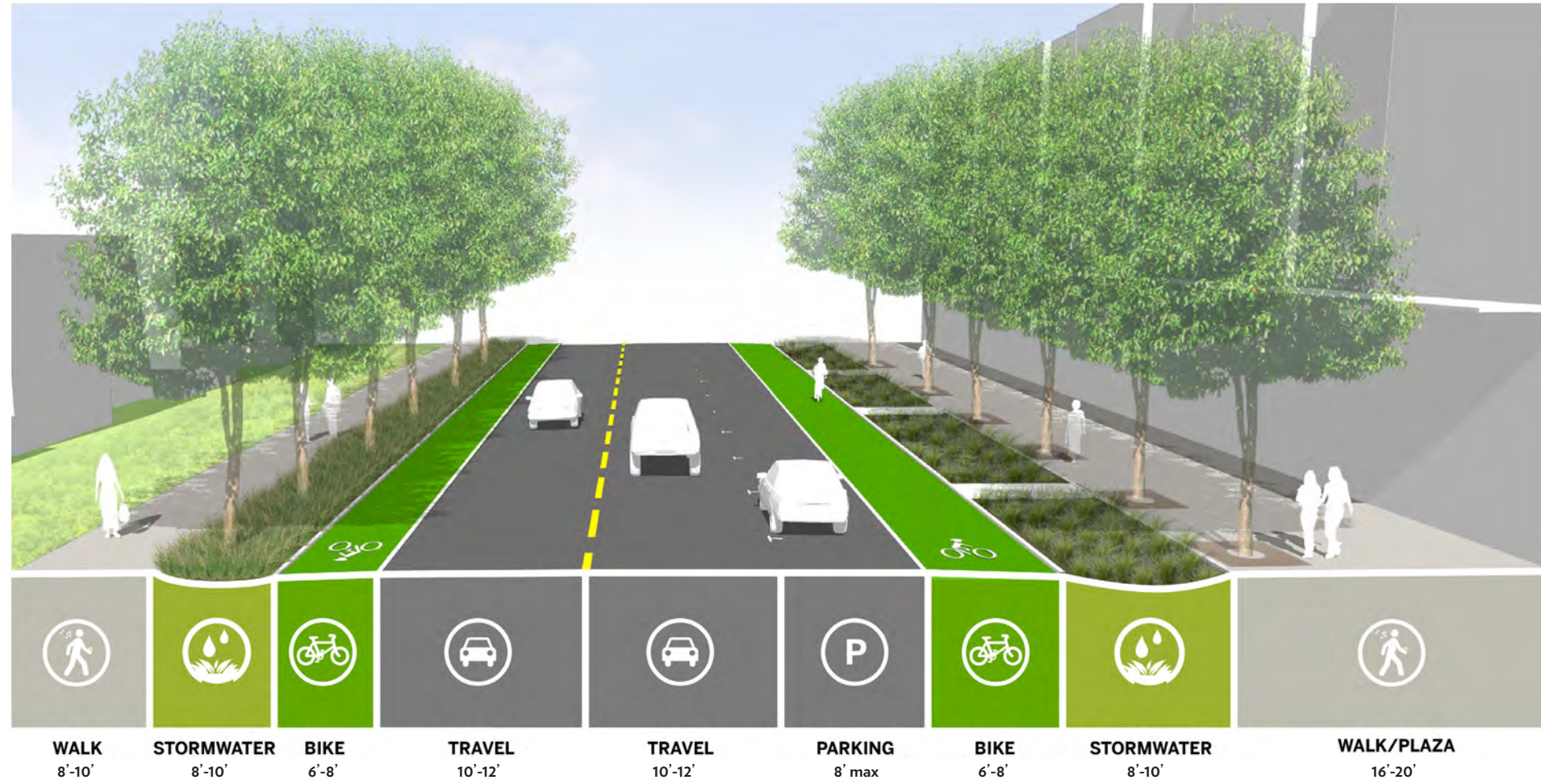


Example of parking outside ‘cycle track’ bike lane, New York City



Example of stormwater swale integrated with street edge, Portland

Figure 4.13 PROPOSED CANYON CREST DRIVE EHNANCEMENTS (P-3)



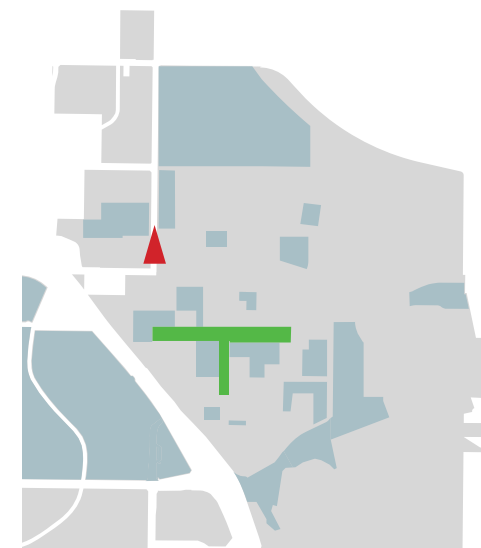
CANYON CREST DRIVE

Canyon Crest Drive north of University Avenue is a public street and an important access route to campus from residential areas to the north and west. The street has been improved in recent years with wider sidewalks and a protected bicycle lane on the east edge. The Planning Team proposes a further transformation of Canyon Crest Drive to reflect growing pedestrian and bicycle use, as well as the anticipated increased intensity of adjacent land uses. UC Riverside should work with the City of Riverside to create improvements to this important entry to campus.

The existing right-of-way (ROW) is approximately 80-85', so additional ROW may be needed to accommodate the design shown in Fig 4.13. Travel lanes should be narrowed to standard widths and the existing excess lane width re-allocated. Wider sidewalks will provide comfortable pedestrian access to campus. Bicycle lanes will be included on both sides of the street. On-street parking will be provided on the east side of the street, next to travel lanes to buffer bicycle traffic from moving vehicles. Stormwater swales will be added to both sides of the street to convey runoff to campus treatment areas and the Gage Basin. This configuration will be re-visited and confirmed, along with all other campus bike infrastructure, in a future detailed Bicycle Master Plan Study.



Canyon Crest Drive today, looking north



Key Plan

- Carillon Mall & Library Mall
- Opportunity Site
- Direction of View

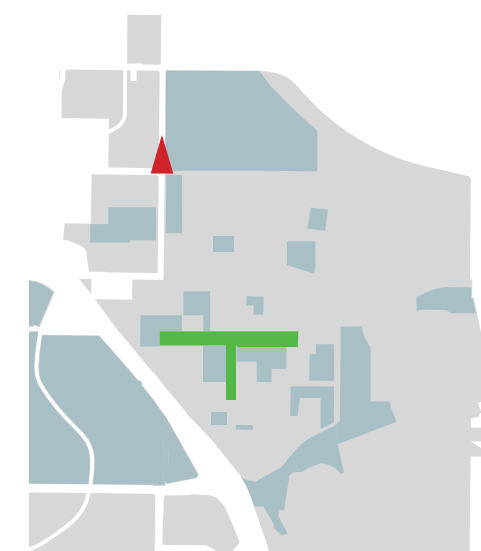
CANYON CREST DRIVE NORTH OF LINDEN STREET

Canyon Crest Drive north of Linden Street will be a similar configuration to its cross-section to the south, but will reflect future adjacent land uses. (The existing 80' ROW will require an additional 5' on each side to accommodate the design shown in Fig 4.14) Should the Campus Events Center be built at the northeast corner of Linden Street and Canyon Crest Drive, the sidewalks adjacent to the future event center will be widened similar to the more urban condition closer to campus. On-street parking will be provided on both sides of the street, with the west side possibly providing some parking for student housing. Stormwater swales will be added to both sides of the street, conveying runoff south to campus treatment areas and the Gage Basin. Bicycle lanes will be provided on both sides of the street, adjacent to the curb and protected from travel lanes by on-street parking. This configuration will be revisited and confirmed, along with all other campus bike infrastructure, in a future detailed Bicycle Master Plan Study.

Figure 4.14 PROPOSED CANYON CREST DRIVE ENHANCEMENTS NORTH OF LINDEN (P-3)



Canyon Crest Drive north of Linden, today



Key Plan
 Carillon Mall & Library Mall
 Opportunity Site
 Direction of View

Figure 4.15 PROPOSED ABERDEEN DRIVE ENHANCEMENTS



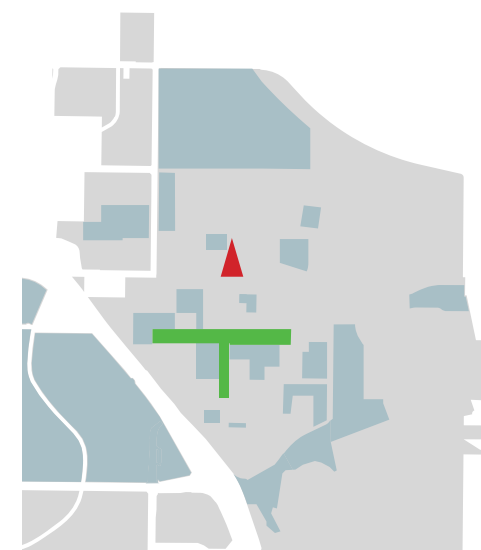
ABERDEEN DRIVE AND BIG SPRINGS ROAD

Aberdeen Drive is a campus street and has excess space, currently devoted to vehicles, that will be re-allocated. Wide travel lanes will be re-striped to add more generous bike lanes. Current curb-tight sidewalks will be replaced with wider walks separated from the roadway by planting strips with new shade trees. Within the central median, some of the legacy turf will be replaced with new drought-tolerant plantings, while retaining the signature palm and citrus trees that provide an evocative entrance to campus and honor UC Riverside’s research legacy. Within this median, linear stormwater swales will also be added to treat some of the stormwater that is conveyed in the pipe underneath Aberdeen Drive. As new housing is built adjacent to Aberdeen Drive, the campus should explore strategies to focus pedestrian crossings to specific locations to avoid cut-through paths on the median and ensure pedestrian safety.

Big Springs Road, another campus street, will also be redeveloped. It currently has bicycle lanes and a generous stormwater swale along much of its southern edge (redesigned as part of a campus flood control and arroyo restoration project.) Some of the current roadway will be reclaimed for wider walks on the north side to facilitate safer pedestrian travel from the east. Both streets have a landscaped central median that serves to enhance the identity of campus entries, but the Aberdeen median is continuous and is particularly important in expressing the character of the campus and its setting.



Aberdeen Drive, today



Key Plan

- Carillon Mall & Library Mall
- Opportunity Site
- Direction of View

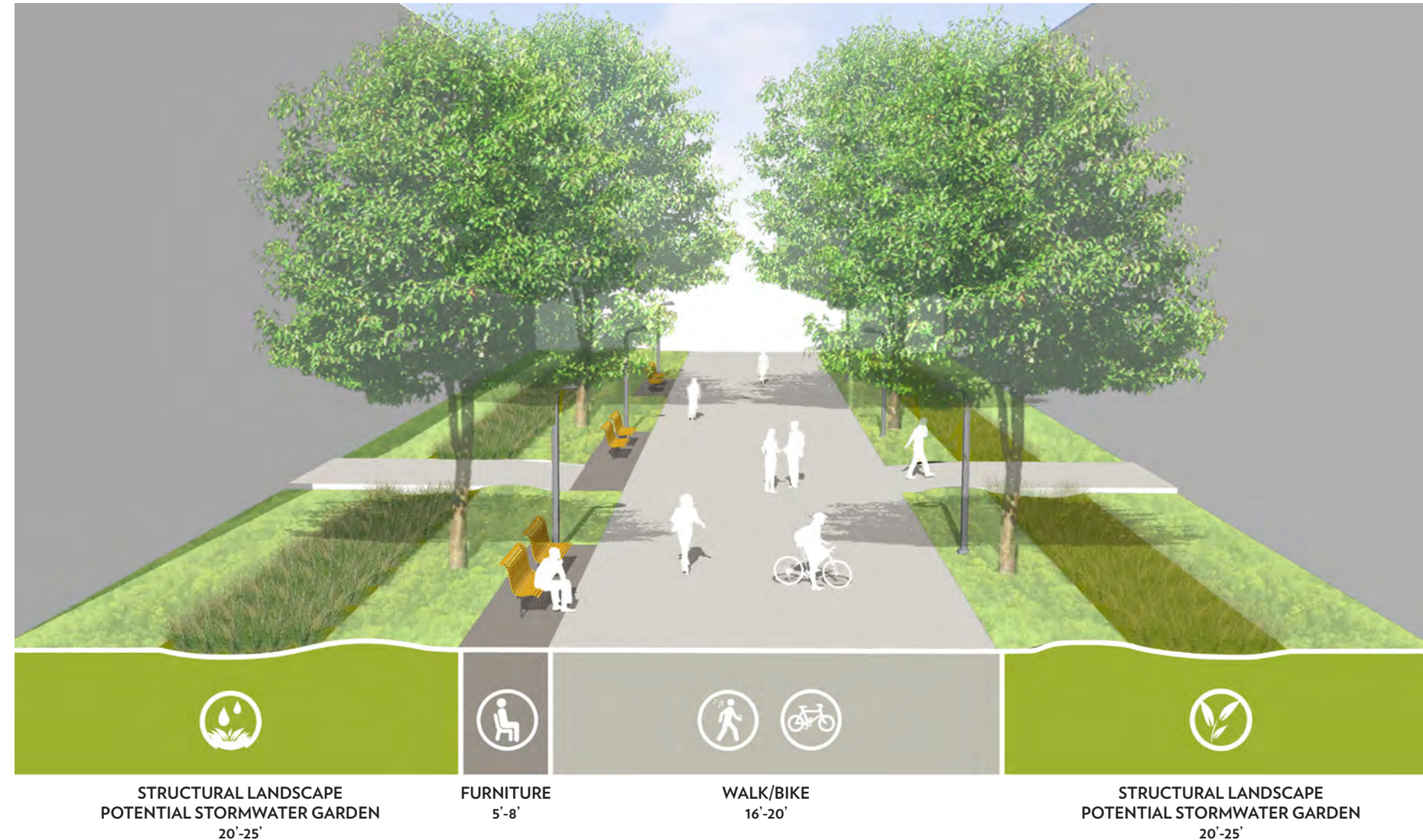


Big Springs Road

ABERDEEN DRIVE EXTENSION NORTH OF LINDEN STREET

Aberdeen Drive terminates at Linden Street. As a primary corridor into the campus, it is logical to continue the alignment of Aberdeen Drive to the north as a walk for pedestrians and bicycles to access proposed student housing in the North District. This may accommodate as much pedestrian and bicycle traffic as the parallel Recreation Mall to the west. This future walk will be similar in character to Recreation Mall, with adequate width to accommodate shared circulation between bicycles and pedestrians. Benches, tables, and lighting will be located on the edges, with planting pockets interspersed. This corridor will also accommodate some open stormwater treatment swales. The future detailed design of this corridor should ensure that it provides access to adjacent recreation fields. At the transition point to the existing Aberdeen Drive, a gateway landscape feature will be designed, as well as a clear and safe crossing at Linden Street.

Figure 4.16 PROPOSED ABERDEEN DRIVE EXTENSION NORTH OF LINDEN STREET



View north of Linden Street, today (Aberdeen Drive terminates at Linden)

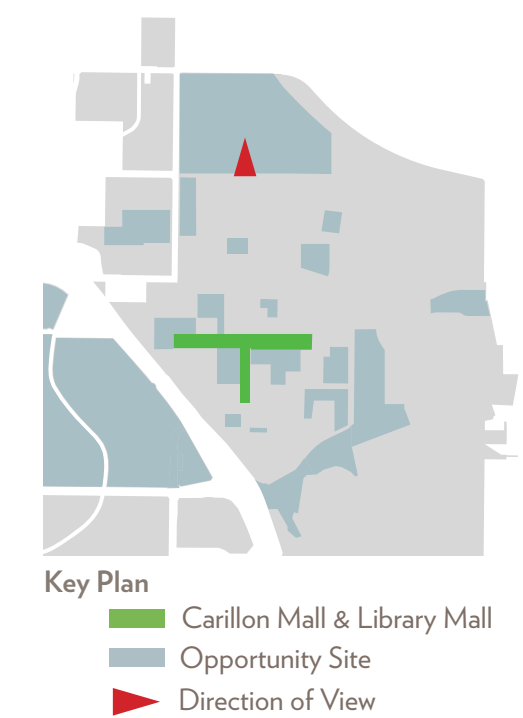
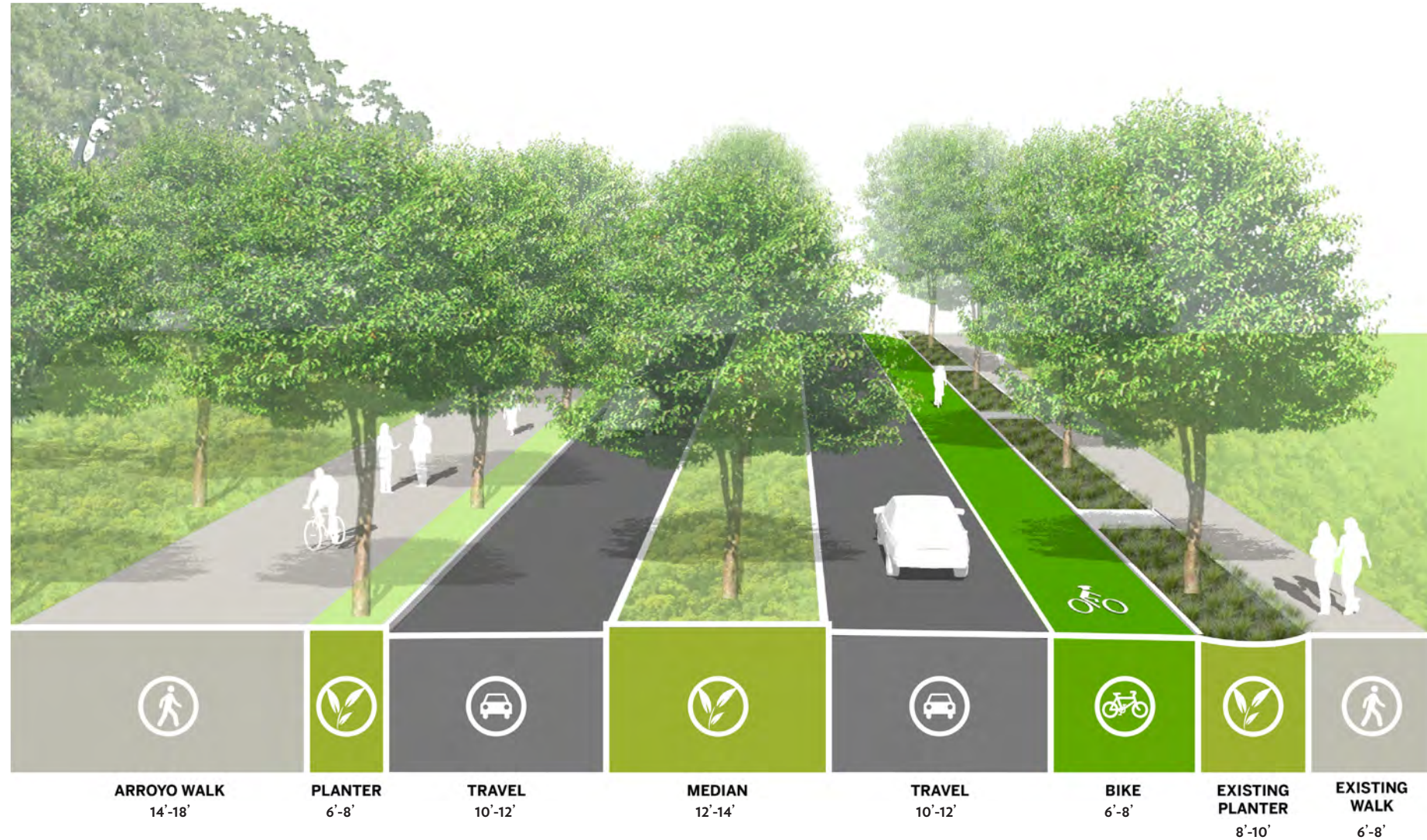


Figure 4.17 PROPOSED UNIVERSITY AVENUE ENHANCEMENT (P-1)

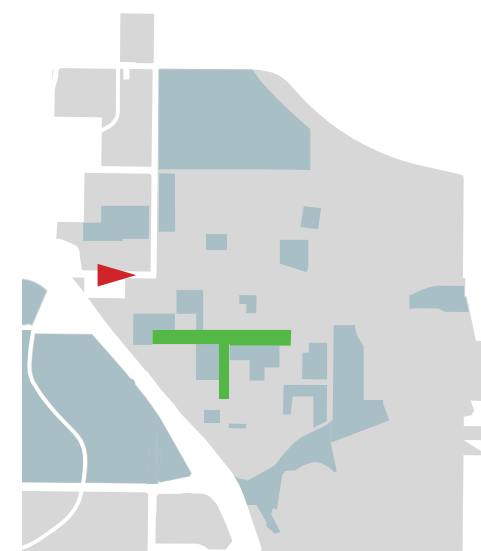


UNIVERSITY AVENUE

This city street, long viewed as the “front door” to UC Riverside, is the primary campus approach from downtown Riverside and from south and northbound I-215/SR-60. The roadway presently has irregular street tree plantings and excess roadway width within an approximately 80’ right of way. Pedestrian access along this route provides challenges, with narrow sidewalks and limited street crossings on a heavily-traveled corridor between the University Village area and the Core Campus. It has the potential to become an important gateway to campus with streetscape improvements. Figure 4.17 describes improvements such as a planted median, widened sidewalks (especially on the north side), new street trees and bike lanes that would not only clarify wayfinding, but also contribute to a sense of entry to the proposed Mobility Hub and the unique place that is the UC Riverside campus. The campus will work with the City of Riverside and CalTrans towards implementing improvements.



University Avenue today, looking east



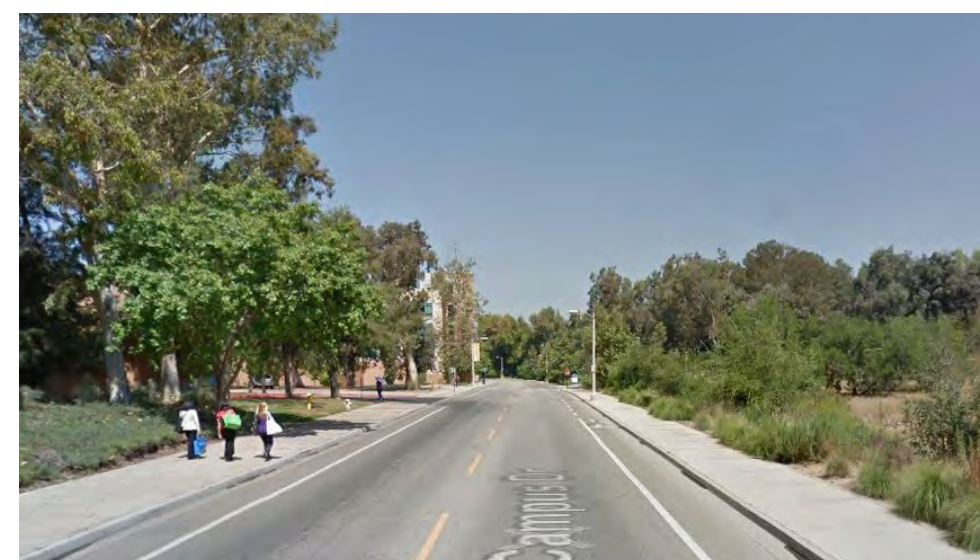
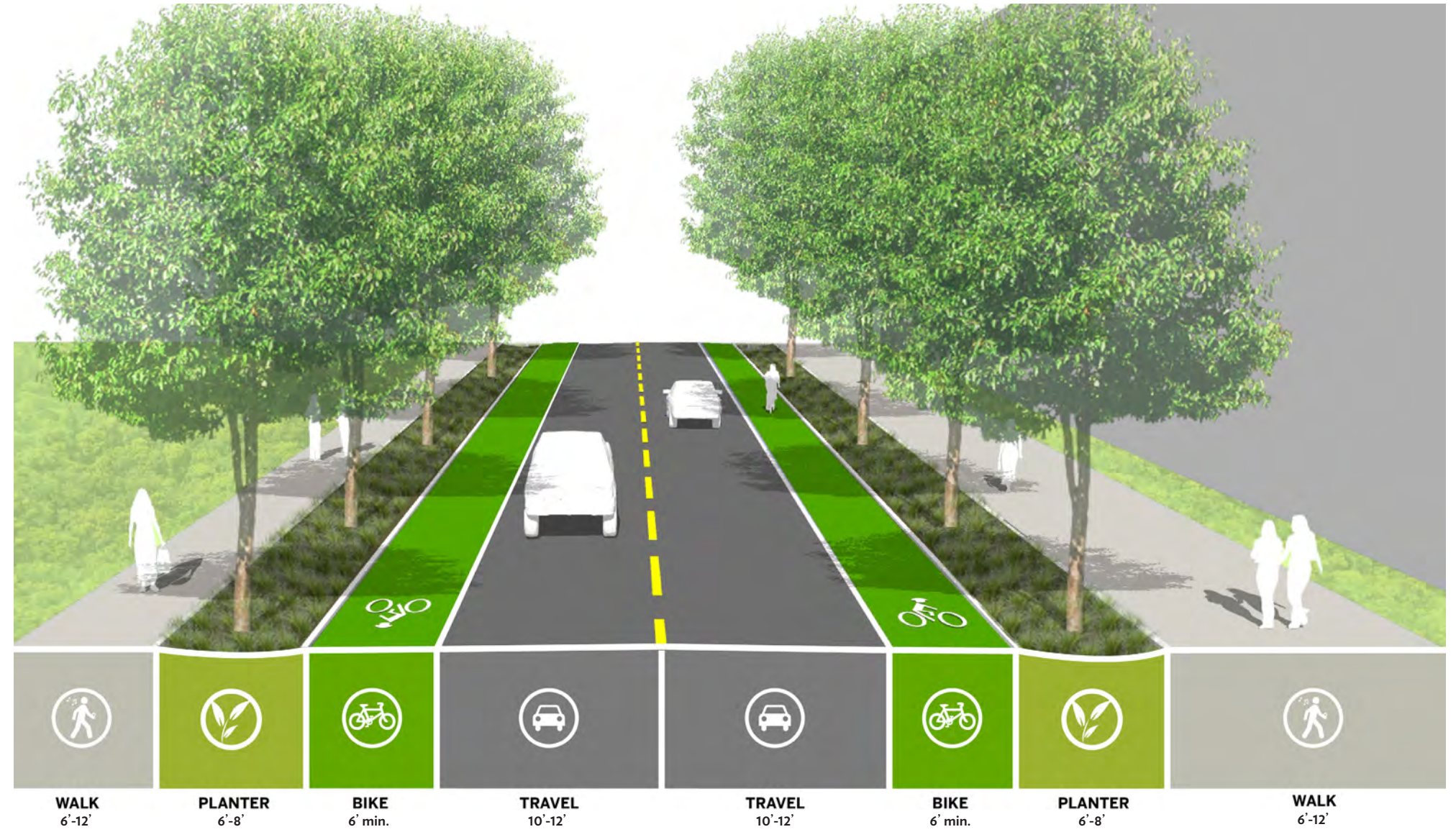
Key Plan

- Carillon Mall & Library Mall
- Opportunity Site
- Direction of View

CAMPUS DRIVE

Within the campus itself, existing campus streets will be transformed into more attractive and safer multi-modal circulation elements. Campus Drive is currently a non-descript, auto-oriented street that feels like a service drive in places, particularly on the south edges of campus. Campus Drive serves as an important loop road for the campus, connecting east and west areas and linking major parking lots. With new development south of Campus Drive, this street will be more of a front door to new buildings on the southern Opportunity Sites and can help to integrate these sites with the Core Campus. The street will be improved incrementally along with adjacent building projects to provide a more pedestrian and bicycle-friendly environment. Current curb-tight sidewalks will be separated from cars with the addition of a planting strip. Space for shade trees will be added to shade the sidewalk and roadway. Existing bicycle lanes will be widened, while auto travel lanes will be narrowed to slow traffic.

Figure 4.18 PROPOSED CAMPUS DRIVE ENHANCEMENTS



Campus Drive, today





Citrus Experiment Station (c. 1930), now known as Anderson Hall

