4.1 Aesthetics

This section evaluates the potential impacts of the proposed 2021 LRDP related to aesthetics, including potential impacts on scenic vistas, visual character and quality, and impacts from light and glare.

4.1.1 Environmental Setting

Regional Setting

The UCR campus is located on the eastern side of Riverside, in western Riverside County, California, an urbanized area surrounded by natural landscape features, hills, ridgelines, and parkland. The higher elevation hills shape the visual outline of the city's viewshed. Specifically, the La Sierra/Norco Hills, Mount Rubidoux, Box Springs Mountains, Sycamore Canyon, and the many smaller ranges south of the city provide a visual backdrop as viewed from streets, buildings, and open spaces. The Santa Ana River watercourse and riverbed is just north of the city's boundary line and serves as a significant natural habitat for many species of birds and other animals. It also forms a visual landmark for visitors and residents who can view this river (City of Riverside 2007a).

Riverside is characterized by a pattern of auto-oriented, low- to medium-density land uses in an established urban environment typical of southern California, with areas of higher density and diverse uses in the downtown area, along Market Street and Mission Inn Avenue, approximately 3 miles from campus.

Parks and open space flank both sides of the northeastern area of the city, with Mount Rubidoux Park and Fairmount Park on the western side and Box Springs Mountain Reserve Park and Sycamore Canyon Wilderness Park on the eastern side. Mount Rubidoux is an approximately 1,331-foot-tall peak just west of downtown Riverside that offers views of the city and surrounding area, trails, and historic landmarks such as the Peace Bridge and the Sierra Cross (Rivers and Lands Conservancy 2018). Sycamore Canyon Wilderness Park, approximately 0.7 mile southeast of West Campus, is an approximately 1,500-acre park of natural lands with trails and the Ameal Moore Nature Center. The Hidden Valley Wildlife Area, just south of the Santa Ana River, is an approximately 1,500-acre hilly nature preserve with public access trails and a nature center. It rests largely in the unincorporated county, but the eastern edge falls within the city boundary.

Riverside Municipal Airport flanks the city's northern boundary on the western edge of the city, near where Central Avenue intersects Jurupa Avenue. This area also features a mix of industrial uses, undeveloped lands, commercial uses along Jurupa Avenue, and single- and multi-family residential development. SR 91 bisects the east and west parts of the city, transitioning to I-215 at its northern terminus and continuing to Orange County and Los Angeles in the west. Where this corridor occurs in Riverside, higher residential and commercial density coincides. SR 91 and the I-215/SR 60 freeway intersect in the middle of the northeastern area of the city, which is largely developed with office and industrial parks east of I-215, northwest of the campus.

The southeastern part of Riverside is characterized by suburban neighborhoods, educational uses, and commercial and office uses along Magnolia Avenue and Arlington Avenue. The Arlington Heights neighborhood in the southwestern area of the city is known as Riverside's greenbelt. Victoria Avenue is an arterial boulevard with a large median lined with eucalyptus, willow, and palm trees, including flowers and other ornamental plants. The roadway and several historic homes along this avenue are listed on the National Register of Historic Places (City of Riverside 2007a). The

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approximately 377-acre California Citrus State Historic Park is east of Victoria Avenue, at Van Buren Boulevard and Dufferin Avenue. It forms this area's prominent parkland, with citrus groves, a segment of the historic Gage Canal, a museum, visitor's center, and event facilities (Friends of California Citrus Park 2020). Agricultural and equestrian businesses in the Arlington Heights district, southeast of Victoria Avenue, give way to the hillside residential neighborhoods further east.

Visual Character – West Campus

West Campus is adjacent to residential neighborhoods, retail, and commercial areas along University Avenue, Martin Luther King Boulevard, Le Conte Drive, Canyon Crest Drive, Iowa Avenue, and Chicago Avenue. West Campus is generally bounded by University Avenue on the north. The University Avenue corridor is lined with tall palm trees, eucalyptus trees, and ornamental landscape and features a mix of commercial, hospitality, and residential development. Two- to four-story, multi-family residential development are interspersed with commercial shopping centers, banks, and other neighborhood-serving uses. University Avenue continues east under the elevated I-215/SR 60 freeway and the underpass features a mural on both walls.

Martin Luther King Boulevard traverses West Campus in an east-west direction and bounds a portion of West Campus on the north. Martin Luther King Boulevard is lined with palm trees in the West Campus segment. Residences north of Martin Luther King Boulevard and west of West Campus are mostly single-story ranch-style structures on small lots. Residences located south of Martin Luther King Boulevard, west of West Campus, are typically two-story structures on small, landscaped lots with central and linear community green space and recreational amenities. West Campus is bounded by Le Conte Drive on the south with a mix of trees and ornamental landscape. Single-family residential development is located south of Le Conte Drive except for the United States Department of Agriculture Forest Service Southwest Research Station with single-story buildings toward the eastern end of Le Conte Drive, at the corner of Monte Vista Drive and Canyon Crest Drive. West Campus is bounded by Canyon Crest Drive on the east with a mix of trees and ornamental landscape. The northern segment of Canyon Crest Drive connects to East Campus under the elevated I-215/SR 60 freeway. One- to two-story single-family residential development and a church are located east of Canyon Crest Drive, across from West Campus. A mix of single-family residential development, multi-family development, retail, commercial uses, and undeveloped lands are located along Canyon Crest Drive south and southeast of West Campus.

lowa Avenue traverses the northern half of West Campus in a north-south direction, north of Martin Luther King Boulevard with a mix of trees and ornamental landscape. A mix of multi-family residential development, retail, and commercial uses are located along lowa Avenue. These structures are up to four stories tall, with some parking structures up to six levels. Iowa Avenue also fronts the new California Air Resources Board (CARB) Consolidation Facility which includes approximately 400,000 sf of new structure, which is up to approximately 45 feet high (CARB 2020). The CARB facility provides office space, vehicle emission testing facilities, laboratories, and an auditorium. West Campus is bounded by Chicago Avenue on the west with a mix of trees and ornamental landscape. Single-family residences, an assisted living facility, commercial shopping centers, and the Victory club golf course are located along Chicago Avenue. Refer to Figure 4.1-1 for a list of the streets and roadways described above.

Shade and shadow are also a component of visual character and occur when there is blockage of direct sunlight by existing and proposed structures. There is currently some development on or around West Campus, including the recently constructed CARB Facility, existing residential development, solar panels, and landscaping/agriculture.

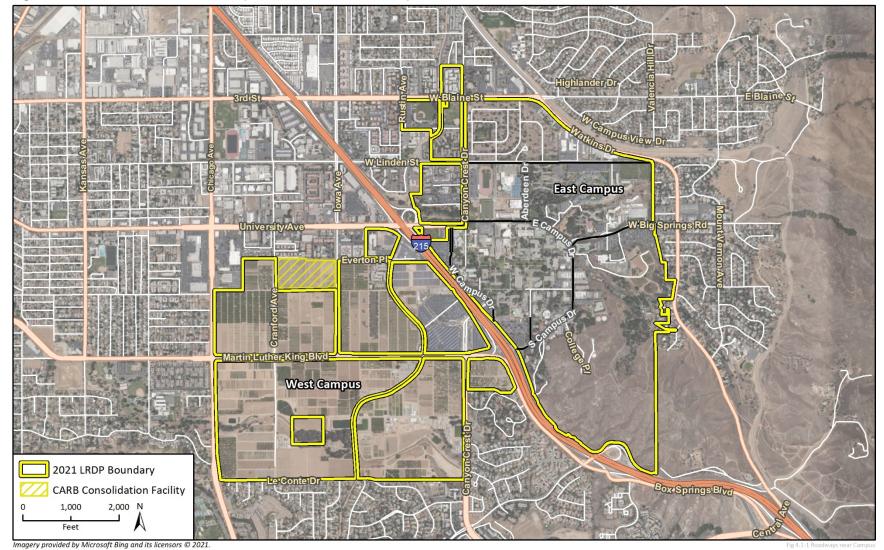


Figure 4.1-1 Streets and Roadways Discussed in this Analysis

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Off-Campus Visual Character – East Campus

East Campus is surrounded to the north, west, and east by residential neighborhoods and some commercial centers. Two- to four-lane streets are lined with mature palm, pine, and other large trees. Most streets have sidewalks. Residences on or near West Linden Street and Blaine Street tend to be two-story multi-family complexes with surface parking lots, some of which were constructed as late as the 1960s. Many of these are used for student housing. Aboveground power lines, streetlights, and cellular towers occur on the north and south sides of Blaine Street, along with mature trees and shrubs of varying heights.

Non-residential uses include churches on University Avenue and a commercial area is north of Blaine Street across from the North District and features a car wash and food service establishment. A modest brick and stucco strip mall, the University Plaza, is further east on Blaine Street, where the County of Riverside building, other food service and neighborhood serving uses, and a surface parking lot occur. East of East Campus along Big Springs Road are two- to three-story multi-family residences. A small one- to two-story commercial center occurs north of Big Springs Road at the intersection with Watkins Drive and contains two religious facilities, a bookstore, yoga studio, a market, and parking lots. The Islander Park and public swimming pool are east of the commercial center on Big Springs Road. Single-family residential neighborhoods occur north and south of Big Springs Road along the foothills of the Box Springs Mountains. UCR Campus is generally not visible from most public locations east of East campus due to the minor elevation change and surrounding structures.

Shade and shadow are also a component of visual character and occur when there is blockage of direct sunlight by existing and proposed structures. Currently, there are shade and shadow effects from the existing development and landscaping on campus (e.g., UCR Bell Tower [161 feet tall], North District Phase I [6 stories], Dundee Glasgow [7 stories]) onto surrounding areas given the heights of the structures, the time of day and direction of the sun.

Campus Setting

Situated in eastern Riverside, the UCR campus is located on the western edge of the Box Springs Mountains. The I-215/SR 60 freeway divides the west and east sides of the campus, where the freeway is largely at-grade, with multiple lanes divided by concrete barriers and a sound wall on the eastern side. The freeway is above grade where it passes over Canyon Crest Drive as it enters the campus and at the eastern terminus of Martin Luther King Boulevard. The communities that surround the campus include a mix of low-slung apartments dating from the 1960s, single-family housing, low-density commercial shopping centers, suburban-scaled parks and sports parks, and religious and educational facilities. These are developed along major arterial roads and freeways in a manner typical of communities in southern California. Topography in most of the developed portions of East Campus and West Campus is gently sloped towards the slopes of the Box Springs Mountains, affording broader views westerly from the wide boulevards as positioned further east towards the hills. The southeast part of East Campus is situated on the westernmost slopes of the Box Springs Mountains. Dotted with mature eucalyptus trees and cradling the extensive UCR Botanic Gardens, this part of campus is the most visually interesting from a topographical perspective.

The UCR Botanic Gardens houses several buildings on the site, including a Gatehouse with two small restrooms and a meeting room near the entrance. Located on the Gardens property are a second

restroom building, garage used as an office and equipment space, propagation lath house, greenhouse, and a business office, meeting rooms, the Schneider House, which is located along the eastern edge of the Gardens approximately halfway up the property from the entrance (UCR 2021).

West Campus

West Campus is a square-shaped area west of the I-215/SR 60 freeway, which forms its northeast border, with University Avenue and Everton Place to the north, Canyon Crest Drive to the east, Le Conte Drive to the south, and Chicago Avenue to the west. Everton Place, Iowa Avenue, Martin Luther King Boulevard, and Canyon Crest Drive are the only paved streets within West Campus, as it is mostly dedicated to agricultural use. Visually dominated by orange groves that are used for research, this area typifies the Riverside area's historic role in citrus industry development. The bright green evergreen foliage of the groves provides a stark contrast against the dusky golden-brown slopes of the Box Springs Mountains for viewers looking east through this zone. These uses are square lots divided by dirt roads. Structures in the area include facilities and infrastructure greenhouses, lath houses, equipment associated with farming, storage and barn structures, research-related infrastructure, and utilities transmission lines. Because of the variations in elevation, existing structures, and the mature landscaping throughout the area, the campus is not generally visible from public locations in these neighborhoods.

Figure 4.1-2 shows agricultural uses from the corner of Martin Luther King Boulevard and the entrance to Parking Lot 30 (see Figure 3-4 in Section 3, *Environmental Setting*), showing representative visual character on this part of campus. Street trees such as those visible in the foreground occur periodically along Martin Luther King Boulevard to where it intersects with Chicago Avenue at the westernmost edge of the campus. The eastern reach of the San Gabriel Mountains is visible in the distant background, beyond the citrus orchards in the middle ground.

Figure 4.1-3 through Figure 4.1-32 are generally sourced from Google street photos and provide baseline information regarding visual character in the area. However, some of these figures are taken from elevated positions when cameras were positioned on the tops of vehicles (approximately 8.2 feet). Consequently, some of these figures may overemphasize views of mountains and other objects available to the average human observer, as they increase the line of sight around obstructions (e.g., fences, which are typically six feet tall according to the Riverside Municipal Code Section 19.550.030, and bushes). Consequently, portions of these views may not be as visible to a human observer at average eye level (approximately 5 feet).

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Figure 4.1-2 Northwesterly View of Citrus Orchards on West Campus with San Gabriel Mountains in the Background



Source: Google Earth 2020

Martin Luther King Boulevard is a four-lane east-west arterial lined with palm trees that bisects West Campus between Chicago Avenue and the I-215/SR 60 freeway. A two-lane north-south arterial, lowa Avenue, bisects the northern half of West Campus and ends in the south at the signalized intersection with Martin Luther King Boulevard. Chicago Avenue is a four-lane north-south arterial that forms the western boundary of West Campus. The campus agricultural lands are surrounded by chain-link fence in this area.

The Gage Canal generally has a north/south orientation from where it enters the campus in the agricultural area south of Martin Luther King Boulevard. It continues aboveground to the northern end of Parking Lot 52 (see Figure 3-4 in Section 3, *Environmental Setting*), where it goes underground through part of East Campus to the northern border of the UCR Baseball Complex. The concrete-lined canal is shallow and narrow, about 8-foot wide, with approximately 20 feet of flat gravel or concrete area running along both its banks. A University solar farm is situated east of the Gage Canal, south of Everton Place, west of the I-215/SR 60 freeway, and north of the campus community garden, university substation, and waste transfer station.

lowa Avenue is lined with sidewalks, street trees, and a planted median near University Avenue, but these are discontinued south of Everton Place, as the roadway transitions into the agricultural research area of West Campus. East of Iowa Avenue, an alleyway and chain-link fence separate the UCR agricultural uses from two-story student residential complexes and parking areas. International Village, a multi-story complex of student residences, and Parking Lot 52 are situated just west of the solar farm and south of the four-story, glass, concrete, and steel University Extension Center building and surface Parking Lots 50 and 51 (see Figure 3-4 in Section 3, *Environmental Setting*). These West Campus facilities are situated south of University Avenue and north of Everton Place, just west of the Caltrans Maintenance Station. An auto-oriented complex of one-story commercial and restaurant uses occurs south of University Avenue and west of the University Extension Center. Everton Place crosses over the Gage Canal, fenced off from public use at each end of the street with chain-link fencing.

University Avenue intersects Iowa Avenue at University Village, a mixed-use complex with a cinema (also used as a lecture hall), parking structure, commercial and restaurant uses, and the University Police Department annex (Figure 4.1-3). West of the campus, light industrial and multi-family residential uses are situated along Chicago Avenue from West Linden Street to University Avenue, where uses transition to auto-oriented commercial plazas on both sides of Chicago Avenue, until 12th Street.

Figure 4.1-3 View East from University Avenue, with University Village on Northeast Corner, I-215/SR 60 Visible in Middle Ground, and Box Springs Mountains Visible at Horizon



Source: Google Earth 2020

East Campus

East Campus comprises two distinct sections situated on the north and south sides of University Avenue, North Campus Drive, and Big Springs Road. The northern area of East Campus contains UCR's athletics and recreation facilities, student housing, Environmental Health & Safety, and Corporation Yard. The southern area of East Campus contains the Academic Center and other academic and student support facility areas, hillside open space, and the UCR Botanic Gardens.

East Campus is bordered by residential, commercial, and restaurant uses along Blaine Street to the north, residential neighborhoods and commercial uses north and east of Watkins Drive, the I-215/SR 60 freeway to the west, the I-215/SR 60 freeway followed by a mix of residential development, and open space to the south. For the most part, the edges of East Campus blend into the surrounding neighborhood of residential, commercial, and educational facilities, where for example, multi-story student housing transitions to multi-family and single-family residential along Big Springs Road (Figure 4.1-4).

Where Parking Structure 1 occurs south of Big Springs Road and west of Valencia Hill Drive, an undeveloped utility easement creates a buffer between the built environment of this part of campus and the residential neighborhood to the east. The landscaped edge at the corner continues along the western side of Valencia Hill Drive and includes grassy lawn and mature shade trees that soften the rectilinear forms of the campus just beyond and soften the views of the campus looking northwest and west. Furthermore, these landscaped setbacks retain the softly rolling topography of the area, and next to Valencia Hill Drive, for example, contribute to the softened transition from single-family residential on Watkins Drive and Big Springs Road to the public institutional development of the campus (Figure 4.1-5).

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Most of East Campus features very gently rolling topography with multi-story buildings and a dense, mature urban landscape that includes shrubbery, grassy areas, pedestrian paths, and hardscaping. From within East Campus, the multi-story buildings are situated around the central open spaces on campus. At the edges, the campus built environment opens to larger views that vary based on heights and orientations of adjacent development. From flat expanses such as parking lots, nearby mountains and hills form the main visual context but do not form expansive views for the most part. As pictured in Figure 4.1-1, a network of two-lane roads surrounding and traversing East Campus connects with the larger city grid, leading to residential areas to the north and east, on-campus open space on the south, and downtown Riverside to the west. Figure 4.1-4 through Figure 4.1-32 offer viewpoints from within the campus and from adjacent neighborhoods toward the campus.

Figure 4.1-4 View of Landscaped Buffer between Parking Structure 1 and Valencia Hill Drive, North of Big Springs Road, Campus on Left, Residential Neighborhood on Right







Figure 4.1-6 Southeast Edge of East Campus, Showing Gentle Slopes that Characterize the Campus with Contrast between Urban Landscape and Brown Hill Slopes



Source: Google Earth 2020

University Avenue provides the main access to East Campus from downtown Riverside. The mix of uses on the west side of the I-215/SR 60 freeway serve to blend the campus into the adjacent urban fabric traveling east on the avenue. A stone monument sign announces the entrance to campus at the north side of the intersection between University Avenue and West Campus Drive. University Avenue terminates at the eastern portion of the roadway and turns into Canyon Crest Drive heading

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north. The Alumni and Visitors Center, Bannockburn Village, and Oban Apartments are located west of Canyon Crest Drive between University Avenue and West Linden Street. Falkirk Apartments and the UCR Baseball Complex are located west of Canyon Crest Drive between West Linden Street and Blaine Street. The Amy S. Harrison Athletic Field, UCR soccer field, Parking Lot 24 (see Figure 3-4 in Section 3, *Environmental Setting*), UCR Police Department, track facility and Student Recreation Center are located east of Canyon Crest Drive between University Avenue and West Linden Street. The North District Development area (Phase I under construction and future phases not yet constructed) is located east of Canyon Crest Drive between West Linden Street and Blaine Street. From the streets and pedestrian walkways looking east, low buildings and parking lots give way to dramatic views of the nearby mountains and the campus buildings in the distance (Figure 4.1-7).

Looking east from Canyon Crest Drive, East Campus contains UCR's student housing complexes and athletic facilities. East of Aberdeen Drive, the Aberdeen-Inverness, Dundee-Glasgow, Lothian, and Pentland Hills residence halls, and the Glen Mor apartments are surrounded by tree-lined grassy open space, arroyo, pedestrian pathways, and parking lots. The residence halls are typically threestory complexes with multiple wings or long buildings. The Dundee-Glasgow will have two sevenstory residence halls. For example, the older four-story Lothian residence hall features ivy-covered walls, wide pedestrian walkways, and picnic benches under mature trees (Figure 4.1-8). The newer Pentland Hills complex of student residences is arranged in a roughly circular maze of concrete and stucco buildings, blue metal sloped roofs, and deep, first-floor overhangs, with open spaces and pedestrian walkways between each building (Figure 4.1-9). Further east, the five-story Glen Mor apartments and associated facilities are surrounded by mature trees, open space, arroyo, and pedestrian pathways. The Glen Mor buildings have a contemporary southwestern style, with flat roofs, sand-colored brick and glass style architecture, separated by grass and concrete pavilions with young trees and ornamental plants (Figure 4.1-10). An approximately 0.4-mile-long arroyo, lined with native plants, snakes through the area, with two pedestrian bridges connecting the northern and southern buildings. The four-level Big Springs Parking Structure is situated just north of Big Springs Road and is an open structure with wire screening between concrete pylons.

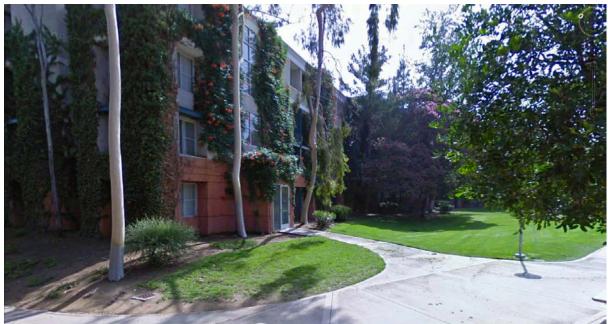
The Corporation Yard consists of a cluster of single-story structures in a large, paved parking area. Other campus support facilities lie east of the Corporation Yard. Tubular steel fencing separates the triangular landscaped area from Watkins Drive and a stucco and brick wall fences off the Corporation Yard and other campus support facilities, where the rectangular buildings appear relatively visually innocuous and congruent with the bermed railroad alignment on the east side of Watkins Drive (Figure 4.1-11). In the figure, the fences are visible in the foreground with mature palm trees beyond and the mountains on the distant horizon.

North of the Corporation Yard is the Early Childhood Services (Child Development Center), with singe-story modern structures, mature trees, and ornamental landscaping. North of the campus across Blaine Street are low-rise (two- to three-story) multi-family residences, a church, a car wash, and the University Plaza commercial center, where restaurants and commercial uses are clustered in a large parking lot. From this area, the North District is visible.

Figure 4.1-7 Southeasterly View of Box Springs Reserve from Canyon Crest Drive and West Linden Street, across Parking Lot 24



Figure 4.1-8 Lothian Hall Looking Northeast



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Figure 4.1-9 Pentland Hills Residence Complex Looking Northeast



Source: Google Earth 2020

Figure 4.1-10 Glen Mor Residential Complex Looking Southeast





Figure 4.1-11 Westerly View of Corporation Yard and Triangular Landscaped Area from Watkins Drive

On the western edge, East Campus is bordered by the I-215/SR 60 freeway and by West Campus Drive, between the freeway and Parking Lots 1, 4, and 5 (see Figure 3-4 in Section 3, *Environmental Setting*). Academic and student buildings include Hinderaker Hall, the College of Humanities and Social Sciences (CHASS), CHASS Interdisciplinary Building, Arts Building, Sproul Hall, and the newly renovated Barn Complex. Hinderaker and Sproul halls are part of the historic mid-century modern architecture that characterizes the form of the Academic Center (described below), with repetitive rectilinear forms, flat roofs, and concrete structural elements, that are important to the visual unity of that section of campus (Figure 4.1-12).

Newer architecture, like the CHASS Interdisciplinary Building, features simple, multi-story structures finished in brick with concrete edges that emphasize the subtle angled articulations in the expansive wall surfaces. As with many of the academic and research buildings, the three-story Interdisciplinary Building forms a courtyard on its west side and provides a human-scale, shady, quiet area for study or interaction (Figure 4.1-13).

The Arts Building, designed by Frank Isreal in the early 2000s, features asymmetrical rectilinear compositions of multilevel platforms, terraces, and courtyards that integrate the visual aspects of the regional desert landscape through colors that range from deep brown to dark violet, a range of asymmetrical angles, and layered elevations (Figure 4.1-14). From the exterior and interior views, the building appears as a stylized rendering of the nearby mountainous landscape. From within the complex, intersections of the various terraces and platforms frame the sky as if the viewer were in a desert canyon looking up at the larger, more distant landscape through the frame of geologic forms.

Throughout the campus, new and renovated buildings are designed to maintain a relationship to the architectural roots of the campus and to the dramatic, natural landscape features, while they also feature innovative, contemporary design. The Barn renovation, for example, retains the structural form and architectural integrity by keeping the original form and details like the exposed wooden trusses from the historic building. Updated and expanded available square footage and the outdoor meeting areas integrate in a way that looks both contemporary and anchored in the history of the building. Figure 4.1-15 shows the original building with its addition and expanded courtyard and

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entrance and Figure 4.1-16 shows the addition with contemporary glass and wood elements that integrate with the form of the original building.

Figure 4.1-12 Hinderaker Hall on the Western Part of East Campus, Looking Northeast



Source: Rincon Consultants, Inc. 2020

Figure 4.1-13 CHASS Interdisciplinary Building, Looking Northeast



Figure 4.1-14 Arts Building, Looking Southwest



Figure 4.1-15 Renovated Original Structure of The Barn, Looking Southwest



Source: UCR 2020b

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Figure 4.1-16 Addition to The Barn - Event Center and Restaurant, Looking East



Source: Design West Engineering 2020

The Academic Center is the core of East Campus and contains most of the existing academic and administrative buildings. In general, this area is characterized by wide pedestrian malls and quad spaces, expansive grassy areas that feature ornamental landscaping and a dense, mature tree canopy of eucalyptus, catalpa, and other tree species organized around the 161-foot-tall UCR Bell Tower (Figure 4.1-17). Most of the buildings in the central core are mid-rise, mid-century modern architectural styles that feature concrete arches and narrow, vertical window slats, as seen in the arcade and building architecture of Tomás Rivera Library (Figure 4.1-17 and Figure 4.1-18). Curved and rectangular forms repeat in different configurations that are simple and elegant, with a strong sense of movement and stability. These forms are evident in the long windows and rectangular structures of Sproul Hall and its courtyards (Figure 4.1-19). Olmstead Hall and University Theatre feature repeating arched and rectangular forms that connect the buildings and frame the landscape (Figure 4.1-20 and Figure 4.1-21).

Along with the simple brick and concrete forms, Watkins Hall features a breezeway with a concrete screen penetrated on sides and top with circular openings that relate to the arched forms in the other buildings, cast shadows during the day, and frame views across the Academic Center (Figure 4.1-22) and Pierce Hall (Figure 4.1-23), all of which are connected by the surrounding tree-covered lawns and by pedestrian pathways designed to repeat the rectilinear forms that make up the distinctive components of the architecture. Finally, west of Pierce Hall, the contemporary architecture of the HUB connects to the Academic Center through the curved forms that make up the courtyard and the southeast corner of the building, facing the UCR Bell Tower (Figure 4.1-24).





Source: Jaime Engbrecht 2021

Figure 4.1-18 Tomás Rivera Library and Arcade



Source: Jaime Engbrecht 2021

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Figure 4.1-19 West Side of Sproul Hall Looking Northeast



Source: Google Earth 2020

Figure 4.1-20 Olmstead Hall and University Theatre Looking Southwest





Figure 4.1-21 Arcade Arches to University Theatre Looking Southeast

Source: Jaime Engbrecht 2021

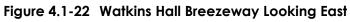




Figure 4.1-23 Pierce Hall Looking Northeast



Figure 4.1-24 HUB Courtyard Looking North, Box Springs Mountains Visible in Background



Source: Google Earth 2020

The buildings in the Academic Center adhere to the style of mid-century modern architecture that includes repetition of form, use of empty space to frame the built and landscaped environment, and human-scale but still grand forms that create an intimate, function, yet graceful sense of place. The Academic Center forms the visual foundation for the newer architecture on the south and east sides

of East Campus. Figure 4.1-25 shows the Physics Building on the right and Winston Chung Hall on the left. The newer building includes contemporary materials contrast harmoniously with the older Physics Building. The rhythmic repetition of rectilinear forms is evident in the open walkways that mediate the tall, uniform brick walls, and the framing of the windows makes a visual connection with the rhythms and patterns of the original, modernist architecture. Rather than dominate, the height and placement of Winston Chung Hall relative to the Physics Building create a visual relationship that ties in with the overall aesthetic of the Academic Center at the same time it continues the campus-wide, architectural scheme of evoking the nearby mountainous landscape in which it is situated.

Similarly, the Materials Science and Engineering Building draws on some of the forms found in the early modernist architecture, such as repetitive rectangles of various sizes and contrasting light-colored concrete with red-brown brick, but with the addition of the industrial metal siding, and angled entrance overhang that correspond with the research areas for which the building is designated (Figure 4.1-26). Moving out from the central core of East Campus, these more contemporary-styled buildings cohere with the intent of the original architectural style, and thus, unify the expanding campus.

South of Eucalyptus Drive and Olmstead Hall, the Psychology Building and Parking Lot 6 (see Figure 3-4 in Section 3, *Environmental Setting*) compose the southwestern side of East Campus. Flanked by expanses of lawn and landscaped areas, the Psychology Building is a contemporary brick and stuccoclad, three-story building with forms that also draw on the modernist style of the Academic Center while introducing a more monumental scale-by-means of the extended roof forms and vertical glass components that draw the eye up to the vast sky (Figure 4.1-27). A low canopy of drought tolerant plants along the front of the building emphasizes the building proportions as well and integrate more clearly with the campus perimeter's desert-like setting than the more densely forested, shaded interior of the campus.

The area east of Citrus Drive and south of Eucalyptus Drive is the University's laboratory and research center, with wide three- and four-story buildings, such as the more modern Genomics Building, Entomology Building, SOM Health Science Research Building, and the Fawcett Laboratory building. These buildings surround Picnic Hill, a grassy tree-lined outdoor relaxation area. The buildings are a mix of architectural styles, including the contemporary style similar to the Psychology Building and a mission colonial revival-style like Anderson Hall and Chapman Hall (Figure 4.1-28). Typically, the buildings are four stories or less and some have adjacent parking areas. All feature mature trees and other landscaping.

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Figure 4.1-25 Physics Building and Winston Chung Hall Looking Northeast



Source: Google Earth 2020

Figure 4.1-26 Material Science and Engineering Building Looking Northeast



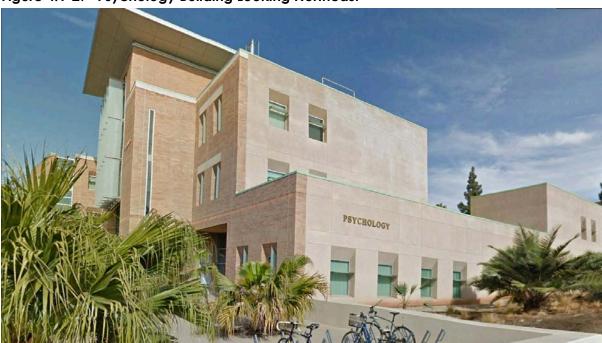


Figure 4.1-27 Psychology Building Looking Northeast



Figure 4.1-28 Anderson Hall and Chapman Hall Looking Northeast

Source: Google Earth 2020

The Computing and Communications Building, lath houses and greenhouses, the Chemical Sciences Building, the USDA Salinity Laboratory and agricultural/research lands, UCR Botanic Gardens, Parking Lot 13 (see Figure 3-4 in Section 3, *Environmental Setting*), and Parking Structure 1 (construction completion anticipated Summer 2021) occur east of East Campus Drive. Big Springs Road serves as the eastern access point to the campus from the adjacent neighborhood, discussed above. This area transforms from flat to hilly, particularly in and around the UCR Botanic Gardens and open space reserve. The Salinity Laboratory is a single-story building constructed on a hill above

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Parking Lot 13, just north of the UCR Botanic Gardens. It is surrounded by landscaped trees and shrubs and is only slightly visible from Parking Lot 13 looking south (Figure 4.1-29).

The UCR Botanic Gardens occur at the southeastern edge of East Campus, just beyond the easternmost campus facility buildings (Figure 4.1-30). Situated on a slight rise, the gardens cover approximately 40 acres and include 4 miles of scenic trails, scenic vistas, and two prominent arroyos with steep slopes and intermittent water flow in Chancellor's Canyon and a group of large, weathered granite boulders in the upper reaches of Alder Canyon (UCR 2020a). From the gardens, views of the rest of the campus are largely obscured by the dense vegetation and mature tree canopy.

East of the UCR Botanic Gardens, across Watkins Drive, single- and multi-family residences make up established neighborhoods in a hilly terrain with many mature trees and other vegetation. Because of the variations in elevation, existing structures, and the mature landscaping throughout the area, the campus is generally not visible from most public locations in these neighborhoods.

Figure 4.1-29 Salinity Laboratory Viewed from Parking Lot 13 Looking Southeast



Figure 4.1-30 UCR Botanic Gardens Entry Looking East

In the area south of South Campus Drive, East Campus is characterized by scattered educational and agricultural facilities (such as the College Buildings North and South and greenhouses), the Superintendent's Cottage, and associated parking lots interspersed in a tree-lined landscape that gives way to UCR's Open Space Reserve characterized by steep hills with rocky outcroppings and grassy vegetation. This distinct area of campus is generally characterized by older buildings and small parking lots in a rural setting. College Place, a narrow road without sidewalks, cuts southward into the hillside before turning into east and north by a dead-end just beyond a water storage tank.

Open Space and Landscaping

Noted mid-century modern landscape architect Ruth Shellhorn was selected as supervising landscape architect for UCR and greatly influenced the 1964 Master Landscape Plan. Shellhorn took inspiration from the natural landscapes and topography of the Riverside area, and she preserved canyons and mesas wherever possible, favoring pedestrian bridges and minimizing grade cuts. Canyons were preserved for recreational uses such as hiking trails and environmental study areas. Shellhorn favored tall shade trees such as olive and eucalyptus, which blended with the native coastal sage scrub plant community. Natural rock outcroppings inspired the use of rock in walls and paved pedestrian areas. The hot summers and cool winters featured into Shellhorn's design consideration, prompting the development of shaded walkways and sunken gardens (Comras 2016).

Today, the campus has distinct landscaping styles in different areas, reflecting the history of campus development and the variation in topography. According to Figure F3.4 in the proposed 2021 LRDP, the campus open space framework has the following fundamental elements:

- Open Space Reserve
- UCR Botanic Gardens
- Primary Open Spaces

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- Secondary Open Spaces
- Planned Open Space
- Public Road Streetscapes
- Campus Road Streetscapes

The Box Springs Mountains in the southeast portion of the campus form an open space reserve with steep hills and rugged outcroppings creating the nearby natural open space (Figure 4.1-31). A notable visual feature of these shrub covered slopes are the annual color changes. In winter and spring, new grasses and established brush transform the normally brown slopes into vibrant green expanses. As spring wears on, the green yellows and browns in color, back to its dominant appearance.

Naturalistic open spaces form an attractive and informal transition from the formal malls and courtyards of the campus into the nearby mountain areas. In these less-maintained areas, the landscape offers space for passive recreation, wildlife habitat, and water flow into arroyos and drainages. Naturalistic open spaces make up critical connective elements of the campus open space system, weaving through campus as expressions of the area's natural heritage. Examples of naturalistic open spaces include Picnic Hill and the open spaces between new buildings on the site of the current Intramural Athletic Fields (Figure 4.1-32). The northern and northwestern areas of the East Campus feature a series of remnant naturalistic arroyos flowing westward down from the Box Springs Mountains.

Figure 4.1-31 Box Springs Mountains Viewed from Mount Vernon Drive, Looking Northeast





Figure 4.1-32 Picnic Hill Naturalistic Open Space Looking East

Pedestrian malls are the signature formal open space type on the UCR campus. The Academic Center of East Campus features a series of iconic linear grassy malls and pedestrian pathways, flanked by large, mature trees. Courtyards and plazas are located throughout campus, typically shaded by trees and sometimes with grass and ornamental landscaping. Some courtyards and plazas have interactive gathering areas, dining terraces, outdoor classrooms and amphitheaters, small informal lawn areas, and thematic gardens (UCR 2019). The plaza outside the HUB, for example, contains a paved outdoor dining area and a lawn for casual sitting and relaxation, with ornamental trees and plants (refer back to Figure 4.1-24).

Structural landscaped spaces are areas between and adjacent to buildings. There are a variety of landscaped spaces on the UCR campus, and typically include trees, shrubs, and groundcover such as grass or low-lying shrub. Streets are typically lined with trees from shady evergreens to palms. Trees and landscaping are also found along bicycle and pedestrian pathways and in parking areas, which typically have shade trees lining the edges in row planters.

Public Views

Off-campus viewpoints consist of publicly available vantage points looking towards campus from various directions. Public views are those visible from major roadways, parks and recreation areas, and publicly accessible open space areas. Views of East Campus and portions of West Campus may be available from the very highest points in Sycamore Canyon Wilderness Park and accessible from the Ameal Moore Nature Center. However, these views would become part of the larger urbanized landscape that makes up this part of Inland Southern California. Views of the campus are also available from trails on west-facing slopes in the Box Springs Mountains and Sycamore Highlands Park, but similarly they would be at such a distance that they would be part of the urbanized landscape. Views of the campus from many streets are obscured by mature trees, topography, and existing development. Nonetheless, the following description characterizes the views from

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perimeter roads to present the existing visual conditions and contribute to the consideration of how new development might affect those conditions.

Key viewpoints (KVP) were generally selected based upon their proximity to locations where development is anticipated, looking toward the campus. These locations are considered representative of other nearby areas and similarly situated locations. Analysis at these locations typically provides a conservative assessment and aesthetic impacts usually decrease with distance as aesthetic details become less discernable to the human eye. The KVP locations are mainly from Canyon Crest Drive, looking south toward East Campus and east and west at existing residential units or parking areas, from Watkins Drive looking southwest toward Lot 20, and looking northwest toward the UCR Botanic Gardens. Figure 4.1-33 indicates the KVPs on an aerial map of the campus and Figure 4.1-34 through Figure 4.1-44 offer images of those views. Table 4.1-1 lists the KVPs, their locations, the direction of the view, visual quality, and viewer sensitivity.

Scenic Vistas

For the purposes of this EIR, scenic vistas may be described in two ways: panoramic views (visual access to a large geographic area, for which the field of view is wide and extends into the distance), and focal views (visual access to a particular object, scene, setting, or feature of interest). Panoramic views are typically associated with vantage points that provide a sweeping geographic orientation and may include urban skylines, valleys, or mountain ranges. Scenic vistas are typically those available from a publicly accessible viewpoint, such as roads or public gathering places, rather than views available from private residences (UCR 2005). Near the UCR campus, the Box Springs Mountains are the most prominent visual feature from many locations, and thus sweeping panoramic views of the Box Springs Mountains are considered a scenic vista for the purposes of this EIR.

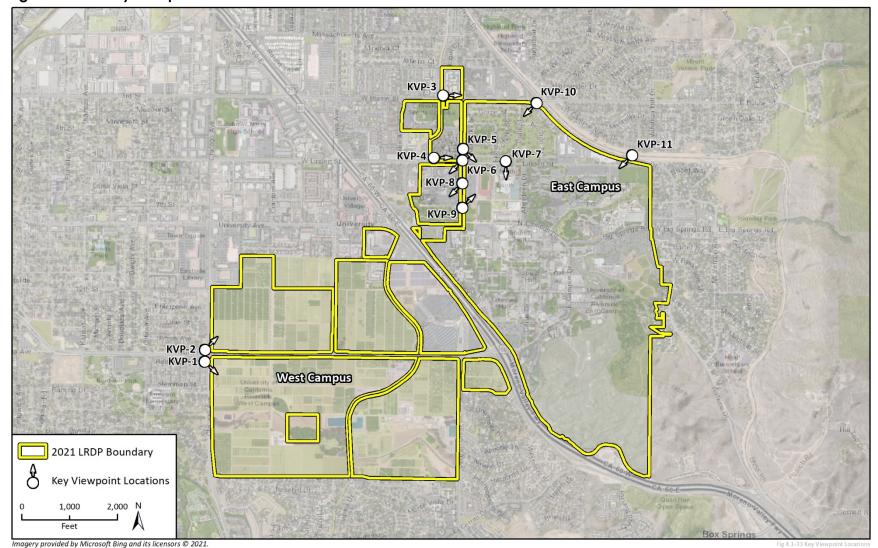


Figure 4.1-33 Key Viewpoint Locations Around UCR

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Table 4.1-1 Summary of KVP Details

KVP	Location	Direction	Visual Quality	Viewer Sensitivity
KVP 1	MLK Bl. & Chicago Av.	SE	High	Moderately High – High
KVP 2	MLK Bl. & Chicago Av.	NE	High	Moderately High
KVP 3	Blaine St., east of Rustin Av.	E	Moderate	Moderately Low to Moderate
KVP 4	West Linden St., east of Rustin Av.	E	Moderate	Moderately Low to Moderate
KVP 5	Canyon Crest Dr., north of West Linden St.	SE	Moderately Low	Moderately Low
KVP 6	Canyon Crest Dr. at West Linden St.	SW	Moderate	Moderate (motorists) Moderately High (pedestrians)
KVP 7	West Linden St. near Aberdeen Dr., east of Student Recreation Center	S	Moderately High	Moderate to Moderately High
KVP 8	Canyon Crest Dr., south of West Linden St. by Parking Lot 24	SW	Moderately Low to Moderate	Moderate (motorists) to Moderately High (pedestrians)
KVP 9	Canyon Crest Dr. at University Av.	NE	Moderately High	High
KVP 10	Watkins Dr. at Blaine St.	SW	Moderate	Moderate
KVP 11	Watkins Dr., west of Valencia Hill Dr.	SW	Moderately High	Moderate
Definitions:		NE = Northeast		
KVP = Key Viewpoint		NW = Northwest		
Av. = Avenue		E = East		
Dr. = Drive		S = South		
MLK Bl. = Martin Luther King Boulevard		SE = Southeast		
St. = Street		SW = Southwest		

Views of West Campus from KVP 1 and KVP 2 on Martin Luther King Boulevard consist largely of relatively flat agricultural research fields (Figure 4.1-34 and Figure 4.1-35). From the roadway, expansive vistas are available in both directions toward the Box Springs Mountains and Sycamore Canyon. In the foreground, palm trees and native shrubs are planted periodically in the easement between the road and the research fields in a way that does not restrict the longer-range views. In the middle distance, orange groves are visible at various stages of growth. KVP 2 also shows the new CARB consolidation facility in the middle distance. The visual quality is high from these perspectives as they offer expansive views of the natural and agricultural landscape. Viewer sensitivity would be moderately high to high as these expansive views are an important part of the visual corridor, and, although motorists may be traveling up to 45 miles per hour (mph) along Martin Luther King Boulevard, the transition from relatively dense development west of Chicago Avenue to the open spaces and expansive views east of that roadway is dramatic in terms of aesthetic effect.





Figure 4.1-35 KVP 2: Corner of Chicago Avenue and Martin Luther King Boulevard Looking Northeast Across Agricultural Fields of West Campus with CARB Facility in the Middle Ground



Source: UCR 2021

On Blaine Street, east of Rustin Avenue, looking east, KVP 3 shows residential development (Stonehaven student apartments) in the foreground and the mountains in the distant background. Mature trees partially screen the development from the street and aboveground utility lines, streetlights, and traffic signals are also visible in the foreground and into the distance down the

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roadway, creating a degree of visual clutter. Nonetheless, the nearby mountains along public rights-of-way are visible looking east on Blaine Street (Figure 4.1-36). The visual quality is moderate in this area as the development does not block entire views of the distant mountains from public rights-of-way, but neither does it integrate into the natural environment in terms of its design, and there is no sense of order to the landscaping. Viewer sensitivity along sidewalks and roadways would be moderate to moderately low through this area as development intervenes consistently with views.

Figure 4.1-36 KVP 3: View East on Blaine Street with Stonehaven Apartments to the Left of Image and the Baseball Field to the Right



Source: Stephanie Tang 2021

Views toward East Campus from KVP 4 feature street trees, including the long-standing palms along West Linden Street, one- and two-story residential development, and institutional (church) uses. The Box Springs Mountains are visible in the background and form a prominent landscape feature. Aboveground utility poles and cars are parked along both sides of the roadway. The visual quality is moderate in this area, as the development does not block views from public rights-of-way, but neither does it integrate into the natural environment in terms of its design (Figure 4.1-37). Viewer sensitivity along sidewalks and roadways would be moderately low to moderate through this area as speed limits are 40 mph on West Linden Street, cars are parked along the roadways, and drivers would be attending to the demands of driving.



Figure 4.1-37 KVP 4: West Linden Street East of Rustin Avenue Looking East

From Canyon Crest Drive looking southeast, KVP 5 shows mature street trees that soften the edges of the Falkirk Apartments to the west (Figure 4.1-38). The development is in poor condition and the landscaping does not follow a discernable design pattern. No distant views are available beyond the development. Thus, visual quality is moderately low. Viewer sensitivity would be moderately low through this area for pedestrians and drivers alike.

Figure 4.1-38 KVP 5: View from Canyon Crest Drive North of West Linden Street Looking Southeast



Source: Google Earth 2020

KVP 6 shows a view southwest on Canyon Crest Drive toward University Avenue, where the Humanities & Social Sciences building can be seen on the distant horizon. The apartment buildings (Oban Family Housing) along the west side of Canyon Crest Drive are two stories and built close to the roadway (Figure 4.1-39). A few mature trees occur between the sidewalk and the buildings.

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Intervening development obscures views of the mountains to the south, and the university buildings are only visible in the distant southern background. Visual quality is moderate as the apartment architecture is not distinctive and the landscaping is unremarkable. Furthermore, the views into the campus are not impressive for drivers or pedestrians traveling on West Linden Street or on Canyon Crest Drive. Viewer sensitivity would be moderate for drivers to moderately high for pedestrians through this area as motorists would likely be attending to driving, but pedestrians would have more time to observe surroundings.

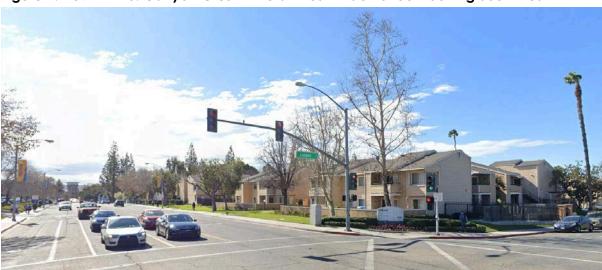
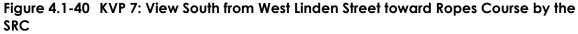


Figure 4.1-39 KVP 6: Canyon Crest Drive at West Linden Street Looking Southwest

Source: Google Earth 2020

From West Linden Street looking south, KVP 7 shows that the SRC is largely hidden from view by trees and shrubbery (Figure 4.1-40). The eastern edge of the existing SRC is visible in the right side of the image. The visual quality is moderately high in this area due to landscaping and the consistent architecture. The more distant landscape is obscured by intervening landscaping and development, restricting access to vistas. On the north side of West Linden Street, construction has begun on the North District, where multi-use buildings, including multi-story residential units will occur close to the street. Viewer sensitivity would be moderate to moderately high through this area as views are obscured by existing development, but the architecture and landscaping at the SRC to the south, the North District to the north, and the student housing areas to the east are unified in visual character and designed to create a pedestrian-oriented district.

¹ The North District Development Plan Environmental Impact Report offers a full analysis of the visual impacts of this project on the area (UCR 2019).





In KVP 8, from Canyon Crest Drive, south of KVP 6 and closer to the intersection with University Avenue, the Bannockburn Village is visible on the west side of the street and Parking Lot 24 can be seen on the east side (Figure 4.1-41). The two-story apartments are constructed close to the roadway. Mature trees line the parkway between the sidewalk and the buildings but follow no clear landscape design plan. Buses are parked along the west side of Canyon Crest Drive. From the position in KVP 8, the western Humanities & Social Sciences Building is visible on the southern horizon, just beyond the trees. An edge of the Arts Building can also be glimpsed just west of the southernmost tree line. In the photograph, the painted signage in the windows of a restaurant is partly visible from behind the street tree.

Figure 4.1-41 KVP 8: Canyon Crest Drive Looking Southwest with Bannockburn Village on the Right and Parking Lot 24 on the Left



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Reflected in Figure 4.1-41, the poor condition of the apartment complex and the provisional signage in the restaurants contribute to the moderately low to moderate visual quality through the area, despite the long-distance views of East Campus to the south. Viewer sensitivity would be moderate for drivers and moderately high for pedestrians through this area as the motorists would be occupied with attending to multiple distractions, including buses entering and exiting traffic from on-street bus stops, pedestrians crossing the street near the southern end of Parking Lot 24, and vehicles entering and exiting parking areas on the east and west sides of the street. Pedestrians would have more time to observe the surroundings.

The proposed 2021 LRDP designates the current site of the Amy S. Harrison Athletic Field and the soccer field east of Canyon Crest Drive as sites for future academic expansion. From the roadway looking northeast, KVP 9 shows the nearby mountains form, even with the intervening development in the middle ground (Figure 4.1-42) and thus is considered a scenic vista. The SRC, the Materials Science & Engineering building, and the Multi-disciplinary Research Building 1 can be seen beyond the soccer fields, with the mountains in the horizon. Although not pictured in the image, Phase I of the North District project is under construction and may be visible beyond the athletic field, as the heights of the North District structures are greater than the SRC. The visual quality is moderately high as the dramatic ridgeline is distinctive and the building heights, colors, and forms are in relative unity with the landscape. Viewer sensitivity would be high in this area as motorists would slow down as they curve traveling from east on University Avenue to north on Canyon Crest Drive. Pedestrians traversing the heart of East Campus would be sensitive to the transition from the built environment at the Academic Center and to the opening of the viewshed to the mountains on northeast horizon.

Figure 4.1-42 KVP 9: View Northeast on Canyon Crest Drive toward Amy S. Harrison Athletic Field and Soccer Fields



Source: Melissa Garrety 2021

From Watkins Drive at Blaine Street, KVP 10 shows a southwesterly view of East Campus (Figure 4.1-43). The foreground comprises the sidewalk along Watkins Drive, Early Childhood Services (Child Development Center), the easement planted with drought-tolerant bushes and trees, and the tubular steel fence. Beyond, the North District Phase I can be seen under construction in the middle distance along with other mature trees on campus. On the distant horizon, partial views of

the mountainous ridgeline can be seen. While the mountains are partially visible in the distance, intervening development prevents this perspective from being considered a scenic vista. The visual quality is moderate in this area as there are no distinctive visual resources in either the natural or built environments. Viewer sensitivity would be moderate as speed limits are 40 to 45 mph in the area, cars are parked along the roadways, and distant views are not dramatic enough to draw attention away from attending to the demands of driving.



Figure 4.1-43 KVP 10: Watkins Drive Looking Southwest toward Campus

Source: Google Earth 2020

From Watkins Drive, KVP 11 is oriented toward the Glen Mor Intermural Fields on the northeastern edge of East Campus (Figure 4.1-44). In the foreground, the fence along the campus boundary, a row of palm trees, and intramural field lighting feature prominently. The middle ground comprises a grassy field, a row of trees, and some buildings, beyond which the southern hillsides form the horizon line. The visual quality is moderately high as there is little intervening development, but there are also no remarkable visual resources, and the views of the distant hillsides are not particularly notable. Viewer sensitivity would be moderate through this area as speed limits are 40 to 45 mph in the area, cars are parked along the roadways, and distant views are not dramatic enough to draw attention away from attending to the demands of driving.

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Figure 4.1-44 KVP 11: Watkins Drive Looking Southwest toward Campus



Source: Google Earth 2020

Scenic Vistas on and Near UCR

As noted above, scenic views of the hills and open space preserves are the predominant scenic vistas in the area. Scenic vistas for the campus include those publicly accessible and important panoramic views of the Box Springs Mountains approximately 1 mile to the north, northeast, east, and southeast of campus; Mount Rubidoux approximately 3 miles to the west; the San Bernardino Mountains approximately 15 miles to the northeast; and the San Gabriel Mountains approximately 20 miles to the northwest. These scenic vista areas can be seen, in general, from the existing Open Space Reserve, flat areas of expansive spaces in East Campus such as the Glen Mor Intermural Fields, certain parts of the UCR Botanic Gardens, and sections of Canyon Crest Drive and Big Springs Road. In other areas of East Campus, the existing views of the distant mountains are intermittent and substantially obstructed by on-campus and off-campus structures and trees. Portions of West Campus provide partial views of Mount Baldy, San Gabriel Mountains, and San Bernardino Mountains. West Campus views are generally accessible in agricultural areas unobscured by built structures and along roadways such as Everton Place, Iowa Avenue, and Martin Luther King Boulevard (Figure 4.1-34 and Figure 4.1-35). As shown in the KVPs, intervening development limits public views. However, publicly accessible, and at times, panoramic views of the Box Springs Mountains are visible from various sites around campus considered for development under the 2021 LRDP and are considered represented by KVP 9.

The UCR Botanic Gardens, located in the southeastern portion of East Campus, provides a scenic landscape and regional visual resource, containing landscaping features such as waterfalls, ponds, trails, and plant collections (Figure 4.1-30). Views of the UCR Botanic Gardens are not accessible from public vantage points on or off campus.

Light and Glare

Light refers to light emissions (brightness) generated by a source of light. Stationary sources of light typically include exterior parking lot and building security lighting, campus building lighting, illuminated signage, athletic field lighting, and street and traffic lights. Moving sources of light

include the headlights and taillights of vehicles driving on roadways. Ambient lighting is the general overall level of lighting in each area due to the various light sources present. Excessive lighting can interrupt human sleep. For discussion of lighting and its effects on wildlife, see Section 4.4, *Biological Resources*.

The UCR main campus and surrounding development within the City generate levels of light typical for a highly urbanized setting with substantial sources of ambient lighting. Due to the urban setting of the campus as well as the surrounding area, it is difficult to view the night sky under existing conditions.

Glare is defined as focused, intense light emanated directly from a source or indirectly when light reflects from a surface. Daytime glare is caused in large part by sunlight shining on highly reflective surfaces at or above eye level. Reflective surfaces are associated with buildings that have expanses of polished or glass surfaces, and the windshields of parked cars.

On-Campus Light and Glare

Most existing sources of nighttime illumination on campus come from interior and exterior building illumination and lighting along internal campus roadways, in surface parking lots, and along pedestrian pathways. Other sources of nighttime illumination include overhead lighting installed at the aquatics center, tennis courts, and athletic fields and stadiums illuminated during nighttime games and practices. UCR has replaced some campus lighting with high-efficiency, full cutoff, LED lamps and fixtures, which has reduced nighttime light pollution (UCR 2015). However, there remains unshielded lighting under existing conditions, some of which is used for highlighting architectural elements/features, security lighting, and legacy unshielded light fixtures. Existing sources of glare on campus include reflective surfaces such as building exteriors and glass. Glare from reflected sunlight off adjacent buildings is generally minimized due to the low density of development, the relatively low height of buildings (e.g., one to four stories), the extent of mature trees and landscaping, and the limited use of reflective glass surfaces in existing buildings. Some of the buildings at the center of the campus were constructed after 2000 and designed with reflective materials such as metal and large windows (e.g., the HUB as pictured in Figure 4.1-24).

Off-Campus Light and Glare

Off-campus lighting sources include overhead street lighting on local streets, headlights and taillights from vehicles traveling along the I-215/SR 60 freeway, headlights from the train, as well as traffic lights. Other sources of outdoor lighting near campus include lighting from residences, commercial businesses, parking lot lighting, and lighting from the park. The nearby commercial and residential structures have security lighting, architectural building highlighting, and landscape nighttime lighting. These all contribute to the artificial nighttime light levels.

The use of reflective building materials is generally low in the areas surrounding the campus. Buildings in the area are typically constructed of brick, stucco, or wood, and commercial buildings with large windows generally are set back from the street or campus uses. As such, opportunities for noticeable glare during daytime hours are low.

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4.1.2 Regulatory Setting

Federal

There are no applicable federal regulations regarding the protection of visual resources that would be applicable to the proposed 2021 LRDP.

State

California Code of Regulations, Title 24

Title 24 of the California Code of Regulations (CCR), also known as the California Building Standards Code, consists of regulations to control building standards throughout the State. The California Electrical Code (Title 24, Part 3) and Green Building Standards Code (also referred to as the CALGreen Code; Title 24, Part 11) stipulate minimum light intensities for safety and security at pedestrian pathways, circulation ways, and paths of egress.

The CALGreen Code (24 CCR, Part 11, Paragraph 5.106.8, Light Pollution Reduction) provides that all nonresidential outdoor lighting must comply with the following:

- The minimum requirements in the California Energy Code (CEC) for Lighting Zones 1–4 as defined in Chapter 10 of the California Administrative Code
- Backlight, Uplight, and Glare (BUG) ratings as defined in the Illuminating Engineering Society's
 Technical Memorandum on Luminaire Classification Systems for Outdoor Luminaires
- Allowable BUG ratings not exceeding those shown in Table A5.106.8 in Section 5.106.85 of the CALGreen Code
- A local ordinance lawfully enacted pursuant to Section 101.7 of the CALGreen Code, whichever is more stringent

The 2019 updates to the CalGreen Code went into effect on January 1, 2020. They require nonresidential buildings to maximize light emitting diode (LED) technology in indoor and outdoor lighting plans.

University of California

Design Review Process

The UC initiated independent design and cost review of building plans in 1985 in response to concerns about the design quality management of a rapidly growing capital improvement program. Current UC policy 5.1 requires independent architectural design review and independent cost estimates of projects when a total project cost exceeds \$5 million. The policy requires design reviews to be performed early in the design process, at suitable intervals during design, and at the time of completion of design. Selection of the review or reviewers and the format for the design review process are left to the discretion of the Chancellor. This policy is available online at https://www.ucop.edu/construction-services/facilities-manual/volume-3/vol-3-chapter-1.html.

Long Range Development Plan

The LRDP is a general guide that discusses future land use patterns and development of facilities, circulation, open space and infrastructure. To assist in implementation of the LRDP, UCR references a number of more detailed documents, including the *Physical Design Framework* and *Campus Construction and Design Standards*, which are considered during the Design Review process. UCR considers these as living documents and will update these documents as necessary to continue to align with the 2021 LRDP.

Physical Design Framework

The UCR Physical Design Framework provides guidelines for future architects and planners to inform any physical changes to the campus, emphasizing the elements of the campus physical setting, landscape, and infrastructure, as well as architectural themes characteristic to the University. It provides guidance on the broader character of the campus as well as layout and specific focus areas, as well as specific guidelines for facility orientation, materials, components, design and color palette, massing, and articulation. It includes simple and legible guidelines to shape the campus' physical form, allowing the campus to evolve in a dynamic way that recognizes the physical and academic roots that define campus character.

Campus Construction and Design Standards

The 2007 Campus Design Guidelines has been recast and expanded as a living document in the form of the Campus Construction and Design Standards. This document includes up-to-date provisions related to lighting and includes requirements to focus on providing an even, consistent coverage, softening contrast ratios at edges and thus improving visibility by avoiding excess illumination and brightness. Details and specifications for light fixtures that meet these requirements have been incorporated as a campus standard. Additionally, new pedestrian walkways associated with the campus project would typically use the "UCR tan" color mixture to reduce surface glare.

UCR Design Review Process

Each proposed major capital project which involves new construction or exterior alterations undergoes a review process, consistent with the UC-wide process discussed above. The project designs are reviewed by the Design Review Board (DRB), which is comprised of outside design professionals who are advisory to the Chancellor, in discussion with the Campus Architect. For each major building, landscaping, or infrastructure project, a project-specific Project Advisory Committee offers programmatic and design input. The committee is made up of faculty, students, administrative leaders, and senior capital planning and design and construction staff.

The DRB, with the assistance of the Campus Architect, advises the Chancellor on the designs of new buildings, major landscape projects, and master planning efforts to ensure consistency with applicable planning principles and guidelines. All projects are reviewed a minimum of two times by the board.

The responsibilities of the DRB include, but is not limited to, the following:

 To assure compatibility with the approved 2021 LRDP and supporting planning documents that have been adopted by the campus

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- To review planning studies, proposed building designs and siting alternatives for compatibility with their settings and appropriateness to their function programs and budgets
- To ensure that proposals for new campus projects are presented in a broad context, with due consideration given at all points of project development to issues of landscape design, circulation, and environmental protection
- To review all aspects of exterior urban and landscape design and to provide guidance to the design teams, building committees, and the campus planning committee
- To identify and articulate to the campus community planning and design issues critical to ongoing campus development

4.1.3 Environmental Impacts and Mitigation Measures

Significance Criteria

UCR utilizes the following 2020 CEQA Guidelines Appendix G significance criteria questions with minor modifications related to Aesthetics.

Would the proposed 2021 LRDP:

- a) Have a substantial adverse effect on a scenic vista?
- b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?
- c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point)?
- d) Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?

Issues Not Evaluated Further

State Scenic Highways (Criterion b)

The Initial Study for the proposed 2021 LRDP (Appendix A) determined that that UCR campus is not located within the viewshed of an identified State Scenic Highway. Thus, the threshold related to this subject is not evaluated further.

Analysis Methodology

The evaluation of potential aesthetic and visual resource impacts is based on on-site review of the LRDP area and surrounding environment, review of site photographs representing KVPs, and surrounding areas. In determining the level of significance, this analysis focuses on the nature and magnitude of visual change, the number of public vantage points from where this change would be visible, and the number of viewers who would be affected by this change. In addition, the analysis considers viewer sensitivity as a function of the visibility of resources in the landscape, proximity of the viewers to the visual resource, elevation of the viewers relative to the visual resource, frequency and duration of views, numbers of viewers, and types and expectations of individuals and viewer groups. It is assumed that projects implemented under the 2021 LRDP would comply with existing procedures pertaining to development within UCR (e.g., Design Review) and would be consistent with the UCR Physical Design Framework.

As addressed in CEQA analysis, aesthetics refers to visual concerns. Aesthetics or visual resources analysis is a process to assess the visible change that could result from project implementation. Methodologies developed by federal and State agencies have been adopted here for assessments consistency with industry-wide standards (Bureau of Land Management 1984, Federal Highway Administration 2015). While the conclusions of these assessments may seem partly subjective, value is measured based on generally accepted criteria for quality, viewer sensitivity, and viewer response, supported by consistent levels of agreement in research on visual quality evaluation. Modifications in a landscape that repeat basic elements found in that landscape are said to be in harmony with their surroundings. Changes that do not harmonize often look out of place and can be found to form an unpleasant contrast when their effects are not evaluated adequately. An aesthetics impacts assessment uses data from three steps, as follows:

- Identify visual features or resources in the landscape from KVPs
- Assess the character and quality of those resources relative to the overall regional visual character
- Evaluate potential significance of features in the landscape to people who view them and determine their potential sensitivity to the changes proposed by the project

For the purposes of this EIR, scenic vistas are viewpoints that provide a publicly accessible expansive and panoramic view of a large geographic area. Furthermore, panoramic views provide visual access to a large geographic area for which the field of view can extend into the distance. They can be associated with a dramatic change in elevation, but they can also be from an undeveloped flat area toward features, such as mountains in the distance. In addition, these views are typically available from a publicly accessible viewpoint, such as roads or public gathering places, rather than views available from private residences. Near the UCR campus, the Box Springs Mountains are the most prominent visual feature from many locations, and thus sweeping panoramic views of the Box Springs Mountains are considered a scenic vista for the purposes of this EIR. As pictured in the KVPs described above, scenic vistas as defined by UCR are not available from most locations around the campus, with the exception of those visible at KVP 1 and KVP 2 on Martin Luther King Boulevard and Chicago Avenue, and KVP 9 on Canyon Crest Drive (see Figure 4.1-34, Figure 4.1-35, and Figure 4.1-42).

Although not considered scenic vistas, other visual features of note in the vicinity include Mount Rubidoux to the west, the San Bernardino Mountains and the San Gabriel Mountains to the northwest, with these ranges being visible from the campus only when atmospheric conditions permit.

Visual character is described in terms of high, moderate, and low visual quality. Scenic quality can be described best as the overall impression a viewer retains after driving through, walking through, or flying over an area (Bureau of Land Management 1984). Viewer response is a function of the number of viewers, number of views seen, distance of the viewers from the KVP, and the viewing duration. Viewer sensitivity reflects the extent of public concern for a particular viewshed (Federal Highway Administration 2015). High quality areas must be vivid, memorable, distinctive, unique, and intact; they can be natural, park-like, or urban (with urban areas displaying strong and consistent or notable architectural and urban design features). Moderate quality areas are generally pleasant appearing but are considered common or ordinary as they lack dramatic or memorable features. Low quality areas may be visually out of place, lack visual coherence, not have compositional harmony, or contain elements considered an eyesore. The potential for degradation of visual character of the campus and its surroundings is evaluated in terms of substantial adverse

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change in the visual character or quality, including a change in land use, and development of currently undeveloped land. Visual change that is compatible with existing patterns of development would not be considered a significant impact.

This analysis also reviewed potential impacts from new or increased sources of light and glare. Light sources may include exterior and interior building lighting, parking lot lighting, lighting from recreational fields, streetlights, pathway and security lighting, and headlights/taillights from vehicles. *Glare* refers to light from reflective surfaces that is so bright that it creates a nuisance or a hazard or inhibits the ability to see effectively.

2021 LRDP Objectives and Policies

The proposed 2021 LRDP contains objectives and policies relevant to aesthetics and visual resources:

Land Use (LU)

- Objective LU1 Serve as good stewards of limited campus lands and natural resources as UCR continues to grow and develop toward its enrollment goals
 - Policy: Promote increased densities on East Campus through increased site coverage and heights of future projects flanking northern and western gateways and campus loop road
- Objective LU2 Retain existing land-based research operations on West Campus, while balancing the need for innovative partnerships and initiatives
 - Policy: Require increased development density on East Campus
- Objective LU3 Maintain the general height and character of the Mid-Century Modern Core to preserve its unique design legacy in the Mid-Century Modern Core
 - Policy: Plan and design future buildings consistent with the existing established heights,
 building setbacks, and character of the Academic Center
 - Policy: Retain the Carillon Mall as a major campus mall, respecting its existing dominant width of approximately 200 feet throughout its length
- Objective LU4 Generally locate higher density future growth adjacent to and outside of the campus loop road
 - Policy: Allow increased heights and increased density on underutilized lands such as surface parking lots and in infill areas to meet future needs
- Objective LU5 Continue to grow on-campus student housing to 40 percent and increase student life facilities
 - Policy: Provide increased housing capacity and student life facilities in existing student neighborhoods in the northern portions of East Campus
- Objective LU6 Enhance Canyon Crest Drive as a new campus "Main Street" and northern gateway
 - Policy: Ensure that all proposed buildings include a mix of active uses that have a street interface

- Objective LU7 Celebrate the University Avenue corridor as the primary gateway into campus
 - Policy: Promote new facilities in this area which serve a broad swath of the campus population, engage the community, and support multi-modal access
- Objective LU8 Enhance campus edges to promote a welcoming impression to visitors and visually communicate the transition to campus-owned land areas
 - Policy: Locate key campus community-related facilities to engage campus edges and enhanced landscape strategies
- Objective LU9 Develop and maintain current principles and standards on the design of campus buildings and landscapes
 - Policy: Provide project designers with a current version UCR Physical Design Framework and Campus Construction and Design Standards

Open Space (OS)

- Objective OS1 Preserve and enhance major open spaces (malls, courtyards, streetscapes, quads, and pedestrian corridors) which contribute to the unique character and beauty of UCR
 - Policy: Limit future campus development from intruding into major open spaces as defined by the Open Space Framework Diagram [Figure F3.3 of the proposed 2021 LRDP], while allowing for supporting elements like individual project site design, landscaping, signage, etc., but ensuring those are sensitively integrated
- Objective OS2 Balance open spaces with the built environment throughout all areas of campus and provide opportunities for indoor-outdoor relationships between campus facilities and the landscape
 - Policy: Encourage new facility construction and renovations to activate first floors to allow for increased access and integration with the natural campus environment
- Objective OS3 Provide opportunities to engage with informal, naturalized landscapes with a special focus on internal campus Open Space Reserve areas and the UCR Botanic Gardens
 - Policy: Ensure safe, accessible entry points to informal landscape areas for passive recreational opportunities to benefit the entire campus population
- Objective OS4 Consider views to Box Springs Mountains and the San Gabriel Mountains at the terminus of view corridors and from primary campus open spaces to the extent feasible
 - Policy: Consider the preservation of terminal views from locations accessible to the general public along public corridors and panoramic views from primary open spaces in the location and configuration of new facilities or the introduction of new landscape features
- Objective OS5 Demonstrate an increased commitment to preservation and enhancement of the natural environment through the design and placement of future campus landscapes
 - Policy: Consider the ecological and potential stormwater management functions of proposed landscapes. Utilize climate-appropriate, native/drought-tolerant, and/or low maintenance landscape materials outside of signature campus open spaces

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- Policy: Protect the steep and natural hillsides on the southeast campus designated as an Open Space Reserve, to protect cultural resources, wildlife habitat, provide a visual backdrop to the campus, and protect against erosion
- Policy: In Open Space Reserve areas, where arroyos and other natural features exist, preserve wherever feasible, existing landforms, native plant materials, and trees. Where appropriate, restore habitat values

Impact Analysis

Impact AES-1 RESULT IN A SUBSTANTIAL ADVERSE EFFECT ON A SCENIC VISTA.

DEVELOPMENT UNDER THE PROPOSED 2021 LRDP COULD BLOCK OR IMPEDE VIEWS OF SCENIC VISTAS, NAMELY VIEWS OF THE BOX SPRING MOUNTAINS. IMPACTS TO SCENIC VISTAS WOULD BE SIGNIFICANT AND UNAVOIDABLE.

Agricultural lands on West Campus would mostly remain in their current state for land-based research, including those locations near KVP 1 and KVP 2. Thus, views would remain available to motorists traveling on Chicago Avenue, Martin Luther King Boulevard, and Iowa Avenue looking east. New development may occur in infill locations including the Agricultural/Campus Research, Student Neighborhood, Campus Support, and University Avenue Gateway LRDP land use designations. These locations are surrounded on three sides by existing development. Some of these new structures would be visible, similar to the CARB facility shown in the middle ground of KVP 2, however this development on West Campus would not substantially impair scenic vistas to the general public.

Under the proposed 2021 LRDP, a resource-efficient approach to land use planning on East Campus would be reinforced to accommodate growth pressures for the projected increase in student and faculty population. As currently envisioned, development under the proposed 2021 LRDP would occur primarily in previously disturbed areas, adjacent to previously developed areas, surface parking areas, generally along North/South/East/West Campus Drive, and generally along University Avenue, Canyon Crest Drive, Big Springs Road, Aberdeen Drive, and West Linden Street. Additionally, development under the 2021 LRDP would primarily be infill development or expansion of already developed areas. Some limited development is programmatically assumed for a new interpretative center in the UCR Botanic Gardens LRDP land use designation, however, no specific plans have been proposed.

From on campus, views toward the nearby hillsides and mountains are framed by the campus buildings, where architectural style, orientation, and landscaping are designed to evoke similar shapes, colors, and horizon lines as those created by the natural landscape. From nearby roadways looking toward the campus, including West Linden Street, Blaine Street, Watkins Drive, Canyon Crest Drive, and University Avenue, the existing built environment is either distant enough from the scenic landscape not to be visible, or dense enough not to afford expansive views of that landscape. Impacts on scenic vistas in the areas listed above would be **less than significant**.

Additional student housing is projected to occur through strategic infill and selective replacement of existing housing facilities in the northern part of East Campus, including the North District Development area, Bannockburn Village and Oban Apartments on Canyon Crest Drive south of West Linden Street, and the Falkirk Apartments on Canyon Crest Drive north of West Linden Street. Infill development may replace the existing Amy S. Harrison Athletic Field near the northeast corner of University Avenue and Canyon Crest Drive (KVP 9). New development would be designed and

constructed in a manner consistent with, and generally adjacent to, existing development which has already altered some long-distance views. In addition, any campus-related development would be required to comply with the UCR Design Review process and be generally consistent with the Physical Design Framework.

As summarized in Table 4.1-1, most of the KVPs in the area of West Linden Street and Canyon Crest Drive, where these sites are situated, do not feature expansive views that meet the definition of a scenic vista. Where new development would replace existing, deteriorating buildings, no new impact to scenic vistas would occur, even if those buildings are taller. The exception would be academic buildings that could be constructed where the athletic and soccer fields occur east of Canyon Crest Drive and the CHASS Interdisciplinary Building (KVP 9 and similarly situated views within campus). Because expansive views are available across the campus from this site, scenic vistas could be impacted with the construction of new buildings that may be five to eight stories or up to 65 to 80 feet tall. Although, adherence to the Design Review process, including the UCR *Physical Design Framework*, would ensure that new buildings fit in and contribute to the current sense of place and developing with campus expansion, new campus development in this area would potentially block views of the Box Springs Mountains from the roadway and pedestrian walkways. As such, impacts to scenic vistas for KVP 9 would be considered **significant**.

The UCR Botanic Gardens is in the easternmost portion of East Campus, at the foothills of the Box Springs Mountains, and serves a unique role as a venue for a wide array of teaching, research, and demonstration activities. Approximately one-third of the UCR Botanic Gardens land remains natural, featuring the native habitat of the region. The UCR Botanic Gardens houses several buildings on the site, including a Gatehouse with two small restrooms and a meeting room near the entrance. Located on the Gardens property are a second restroom building, garage used as an office and equipment space, propagation lath house, greenhouse, and a business office, the Schneider House, which is located along the eastern edge of the Gardens approximately halfway up the property from the entrance.

The predominant UCR Botanic Gardens uses may include demonstration gardens, habitat restoration and management areas, and incidental facilities such as a new interpretive center, seating and viewing areas, and other amenities typically compatible with a botanic garden program. Secondary permissible uses may include support facilities for the UCR Botanic Gardens and parking. Development proposed within the UCR Botanic Gardens area includes facilities typical of this type of use and thus would not substantially affect the existing views of the UCR Botanic Gardens nor substantially affect the distant views of the Box Springs Mountains as future proposed development such as trails would afford partial views of these areas. Therefore, impacts on scenic vistas would be less than significant.

Mitigation Measures

No feasible mitigation available.

Significance After Mitigation

Impacts would be significant and unavoidable.

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Impact AES-2 DEGRADE EXISTING VISUAL CHARACTER OR QUALITY.

DEVELOPMENT UNDER THE PROPOSED 2021 LRDP WOULD INCLUDE CONSTRUCTION OF NEW FACILITIES AND GREEN SPACE ON THE UCR CAMPUS AND RENOVATIONS OF EXISTING STRUCTURES. PHYSICAL CHANGES WOULD NOT DEGRADE THE VISUAL CHARACTER OF THE CAMPUS OR SURROUNDING AREAS. IMPACTS WOULD BE LESS THAN SIGNIFICANT. NO MITIGATION MEASURES ARE REQUIRED.

Construction

Potential visual impacts would arise from intermittent construction activities (i.e., barricade installation, construction staging, and grading). During construction, areas would be graded and excavated, which would include the removal of existing structures, and the temporary removal of some of the existing ground cover and vegetation. The types and number of equipment would vary throughout the construction period, depending on the types of activities occurring, but the presence of trucks with building materials and equipment would result in short-term visual degradation. These would occur on construction sites and in nearby staging areas, as appropriate for each project. Visual degradation would be limited to the duration of construction and to specific project sites. From public roadways and nearby public places, such as shopping centers, the visibility of construction staging would vary, depending on project location. While construction sites could be unsightly, it would be temporary, phased over time, and screened to an extent with construction fencing as noted in the Campus Construction and Design Standards. While this would temporarily change the visual character and quality of the site, construction activities and equipment are common features in the area, and would not result in permanent visual degradation and would not substantially degrade the existing visual character or quality of the site and its surroundings. Therefore, impacts during construction would be less than significant.

Operation

Existing visual quality of the campus is generally high, due to the existing high number of visual resources such as consistent architectural elements, landscaping, and resources such as the UCR Bell Tower and Carillon Mall, Modernist and contemporary architectural styles, and open spaces, such as Picnic Hill and the UCR Botanic Gardens. New development would be designed to support the campus academic mission and enhance the sense of place on the campus and in nearby student housing and mixed-use facilities, to sustain the well-being of UCR's student, faculty, and staff communities (UCR 2010). All new development on campus would be subject to the design review and approval processes described in the *Physical Design Framework*, that includes multiple working groups and advisory committees. These advisory committees feature membership from Faculty Senate, undergraduate and graduate student associations, and other campus stakeholders who consider topics as broad as pedestrian and vehicular circulation, campus art, and orderly growth.

In some cases, the existing built environment is neither cohesive in terms of design and plan nor maintained to a degree that the buildings and cultivated landscape are harmonious or remarkable. This is particularly evident in the older student apartment complexes along Blaine Street, West Linden Street, and Canyon Crest Drive, as described in KVP 3, KVP 4, KVP 5, and KVP 6 (Figure 4.1-36, Figure 4.1-37, Figure 4.1-38, and Figure 4.1-39). Thus, older development competes visually with newer construction and reduces the visual quality overall. This is particularly true along areas of West Linden Street and Blaine Street, west of Watkins Drive and west and east of Canyon Crest Drive. New development that results from implementation of the proposed 2021 LRDP would therefore have a beneficial effect on visual quality as architectural and landscape design would

comply with the UCR Physical Design Framework and increase the unity, harmony, and overall quality of these areas.

As shown on Figure F3.2, Density Framework, of the proposed 2021 LRDP, heights of up to 55 feet to 80 feet would be allowed within the northern portions of East Campus; heights of up to 55 feet to 65 feet would be allowed in the Academic Center; heights of up to 55 feet to 85 feet would be allowed in the southern portions of East Campus; and heights of up to 55 feet to 85 feet would be allowed in the Campus Support (55 feet high), Student Neighborhood (65 feet high), Agricultural/Campus Research (65 feet high) and University Avenue Gateway (85 feet high) LRDP land use designations. The proposed heights will cast shade and shadow during times of the day during different seasons of the year similar to that of other taller campus facilities on campus (e.g., North District Phase I – 6 stories, Dundee Glasgow – 7 stories). As specific projects are not being evaluated here, exact shadow studies are not possible. Nonetheless, new sources of shadow would change the degree to which different areas experience direct sunlight.

The proposed 2021 LRDP would strengthen the visual quality by replacing deteriorating residential buildings, increasing the sense of place campus-wide, and enhancing gateways on Canyon Crest Drive and University Avenue. These would improve visual resources and overall scenic quality on and off campus. As noted above, a new interpretative center has also been programmatically assumed in the UCR Botanic Gardens LRDP land use designation. This development would be similar in nature to the existing structures, which include several buildings on the site, as described in greater detail in the environmental setting above.

Agricultural lands on West Campus would mostly remain in their current state for land-based research, including those locations near KVP 1 and KVP 2. New development may occur in infill locations on West Campus including the Agricultural/Campus Research, Student Neighborhood, Campus Support, and University Avenue Gateway designations. These locations are surrounded on three sides by existing development. Some of these new structures would be visible, similar to the CARB facility shown in the middle ground of KVP 2 and would change these parcels from agricultural land to urbanized land. However, these changes are considered a **less than significant impact.**

As described in the regulatory setting above, as new construction would undergo design review, new buildings would have a high-quality visual character, such that the overall visual quality of the campus would be maintained or improved. Therefore, the proposed 2021 LRDP would have **less than significant impacts** on visual character and quality.

Mitigation Measures

No mitigation required.

Significance After Mitigation

Impacts would be less than significant without mitigation.

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Impact AES-3 Create a New Source of Light or Glare.

IMPLEMENTATION OF THE PROPOSED 2021 LRDP WOULD LEAD TO MORE INTENSIVE DEVELOPMENT ON THE CAMPUS AND NEW SOURCES OF NIGHTTIME ILLUMINATION. FUTURE DEVELOPMENT WOULD BE REQUIRED TO COMPLY WITH UCR CAMPUS CONSTRUCTION AND DESIGN STANDARDS AND CALIFORNIA POLICIES AND STANDARDS SPECIFICALLY DESIGNED TO REDUCE LIGHTING IMPACTS. ADHERENCE TO THESE POLICIES AND STANDARDS AS WELL AS INCORPORATION OF MITIGATION MEASURES MM AES-1 AND MM AES-2 WOULD REDUCE LIGHT AND GLARE IMPACTS TO A LESS THAN SIGNIFICANT LEVEL.

As discussed in Section 4.1.1, existing moderate to high levels of exterior lighting are typical for the level of campus facilities, commercial, and residential development in the urbanized project area and immediate vicinity. Existing light sources located in the immediate vicinity of the campus area include street and parking lot lighting, lighting associated with recreational uses, campus facilities, commercial and residential uses, as well as lighting from vehicle headlights and taillights.

Construction

Temporary and intermittent glare during construction would be anticipated from sunlight reflecting from equipment or vehicle windshield or material staging areas; however, the amount of glare from such equipment is not anticipated to be substantial given the limited number of construction equipment on-site at any one time. Furthermore, the duration of construction equipment is temporary, and construction areas are routinely fenced (opaque screen mesh) from public view. Impacts would be a **less than significant impact**.

Construction may occasionally occur at night with associated equipment and construction lighting. However, construction would primarily be limited to daytime hours. In addition, some sites may utilize temporary nighttime security lighting during construction. Use of construction lighting would be minimal and temporary in nature and focused on the work area within the project site. No long-term significant lighting or glare impacts are anticipated during construction. Impacts would be a less than significant impact.

Operation

As described in Section 4.1.1, there is existing moderate to high levels of exterior lighting that are typical for the level of campus, commercial, and residential development in the LRDP area and immediate vicinity.

Implementation of the proposed 2021 LRDP would create new light sources associated with new or remodeled residential and academic buildings, parking structures, recreational uses, and lighting for pathways, signs, transit hubs, security, and pedestrian crossings. These would include building safety lighting, parking lot lights, street/pathway lighting, lighting from recreational related uses, architectural lighting, signage, lights that could emanate from windows at night, and cars entering and exiting parking lots and parking structures at night.

Glare could be produced by the sun shining on the windshields of parked vehicles, reflective glass exteriors, or other light-colored surfaces. The exterior or façade of facilities developed under the proposed 2021 LRDP could include reflective surfaces such as glass and metal that have the potential to create glare.

New sources of exterior lighting would be subject to the development guidelines and standards of California Title 24, as assured by the *Physical Design Framework* or *Campus Construction and Design Standards* that specify fundamental development standards including:

- Developments include sufficient lighting for safety
- All new and replacement pathway, street, and parking facilities light fixtures will be full cutoff and shielded as necessary
- Lighting should be visually compatible to developments, and as appropriate, highlight key features such as special building or landscape elements
- Specialty lighting shall meet the programmatic and functional requirements of the development
- Typical campus exterior light temperatures are as follows:
 - Street and parking lot lighting: 5,000 Kelvin (K)
 - Walkway lighting: 4,000K
 - Special area and accent lighting: 3,000K

The campus is currently characterized by a moderate to high level of nighttime illumination, depending on location, that allows for safe and secure nighttime operation of campus facilities and events and on-campus residential life. New structures developed under the 2021 LRDP would comply with the current lighting standards outlined in the Physical Design Framework or the Campus Construction and Design Standards. Infill development along Canyon Crest Drive, University Avenue, West Linden Street, Blaine Street, Big Springs Road, Aberdeen Drive, and North/South/East/West Campus Drive may improve lighting conditions, making those areas safer for pedestrians traversing the campus and its residential neighborhoods. Furthermore, the Physical Design Framework requires that sidewalks be shaded to the greatest extent feasible to reduce heat. Landscaping would also reduce the amount of light that would spill into public places from uncovered windows and exterior fixtures.

Additionally, development under the proposed 2021 LRDP would occur primarily within previously disturbed areas, adjacent to previously developed areas, and surface parking areas where parking lot lighting would be removed for the construction of new structures, potentially reducing the amount of lighting within that specific area.

Sensitive light and glare receptors in Riverside include residents in nearby areas; however, as most development proposed by the 2021 LRDP would occur in already developed areas, sensitive receptors would not be impacted more than under current conditions by new light sources. New lighting would be in proximity to off-campus residential uses adjacent to campus, but lighting within internal campus would be similar to that of existing lighting conditions. Although the new lighting associated with implementation of the proposed 2021 LRDP would contribute to the overall ambient glow of the campus and immediate surrounding areas, lighting on on-site campus uses would be required to be reflected away from adjacent residential premises to prevent light spillover. Further, the UCR main campus and surrounding development within the City generate levels of light typical for a highly urbanized setting with substantial sources of existing ambient lighting. Due to the urban setting of the campus as well as the surrounding area, it is difficult to view the night sky under existing conditions. However, new sources of exterior light could impact visibility of the night sky if they were to be bright enough or directed upward such that they increase the light levels in the area substantially. Thus, impacts to light and glare is considered to be significant. New lighting would be subject to the Campus Construction and Design Standards along with Mitigation Measure MM AES-1. With implementation of the Campus Construction and Design Standards and Mitigation Measure MM AES-1, impacts would be less than significant with mitigation incorporated.

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As projects are implemented under the proposed 2021 LRDP, they would be developed in accordance with the UCR Physical Design Framework, which requires that building materials and color palettes are contextually sensitive. New pedestrian walkways associated with the project would typically use the "UCR tan" color mixture to reduce surface glare.

Increased vehicular traffic could impact glare effects along Martin Luther King Boulevard and Canyon Crest Drive, University Avenue and Everton Place, east of Iowa Avenue, West Linden Street, west of Canyon Crest Drive, West Linden Street and Blaine Street, and Watkins Drive, east of Canyon Crest Drive, as vehicles enter and exit parking structures. However, these effects would be temporary and adjacent uses would not experience significant impacts from increased glare. Furthermore, the construction of new parking facilities in garage structures would limit glare from parked cars.

With adherence to the *Campus Construction and Design Standards*, the UCR *Physical Design Framework*, the policies in the proposed 2021 LRDP related to light and glare, and incorporation of Mitigation Measures **MM AES-1** and **MM AES-2**, impacts would be **less than significant with mitigation incorporated**.

Mitigation Measures

MM AES-1

UCR shall incorporate site-specific consideration of the orientation of the building, use of landscaping materials, lighting design, and choice of primary façade materials to minimize potential off-site spillover of lighting and glare from new development. As part of this measure and prior to project approval, UCR shall require the incorporation of site- and project-specific design considerations (to be included in the lighting plans) to minimize light and glare, including, but not limited to, the following:

- New outdoor lighting adjacent to on-campus residences and adjacent off-campus sensitive uses shall utilize directional lighting methods with full cutoff type light fixtures (and shielding as applicable) to minimize glare and light spillover.
- All elevated light fixtures such as in parking lots, parking structures, and athletic fields shall be shielded to reduce glare.
- Provide landscaped buffers where on-campus student housing, uses identified as Open Space Reserve and UCR Botanic Gardens, and off-campus residential neighborhoods might experience noise or light from UCR activities.
- All lighting shall be consistent with the Illuminating Engineering Society of North America (IESNA) Lighting Handbook.
- The UCR Planning, Design, & Construction staff shall review all exterior lighting design for conformance with the Campus Design and Construction Standards.

Verification of inclusion in project design shall be provided at the time of design review and lighting plans shall be reviewed and approved prior to project-specific design and construction document approval.

MM AES-2

Ingress and egress from new parking areas and parking structures shall be designed and situated to direct vehicular headlights away from adjacent residential uses, as necessary. Walls, landscaping, or other light barriers and shielding shall be provided where appropriate. Site plans shall be reviewed and approved as part of project-specific design and construction document approval.

Significance After Mitigation

Impacts would be less than significant with Mitigation Measures MM AES-1 and MM AES-2 incorporated.

4.1.4 Cumulative Impacts

The cumulative context for aesthetic resource impacts for the proposed 2021 LRDP include the existing and planned land uses on and around the campus, including in adjacent neighborhoods in Riverside. Development of past and current projects and future projects continue to alter the visual environment of the city and the surrounding area. The projects listed in Table 4-1, represent development and redevelopment that will physically change the visual environmental setting on the campus, creating cumulative on-campus impacts; further described in Section 4 are several neighborhood plans that will also contribute to cumulative aesthetic impacts to the city of Riverside in combination with development facilitated by the proposed 2021 LRDP.

The largest of the on-campus projects listed in Table 4-1, is the North District mixed-use development, a multi-phase project that would have the most potential to cause aesthetic impacts as it increases density and changes the visual character of the area in which it is being or will be built. However, aesthetics impacts for this development were found to be **cumulatively less than significant** and, even, beneficial.

Elsewhere, the Eastside Neighborhood Plan will implement development of single- and multi-family residential, retail, and industrial areas directly west of West Campus, east of the downtown neighborhood, and south of Hunter Industrial Park. Plans related to the Eastside Neighborhood include the University Avenue Specific Plan, which directs land uses and transportation modes along the University Avenue corridor, and the Riverside Marketplace Specific Plan, which directs land use and historic preservation in the Marketplace area (City of Riverside 2009). The Sycamore Canyon Specific Plan occurs in the Canyon Crest Neighborhood south of West Campus and southwest of the I-215/SR 60 freeway. The main objective of this specific plan is to direct the development of existing and annexed lands for residential uses in a manner that preserves open space areas high in scenic quality, biological, and cultural significance, including the Sycamore Canyon Park (City of Riverside 2007b).

These specific plans are designed to comply with the Citywide Design and Sign Guidelines, which limit impacts to aesthetic resources by reducing interruptions of scenic vistas, maintaining and enhancing scenic resources and visual character, and reducing light and glare in various planning areas. The City's General Plan also includes policies that reduce any given project's contribution to cumulative aesthetic impacts related to scenic vistas and light and glare (City of Riverside 2007b).

These planning areas are in the vicinity of UCR but are not visible from public vantage points on or adjacent to campus. Despite the adjacency, development in those areas would occur in areas that have existing development and would be required to comply with the policies concerning community character, design, and aesthetics of the City's General Plan, the City's Municipal Code, and the City's Citywide Design and Sign Guidelines. Furthermore, the Hillside Residential designation

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in the City's General Plan limits development in ecologically and visually sensitive areas, reducing potential cumulative impacts but regulating the amount of development that can occur near areas like Box Springs Mountains or Sycamore Canyon Park. Thus, the regulatory environment and design guidelines for the city provide a framework for future development to enhance community cohesion and visual identity, ensure design compatibility, strengthen linkages between UCR and the surrounding community, and preserve natural amenities and views.

Academic buildings could be constructed where the athletic and soccer fields occur east of Canyon Crest Drive and the CHASS Interdisciplinary Building (KVP 9 and similarly situated views within campus). Because expansive views are available across the campus from this site, scenic vistas could be impacted with the construction of new buildings that may be five to eight stories or up to 65 to 80 feet tall. Although, adherence to the Design Review process, including the UCR *Physical Design Framework*, would ensure that new buildings fit in and contribute to the current sense of place and developing with campus expansion, new campus development in this area would potentially block views of the Box Springs Mountains from the roadway and pedestrian walkways. As such, impacts to scenic vistas for KVP 9 would be considered **significant**. Therefore, the project's contribution to impacts to scenic vistas (Impact AES-1) would be **cumulatively significant**.

Cumulative effects of lighting are visible over a wide area, and collective lighting from denser development can create skyglow, which would be a significant cumulative impact. The campus and surrounding areas are in an urban setting with lighting from streetlights, illumination for paths, buildings, and other facilities and structures. As described in Section 4.1.4, implementation of the 2021 LRDP would introduce new lighting sources, but these would be like existing sources. Campus lighting design guidelines and lighting regulations under CalGreen would limit light trespass and glare on areas adjacent to UCR. Impacts would be less than significant with the implementation of MM AES-1 and MM AES-2. Therefore, the project's contribution to light and glare (Impact AES-3) would be cumulatively less than significant with mitigation incorporated.

4.1.5 References

- Bureau of Land Management. 1984. Manual 8400 Visual Resource Management. Washington, DC. April 5, 1984.
- California Air Resources Board (CARB). 2020. "Southern California Headquarters." [web page]. https://ww2.arb.ca.gov/southern-california-headquarters (accessed December 2020).
- Comras, Kelly. 2016. Ruth Shellhorn. The University of Georgia Press. Pp. 131-143.
- Federal Highway Administration. 2015. Guidelines for the Visual Impact Assessment of Highway Projects. Prepared by ICF International for the Federal Highway Administration. Washington, DC. January 2015.
- Design West Engineering. 2020. "The Barn." [web page]. http://www.designwesteng.com/ucr-barn (accessed December 2020).
- Friends of the California Citrus Park. 2020. "Visitor Center." [web page]. https://californiacitruspark.com/visitor-center/ (accessed December 2020).
- Rivers and Lands Conservancy. 2018. "Totally Mt. Rubidoux." [web page]. Last updated 2019. https://riversandlands.org/mt-rubidoux-peak-campaign-2018/more-about-mt-rubidoux-peak/ (accessed December 2020).

Riverside, City of. 2007a. Riverside General Plan 2025 PEIR, 5.1 Aesthetics. Riverside, CA. Amended November 2012.
2007b. Sycamore Highlands Specific Plan. Riverside, CA. November 2007.
2009. Eastside Neighborhood Plan, Appendix D of the General Plan 2025. Riverside, CA. June 2009.
University of California (UC). 2018. Field Operations Manual. Revised November 2018. https://www.ucop.edu/safety-and-loss-prevention/_files/field-research-safety/wildland-fire-safety.pdf
University of California Riverside (UCR). 2005. University of California Riverside 2005 Long Range Development Plan. http://rplan.ucr.acsitefactory.com/sites/g/files/rcwecm1811/files/2018-10/LRDP%20-%20FInal.pdf .
2010. The History of UCR: UCR 2020 Strategic Planning Working Paper. https://strategicplan.ucr.edu/sites/g/files/rcwecm2701/files/2019-03/history_of_ucr.pdf.
2019. North District Development Plan Revised Draft Environmental Impact Report. SCH #2018061044. Prepared by Impact Sciences. Riverside, CA. https://pdc.ucr.edu/sites/g/files/rcwecm2356/files/2019-04/ndd_revised_deir_all_sections.pdf
2020a. "The Physical Site." UCR Botanic Gardens. [web page]. https://gardens.ucr.edu/gardens/site (accessed December 2020).
2020b. "The Barn to reopen for dining." Inside UCR. [web page]. https://insideucr.ucr.edu/stories/2020/07/07/barn-reopen-dining (accessed December 2020).
2021. "Buildings and Facilities." UCR Botanic Gardens. [web page]. https://gardens.ucr.edu/gardens/buildings_and_facilities (accessed July 2021).

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