



CAPITAL PROJECTS
PHYSICAL AND ENVIRONMENTAL PLANNING
300 A & E BUILDING, # 1382
BERKELEY, CALIFORNIA 94720-1382

October 2009

**ENVIRONMENTAL ASSESSMENT AND
ADDENDUM #6¹
TO THE 2020 LONG RANGE DEVELOPMENT PLAN
ENVIRONMENTAL IMPACT REPORT**

NOTICE OF AVAILABILITY

Project Title: UC Berkeley Anna Head West Student Housing
Project Location: Southside Area, University of California, Berkeley
Block bounded by City of Berkeley streets Channing Way, Bowditch Street, and Haste Street
County: Alameda County, California
Program EIR: UC Berkeley 2020 Long Range Development Plan EIR, certified by The Regents January 2005, SCH #2003082131

INTRODUCTION AND SUMMARY

PROJECT OVERVIEW

The Anna Head West Student Housing project will construct a new undergraduate housing complex that will help meet undergraduate student housing goals as described in the University's 2020 Long Range Development Plan (hereafter, the 2020 LRDP). The 2020 LRDP identified a need for over 1,600 new beds of single-student housing. The 142,931 gsf project will provide 424 beds towards this goal, consisting of a new residence hall for 200 sophomores and apartments for 224 upper division students. The objectives are to meet single student housing demand and to provide the opportunity for students to have continuity in housing throughout their university careers.

The Project site is a University-owned surface parking lot located three blocks south of the central campus. The property includes the former Anna Head School for Girls, a City of Berkeley Landmark, currently used by UCB research units, student services and a childcare program. The project site is bounded by Channing Way, Bowditch and Haste Streets, and commercial properties on Telegraph Avenue, and is directly across

^{1 1} Earlier addenda to the UC Berkeley 2020 LRDP EIR were completed for the Amendments to the Sustainable Campus chapter of the 2020 LRDP to address climate change (Addendum #5, July 2009); Naval Architecture Building Restoration and Addition (Addendum #4, December 2008); the Durant Hall Renovation Project (Addendum #3, March 2008); the Campbell Hall Replacement Building (Addendum #2, March 2008); and the Center for Biomedical and Health Sciences (Addendum #1, May 2007).

the street from People's Park. The site is within the LRDP Housing Zone defined as within one mile of the center of campus, or within a 20 minute trip by transit and walking, in the 2020 LRDP. This location provides excellent access to public transportation, stores, and services, including the nearby Central Dining Facility.

The program goals for the Project are based on Residential and Students Services (RSSP) Residential Life program values:

- Provide an environment that fosters an inclusive sense of community and cooperative learning
- Design living spaces to promote social, physical and emotional health
- Incorporate measures that contribute to the security of the site and its surroundings

In response to the shortage of housing available to students within the City of Berkeley, the UC Berkeley 2020 Long Range Development Plan (LRDP), approved by the Regents in May 2005, established a policy to increase the inventory of undergraduate beds to equal 100% of entering freshman and 50% of entering transfer students and continuing sophomores, or an estimated increase of up to 2600 beds by the year 2020. RSSP guarantees two years of student housing for entering Freshmen and one year for transfer students. Currently, applications for undergraduate beds exceed inventory by 700 to 800, split evenly between entering Freshman and continuing or transfer students (personal communication, 8/19/09 Hoenig/Piatnitzka).

Table 1
Housing Supply

	No. of Beds
Housing goal from 2020 LRDP (source: 2020 LRDP, Table 2)	10,790
Current inventory ²	8,197
Proposed for single undergraduates in Anna Head West Student Housing	424
Remaining shortfall in bed spaces upon completion of Anna Head West	2,169

The Berkeley campus has a large supply (15%) of existing undergraduate beds in facilities that are over 50 years old that are in need of renewal. RSSP's ten-year capital plan includes a combination of both renewal and new construction, with only two projects that would supply a significant number of single undergraduate beds. Since the approval of the LRDP in 2005 the campus has invested \$135,000,000 in upgrading 642 beds at the historic Clark Kerr Campus (CKC). Other proposed renewal projects include the renovation of the historic 1920's-era Bowles Hall and the mid-century era Stern Hall. When completed, these two projects are expected to generate a total of 25-30 new beds. In addition to contributing towards LRDP targets, the Project is necessary to relieve some of the pressure caused by the loss of 200 beds during the Bowles Hall renovation, planned for 2013-14.

The Project will consist of up to six residential stories, with a residence hall component on the north and apartments on the west and south, served by separate lobbies. A ground level concourse level consists of common spaces to serve the facility as a whole, including staffed security counters, a student lounge, mail room, fitness room, laundry, kitchenette and academic support spaces. The residence hall is designed for double-occupancy bedrooms and compartmentalized bathrooms situated around a small courtyard. The apartment units consist of four single beds, a bathroom and a combined living/study/kitchen area.

Consistent with RSSP's commitment to the academic mission of the campus, the program includes an Academic Services Center (ASC) to assist students in their academic work. The ASC offers free computing,

² Seven bed spaces were added as a result of the renewal program at the Clark Kerr Campus

academic advising by the College of Letters and Science, tutoring in critical lower-division classes, and faculty mentoring programs. The ASC consists of a computing center with ten work stations; group study space; and offices for L & S advising, one Resident Faculty, and one Resident Director.

UCB student housing projects are located within walking distance of the campus and do not provide parking for students. The campus policy, as described on the RSSP housing website, states the following: "Parking is very limited at the University. Only a small number of parking spaces will be allocated to residents on the basis of demonstrated compelling need. Permits will be issued at the University's sole discretion, based upon consideration of medical needs, job requirements, academic needs or other extenuating circumstances." The addition of housing to the vicinity is expected to reduce parking demand among students who would otherwise require parking for commutes to campus. The Underhill parking structure, completed in 2007, implemented University policy by consolidating parking in a covered structure. The Underhill facility provided a net addition of 558 parking spaces over the previously existing number of surface spaces at that site, one block east of the Anna Head property. Due to the completion of the Underhill parking structure, the Anna Head West parking lot became less utilized and was converted to public parking by UCB Parking & Transportation in November 2008. The Project will not replace the existing 205 parking spaces on site. Any remaining parking demand would utilize on street parking, private parking in the vicinity, or the public Telegraph Channing garage; University permit holders would utilize the Underhill Parking Structure³.

UC Berkeley expects to submit the design for the Anna Head West Student Housing to the Regents for their consideration in November 2009. Construction is anticipated to start in July 2010 and be completed by Fall 2012.

ENVIRONMENTAL REVIEW

An Environmental Assessment has been prepared in accordance with CEQA, the CEQA Guidelines, and University of California Guidelines for the Implementation of CEQA, to determine the appropriate level of environmental review for the Anna Head West Student Housing project.

The UC Berkeley 2020 LRDP EIR indicated that projects implementing the 2020 LRDP would be examined to determine whether subsequent project-specific environmental documents are required. The 2020 LRDP EIR states:

CEQA and the CEQA Guidelines state that subsequent projects should be examined in light of the program-level EIR to determine whether subsequent project-specific environmental documents must be prepared. If no new significant effects would occur, all significant effects have been adequately addressed, and no new mitigation measures would be required, subsequent projects within the scope of the 2020 LRDP could rely on the environmental analysis presented in the program-level EIR, and no subsequent environmental documents would be required; otherwise, project-specific environmental documents must be prepared (2020 LRDP EIR Vol I page 1-2).

The use of the 2020 LRDP EIR in project review was also specifically addressed in the first Thematic Response to comments received on the 2020 LRDP Draft EIR (2020 LRDP EIR Vol 3a, page 11.1-1). There, the document reiterated the text quoted above, and explained :

Projects subsequently proposed must be examined for consistency with the program as described in the 2020 LRDP and with the environmental impact analysis contained in the 2020 LRDP EIR; if new

³ An April 2009 survey showed peak period occupancy of Underhill was only 79%, with 205 spaces available (personal communication, Riggs, 9.16.09).

environmental impacts would occur, or if new mitigation measures would be required, an additional environmental document would be prepared.

In accordance with CEQA (Public Resources Code Section 21000 et seq.), and the University of California Procedures for Implementation of CEQA, this Environmental Assessment was prepared to evaluate the Anna Head West Student Housing Project as it may conform or contrast from the LRDP implementation effort as described and analyzed in the 2020 LRDP EIR. The Environmental Assessment concludes the Project would not cause any new significant environmental effect not considered in the 2020 LRDP EIR, nor increase the severity of any impact previously found significant in the 2020 LRDP EIR; that no new information of substantial importance, which was not known at the time the 2020 LRDP EIR was certified, has become available; that the circumstances under which the Project will be undertaken have not changed to involve new significant environmental effects or substantially increased severity in environmental effects; and thus the University has determined that an Addendum to the 2020 LRDP EIR is appropriate for the Anna Head West Student Housing Project, itself in the form of the following Environmental Assessment.

ORGANIZATION OF THIS DOCUMENT

This Initial Study is organized into the following sections:

- **Notice of Availability, Introduction & Summary.** Summarizes the purpose of the Initial Study, the CEQA provisions applicable to the project, the approval process for the Project, and its policy context.
- **Project Description.** Presents a description of the Project.
- **Relationship to 2020 LRDP.** Describes the consistency of the Project with the UC Berkeley 2020 Long Range Development Plan and its Environmental Impact Report.
- **Environmental Evaluation.** Presents a topic-by-topic evaluation of potential environmental impacts of the Project and a determination of whether those impacts were adequately addressed in the 2020 LRDP EIR, based on the checklist questions set forth in Appendix G of the CEQA Guidelines
- **Environmental Determination.** States the appropriate level of environmental documentation based on the findings of the Environmental Evaluation.
- **Environmental Evaluation.** Presents a topic-by-topic evaluation of potential environmental impacts of the Project and a determination of whether those impacts were adequately addressed in the 2020 LRDP EIR.
- **APPENDICES**
 - Appendix A: Mitigation Measures and Best Practices Incorporated into the Anna Head West Student Housing Project as proposed (also within checklist)
 - Appendix B: Project-specific design guidelines
 - Appendix C: Project images
 - Appendix D: Arborist report
 - Appendix E: Cumulative foreseeable projects (list)

Although public circulation and review is not required, copies of this Addendum (Addendum #6 to the 2020 LRDP EIR) are available for review during normal operating hours at the offices of Capital Projects' Physical and Environmental Planning offices, Room 1 A&E Building on the UC Berkeley campus; and online at <http://www.cp.berkeley.edu>. The 2020 LRDP and the 2020 LRDP Environmental Impact Report (SCH #2003082131) are available on line at lr.dp.berkeley.edu; copies are available for review at the offices of Physical and Environmental Planning/Capital Projects/Facilities Services, Room 1, A&E Building on the Berkeley campus, and are available for review at the Berkeley Public Library and online. Comments on Addendum #6 will be accepted until end of the day October 30, 2009 and may be submitted to Beth Piatniza at this address:

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The project is scheduled for design approval at the November 2009 meeting of the Regents of the University of California committee on Grounds and Buildings. If you have any questions about the Project or environmental review for the Project, please contact Beth Piatnitzer, Associate Director, Physical and Environmental Planning, at (510) 643-2082.

Sincerely,



Emily Marthinsen

Assistant Vice Chancellor
Physical and Environmental Planning
Capital Projects

Enclosures

Cc: Vice Chancellor Edward Denton

PROJECT DESCRIPTION

PROJECT LOCATION

UC Berkeley is located approximately ten miles east of San Francisco, as shown in figure 1. Interstate 80, Highway 13, Highway 24, and Interstate 580 provide regional vehicular access to the campus. Regional transit access is provided by Bay Area Rapid Transit District (BART) and Alameda-Contra Costa Transit (AC Transit).

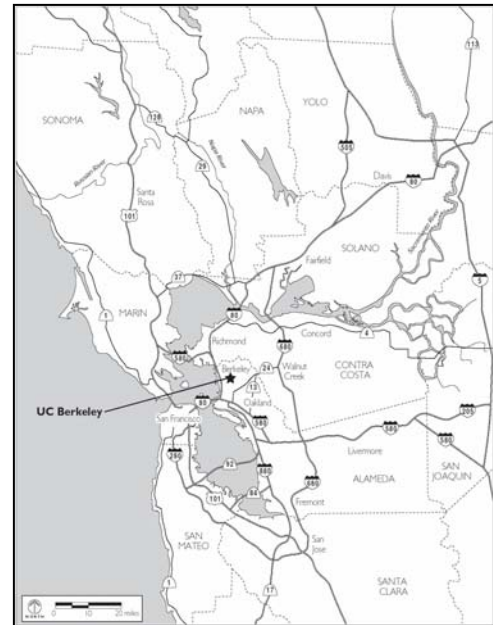


Figure 1: Regional location

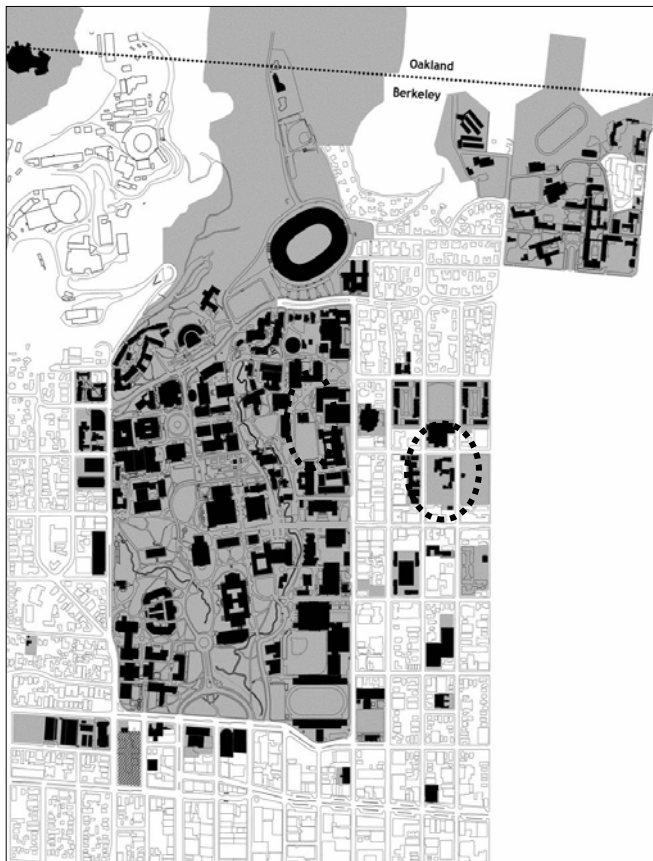


Figure 2: Site location in Southside neighborhood in the City of Berkeley.

SITE DESCRIPTION

As shown in figure 2, the Project site lies in the Berkeley city environs, three blocks from the southern edge of the central campus, and within the 2020 LRDP Housing zone, defined as within a one-mile radius of the center of campus, or 20 minute transit/walking trip. The site is located in the middle of a block bounded by Channing Way, Bowditch Street, Haste Street and Telegraph Avenue.

The site is located within the area designated in the 2020 LRDP as the Southside. In 1997 the City and University adopted an agreement, stating "The city and the university will jointly participate in the preparation of a Southside Plan....the campus will acknowledge the Plan as the guide for developments within the Southside area" (2020 LRDP p.49). The Project location conforms to the draft City of Berkeley's Southside Plan Design Guidelines, which encourages the construction of new housing on surface parking lots. As of fall 2009, the City of Berkeley has not yet adopted the Southside Plan.

The Southside area is comprised of a mixture of land uses, including residential, office, retail, parking, schools, recreational and institutional uses. Buildings are eclectic, diverse and rich in style and detail. Examples include Bernard Maybeck's historic Christian Scientist Church and Mario Ciampi's modern University Art Museum.

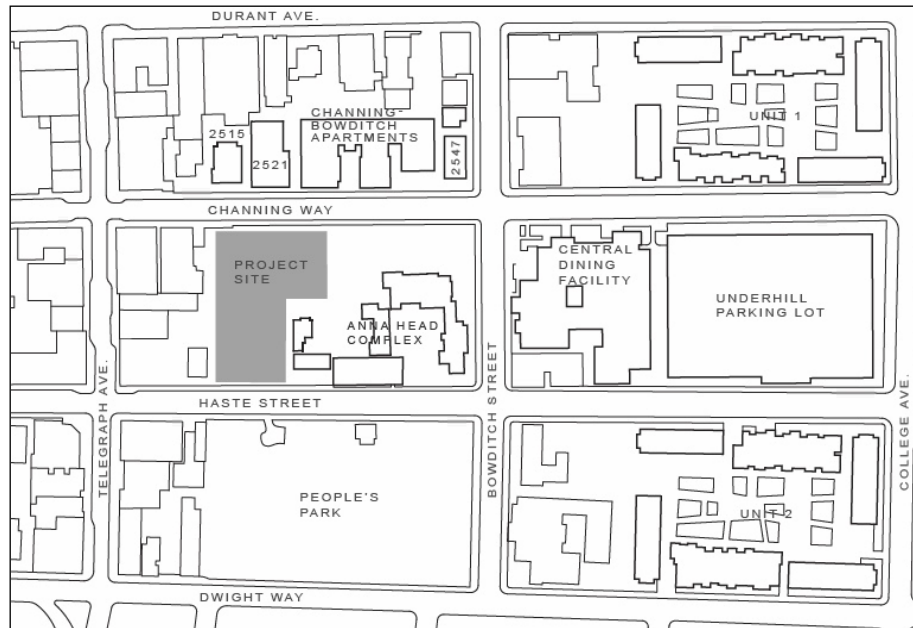


Figure 3. Project Site

Recent student housing projects include the projects completed under the Underhill Area Projects Master Plan which include the Unit 1 and Unit 2 Infill, the Channing Bowditch student apartments, and the Central Dining Facility, all of which contribute a variety of architectural styles from mid-rise modern to brown shingle.

The University-owned site was historically comprised of two properties: the John Hinkel estate and the Anna Head School for Girls, a complex of six buildings built in phases between 1892-1927. The Anna Head School is a City of Berkeley Landmark and is listed on the National Register of Historic Places and the State Historic Resources Inventory. The University acquired the Hinkel estate in 1948 and the Anna Head School in 1963 and combined the grounds of the two properties into one parking lot. The school is a noted example of the Bay Region Tradition, a regional expression of the Arts and Crafts movement, and is one of the first uses of the Brown Shingle mode in the Bay Area (see http://www.cp.berkeley.edu/CP/PEP/History/HistoricReports/HSR/HSR_AnnaHead_final_June2008.pdf for the *Anna Head Historic Structure Report*).

The Anna Head complex is used by University research units, student services, and an RSSP childcare program. All programs with the exception of the childcare program will remain on site during the construction period. The childcare program is expected to be relocated off site during the Anna Head West Student Housing construction. RSSP is evaluating options for a permanent location of this childcare program, which includes an evaluation of the Anna Head site.

A large, mature camphor and a Queensland Kauri-Pine, a rare specimen for the Bay Area, remain on the Hinkel portion of the site, reminders of the years when it was a lush estate. John Hinkel was a prominent businessman and an amateur horticulturalist. The Anna Head School was also surrounded by gardens and a few significant features remain. These include the two Canary Island Palm trees, a Red Flowering Gum tree, and a portion of the stone edging that defined the crescent driveway entering from Channing Way on the north side of the School.

The south edge of the site faces People's Park across Haste Street. The Park is a City of Berkeley landmark, due to its social, historical and cultural significance. The Park arose as a result of the late 1960's conflict with activists assembled on what was vacant UC-owned land who claimed it "for the people". Today the park is used as a campsite for homeless people and it supports a range of ad hoc social services for the disadvantaged. It is generally viewed by residents and members of the University community as unwelcoming and unsafe. (See, for example, The Daily Californian, September 1, 2009 "People's Park Sees Rise in Incidents of Violent Crime.")

PROGRAM DESCRIPTION

The Project will construct a new high-density student housing complex in order to help meet the 2020 LRDP housing targets and fulfill UC's housing guarantee policy. The 142,931 gsf/124,825 asf building is comprised of a residence hall for 200 sophomores and apartments for 224 upper division students. The project will also provide its residents with a range of on-site counseling, mentoring and academic support programs.

The Project will consist of the new student residence building and site and landscaping improvements between the new building and the Anna Head School buildings. Improvement of the northeast corner of the site, including removal of parking, is outside the area of the Project.

The building will be comprised of four to six residential stories, with a residence hall component on the north and apartments on the west and south, served by separate lobbies. A ground level concourse level consists of common spaces that serve the facility as a whole, including staffed security counters, a student lounge, mail room, fitness room, laundry, kitchenette and academic support spaces. The residence hall is designed for double-occupancy bedrooms and compartmentalized bathrooms situated around a small courtyard. The apartment units consist of four single bedrooms, a bathroom and a combined living/study/kitchen area. The apartments surround landscaped courtyards and are accessed from an open-air walkway.

Consistent with RSSP's commitment to the academic mission of the campus, the program includes an Academic Services Center (ASC) to assist students in their academic work. The ASC offers free computing, academic advising by the College of Letters and Science, tutoring in critical lower-division classes, and faculty mentoring programs. The ASC consists of a computing center with ten work stations; group study space; and offices for L & S advising, one Resident Faculty, and one Resident Director. Common-use areas directly serving the residents will total 18,191 ASF.

PLANNING CONTEXT

2020 LRDP

The Anna Head West Student Housing is proposed as partial implementation of the UC Berkeley 2020 Long Range Development Plan (2020 LRDP).¹ Adopted by the Regents in January 2005, the 2020 LRDP describes both the scope and nature of development proposed to meet the goals of the University through academic year 2020-2021, including projections of growth in both campus headcount and campus space during this timeframe. The 2020 LRDP also prescribes a comprehensive set of principles, policies, and guidelines to inform the location, scale and design of individual capital projects. These include both Location Guidelines, which establish priorities for the location of campus functions.

The Project conforms to the Location Guidelines, which prioritize locations on the Campus Park for uses which include: instructional spaces; faculty office, research, and conference spaces; student workspaces; and research activities with substantial student engagement & participation. All new student housing built under the auspices of the 2020 LRDP would be located within the LRDP Housing Zone, defined as within a one-mile radius of or 20 minute transit/walking trip to the center of campus. The location guidelines for new University housing are designed to help reverse the dispersion of student residences to areas more distant from campus and to support the objective of a vital intellectual community and full engagement in campus life.

The Project is located the Southside area within the City of Berkeley. The 2020 LRDP states that Projects within the Southside would use Southside Plan as a guide for project location and design. Early in the process, UC Berkeley participated extensively in joint planning with the City of Berkeley to guide future development in the Southside area, resulting in a draft Southside Plan. As of September 2009, the City of Berkeley has not yet completed its review and adoption of the plan.

The University of California owns approximately 45% of the land area in the Southside (excluding streets) (2020 LRDP p. 49). The University's property contains a wide variety of land uses including residence halls, academic offices, student support facilities, parking lots, and recreational and cultural facilities.

The University as a state entity is exempt under state law from complying with local zoning regulations. The University does comply with the California Environmental Quality Act (CEQA) and does an internal design review of all new campus developments. In addition, for projects located off the Campus Park in the City Environs, the city planning director participates in the internal campus design review process, and the University brings new development proposals to City commissions such as the Planning Commission for input.

2020 LRDP EIR

The 2020 LRDP Environmental Impact Report (SCH #2003082131), certified by The Regents of the University of California in January 2005, provides a comprehensive program-level analysis of the 2020 LRDP, and its potential impacts on the environment, in accordance with Section 15168 of the California Environmental Quality Act (CEQA) Guidelines. The 2020 LRDP EIR prescribes Continuing Best Practices and Mitigation Measures for all projects implemented under the 2020 LRDP, as described in Mitigation Measures: Policies and Best Practices Incorporated into the Anna Head West Student Housing Project.

CITY OF BERKELEY PLANNING COMMISSION & LANDMARKS PRESERVATION COMMISSION

The Continuing Best Practices prescribed in the 2020 LRDP EIR include the following requirements for all projects located in the 'City Environs', which includes the areas within Berkeley lying outside the 'Campus Park' and 'Hill Campus':⁴

UC Berkeley would make informational presentations on all major projects in the City Environs in Berkeley to the Berkeley Planning Commission and, if relevant, the Berkeley Landmarks Preservation Commission for comment prior to schematic design review by the UC Berkeley Design Review Committee ... Whenever a project in the City Environs is under consideration by the UC Berkeley DRC, a staff representative designated by the city in which it is located would be invited to attend and comment on the project. (Continuing Best Practice AES-1-e)

The subject Project is in the City Environs, and thus these practices are required by the 2020 LRDP EIR.

CITY OF BERKELEY DRAFT SOUTHSIDE PLAN

The Project Design Guidelines (Appendix B) draw recommendations from the draft Southside Plan Design Guidelines and other sources, as described below. The 2003 draft Southside Plan has not been adopted by the City of Berkeley and is currently undergoing revisions.

Southside Plan Guidelines. In 1997 the City of Berkeley and UC Berkeley signed a Memorandum of Understanding, which states ‘the city and university will jointly participate in the preparation of a Southside Plan...the campus will acknowledge the Plan as the guide for campus developments in the Southside area’. Given the mixed-use character of the Southside and the constant flux of new student residents, it is important to remember the Southside is, first and foremost, a place where people live and projects must be planned to enhance the quality of life for all Southside residents (2020 LRDP, p. 49)

The intent of the draft Southside Plan is to:

- Encourage the creation of additional affordable housing in the Southside for students and for year-round residents;
- Encourage the construction of infill buildings, particularly new housing and mixed-use developments, on currently underutilized sites such as surface parking lots and vacant lots;
- Enhance the pedestrian orientation of the Southside.

The Project-specific Design Guidelines draw from the draft Southside Plan Guidelines, which are highlighted as follows:

- **Utilize massing, setbacks, articulation, roof form and materials to create a modulated building mass appropriate in scale to the context of this sub-area.**

The draft Southside Design Guidelines state that “new buildings should respect and respond to the pattern of residential height and massing of buildings in this subarea.” If the Southside Plan were adopted and approved, the listed maximum height within the project’s zone, R-S (Residential High Density) would be 5 stories and 60 feet. Any new construction on the southern side of the site should also respect adjacencies to the proposed Residential Medium Density subarea (R-3) which limits buildings to a maximum height of 4 stories. However, under the operative R-4 zoning at the site, six stories and 65 feet are permissible. See Chapter 23D.40 of the Berkeley Municipal Code, page 181 (<http://www.ci.berkeley.ca.us/bmc/BMC-Part2-091107.pdf>).

The Project height varies from four to six stories, with lower heights on the east side adjacent to the Anna Head buildings and maximum heights concentrated on the west side which abuts commercial properties on Telegraph Avenue. At its maximum height, the Project exceeds the draft Southside Plan height limit by one story and approximately six feet; the Project exceeds the operative limits in the R-4 district by only one foot. The intent of the massing is to meet the necessary number of beds for the financial model while allowing for a generous amount of space between the Project and the Anna Head complex, and the density of the site was generally endorsed by the City of Berkeley Planning Commission at a September 2009 meeting. The project is compliant with setback and lot coverage requirements. In general, therefore, the project meets the 2020 LRDP objectives, has used the draft Southside Plan as a guide to the design of the project, and allowed municipal plans and policies to inform the design of the project.

- **Enhance the aesthetics & utility of the streetscape for pedestrians.**

At both street frontages, the Project is built to the property line, as allowed in the 2003 draft Southside Plan. City of Berkeley-maintained street trees that are to be removed will be replaced in consultation with Berkeley's Public Works department. New landscaping replaces existing asphalt to create a buffer between the new student housing and the Anna Head buildings and to create outdoor space for passive recreation. A path from the new housing leads students to crosswalks as they walk to the central dining facility or campus. The path continues within the site to a well-lit landscaped public pathway that runs north-south through the site to connect Channing Way to Haste Street at mid-block.

- **In areas that are now visually heterogeneous, a project should be responsive to the best design elements of the area or neighborhood.**
- **Create distinguished contemporary solutions that respect and compliment the historic fabric of the neighborhood.**

The building is designed to be a product of its own time while respecting the surrounding context by preserving primary views of the Anna Head School. The design seeks to contribute to the eclectic mix of low-rise and high-rise architecture in the neighborhood. The facades are designed with a modular window system and varying wood siding patterns that shift vertically to break down the visual mass of the building.

The building design seeks to meet the demands of a high-density program without compromising livability. The residential units are located around courtyards which provide usable outdoor areas for social gatherings or quiet study and which provide for outdoor views, maximum natural ventilation, thermal mass and daylight. One of the courtyards is designed around a Queensland Kauri-Pine, which is identified as a rare specimen tree for the Bay Area.

The Southside Plan Design Guidelines encourage strong physical connections between People's Park and adjacent land uses:

- **Encourage infill buildings on sites around People's Park to create more "eyes on the Park".**
- **Consider the Haste Street frontage of the Anna Head parking lot as a UC housing site to create a residential constituency who use the Park, as recommended by the University's 1990 LRDP.**

Many of the buildings surrounding People's Park do not have windows that help create a sense of "eyes on the Park". The commercial buildings to the west face away from the Park toward Telegraph Avenue and the religious buildings on the east are inward-looking. The Project will transform the northern edge of the Park by creating infill housing with student apartments and common spaces overlooking the Park. In time, perhaps the residential constituency inhabiting the Project will begin to use the Park.

Landscape Design: The building site is envisioned as park-like, replacing what is now asphalt with new usable outdoor space that helps provide a buffer between the new building and the Anna Head complex. Significant trees, including a Red Flowering Gum, Canary Island date palms and a Queensland Kauri-Pine, a rare specimen for the Bay Area, are preserved. One specimen tree, the large camphor tree located on the parking lot, will not be retained. Under the campus specimen tree program, a removed specimen tree must be replaced by new planting at a ratio of 3 to 1 in closest available size. The landscape plan includes a replacement of two trees to each existing non-specimen tree removed.

A landscaped diagonal path runs through the site, connecting Channing Way and Haste Street and affording the opportunity for public circulation through the site, similar to other nearby mid-block pathways at Units 1 and 2 and the University Art Museum. The pathway will provide an accessible connection between the residence hall entry plaza at Channing Way and the apartment entry at Haste Street.

Security is a major consideration for student housing sites, particularly in proximity to People's Park. The project will provide enhanced exterior lighting throughout the site, active building uses on the ground floor with views of the exterior circulation area, multiple "blue light" phones and staffed entrances off both streets. Covered, secure bike parking is located near both building entries.

Historic Structures Report Recommendations: The project is located on University-owned property that includes the Anna Head School complex. In 2008, an Historic Structures Report was prepared by Knapp Architects for the Anna Head School buildings and site: see <http://www.tinyurl.com/AnnaHeadHSR>. The HSR includes historical information about the Hinkel estate property and an arborist evaluation of trees on both sites. The HSR provides recommendations for development on or adjacent to the site:

The spatial organization of the site should be maintained.

Views toward the Anna Head School buildings from the Channing Way frontage and Bowditch Street should be preserved. Angled views of this dominant building from the northwest and northeast should be preserved.

New structures should not be sited or constructed north of Channing Hall.

The project has been designed with an understanding of the development guidelines and with sensitivity to the existing significant landscape features. The Project does not include construction on the north side of Channing Hall and does preserve important angled views of Channing Hall, from the northeast and northwest as recommended in the HSR. The current northeast view from the Channing Way and Bowditch Street intersection is not affected by the Project. The northwest view of the Anna Head School complex is currently viewed across a surface parking lot. The Project reduces this view so that the complex as a whole is not seen but it preserves the important angled view of Channing Hall and view of the former main entry.

The Anna Head School site was historically heavily planted on the west and north of the property and had a stone-edged circular drive that was accessed from Channing Way and demarcated by two Canary Island date palms. The Hinkel site also landscaped - John Hinkel was an amateur horticulturalist. Although most of site was paved in 1964 with asphalt for parking, vestiges of the historic landscape remain. These include the two Canary Island date palms and the stone edging that defined the historic driveway. Several mature trees, including the specimen Queensland Kauri-Pine were evaluated. The Queensland Kauri-Pine is a rare specimen for the entire Bay Area. From the HSR:

The nature of the current use of the property does not realistically allow for the restoration of the landscape design that characterized the property during the Anna Head School era, through this would be the recommended treatment if achievable. However, existing landscape features and materials rated as Very Significant, Significant, and Contributing should be preserved and maintained.

The “Front Lawn” area should be restored to its original location north of the main entry drive. This would require removal of asphalt paving along its north and west end...The presence of this open area continues to provide a setting for Channing Hall, and as one of the few remaining unpaved areas, this “lawn area” provides a connection to the historic lawn and garden spaces of the school grounds”.

The Project scope does not extend into the “Front Lawn” area, however, Very Significant & Significant landscape features located within the Project scope will be preserved. Per the Project Design Guidelines, the project will preserve specimen trees and retain or replace street trees. The campus landscape architect has determined that of the 81 trees inventoried on site that six should be considered specimens. In 2007, an arborist evaluated the trees on the entire University-owned site and prepared a report which contributed to the determination of specimen status (see Appendix D). The Queensland Kauri-Pine represents a particularly outstanding example of California flora, rare to the San Francisco Bay Area, and should be preserved and maintained. The other specimen trees include two Canary Island Palms, Red Flowering Gum, Tasmanian Blue Gum and the large Camphor tree: of specimen trees, only the Camphor tree would be removed.

Several other trees will be removed in order to accommodate the program and preserve the Kauri-Pine. Three Southern Magnolias on Channing Way and a Samuel Sommers Magnolia on Haste Street could be expected to grow to 50 ft in diameter. The Project cannot accommodate this expected growth and will therefore remove these trees and replace them with more appropriate sized street trees in coordination with the City of Berkeley Public Works Department street tree plan. A Deodar Cedar on Channing and a Blue Atlas Cedar and specimen Camphor tree within the Anna Head School property will also be removed. An outstanding Red Flowering Gum will be preserved in the center of the site. The Project includes replacement of the specimen Camphor at a three to one ratio. The historically significant Canary Island Date Palms will not be impacted by the Project. The Campus Landscape Architect has been consulted and will continue to be involved in the design and construction phases to safeguard the historically significant trees.

Under this program, the retention of existing specimen trees, shrubs and grass areas is a priority in the final design of proposed projects. Projects are reviewed with the UC Berkeley Design Review Committee to minimize impacts to specimens. Site preparation is conducted to minimize removal and/or damage of specimen trees or plant species to the full feasible extent. Sensitive construction practices are used to avoid possible damage to trees to be retained, including construction setbacks, installation of temporary construction fencing around individual trees to be preserved, and monitoring by a certified arborist of any required limb removal or disturbance within the dripline of trees to be retained. Grading, vegetation removal and replacement plans, where necessary, are coordinated with the Campus Landscape Architect. Specimens impacted are replaced by successful transplanting, or must be replaced by new planting at a ratio of 3 to 1 in closest available sizes. Disturbed landscaped areas are restored to the full feasible extent. ²

Sustainable Practices: The project will comply with the *University of California Policy on Sustainable Practices*. The project is expected to achieve a LEED Gold rating. As required by this policy, the project will adopt the principles of energy efficiency and sustainability to the fullest extent possible, consistent with budgetary constraints and regulatory and programmatic requirements. Sustainable design measures include the use of high performance building envelopes, thermal mass and natural ventilation, and the use of landscape and permeable surfaces to reduce stormwater run-off.

Policies and 2020 LRDP EIR Best Practices Incorporated into the Anna Head West Student Housing Project. A list of 2020 LRDP EIR mitigation measures and continuing best practices incorporated into the Project as proposed is printed in Appendix A.

For images detailing the design of the proposed project, see Appendix C.

PROJECT SCHEDULE

Major milestones for the Project have included the following:

State Historic Preservation Office: SHPO reviewed the site on November 24, 2008 and commented on early massing concepts. The proposed design was reviewed with SHPO on August 27, 2009.

City of Berkeley Landmarks Preservation Commission: The Project was presented to the City of Berkeley Landmarks Preservation Commission in June 2009.

City of Berkeley Planning Commission: The Anna Head West Student Housing project was presented to the City of Berkeley Planning Commission in September 2009.

Community Review: Public meetings were held for community review of the Anna Head West Student Housing Project in December 2008 and June 2009.

UC Berkeley Design Review Committee: The Project was reviewed by the UC Berkeley Design Review Committee at its September 2008, March 2009 meetings, and was reviewed at the September 2009 meeting: a representative from the City of Berkeley participated in all previous reviews. In September 2008, the DRC approved design guidelines for the Project. In March 2009, the DRC endorsed conceptual massing studies of the proposed design. In September 2009, the DRC reviewed schematic level design.

Regents Consideration: The Anna Head West Student Housing project budget was approved at the June 2009 Regents meeting. UC Berkeley expects to ask The Regents to approve the design of the Anna Head West Student Housing project in November 2009, and if approved the construction of the Project is planned to be underway in July 2010, to be completed by Fall 2012.

RELATIONSHIP TO 2020 LRDP

BACKGROUND

UC Berkeley's Long Range Development Plan (2020 LRDP) was approved by The Regents in January 2005, and describes both the scope and nature of development proposed to meet the goals of the University through academic year 2020-2021, as well as land use principles and policies to guide the location, scale and design of individual capital projects.

The 2020 LRDP Environmental Impact Report provides a comprehensive program-level analysis of the 2020 LRDP, and its potential impacts on the environment, in accordance with Section 15168 of the California Environmental Quality Act (CEQA) Guidelines. Under CEQA, subsequent projects should be examined in light of the program-level EIR to determine whether subsequent project-specific environmental documents must be prepared. Subsequent documents may rely on the program-level EIR for information on setting and regulatory framework, for analysis of general growth-related and cumulative impacts, and for alternatives to the 2020 LRDP. 2020 LRDP mitigation measures and best practices that reduce potential impacts of the project would be implemented as part of the project, and would be identified in the project-specific review. Additional mitigation measures may also be identified.

2020 LRDP EIR mitigation measures and continuing best practices to be incorporated into the Anna Head West Student Housing project are identified in each topical section of the ENVIRONMENTAL EVALUATION in this document. The 2020 LRDP and the 2020 LRDP Environmental Impact Report (SCH #2003082131) are available on line at lrdp.berkeley.edu; copies are available for review at the offices of Physical and Environmental Planning/Capital Projects/Facilities Services, Room 1, A&E Building on the Berkeley campus, and are available for review at the Berkeley Public Library and online.

CONFORMANCE TO THE 2020 LRDP

The proposed site for the Project is governed by the 2020 LRDP. The project would be located on the area designated in the 2020 LRDP as the City Environs (2020 LRDP EIR Vol 3a, 3.1-5). The 2020 LRDP anticipated an increase of up to 2500 new student beds, all accommodated within the 2020 LRDP Housing Zone within the City Environs. Given the preference of students for housing close to campus, it is assumed that the balance of new student beds would be filled by students who would otherwise live outside Berkeley. The student housing to be built under the 2020 LRDP, therefore, could result in up to 2500 new Berkeley residents by 2020.

This growth is well within the projections used in the 2020 Berkeley General Plan EIR. The new university housing built under the 2020 LRDP would support the policies of the Berkeley General Plan and the conclusions of the Berkeley General Plan EIR which encourage the University to build new student housing within Berkeley. The population growth in Berkeley due to University housing built under the 2020 LRDP is not, therefore, anticipated to result in significant adverse effects. (2020 LRDP 4.10-11)

OBJECTIVES OF THE 2020 LRDP

The purpose of the 2020 LRDP is to set forth a framework for land use and capital investment undertaken in support of the campus' academic principles. The 2020 LRDP is driven by the following broad objectives: those which are directly relevant to the Project are shown in **bold black** (2020 LRDP EIR Vol 3a, 3.1-10).

- Provide the space, technology and infrastructure we require to excel in education, research, and public service.
- **Provide the housing, access, and services we require to support a vital intellectual community and promote full engagement in campus life.**
- Stabilize enrollment at a level commensurate with our academic standards and our land and capital resources.
- Build a campus that fosters intellectual synergy and collaborative endeavors both within and across disciplines.
- **Plan every new project to represent the optimal investment of land and capital in the future of the campus.**
- **Plan every new project as a model of resource conservation and environmental stewardship.**
- Maintain and enhance the image and experience of the campus, and preserve our historic legacy of landscape and architecture.
- **Plan every new project to respect and enhance the character, livability, and cultural vitality of our city environs.**
- Maintain the hill campus as a natural resource for research, education and recreation, with focused development on suitable sites.

Provide the housing, access, and services we require to support a vital intellectual community and promote full engagement in campus life.

As stated in the 2020 LRDP: The ability of UC Berkeley to recruit, retain and support outstanding individuals is fundamental to academic excellence. Many of our best student candidates cite the scarcity of good, reasonably priced housing near campus as key factors in their decisions whether or not to come to UC Berkeley. The problem of housing is particularly acute for students: expanding and improving the supply of housing near campus is critical not only to ensure our students are adequately housed, but also to provide the community of peers and mentors, and the access to campus resources, they require to excel.

The Project is providing a residence hall for sophomores in close proximity to the educational resources of the campus. As well as convenience to campus, such housing also provides its residents with a wide range of on-site counseling, mentoring and academic support programs. The upper division students in the apartment portion of the complex will have greater independence but will also have access to an on-site computing center, fitness center, laundry and other common amenities.

Policy: Increase the single undergraduate bed spaces to equal 100% of entering freshmen plus 50% of sophomores and entering transfer students by 2020.

The Strategic Academic Plan defines our long-term goals for student housing at UC Berkeley:

- provide two years of university housing to entering freshmen who desire it,
- provide one year of university housing to entering transfer students who desire it

The 2020 LRDP proposed to increase the supply of student housing by 2500 beds. The Project targets the needs of sophomores and continuing students, including transfer students by providing 160 beds for sophomores and 264 beds for upper division students.

Policy: Locate all new university housing within a mile or within 20 minutes of campus by transit.

The Location Guidelines in the 2020 LRDP prioritize Campus Park space for programs that directly engage students and promote student-faculty interaction: other programs such as housing must be accommodated within the City Environs. To ensure university housing improves access to the academic life and resources of the campus, and supports a vital intellectual community, all new housing built under the 2020 LRDP would be located within the Housing Zone, defined as within a one mile radius of the center of campus, defined as Doe Library. The Project is located within three blocks of the south edge of central campus, convenient for walking or bicycling to campus.

Policy: Replace and consolidate existing university parking displaced by new projects.

The campus's strategy to accommodate housing requires in some cases that existing surface parking lots be replaced by new buildings and open spaces. In order to maintain the campus parking supply, these displaced spaces should be replaced on site or elsewhere, and the scope and budget for each such project should include those replacement spaces. The Anna Head West Student Housing project is located on a university-owned surface parking lot that was formerly designated for campus parking but which was changed to public parking in November 2008 after the opening of the 1000 space Underhill Parking Facility added 558 spaces to the campus parking supply.

Plan every new project to represent the optimal investment of land and capital in the future of the campus.

The Project has long been included in Residential and Student Services 10-year Capital Plan in order to help meet the housing goals in the 2020 LRDP. The site is one of only two UC-owned surface parking lots being considered for new housing – the other is located at Channing Way and Ellsworth streets. The majority of single student beds are to be accommodated at these two sites. Other projects in the 10-year Capital Plan are primarily renovations with minimal increase in new student beds.

During the feasibility phase, the following alternatives to constructing new student housing were considered:

1) Build no additional housing

The campus could choose not to build new beds at this time; however, this alternative could affect future campus enrollments and prevent the campus from meeting commitments to provide university housing for 100% of entering and students and 50% of entering transfer students. In order to meet demand, RSSP would be forced to house students in triples in existing rooms designed for double capacity. In addition, it would not provide new beds needed to absorb the loss of beds at planned residence hall renewal projects.

2) Renovate the former Anna Head School for Girls as student housing.

With RSSP funding, a study was conducted to determine the potential capacity and cost of renovating the historic Anna Head School into a residence hall. The deterioration of the historic complex has long been a source of public concern. A major portion of the complex, now used by campus research units, was historically a dormitory for girls. It was determined that conversion back to residence hall use could net approximately 55 beds. The renovation would require program modifications, seismic, life safety and code upgrades, and deferred maintenance scope, resulting in a high cost per bed. The cost and the risk of unknown additional costs in taking on this endeavor could not be supported by RSSP revenue at this time.

Plan every new project as a model of resource conservation and environmental stewardship.

The Project would support 2020 LRDP policies and the *University of California Policy on Sustainable Practices* to:

‘Design new buildings to a standard equivalent to LEED 2.1 certification with a goal of silver or higher’,

‘Design new buildings to outperform the required provisions of title 24 of the California Energy Code by at least 20 percent’, and

‘Design new projects to minimize energy and water consumption and wastewater production’

Both the architecture and the infrastructure of the building have been designed to obtain the optimal performance with respect to energy and water consumption. Preliminary sustainable design measures include the use of a high performance building envelope, thermal mass, natural daylight and ventilation, and the use of landscape and permeable surfaces to reduce stormwater run-off.

Plan every new project to respect and enhance the character, livability, and cultural vitality of our city environs.

As defined in the 2020 LRDP, the City Environs include the Adjacent Blocks, the Southside, Other Berkeley Sites, and the Housing Zone in its entirety. The areas within the City Environs consist mostly of city blocks served by city streets, and include university properties interspersed with non-university properties.

The 2020 LRDP anticipated that new space for non academic programs would be accommodated in the Southside through more intensive development of existing university owned sites. In the City Environs, the objectives of the University must be “informed by the plans and policies of neighboring cities, to respect and enhance the character and livability through new University investment”. The Project Design Guidelines draw heavily from the City of Berkeley’s draft Southside Plan Design Guidelines.

Project Design.

Policy: Use the Southside Plan as a guide to the design of future capital projects in the Southside. Prepare project specific design guidelines for each major new project.

In 1997 the City of Berkeley and UC Berkeley signed a Memorandum of Understanding, which states ‘the city and university will jointly participate in the preparation of a Southside Plan...the campus will acknowledge the Plan as the guide for campus developments in the Southside area’. Given the mixed-use character of the Southside and the constant flux of new student residents, it is important to remember the Southside is, first and foremost, a place where people live and projects must be planned to enhance the quality of life for all Southside residents (2020 LRDP, p. 49)

The definition of the Housing Zone serves the objectives of improving student access to the intellectual and cultural life of the campus and minimizing vehicle trips. While future housing projects must have adequate density to support reasonable rents, they should also be designed to respect and enhance the character and livability of the cities in which they are located. Therefore, to the extent feasible university housing projects should not have a greater number of stories nor have setback dimensions less than could be permitted for a project under the relevant city zoning ordinance as of July 2003 (2020 LRDP, p. 50).

Major capital projects would be reviewed at each stage of design by the UC Berkeley Design Review Committee, based on project specific design guidelines informed by the provisions of the Berkeley general plan and other relevant city plans and policies. The university would make informational presentations of all major projects in the Housing Zone to the relevant city planning commission and landmarks commission for comment prior to schematic design review by the UC Berkeley Design Review Committee.

2020 LRDP CLIMATE CHANGE AMENDMENT

In June 2009, UC Berkeley published a proposed amendment to the UC Berkeley 2020 LRDP, Sustainable Campus chapter, to reflect existing campus commitments to address climate change. The LRDP amendment reflects campus policy, including: “Design all aspects of new projects to achieve short term and long term climate change emission targets established in the campus climate action plan.” UC Berkeley targets achievement of 1990 greenhouse gas emission levels by 2014, six years ahead of state mandated targets, and climate neutrality as soon as possibly but not later than 2050. The amendment links the 2020 LRDP and the campus climate action plan, which is updated annually: see sustainability.berkeley.edu/calcap.

The amendment to the UC Berkeley 2020 LRDP was approved by the University based on Addendum #5 to the UC Berkeley 2020 LRDP EIR. The Addendum was published in advance of consideration, and the LRDP Amendment was approved in July 2009 by the University, following review and consideration of comments from community members. Addendum #5 described existing climate change conditions and evaluates the potential for development under the UC Berkeley 2020 LRDP, with minor amendments to reflect current campus policy, to affect climate change. Addendum #5 provided a summary of the current

regulatory framework applicable to climate change, discussing the applicable federal, state, regional, and local agencies that regulate, monitor, and control GHG emissions. Addendum #5 discussed the existing global, national, and statewide conditions for greenhouse gases (GHG) and global climate change and evaluates the potential impacts on global climate from the implementation of the UC Berkeley 2020 LRDP as amended to document existing UC Berkeley climate action strategies. Addendum #5 concluded that the proposed amendment to the 2020 LRDP Sustainable Campus chapter did not trigger a need to prepare a subsequent EIR to the 2020 LRDP EIR. The Anna Head West Student Housing project complies with University policies on sustainable practices, as further described below. See <http://tinyurl.com/UCBClimate> for documents and information.

ENVIRONMENTAL DETERMINATION

The purpose of the following Environmental Assessment is to determine the appropriate form of environmental review for the Anna Head West Student Housing project, and to document that determination.

The UC Berkeley 2020 Long Range Development Plan Environmental Impact Report (SCH #2003082131), certified by The Regents of the University in January 2005, indicated that projects implementing the 2020 LRDP would be examined to determine whether subsequent project-specific environmental documents are required. A portion of the 2020 LRDP EIR text is quoted below:

CEQA and the CEQA Guidelines state that subsequent projects should be examined in light of the program-level EIR to determine whether subsequent project-specific environmental documents must be prepared. If no new significant effects would occur, all significant effects have been adequately addressed, and no new mitigation measures would be required, subsequent projects within the scope of the 2020 LRDP could rely on the environmental analysis presented in the program-level EIR, and no subsequent environmental documents would be required; otherwise, project-specific environmental documents must be prepared (2020 LRDP EIR Vol I, 1-2).

The use of the 2020 LRDP and 2020 LRDP EIR in project review was also specifically addressed in the first Thematic Response to comments received on the 2020 LRDP Draft EIR (2020 LRDP EIR Vol 3A, 11.1-1). There, the document reiterated the text quoted above, and explained:

Projects subsequently proposed must be examined for consistency with the program as described in the 2020 LRDP and with the environmental impact analysis contained in the LRDP EIR; if new environmental impacts would occur, or if new mitigation measures would be required, an additional environmental document would be prepared.

This is consistent with Section 15168(c) of the California Environmental Quality Act (CEQA) Guidelines (Title 14, California Code of Regulations) which states in relevant part:

Subsequent activities in the program must be examined in the light of the program EIR to determine whether an additional environmental document must be prepared....(2) If the agency finds that pursuant to Section 15162, no new effects could occur or no new mitigation measures would be required, the agency can approve the activity as being within the scope of the project covered by the program EIR, and no new environmental document would be required.....(4) Where the subsequent activities involve site specific operations, the agency should use a written checklist or similar device to document the evaluation of the site and the activity to determine whether the environmental effects of the operation were covered in the program EIR.

When an EIR has been certified for a project, no additional environmental review is required except as provided for in Section 15162 of the California Environmental Quality Act (CEQA) Guidelines (Title 14, California Code of Regulations, Sections 15000 et seq), which sets forth the circumstances under which a project may warrant a Subsequent EIR or Negative Declaration:

- (1) Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
- (2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or Negative Declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
- (3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the Negative Declaration was adopted, shows any of the following:
 - (A) The project will have one or more significant effects not discussed in the previous EIR or negative declaration;
 - (B) Significant effects previously examined will be substantially more severe than shown in the previous EIR;
 - (C) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or
 - (D) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

Under Section 15163, a supplement to a certified EIR may be prepared when any of the conditions requiring preparation of a subsequent EIR are met, but only minor additions or changes would be necessary to make the previous EIR adequately apply to the project in the changed situation. Under Section 15164, in cases where only minor technical changes or additions are necessary to make the previous EIR adequately apply to the project, and none of the conditions calling for a subsequent or supplemental EIR have occurred, an EIR addendum may be prepared. If none of the above conditions are present, no further environmental review is required.

This Environmental Assessment finds the Project to be consistent with the UC Berkeley 2020 LRDP EIR, certified by The Regents in January 2005. The Environmental Assessment also concluded that the Project would not cause any new significant environmental effects that was not considered in the 2020 LRDP EIR, nor increase the severity of any impact previously found significant in the 2020 LRDP EIR, and that no new information of substantial importance, which was not known at the time the 2020 LRDP EIR was certified, has become available. Accordingly, the University has determined that an Addendum to the 2020 LRDP EIR is the appropriate level of environmental review for the Anna Head West Student Housing project, and specifically describes the scope of the Project, its impacts in relation to the 2020 LRDP and 2020 LRDP EIR, and an analysis under CEQA Guidelines 15162.

On the basis of the evaluation that follows, UC Berkeley finds that:

	The proposed project MAY have a 'potentially significant impact' or 'potentially significant impact unless mitigated' impact on the environment, and that these effects have not been adequately analyzed by an earlier EIR. A SUBSEQUENT OR SUPPLEMENTAL EIR will be prepared.
X	Although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards; and (b) have been avoided or mitigated to the extent feasible pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are incorporated into the proposed project, and (c) the project does not involve new information of substantial importance that shows mitigation measures or alternatives which are considerably different from those analyzed in the 2020 LRDP EIR or which were previously considered infeasible, are now feasible; therefore, an ADDENDUM to the 2020 LRDP EIR based upon the documentation enclosed presents sufficient environmental analysis for the project.

Emily Marthinsen

Emily Marthinsen

Assistant Vice Chancellor

ENVIRONMENTAL EVALUATION

All answers take account of the whole action involved, including beneficial, direct, indirect, construction-related, operational, and cumulative impacts. A list of references used in the preparation of this Initial Study is included at the end of this document.

Appendix G of the CEQA Guidelines provides only a suggested format to use when preparing an Initial Study. UC Berkeley has adopted a slightly different format with respect to the response column headings (refer to the definitions provided below), while still addressing the Appendix G checklist questions that are relevant to each environmental issue. In the checklist that follows:

2020 LRDP Analysis Sufficient applies to those issues where the environmental review completed for the 2020 LRDP is determined to be sufficient to address impacts of the Project, and where additional CEQA review would be repetitive. Discussion under each issue area marked '2020 LRDP Analysis Sufficient' includes specific reference to the 2020 LRDP EIR setting, pertinent impact analysis, and continuing best practices and mitigation measures incorporated into the Project to address the potential environmental impact in question.

Further Analysis Required is checked for those potential environmental impacts, which may or may not be significant, for which the environmental review completed for the 2020 LRDP does not in itself provide an adequate basis for a determination of no significant impact, and for which further analysis of the Project is required.

AESTHETICS

SETTING

The Project is located within the Southside area of the City of Berkeley, immediately to the south of the central campus. The Southside area is comprised of a mixture of land uses, including residential, office, retail, parking, recreational and cultural. It is described as a “vibrant, eclectic and densely populated center of student life, social activism, and commerce”. The architecture in the Southside is equally eclectic. Diverse examples include Maybeck’s historic Christian Scientist Church and Ciampi’s modernist University Art Museum. Recent student housing and dining projects include the Infill projects at Units 1 and 2, the Channing-Bowditch student apartments, and the Central Dining Facility, all of which contribute a variety of architectural styles.

The University-owned site includes the former Anna Head School for Girls and a through-block property to the west which was, for nearly a century, a separate property from the Anna Head School. This property is a parking lot known as Anna Head West and is administered by the University’s Parking & Transportation. It is mostly paved, with a few large trees, light standards and a small parking attendant structure. The trees remain from the period when the property was the estate of John Hinkel, a prominent Berkeley businessman and mature horticulturalist. One tree, the Queensland Kauri-Pine has been identified as a rare specimen for the Bay Area.

The former Anna Head School for Girls is listed on the National Register of Historic Places and is a City of Berkeley Landmark. The six buildings that make up the Anna Head complex school were built in phases between 1892-1927. The school is a remarkable example of the Bay Region Tradition, a regional expression of the Arts and Crafts movement, and is one of the first uses of the Brown Shingle mode in the Bay Area. The Anna Head buildings have been owned by the University since 1963 and are currently used by research units, student services and a childcare program.

The site has suffered serious diminishment of integrity due to the removal of the landscape and addition of asphalt paving over a majority of both Hinkel and Anna Head properties.

The project site faces People’s Park to the south. The Park is also rich in historical and cultural significance, arising as a result of opposition to the University of California’s plans to develop the site for high-rise student housing. As a result of the conflict, the site was claimed as a park “for the people”. The dominant use of the Park is as a camp site for homeless people. The park supports a range of ad hoc and loosely organized social services for the disadvantaged, but is viewed by many residents and members of the campus community as unwelcoming and unsafe.

2020 LRDP & 2020 LRDP EIR

The 2020 LRDP and its EIR provide a framework for considering the visual effects of the Anna Head West Student Housing project within the context of the campus as a whole. The visual setting of the campus and its environs are described in the 2020 LRDP EIR (Section 4.1).

MITIGATION MEASURES & CONTINUING BEST PRACTICES

Design and construction of the Project would be performed in conformance with the 2020 LRDP. The 2020 LRDP EIR includes mitigation measures and continuing best practices developed to reduce the effect of the implementation of the 2020 LRDP upon aesthetics. Where applicable, the Project would incorporate the following mitigation measures and/or continuing best practices:

2020 LRDP Continuing Best Practice AES-1-b: Major new campus projects would continue to be reviewed at each stage of design by the UC Berkeley Design Review Committee. The provisions of the 2020 LRDP, as well as project specific design guidelines prepared for each such project, would guide these reviews.

Design guidelines prepared for the Project are attached in Appendix B. The project conforms to these. For example, the Project is designed to take advantage of solar angles and wind direction in order to maximize daylighting, thermal mass, and natural ventilation and the landscape design preserves existing trees and creates usable outdoor spaces. The Project was reviewed by the UC Berkeley Design Review Committee at its September 2008, March 2009 meetings, and September 2009 meeting: a representative from the City of Berkeley participated in all previous reviews. In September 2008, the DRC approved design guidelines for the Project. In March 2009, the DRC endorsed conceptual massing studies of the proposed design. In September 2009, the DRC reviewed schematic level design.

2020 LRDP Continuing Best Practice AES-1-e: UC Berkeley would make informational presentations of all major projects in the City Environs in Berkeley to the Berkeley Planning Commission and, if relevant the Berkeley Landmarks Preservation Commission for comment prior to schematic design review by the UC Berkeley Design Review Committee. Whenever a project in the City Environs is under consideration by the UC Berkeley DRC, a staff representative designated by the city in which it is located would be invited to attend and comment on the project.

The project was reviewed with both the City of Berkeley Landmarks Preservation Commission and Planning Commission in 2009. The city planning director was invited to project reviews with the campus Design Review Committee.

2020 LRDP Continuing Best Practice AES-1-f: Each individual project built in the City Environs under the 2020 LRDP would be assessed to determine whether it could cause potential significant aesthetic impacts not anticipated in the 2020 LRDP, and if so, the project would be subject to further evaluation under CEQA.

The project would replace an existing asphalt surfaced parking lot. At no point in project review have unique aesthetic impacts been identified. The design has not garnered universal support, but the plan for the project is intended to protect important views of the historic Anna Head complex as well as add a modern, attractive, sustainable housing complex to the University supply of housing in the Southside.

2020 LRDP Continuing Best Practice AES-1-g: To the extent feasible, University housing projects in the 2020 LRDP Housing Zone would not have a greater number of stories nor have setback dimensions less than could be permitted for a project under the relevant city zoning as of July 2003.

2020 LRDP Continuing Best Practice AES-1-h: Assuming the City adopts the Southside Plan without substantive changes, the University would as a general rule use, as its guide for location and design of University projects implemented under the 2020 LRDP within the area of the Southside Plan, the design guidelines and standards prescribed in the Southside Plan, which would supersede provisions of the City's prior zoning policy.

Project-specific design guidelines were reviewed and endorsed by the Design Review Committee in September 2008; review of the Project based on the guidelines occurred in March 2009 and September 2009. The Project was reviewed by the City of Berkeley Landmarks Preservation Commission in June 2009 and by the Berkeley Planning Commission in September 2009. The Project Design Guidelines draw from the Southside Plan Design Guidelines. However, the City of Berkeley has not yet adopted the Southside Plan.

The Project largely conforms to the operative R-4 zoning at the site, which allows a maximum of six stories and 65 feet in height with a use permit. The building is four to six stories and 66 feet in height, with four story areas adjacent to the Anna Head buildings on the east and the maximum height consolidated along the west end of the property against commercial property. The added stories and height are necessary to accommodate the program while maintaining the setback desired for the National Register Anna Head buildings.

Because it adds desired density at an appropriate scale in an urban environment, the project was lauded by representatives of the City of Berkeley Planning Commission in September.

2020 LRDP Mitigation Measure AES-3-a: Lighting for new development projects would be designed to include shields and cut-offs that minimize light spillage onto unintended surfaces and minimize atmospheric light pollution. The only exception to this principle would be in those areas where such features would be incompatible with the visual and/or historic character of the area.

2020 LRDP Mitigation Measure AES-3-b: As part of the design review procedures described in the above Continuing Best Practices, light and glare would be given specific consideration, and measures incorporated into the project design to minimize both. In general, exterior surfaces would not be reflective: architectural screens and shading devices are preferable to reflective glass.

Although still under development, the lighting fixtures would be designed to include shields and other devices to minimize light spillage and atmospheric light pollution.

AESTHETICS

Would the Anna Head West Student Housing project:

	Further Analysis Required	2020 LRDP EIR Analysis Sufficient
1. Have a substantial adverse effect on a scenic vista?		●

There are no scenic vistas in the vicinity of the Project.

	Further Analysis Required	2020 LRDP EIR Analysis Sufficient
2. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?		●

There are no designated scenic routes are in the vicinity of the Project.

<p>3. Create a new source of substantial light or glare which would adversely affect day- or night-time views in the area?</p>	<p>Further Analysis Required</p>	<p>2020 LRDP EIR Analysis Sufficient</p> <p style="text-align: center;">●</p>
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The Project would replace an existing surface parking lot with a new building and landscape with new exterior lighting. Project lighting is being designed to include shields and other devices to minimize light spillage and atmospheric light pollution, and reflective surfaces would be minimized, as prescribed in the 2020 LRDP EIR (Mitigations AES-3a, AES-3b).

<p>4. Substantially degrade the existing visual character or quality of the site and its surroundings?</p>	<p>Further Analysis Required</p>	<p>2020 LRDP EIR Analysis Sufficient</p> <p style="text-align: center;">●</p>
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As described above, the Project implements the provisions of the 2020 LRDP EIR (Best Practices AES-1-a, AES-1-b, AES-1-e) with respect to the visual character of the building and landscape. The existing visual character is an asphalt surface parking lot with sparse landscaping.

The Project is consistent with the following recommendations from the Anna Head School HSR:

- New structures should not be sited or constructed north of Channing Hall or east of the Gables
- Preserve the angled northeast and northwest views of Channing Hall and the historic public entry

An arborist has determined the presence of six specimen trees on site, which include the rare specimen Queensland Kauri-Pine, two Canary Island Palms, a Red Flowering Gum, a Tasmanian Blue Gum, and a large Camphor tree. The Camphor tree is located within the proposed building footprint and will be removed and be replaced by new planting at a ratio of 3 to 1 in closest available sizes. The five other specimen trees are to be preserved on site. The Project will utilize the guidelines for construction near trees which have been provided by the consulting arborist (See Appendix D).

SUMMARY OF AESTHETICS ANALYSIS

The 2020 LRDP EIR determined projects implementing the 2020 LRDP, which would incorporate design provisions of the 2020 LRDP and mitigation measures relating to light and glare, would not result in new significant aesthetic impacts (2020 LRDP EIR Vol 1, 4.1-15 to 4.1-19); nor would the 2020 LRDP make a cumulatively considerable contribution to adverse aesthetic impacts (2020 LRDP EIR Vol 1, 4.1-22 to 4.1-24). The Project is consistent with the 2020 LRDP as analyzed and described in the 2020 LRDP EIR and would not introduce any new potential aesthetic impacts, and no changed circumstance or new information is present that would alter the conclusions of the 2020 LRDP EIR analysis, as described above. With the incorporation of all applicable LRDP EIR mitigation measures and best practices, described above, the Project will not result in any new aesthetics impact. No Project revisions or additional mitigation measures are required and the 2020 LRDP EIR analysis is sufficient and comprehensive to address aesthetic impacts of the Project.

AIR QUALITY

(NOTE: For a discussion of greenhouse gas emissions, see topic area following Geology, below)

SETTING

The air quality setting of the campus is described in the 2020 LRDP EIR (Section 4.2). The 2020 LRDP would influence air quality by guiding the location, scale, form and design of new University projects.

As a residential building without unique operational requirements, the only air pollutant emissions associated with the Anna Head West Student Housing project would be during construction. Construction emissions are accounted for in the annual construction year maximum estimate discussed in the 2020 LRDP EIR.

MITIGATION MEASURES & CONTINUING BEST PRACTICES

Design and construction of the Anna Head Student Housing project would be performed in conformance with the 2020 LRDP. The 2020 LRDP EIR includes mitigation measures and continuing best practices developed to reduce the effect of the implementation of the 2020 LRDP upon air quality. Where applicable, the Project would incorporate the following mitigation measures and/or continuing best practices:

Continuing Best Practice AIR-4-a: UC Berkeley shall continue to include in all construction contracts the measures specified below to reduce fugitive dust impacts:

- All disturbed areas, including quarry product piles, which are not being actively utilized for construction purposes, shall be effectively stabilized of dust emissions using tarps, water, (non-toxic) chemical stabilizer/suppressant, or vegetative ground cover.
- All on-site unpaved roads and off-site unpaved access roads shall be effectively stabilized of dust emissions using water or (non-toxic) chemical stabilizer/suppressant.
- When quarry product or trash materials are transported off-site, all material shall be covered, or at least two feet of freeboard space from the top of the container shall be maintained.

LRDP Mitigation Measure AIR-4-a: In addition, UC Berkeley shall include in all construction contracts the measures specified below to reduce fugitive dust impacts, including but not limited to the following:

- All land clearing, grubbing, scraping, excavation, land leveling, grading, cut and fill, and demolition activities shall be effectively controlled of fugitive dust emissions utilizing application of water or by presoaking.
- When demolishing buildings, water shall be applied to all exterior surfaces of the building for dust suppression.
- All operations shall limit or expeditiously remove the accumulation of mud or dirt from paved areas of construction sites and from adjacent public streets as necessary. See also CBP HYD 1-b.
- Following the addition of materials to, or the removal of materials from, the surface of outdoor storage piles, said piles shall be effectively stabilized of fugitive dust emissions by utilizing sufficient water or by covering.
- Limit traffic speeds on unpaved roads to 15 mph.
- Water blasting shall be used in lieu of dry sand blasting wherever feasible.
- Install sandbags or other erosion control measures to prevent silt runoff to public roadways from sites with slopes over one percent.
- To the extent feasible, limit area subject to excavation, grading, and other construction activity at any one time.
- Replant vegetation in disturbed areas as quickly as possible.

Continuing Best Practice AIR-4-b: UC Berkeley shall continue to implement the following control measure to reduce emissions of diesel particulate matter and ozone precursors from construction equipment exhaust:

- Minimize idling time when construction equipment is not in use.

LRDP Mitigation Measure AIR-4-b: UC Berkeley shall implement the following control measures to reduce emissions of diesel particulate matter and ozone precursors from construction equipment exhaust:

- To the extent that equipment is available and cost effective, UC Berkeley shall require contractors to use alternate fuels and retrofit existing engines in construction equipment.
- To the extent practicable, manage operation of heavy-duty equipment to reduce emissions, including the use of particulate traps.

AIR QUALITY

Would the Anna Head West Student Housing project:

	Further Analysis Required	2020 LRDP EIR Analysis Sufficient
1. Conflict with or obstruct implementation of the applicable air quality plan?		●

The 2020 LRDP EIR conservatively found operational emissions from implementation of the 2020 LRDP may hinder the attainment of the Clean Air Plan, because the 2020 LRDP EIR conservatively assumed that growth under the 2020 LRDP was not included in local area projections (2020 LRDP EIR Vol 1, 4.2-26). The 2020 LRDP analysis anticipated up to 2,200,000 million net new gsf of academic and support space, less than half of which has been approved or constructed as of September 2009. As prescribed in the 2020 LRDP EIR, the campus would work with the City of Berkeley, ABAG, and BAAQMD to ensure that campus growth is accurately addressed in the Clean Air Plan, and would continue to develop and implement transportation control measures.

	Further Analysis Required	2020 LRDP EIR Analysis Sufficient
2. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?		●

The 2020 LRDP EIR examined the potential for vehicle and stationary source emissions under the 2020 LRDP to violate state and federal air quality standards or contribute to existing air quality violations, and determined implementation of the 2020 LRDP would not violate the carbon monoxide (CO) standard or expose sensitive receptors to substantial CO concentrations (2020 LRDP EIR Vol 1, 4.2-20).

The 2020 LRDP EIR further found traffic associated with development under the 2020 LRDP would not contribute to a cumulatively considerable increase in or expose receptors to substantial CO concentrations. Using measured CO concentrations associated with peak hour vehicle volumes for the intersection of Mission Boulevard and Jackson Street/Foothill Boulevard in Hayward as a ‘worst-case’ comparable in the same air basin as the campus, the 2020 LRDP EIR found changes at local intersections resulting from implementation of the 2020 LRDP would not result in significant impacts.

The Project is not expected to result in any significant air quality impacts not anticipated in the 2020 LRDP EIR: the growth in near campus housing could be expected to reduce the number of commuters to campus, reducing contributions to violations of air quality standards.

<p>3. Expose sensitive receptors to substantial air pollutant concentrations?</p>	<p>Further Analysis Required</p> <p>2020 LRDP EIR Analysis Sufficient</p> <p>●</p>
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2020 LRDP EIR evaluated whether construction and development activities under the 2020 LRDP would expose sensitive receptors, including nearby schools, to substantial pollutant concentrations. The campus completed a Health Risk Assessment for the 2020 LRDP, which evaluated risks from toxic air contaminants to sensitive receptors, including schools, hospitals, day care centers and senior care facilities. The 2020 LRDP EIR evaluated the maximum exposure risk to sensitive receptors from conditions existing at the time, and estimated the maximum exposure risk to sensitive receptors with buildout of the LRDP program (2020 LRDP EIR Vol 1, 4.2-15 and 4.2-22).

The proposed Project does not include laboratory research space or other programs with the potential to emit substantial pollutant concentrations. Because it is in the vicinity of the proposed construction project, the childcare program currently located within the Anna Head complex would be relocated to another location during construction.

<p>4. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?</p>	<p>Further Analysis Required</p> <p>2020 LRDP EIR Analysis Sufficient</p> <p>●</p>
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The 2020 LRDP EIR found the 2020 LRDP, in combination with other reasonably foreseeable projects, had the potential to result in a cumulatively considerable increase in non-attainment pollutants and thereby conflict with the Clean Air Plan (2020 LRDP EIR Vol 1, 4.2-31). But as noted in response to Air Quality item 1, the 2020 LRDP EIR conservatively assumed that growth under the 2020 LRDP was not included in local area projections. As prescribed in the 2020 LRDP EIR, the campus would work with the City of Berkeley, ABAG, and BAAQMD to ensure that campus growth is accurately addressed in the Clean Air Plan, and would continue to develop and implement transportation control measures (Best Practice AIR-5, Mitigation AIR-5). The proposed Project does not result in growth that would contribute to this impact.

<p>5. Expose people to substantial levels of toxic air contaminants (TACs), such that the exposure could cause an incremental human cancer risk greater than 10 in one million or exceed a hazard index of one for the maximally exposed individual?</p>	<p>Further Analysis Required</p> <p>2020 LRDP EIR Analysis Sufficient</p> <p>●</p>
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As described in Air Quality item 3 above, the Project would not result in a new source of substantial air pollutant emissions. The total 2020 LRDP development envelope is expected to result in a maximum cancer risk of 5.4 in one million for the maximally exposed individual, well below the significance standard of 10 in one million. The 2020 LRDP EIR is sufficient and comprehensive to address this issue adequately.

	Further Analysis Required	2020 LRDP EIR Analysis Sufficient
6. Cause objectionable odors affecting a substantial number of people?		●

Existing student housing facilities are not commonly sources of odors, and no element of the proposed project is anticipated to result in new odors that may affect a substantial number of people.

SUMMARY OF AIR QUALITY ANALYSIS

The 2020 LRDP EIR concluded that projects implementing the 2020 LRDP, guided by compliance with regulation, campus policies and programs to reduce emissions and risk of toxic air contaminant releases, would, with one exception, not result in new significant air quality impacts (2020 LRDP EIR Vol 1 p. 4.2-20 to 4.2-26). As the one exception, the 2020 LRDP EIR conservatively estimated that the Bay Area Air Quality Management District’s (BAAQMD) Clean Air Plan did not include an increment for growth at UC Berkeley, and found that campus growth overall may not comply with the Clean Air Plan, and may result in a cumulatively considerable increase in non-attainment pollutants that conflicts with the Clean Air Plan (2020 LRDP EIR Vol 1 p. 4.2-26, and p. 4.2-31). The conclusion relates to the overall LRDP program of which the Project is a part. This impact has therefore been fully analyzed and no additional mitigation measures are available that would further reduce the previously identified impact.

The project will not result in air quality impacts more significant than those described in the 2020 LRDP EIR, SCH #2003082131. The Project is consistent with the 2020 LRDP as analyzed and described in the 2020 LRDP EIR, incorporates sustainability practices intended to address campus to climate change, and would not introduce any new potential air impacts, and no changed circumstance or new information is present that would alter the conclusions of the 2020 LRDP EIR analysis, as described above. Further, the Project incorporates all applicable mitigation measures and best practices prescribed in the 2020 LRDP EIR. No additional mitigation measures or project revisions have been identified that would further lessen any previously identified significant impact. Therefore, the 2020 LRDP EIR is sufficient and comprehensive to address the air quality impacts of the proposed Project.

(NOTE: For a discussion of greenhouse gas emissions, see topic area following Geology, below)

BIOLOGICAL RESOURCES

SETTING

The biological resources setting of the campus is described in the 2020 LRDP EIR (Section 4.3). The following text summarizes context information for biological resources relevant to the Anna Head West Student Housing project.

Special-status species³ are plants and animals that are legally protected under the state and/or federal Endangered Species Acts⁴ or other regulations, as well as other species that are considered rare enough by the scientific community and trustee agencies to warrant special consideration, particularly with regard to protection of isolated populations, nesting or denning locations, communal roosts, and other essential habitat. Impervious surfaces, such as those at the project site, and structures provide little opportunity for use by wildlife, and species found in the vicinity are typical in urbanized areas. Due to the extent of past development, the southside neighborhood does not provide suitable habitat for special-status plant or animal species, with the exception of possible nesting by raptors.

2020 LRDP & 2020 LRDP EIR

The provisions of the 2020 LRDP would eliminate or minimize the effect on biological resources by guiding the location, scale, form and design of new University projects. The 2020 LRDP includes a number of policies and procedures for individual project review to support the Objectives of the 2020 LRDP.

The 2020 LRDP includes the Campus Specimen Tree Program. The Campus Landscape Architect and project arborist have determined that one of the existing trees on site is a specimen tree; no specimen trees would be adversely affected by the Project. The new proposed landscape plan includes new planting that respects the historic landscape character of the setting.

MITIGATION MEASURES & CONTINUING BEST PRACTICES

Design and construction of the Anna Head West Student Housing Project would be performed in conformance with the 2020 LRDP. The 2020 LRDP EIR includes mitigation measures and continuing best practices developed to reduce the effect of the implementation of the 2020 LRDP upon biological resources. Where applicable, the Project would incorporate the following mitigation measures and/or continuing best practices:

LRDP Mitigation Measure BIO-1-a: UC Berkeley will, to the full feasible extent, avoid the disturbance or removal of nests of raptors and other special-status bird species when in active use. A pre-construction nesting survey for loggerhead shrike or raptors, covering a 100 yard perimeter of the project site, would be conducted during the months of March through July prior to commencement of any project that may impact suitable nesting habitat on the Campus Park and Hill Campus. The survey would be conducted by a qualified biologist no more than 30 days prior to initiation of disturbance to potential nesting habitat. In the Hill Campus, surveys would be conducted for new construction projects involving removal of trees and other natural vegetation. In the Campus Park, surveys would be conducted for construction projects involving removal of mature trees within 100 feet of a Natural Area, Strawberry Creek, and the Hill Campus. If any of these species are found within the survey area, grading and construction in the area would not commence, or would continue only after the nests are protected by an adequate setback approved by a qualified biologist. To the full feasible extent, the nest location would be preserved, and alteration would only be allowed if a qualified biologist verifies that birds have either not begun egg-laying and incubation, or that the juveniles from those nests are foraging independently and capable of survival. A pre-construction survey is not required if construction activities commence during the non-nesting season (August through February).

LRDP Mitigation Measure BIO-1-b: UC Berkeley will, to the full feasible extent, avoid the remote potential for direct mortality of special-status bats and destruction of maternal roosts. A pre-construction roosting survey for special-status bat species, covering the project site and any affected buildings, would be conducted during the months of March through August prior to commencement of any project that may impact suitable maternal roosting habitat on the Campus Park and Hill Campus. The survey would be conducted by a qualified biologist no more than 30 days prior to initiation of disturbance to potential roosting habitat. In the Hill Campus, surveys would be conducted for new construction projects prior to grading, vegetation removal, and remodel or demolition of buildings with isolated attics and other suitable roosting habitat. In the Campus Park, surveys would be conducted for construction projects prior to remodel or demolition of buildings with isolated attics. If any maternal roosts are detected during the months of March through August, construction activities would not commence, or would continue only after the roost is protected by an adequate setback approved by a qualified biologist. To the full feasible extent, the maternal roost location would be preserved, and alteration would only be allowed if a qualified biologist verifies

that bats have completed rearing young, that the juveniles are foraging independently and capable of survival, and bats have been subsequently passively excluded from the roost location. A pre-construction survey is not required if construction activities commence outside the maternal roosting season (September through February).

Continuing Best Practice BIO-1-a: UC Berkeley will continue to implement the Campus Specimen Tree Program to reduce adverse effects to specimen trees and flora. Replacement landscaping will be provided where specimen resources are adversely affected, either through salvage and relocation of existing trees and shrubs or through new plantings of the same genetic strain, as directed by the Campus Landscape Architect.

The building site is envisioned as park-like, replacing what is now asphalt with new usable outdoor space that helps provide a buffer between the new building and the Anna Head complex. Per the Project Design Guidelines, the project will preserve specimen trees and retain or replace street trees. The campus landscape architect has determined that of the 81 trees inventoried on site that six should be considered specimens. In 2007, an arborist evaluated the trees on the entire University-owned site and prepared a report which contributed to the determination of specimen status. The Queensland Kauri-Pine represents a particularly outstanding example of California flora, rare to the San Francisco Bay Area, and should be preserved and maintained. The other specimen trees include two Canary Island Palms, a Red Flowering Gum, Blue Tasmanian Gum, and the large Camphor tree. The arborist report is included in the Anna Head School HSR (see Appendix D). Several trees will be removed in order to accommodate the program and preserve the Kauri-Pine. Three Southern Magnolias on Channing Way and a Samuel Sommers Magnolia on Haste Street could be expected to grow to 50 ft in diameter. The Project cannot accommodate this expected growth and will therefore remove these trees and replace them with more appropriate sized street trees in coordination with the City of Berkeley Public Works Department street tree plan. A Deodar Cedar on Channing and a Blue Atlas Cedar and specimen Camphor tree within the Anna Head School property will also be removed. The outstanding Red Flowering Gum will be preserved in the center of the site. The Project includes replacement of the specimen tree at a three to one ratio. The historically significant Canary Island Date Palms will not be impacted by the Project. The Campus Landscape Architect has been consulted and will continue to be involved in the design and construction phases to safeguard the historically significant trees.

BIOLOGICAL RESOURCES

Would the Anna Head West Student Housing project:

1. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game (CDFG) or US Fish and Wildlife Service (USFWS)?

**Further
Analysis
Required**

**2020 LRDP EIR
Analysis
Sufficient**



The Project would construct housing upon an existing asphalt-paved surface parking lot. The site is previously disturbed, and no new effects upon habitat are anticipated. However, there is a remote possibility one or more raptor species may establish nests in mature trees in the future ... Tree removal or construction in the vicinity of a nest in active use could result in its abandonment ... Conducting a preconstruction survey would serve to avoid the potential loss of any active raptor nests' (2020 LRDP EIR Vol 1, 4.3-24) and therefore any potential impact is mitigated to a less than significant level.

As prescribed in the 2020 LRDP EIR, a preconstruction nesting survey, covering a 100 yard perimeter of the site, would be conducted during the months of March through July, no more than 30 days prior to commencement of activity which could impact suitable nesting habitat (Mitigation BIO-1-a), if construction activity commences during the nesting season.

2. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the CDFG or USFWS?

**Further
Analysis
Required**

**2020 LRDP EIR
Analysis
Sufficient**



The Project site lies outside any riparian area or sensitive natural community site, and as such is not anticipated to have any impact on riparian habitat or any other sensitive community.

3. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act through direct removal, filling, hydrological interruption or other means?

**Further
Analysis
Required**

**2020 LRDP EIR
Analysis
Sufficient**



The North and South Forks of Strawberry Creek on the Campus Park are the only jurisdictional wetlands on the Campus Park; these are not within the Anna Head West Student Housing site. No sensitive natural communities, special status species, wetlands or important wildlife movement corridors occur within the project site (2020 LRDP EIR Vol 1, 4.3-18 to 4.3-19).

<p>4. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?</p>	<p>Further Analysis Required</p>	<p>2020 LRDP EIR Analysis Sufficient</p> <p style="text-align: center;">●</p>
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The landscape of the Campus Park and its environs is of limited native habitat value due to extensive human activity and alteration. It does not provide a geographic link between two natural areas and, therefore, it does not serve as a primary wildlife movement corridor. However, as noted in Biological Resources item 1, vegetation may provide nesting, roosting, and foraging opportunities for migratory birds. The Project would be designed and implemented to avoid disturbance or removal of nests of raptors and other special-status bird species when in active use, as prescribed in the 2020 LRDP EIR (Mitigation BIO-1-a) and to avoid the remote potential for direct mortality of special-status bats and destruction of maternal roosts (Mitigation BIO-1-b).

<p>5. Conflict with any local policies or ordinances protecting biological resources?</p>	<p>Further Analysis Required</p>	<p>2020 LRDP EIR Analysis Sufficient</p> <p style="text-align: center;">●</p>
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Local ordinances do not apply to campus projects, because the University is a state entity exempted from local controls in accordance with the state constitution, as further described in the 2020 LRDP EIR at page 4.3-30 of Vol 1. The project would not conflict with applicable policies.

<p>6. Conflict with any adopted Habitat Conservation Plan, Natural Communities Conservation Plan or other approved local, regional or state habitat conservation plan?</p>	<p>Further Analysis Required</p>	<p>2020 LRDP EIR Analysis Sufficient</p> <p style="text-align: center;">●</p>
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The Project site is not located within any area designated for an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved conservation plan. No additional analysis is required.

SUMMARY OF BIOLOGICAL RESOURCES ANALYSIS

The 2020 LRDP EIR concluded that projects implementing the 2020 LRDP, incorporating existing best practices and 2020 LRDP EIR mitigation measures, would not result in new significant impacts upon biological resources (2020 LRDP EIR Vol 1, 4.3-22 to 4.3-30). The Project site in the City Environs outside the Campus Park; sensitive species are not known to occur at the Project site, and measures to reduce possible impacts to nesting species and specimen trees would be implemented as part of the Project. The project would not result in new or more severe impacts than analyzed in the 2020 LRDP EIR, SCH #2003082131, nor contribute to cumulatively significant adverse effects upon biological resources.

CULTURAL RESOURCES

SETTING

The Project lies within the Southside neighborhood in the city of Berkeley. The character of the neighborhood reflects the history of the Southside, with elements of each period of its historic element present today. The early history of the neighborhood is associated primarily with the subdivision of the land by the College of California (the predecessor of the University of California) to generate money for the College. By the end of the 19th century, the large original blocks had all been subdivided by new streets. The large original lots were subdivided and the new, smaller lots were built upon with single-family dwellings.

Today, the five oldest buildings left in the area – the 1892 Channing Hall in the Anna Head School and four houses built in the 1890's – survive from this late 19th century redevelopment. The Anna Head School may have been one of the first examples in Berkeley of a building clad in brown shingles. The other 19th century houses remaining in the area were all clad in brown shingles as well and represent an important period in Berkeley's development.

From about 1906 to 1930, the stucco-clad and multi-unit buildings, including hotels, apartments, and fraternities, constituted the dominant character of the pre-World War II period. In the 1930's and 1940's, the area did not change much in appearance. The 1950's and 1960's were a time dramatic physical change in the Southside neighborhood. This period was characterized by the demolition of older buildings, the assembly of smaller lots into larger parcels, and the development of large facilities for the University, large private institutions, and large apartment buildings. The character of the neighborhood changed from a private residential and commercial district to an area permeated by large and active University facilities including residence halls, parking structures, support service offices, and academic programs such as organized research institutes.

Between 1956 and 1970, three new apartment buildings, two University residence hall complexes, two churches, a large parking garage and an art museum were built in the Southside. The character of the neighborhood was radically changed by these additions, especially the construction of Residence Hall Units 1 and 2, and the Underhill parking structure at the center of the area.

There was little change in the Southside in the 1970's -1990's. The Underhill parking structure was demolished in 1993 after it was deemed seismically unsafe. The first decade of the 21st century has seen a new parking structure and athletic field take its place. The University has built several new student housing projects including the College/Durant graduate student housing, the Channing Bowditch student apartments, and the Units 1 and 2 Infill projects.

Thus, the physical setting within the Southside area today consists of elements from several periods.

Historical Resources. The former Anna Head School for Girls is a complex of wood-frame, shingle-clad buildings built between 1892 and 1927 on a large lot that survives from the College Homesteads Subdivision. The original building was designed by Soule Edgar Fisher. The additions were designed by Walter H. Ratcliff, Jr. The design of the original structure is characteristic of a New England Shingle Style of its period. Now used as University offices for research units and student services and for a childcare program, the complex is a City of Berkeley Landmark and is listed on the National Register of Historic Places.

Archaeological Resources. The Anna Head West parking lot was formerly the Hinkel estate. In the summer of 2009 the project supported an archaeological field school at the project site to determine the likelihood of archaeological resources at the site.

2020 LRDP & 2020 LRDP EIR

In recognition of the fact that more than a third of UC Berkeley buildings are over 50 years old and thus potentially eligible for the National Register, the 2020 LRDP includes several objectives that seek to protect potential historic resources for future generations. They include:

- **Plan every new project as a model of resource conservation and environmental stewardship.**
- **Maintain and enhance the image and experience of the campus, and preserve our historic legacy of landscape and architecture.**
- **Plan every new project to respect and enhance the character, livability, and cultural vitality of our city environs.**

The 2020 LRDP would support these objectives by ensuring future Campus Park projects conform to the Campus Park Design Guidelines, which include special provisions to protect significant landscape and open space features, and to preserve and enhance the integrity of the classical core. For projects in the City Environs, the 2020 LRDP would continue the existing UC Berkeley practice of presenting all major City Environs projects to the relevant city planning commission and landmarks commission for information and comment, prior to schematic design review by the UC Berkeley Design Review Committee.

MITIGATION MEASURES & CONTINUING BEST PRACTICES

Design and construction of the Anna Head West Student Housing would be performed in conformance with the 2020 LRDP. The 2020 LRDP EIR includes mitigation measures and continuing best practices developed to reduce the effect of the implementation of the 2020 LRDP upon cultural resources. Where applicable, the Project would incorporate the following mitigation measures and/or continuing best practices:

Continuing Best Practice CUL-1: In the event that paleontological resource evidence or a unique geological feature is identified during project planning or construction, the work would stop immediately and the find would be protected until its significance can be determined by a qualified paleontologist or geologist. If the resource is determined to be a 'unique resource,' a mitigation plan would be formulated and implemented to appropriately protect the significance of the resource by preservation, documentation, and/or removal, prior to recommencing activities.

The proposed Project is construction upon a previously developed infill site. No paleontological resources or unique geological features are known or anticipated at the site.

Continuing Best Practice CUL-2-a: If a project could cause a substantial adverse change in features that convey the significance of a primary or secondary resource, an Historic Structures Assessment (HSA) would be prepared. Recommendations of the HSA made in accordance with the Secretary of the Interior's Standards would be implemented, in consultation with the UC Berkeley Design Review Committee and the State Historic Preservation Office, such that the integrity of the significant resource is preserved and protected. Copies of all reports would be filed in the University Archives/Bancroft Library.

Implementing this measure, the Anna Head Historic Structure Report (HSR) was completed for the University of California in 2009, by Knapp Architects, see: <http://www.tinyurl.com/AnnaHeadHSR>; recommendations of the HSR informed the design guidelines for the Project, the design and planning for the Project and were incorporated to the full feasible extent. See also discussion under LRDP Mitigation Measure CUL-3, and in response to question numbered 1 below.

Continuing Best Practice CUL-2-b: For projects with the potential to cause adverse changes in the significance of historical resources, UC Berkeley would make informational presentation of all major projects in the City Environs in Berkeley to the Berkeley Planning Commission and the Berkeley Landmarks Preservation Commission for comment prior to schematic design review by the UC Berkeley Design Review Committee.

Informational presentations were made to the City of Berkeley Landmarks Preservation Commission in the spring of 2009, and to the City of Berkeley Planning Commission in September 2009, prior to review by the campus Design Review Committee.

LRDP Mitigation Measure CUL-3: If, in furtherance of the educational mission of the University, a project would require the demolition of a primary or secondary resource, or the alteration of such a resource in a manner not in conformance with the Secretary of Interior's Standards, the resource would be recorded to archival standards prior to its demolition or alteration.

Although the existing setting for the Anna Head complex is currently compromised, prior to construction standard documentary photographs of the site would be completed to archival standards.

Continuing Best Practice CUL-4-a: In the event resources are determined to be present at a project site, the following actions would be implemented as appropriate to the resource and the proposed disturbance:

- UC Berkeley shall retain a qualified archaeologist to conduct a subsurface investigation of the project site, to ascertain the extent of the deposit of any buried archaeological materials relative to the project's area of potential effects. The archaeologist would prepare a site record and file it with the California Historical Resource Information System.
- If the resource extends into the project's area of potential effects, the resource would be evaluated by a qualified archaeologist. UC Berkeley as lead agency would consider this evaluation in determining whether the resource qualifies as a historical resource or a unique archaeological resource under the criteria of CEQA Guidelines section 15064.5. If the resource does not qualify, or if no resource is present within the project area of potential effects, this would be noted in the environmental document and no further mitigation is required unless there is a discovery during construction (see below).
- If a resource within the project area of potential effect is determined to qualify as an historical resource or a unique archaeological resource in accordance with CEQA, UC Berkeley shall consult with a qualified archaeologist to mitigate the effect through data recovery if appropriate to the resource, or to consider means of avoiding or reducing ground disturbance within the site boundaries, including minor modifications of building footprint, landscape modification, the placement of protective fill, the establishment of a preservation easement, or other means that would permit avoidance or substantial preservation in place of the resource. If further data recovery, avoidance or substantial preservation in place is not feasible, UC Berkeley shall implement LRDP Mitigation Measure CUL-5, outlined below.
- A written report of the results of investigations would be prepared by a qualified archaeologist and filed with the University Archives/ Bancroft Library and the Northwest Information Center.

Professor Laurie Wilkie of the Department of Anthropology and the Archaeological Research Facility conducted a Field School in archeological techniques at the Anna Head West Parking Lot in Summer, 2009. Two areas of asphalt paving were removed and the area beneath partially excavated, and another unpaved portion of the site was also investigated.

The Field School identified subsurface building remnants that could be connected to the 19th century John Hinkel House that stood at 2520 Channing Way including a freestanding greenhouse in the center of the property; a small freestanding garage structure that was located on the extreme southeast edge of the site, facing Haste Street. Brick and concrete foundation piers and remnants were identified, along with areas of soil disturbance that were identified as the location of deteriorated wooden structural members. Piping was found at the site of the greenhouse structure. The foundation of the main house had been disturbed during demolition of the house, and only portions remained.

A variety of artifacts was uncovered during the excavation, primarily small items including glass fragments bearing the patina of greenhouse use, and small personal and household items such as buttons and bottles. The artifacts and other data gathered during the Field School are being processed at the Archaeological Research Facility and a report detailing and analyzing the findings will be prepared in Spring, 2010.

The known history of the site was described prior to the Field School in the Anna Head School Historic Structures Report (Frederic Knapp, Architect, 2008). Building remnants and other items found during the Field School are generally consistent with historical records documenting the uses of the site as the location of a private estate home.

LRDP Mitigation Measure CUL-4-b: If a resource is discovered during construction (whether or not an archaeologist is present), all soil disturbing work within 35 feet of the find shall cease. UC Berkeley shall contact a qualified archaeologist to provide and implement a plan for survey, subsurface investigation as needed to define the deposit, and assessment of the remainder of the site within the project area to determine whether the resource is significant and would be affected by the project, as outlined in Continuing Best Practice CUL-3-a. UC Berkeley would implement the recommendations of the archaeologist.

Continuing Best Practice CUL-4-b: In the event human or suspected human remains are discovered, UC Berkeley would notify the County Coroner who would determine whether the remains are subject to his or her authority. The Coroner would notify the Native American Heritage Commission if the remains are Native American. UC Berkeley would comply with the provisions of Public Resources Code Section 5097.98 and CEQA Guidelines Section 15064.5(d) regarding identification and involvement of the Native American Most Likely Descendant and with the provisions of the California Native American Graves Protection and Repatriation Act to ensure that the remains and any associated artifacts recovered are repatriated to the appropriate group, if requested.

These construction best practices will be implemented through construction contracts.

Continuing Best Practice CUL-4-c: Prior to disturbing the soil, contractors shall be notified that they are required to watch for potential archaeological sites and artifacts and to notify UC Berkeley if any are found. In the event of a find, UC Berkeley shall implement LRDP Mitigation Measure CUL-4-b.

These construction best practices will be implemented through construction contracts.

LRDP Mitigation Measure CUL-4-b: If a resource is discovered during construction (whether or not an archeologist is present), all soil disturbing work within 35 feet of the find shall cease. UC Berkeley shall contact a qualified archeologist to provide and implement a plan for survey, subsurface investigation as needed to define the deposit, and assessment of the remainder of the site within the project area to determine whether the resource is significant and would be affected by the project, as outlined in Continuing Best Practice CUL-3-a. UC Berkeley would implement the recommendations of the archeologist.

This measure describes actions the Project would undertake under the specified circumstance.

LRDP Mitigation Measure CUL-5: If, in furtherance of the educational mission of the University, a project would require damage to or demolition of a significant archaeological resource, a qualified archaeologist shall, in consultation with UC Berkeley:

- Prepare a research design and archaeological data recovery plan that would attempt to capture those categories of data for which the site is significant, and implement the data recovery plan prior to or during development of the site.
- Perform appropriate technical analyses, prepare a full written report and file it with the appropriate information center and provide for the permanent curation of recovered materials.

CULTURAL RESOURCES

Would the Anna Head West Student Housing Project:

	Further Analysis Required	2020 LRDP EIR Analysis Sufficient
1. Cause a substantial adverse change in the significance of a historical resource as defined in CCR Section 15064.5 ?		●

In accordance with campus best practices, the HSR for the Anna Head complex guided planning and design for its proposed new neighbor, the Anna Head West Student Housing project. The proposed Project has been reviewed with representatives of the State Historic Preservation Office, including the decision to increase density at the west end of the site, to maximize setbacks west of the historic Anna Head buildings.

Despite adding density at the west of the site, the site plan for the Anna Head West Student Housing project encroaches significantly into the setting of the historic Anna Head complex. As noted in the HSR, although the grounds of the former Anna Head School have been significantly altered since its period of significance, “while much of the landscape is now pavement which does not have historical integrity and lacks significance, the spatial qualities of the site do retain integrity overall”. Please see Figure 1, attached, excerpted from the Anna Head HSR illustrating the extent of the Anna Head complex considered to be “very significant” with regard to the spatial organization of the site. The following excerpts from the HSR (<http://tinyurl.com/AnnaHeadHSR>) provide further background:

During the years the school was in operation, the open space to the north of the buildings included a variety of outdoor spaces and landscaped areas that were used to carry out the school’s curriculum and contributed to the image of the Anna Head School. When the University purchased the property in 1963, many of the character-defining landscape features and plant materials were removed or altered to accommodate the use of the property by the University.

The most drastic change was the creation of a paved parking lot that covered virtually all of the open space in the western portion of the property. At the same time, the former residential lots west of the school property known as Anna Head West today, which had been purchased by the University in 1948, were also paved for parking. The resulting large parking lot then functioned and appeared to be one property, blurring the separate historic identities of the parcels before the 1960s.

This parking lot was the major alteration to the Anna Head School site and resulted in the removal or substantial alteration of most of the significant features in the landscape. However, the original spatial organization of the school site and the open space surrounding the buildings remains.

Other remaining key features of the landscape design include a part of the main entry drive in front of Channing Hall, a secondary entry drive along the east side of the property, a portion of the front lawn area with its two iconic Canary Island date palms, isolated large trees in the parking lot, a group of eucalyptus trees and a palm in the southeast corner of the site, and the wisteria vines in the Quad.

Excerpt, Section L of the HSR,

The boundary of the Anna Head School buildings and site includes that of the original 270' x 300' lot that Anna Head purchased in 1892 (Lots 5 and 6 of Block 7 in the College Homestead Association Tract). Today, the parking lot on the northwest side of the Anna Head School property is visually indistinguishable from that of the parking lot located on the lot (originally 2523 Haste Street) to the west. This lot is not part of the Anna Head School historic district. After the University purchased the Anna Head School property in 1964, the wall along the west side of the property (that separated it from the lot to the west) was removed and the area was paved.

Overall, the complex of buildings retain a high degree of integrity with respect to all three areas of significance, while conversely the landscape has experienced a diminishment of integrity. While much of the landscape is now pavement which does not have historical integrity and lacks significance, the spatial qualities of the site do retain integrity overall.

Significance of Elements and Materials

Landscape

The following materials and elements are Very Significant:

Spatial organization of the site: (1) Buildings contained on the southern portion of the site with a continuous open space in the area in front (north) of these buildings and along a narrow strip along the east side of the cluster and (2) the two exterior quadrangle spaces defined by the buildings.

Two Canary Island date palms (listed as Trees 41 and 42 in the Arborist's Report) located north of Channing Hall.

The following materials and elements are Significant:

The "Front Lawn" area is a key element of the spatial organization of the north side of the property and remains so even with the alterations that have occurred to this landscape feature. The shape and size of this area have been altered by the addition of pavement for parking to a section of the south side and to the west end. The lawn and most of the historic vegetation are gone. However, the presence of this open area continues to provide a setting for Channing Hall, and as one of the few remaining unpaved areas, this "lawn area" provides a connection to the historic lawn and garden spaces of the school grounds.

The alignment of the main entry drive historically provided the southern edge to the "front lawn area." The alignment of this main drive remains a key element of the spatial organization of the north side of the property and a key circulation feature even with the alterations that have occurred. The east end enters at northeast corner of the property (on Channing Way). However the addition of pavement for parking has altered the alignment of the drive west of the Canary Island date palms and has removed the distinct west end entry to Channing Way. This area is now part of the parking lot rather than a distinct drive.

Although the two Canary Island date palms would not be altered by the proposed Project, the boundary of the Project site is located between the two trees; the north wing of the Project significantly encroaches into the former boundary of the Anna Head School buildings. To achieve the necessary balance of bed spaces, respect for height and setback standards, attractive site planning, and project feasibility, however, the encroachment is considered necessary, and presents a significant and unavoidable cultural resource impact of the Project. The 2020 LRDP EIR noted that under certain circumstances, projects developed under the 2020 LRDP could cause substantial adverse changes in the significance of historical resources, which would remain a significant and unavoidable impact despite recordation of the resource (2020 LRDP EIR p.4.4-55; see also Table 4.4-9 in the 2020 LRDP EIR, Southside, Primary Historical Resources).

The project scope does not include improvements to the Anna Head buildings or to the Anna Head site. Desirable measures to reduce the encroachment impact include restoration of the area north of Channing Hall, and continuation of a pathway from the Project site to the northeast corner of the property, recalling the original landscape plan for the Anna Head School. While this might assist to mitigate the encroachment impact, the area is outside the boundary of the Anna Head West Student Housing Project, and improvements are not included in the project. Further, landscape improvement measures north of Anna Head could not reverse the significant unavoidable impact of encroachment upon the site of the Anna Head complex. However, the measures are not precluded by the proposed Project and would remain possible, and should become a priority under the campus policy toward preservation of its historical legacy of landscape and architecture.

	Further Analysis Required	2020 LRDP EIR Analysis Sufficient
<p>2. Directly or indirectly destroy a unique paleontological resource, or site, or unique geologic feature?</p>		●

The 2020 LRDP EIR states there are no known paleontological resources or unique geologic features in the geographic scope of the 2020 LRDP (2020 LRDP EIR Vol 1, 4.4-48). As prescribed in the 2020 LRDP EIR, should such resources be revealed work would stop immediately and any found resource would be protected until its significance can be determined (Best Practice CUL-1). If a resource is determined to be a 'unique resource' by a qualified paleontologist or geologist, a mitigation plan would be formulated and implemented to protect the resource by preservation, documentation and/or removal, prior to resuming activity.

<p>3. Cause a substantial adverse change in the significance of an archaeological resource pursuant to CCR Section 15064.5?</p>	<p>Further Analysis Required</p> <p>2020 LRDP EIR Analysis Sufficient</p> <p>●</p>
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In conformance with the 2020 LRDP EIR (Mitigation CUL-4-a), UC Berkeley has completed an internal document: a UCB Campus Archaeological Resources Sensitivity Map. The site of the proposed project is not on the UCB campus. However, if a resource is discovered during construction, all soil disturbing work within 35 feet of the find will cease and a qualified archaeologist will be contacted to examine the deposit and assess appropriate action (Mitigation CUL-4-b). Archaeological resources would be treated in conformance with the protocols established by the 2020 LRDP EIR (Mitigation CUL-4-b and Best Practices CUL-4-b, CUL-4-c).

<p>4. Disturb any human remains, including those interred outside of formal cemeteries?</p>	<p>Further Analysis Required</p> <p>2020 LRDP EIR Analysis Sufficient</p> <p>●</p>
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Human remains are not anticipated at the Project site. However, in the event human or suspected human remains are discovered, UC Berkeley would notify the County Coroner who would notify the Native American Heritage Commission as appropriate and in accordance with state law (Best Practice CUL-4-b).

SUMMARY OF CULTURAL RESOURCES ANALYSIS

The Project as proposed would significantly diminish the integrity of the historic spatial organization of the Anna Head School complex. The 2020 LRDP EIR noted that under certain circumstances, projects developed under the 2020 LRDP could cause substantial adverse changes in the significance of historical resources, which would remain a significant and unavoidable impact despite recordation of the resource (2020 LRDP EIR p.4.4-55). Other aspects of the historic integrity of the Anna Head School site and buildings would not be diminished by the proposed Project. Aside from the specified change the proposed Project would not impact any known secondary or primary cultural resources, and measures to reduce possible impacts upon unknown potential archaeological resources are incorporated into the project. The project would not result in new or more severe impacts than analyzed in the 2020 LRDP EIR, SCH #2003082131, nor contribute to cumulatively significant adverse effects upon cultural resources; the 2020 LRDP EIR analysis is sufficient and comprehensive to address cultural resource impacts of the Project.

GEOLOGY, SEISMICITY, AND SOILS

SETTING

The San Francisco Bay Area is considered one of the more seismically active areas in the world, based on its record of historical earthquakes and its position relative to the North American and Pacific Plate boundaries.⁵ The Hayward fault is most relevant to UC Berkeley, since it passes through the eastern part of the campus⁶, roughly 2500 feet east of the Project site. The geological setting of the campus is described in the 2020 LRDP EIR (Section 4.5). The following text summarizes context information for geology, seismicity, and soils relevant to the Anna Head West Student Housing project.

2020 LRDP & 2020 LRDP EIR

The 2020 LRDP would guide the location, scale, form and design of new University projects with sensitivity to geology, seismicity and soils considerations.

- **Plan every new project to represent the optimal investment of land and capital in the future of the campus.**

MITIGATION MEASURES & CONTINUING BEST PRACTICES

Design and construction of the Anna Head West Student Housing project would be performed in conformance with the 2020 LRDP. The 2020 LRDP EIR includes mitigation measures and continuing best practices developed to reduce the effect of the implementation of the 2020 LRDP upon geology, seismicity and soils. Where applicable, the Project would incorporate the following mitigation measures and/or continuing best practices:

Continuing Best Practice GEO-1-a: UC Berkeley will continue to comply with the California Building Code and the University Policy on Seismic Safety.

The Project will be fully compliant with the University's Policy on Seismic Safety. Pursuant to this policy, the project design will comply with the 2007 California Building Code using seismic design spectra developed by the URS Corporation specifically for the UC Berkeley campus.

Continuing Best Practice GEO-1-b: Site-specific geotechnical studies will be conducted under the supervision of a California Registered Engineering Geologist or licensed geotechnical engineer and UC Berkeley will incorporate recommendations for geotechnical hazard prevention and abatement into project design.

A site specific geotechnical investigation has been performed. Geotechnical recommendations identified in this investigation will be incorporated into the project design.

Continuing Best Practice GEO-1-c: The Seismic Review Committee (SRC) shall continue to review all seismic and structural engineering design for new and renovated existing buildings on campus and ensure that it conforms to the California Building Code and the University Policy on Seismic Safety.

The Project is subject to Seismic Peer Review during each phase of the design process.

Continuing Best Practice GEO-1-d: UC Berkeley shall continue to use site-specific seismic ground motion specifications developed for analysis and design of campus projects. The information provides much greater detail than conventional codes and is used for performance-based analyses.

Continuing Best Practice GEO-1-g: As stipulated in the University Policy on Seismic Safety, the design parameters for specific site peak acceleration and structural reinforcement will be determined by the geotechnical and structural engineer for each new or rehabilitation project proposed under the 2020 LRDP. The acceptable level of actual damage that could be sustained by specific structures would be calculated based on geotechnical information obtained at the specific building site.

The building design will utilize the site-specific response seismic spectra developed by URS Corporation for the UC Berkeley campus. This represents the best available information regarding seismicity at this site. Other potential geotechnical hazards will be evaluated by the project Geotechnical Engineer based on field explorations and laboratory testing.

Continuing Best Practice GEO-2: Campus construction projects with potential to cause erosion or sediment loss, or discharge of other pollutants, would include the campus Stormwater Pollution Prevention Specification. This specification includes by reference the ‘Manual of Standards for Erosion and Sediment Control’ of the Association of Bay Area Governments and requires that each large and exterior project develop an Erosion Control Plan.

GEOLOGY, SEISMICITY AND SOILS

Would the Anna Head West Student Housing project:

Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

1. Rupture of a known earthquake fault?

**Further
Analysis
Required**

**2020 LRDP EIR
Analysis
Sufficient**



The 2020 LRDP EIR noted the Hayward fault runs directly through the eastern portion of the UC Berkeley campus. However, given continuing campus best practices including compliance with the University Policy on Seismic Safety and incorporation of geotechnical recommendations that reduce hazards, the 2020 LRDP EIR determined the risk to people or structures due to surface fault rupture hazards would not be significantly increased with implementation of the 2020 LRDP. (2020 LRDP EIR Vol 1, 4.5-17). The Project site is located roughly 2500 feet from the Hayward fault.

2. Strong seismic ground shaking?

**Further
Analysis
Required**

**2020 LRDP EIR
Analysis
Sufficient**



UC Berkeley is located in a seismically active region. Ground shaking has the potential to damage buildings. The University has implemented a process for the design of new buildings that applies the best available engineering procedure to maximize safety and resiliency, which are incorporated into the 2020 LRDP EIR. (Best Practices GEO-1-a through GEO-1-g) Given these practices, the 2020 LRDP EIR determined the impacts to people and property due to seismic ground shaking are less than significant.

3. Seismic -related ground failure, including liquefaction?

**Further
Analysis
Required**

**2020 LRDP EIR
Analysis
Sufficient**



The 2020 LRDP EIR notes that the liquefaction potential in areas subject to new development under the 2020 LRDP is minimal. Site development would be completed in accordance with the recommendations of a geotechnical investigation (2020 LRDP EIR Vol 1, 4.5-18) .

4. Landslides?

**Further
Analysis
Required**

**2020 LRDP EIR
Analysis
Sufficient**



Landslide conditions occur in the Hill Campus. The Project is not located in an area of landslide risk.

<p>5. Result in substantial soil erosion or the loss of topsoil?</p>	<p>Further Analysis Required</p>	<p>2020 LRDP EIR Analysis Sufficient</p> <p>●</p>
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As prescribed in the 2020 LRDP EIR, campus construction projects with potential to cause erosion or sediment loss, or discharge of other pollutants, are undertaken in accordance with the campus Stormwater Pollution Prevention Specification. The specification includes by reference the 'Manual of Standards for Erosion and Sediment Control' of the Association of Bay Area Governments, and requires development of an erosion control plan. (Best Practice GEO-2) With the inclusion of this practice as part of the Project, no significant erosion impact is anticipated.

<p>6. Be located on a geologic unit or soil that is unstable, or would become unstable as a result of the project, and potentially result in on- or off-site landslides, lateral spreading, subsidence, liquefaction or collapse?</p>	<p>Further Analysis Required</p>	<p>2020 LRDP EIR Analysis Sufficient</p> <p>●</p>
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As prescribed in the 2020 LRDP EIR, site-specific geotechnical studies would be conducted, and UC Berkeley would incorporate recommendations for geotechnical hazard prevention and abatement into project design, prior to construction of the Project. (Best Practice GEO-1-b)

<p>7. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code, creating substantial risks to life or property?</p>	<p>Further Analysis Required</p>	<p>2020 LRDP EIR Analysis Sufficient</p> <p>●</p>
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Please see response in Geology item 3, above.

SUMMARY OF GEOLOGY, SEISMICITY AND SOILS ANALYSIS

The 2020 LRDP EIR concluded that projects implementing the 2020 LRDP, incorporating existing best practices and 2020 LRDP EIR mitigation measures, would not result in new significant impacts in the area of geology, seismicity, or soils (2020 LRDP EIR Vol 1 p. 4.5-17 to 4.5-24). The Project is consistent with the 2020 LRDP as analyzed and described in the 2020 LRDP EIR and would not introduce any new potential geology, seismicity or soils impacts, and no changed circumstance or new information is present that would alter the conclusions of the 2020 LRDP EIR analysis, as described above. With the incorporation of all applicable LRDP EIR mitigation measures and best practices, described above, the Project will not result in any new geology, seismicity or soils impact. No Project revisions or additional mitigation measures are required and the 2020 LRDP EIR analysis is sufficient and comprehensive to address geology, seismicity and soils impacts of the Project.

GREENHOUSE GAS EMISSIONS

GREENHOUSE GAS EMISSIONS

Would the Anna Head West Student Housing project:

**Further
Analysis
Required**

**2020 LRDP EIR
Analysis
Sufficient**

1. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?



The Anna Head West Student Housing Project is planned, designed and would be managed to comply with the University Policy on Sustainable Practices. Further, the project implements the 2020 Long Range Development Plan as amended and would not generate greenhouse gas emissions in a manner that significantly impacts the environment.

Lead agencies, including municipalities, counties, and universities, have adopted climate action plans in an effort to meet state mandated greenhouse gas reduction targets through comprehensive efforts. Where the focus of CEQA is commonly on the immediate impact of a single new development proposal, on-going pre-existing operations are often the greatest contributors of greenhouse gas emissions. Accordingly, in September 2009 the Bay Area Air Quality Management District published new draft guidelines for compliance with the California Environmental Quality Act to assist lead agencies in evaluating air quality and climate change impacts of projects and plans proposed in the air basin. The new draft guidelines discuss reliance upon an adopted climate action plan to support a finding that greenhouse gas emissions of a proposed plan, such as the 2020 LRDP, are less than significant. As described above, the LRDP was amended to reference the campus climate action plan in July, 2009.⁵

The California Attorney General has published suggested measures to reduce climate impacts. The table below indicates measures to be implemented by the proposed Anna Head West Student Housing project.

ID	Attorney General Project-Specific Climate Change Suggested Mitigation Measures	Implemented by project?
Energy Efficiency		
GCC-1-1	Design buildings to be energy efficient. Site buildings to take advantage of shade, prevailing winds, landscaping and sun screens to reduce energy use.	<i>Yes. For interior spaces, the project would exceed energy efficiency requirements of state code by 20%</i>
GCC-1-2	Install efficient lighting and lighting control systems. Use daylight as an integral part of lighting systems in buildings.	<i>Yes.</i>
GCC-1-3	Install light colored “cool” roofs, cool pavements, and strategically placed shade trees	<i>Yes</i>
GCC-1-4	Provide information on energy management services for large energy users.	<i>n/a</i>

⁵ The BAAQMD Guidelines also suggest a number of “mitigation” actions that are standard best practices at UC Berkeley. For example, projects should: be located in a mixed use area; be proximate to transit; charge for parking; maintain a bicycle and pedestrian network; operate transportation demand management programs; implement energy efficiency beyond the requirements of Title 24. See <http://www.baaqmd.gov/Divisions/Planning-and-Research/Planning-Programs-and-Initiatives/CEQA-GUIDELINES.aspx> page 3-11.

ID	Attorney General Project-Specific Climate Change Suggested Mitigation Measures	Implemented by project?
GCC-1-5	Install energy efficient heating and cooling systems, appliances and equipment, and control systems.	<i>Yes. The need for mechanical systems is minimized. Efficient and cost effective equipment and systems are planned where needed. The project will rely on natural ventilation and not require cooling systems. Heating is to be provided through an innovative solar-heated trombe wall system.</i>
GCC-1-6	Install light emitting diodes (LEDs) for traffic, street and other outdoor lighting.	<i>Yes. LED lighting has been proposed for outdoor lighting.</i>
GCC-1-7	Limit the hours of operation of outdoor lighting.	<i>Yes. Lighting is controlled by photo sensors and site occupancy schedule.</i>
GCC-1-8	Use solar heating, automatic covers, and efficient pumps and motors for pools and spas.	n/a
GCC-1-9	Provide education on energy efficiency.	<i>Yes. Water and energy savings strategies, present and future, will be described and demonstrated.</i>
Renewable Energy		
GCC-1-10	Install solar and wind power systems, solar and tankless hot water heaters, and energy-efficient heating ventilation and air conditioning. Educate consumers about existing incentives.	<i>The project is designed to maximize natural ventilation and daylighting. Water heating will be accomplished using reclaimed heat with heat exchangers. The project goals include the application of alternative and innovative energy saving technologies and systems as possible. These will include study and evaluation of the feasibility of an innovative trombe wall system to generate radiant space heating. The project is determined to achieve LEED Gold certification.</i>
GCC-1-11	Install solar panels on carports and over parking areas.	n/a
GCC-1-12	Use combined heat and power in appropriate applications.	<i>No. Not proposed at this time.</i>
Water Conservation and Efficiency		
GCC-1-13	Create water-efficient landscapes.	<i>Yes. Where new planting occurs, native, drought-resistant materials are used.</i>
GCC-1-14	Install water-efficient irrigation systems and devices, such as soil moisture-based irrigation controls.	<i>No, not proposed at this time.</i>
GCC-1-15	Use reclaimed water for landscape irrigation in new developments and on public property. Install the infrastructure to deliver and use reclaimed water.	<i>No, not proposed at this time.</i>

ID	Attorney General Project-Specific Climate Change Suggested Mitigation Measures	Implemented by project?
GCC-1-16	Design buildings to be water-efficient. Install water-efficient fixtures and appliances.	<i>Yes. High quality water efficient fixtures, including dual flush toilets and low water use urinals are specified.</i>
GCC-1-17	Use graywater. (Graywater is untreated household waste water from bathtubs, showers, bathroom wash basins, and water from clothes washing machines.) For example, install dual plumbing in all new development allowing graywater to be used for landscape irrigation.	<i>Graywater for irrigation is proposed as a bid alternate and will be added to the project after bids are received if cost fits within budget.</i>
GCC-1-18	Restrict watering methods (e.g., prohibit systems that apply water to non-vegetated surfaces) and control runoff.	<i>n/a this phase, operational measure</i>
GCC-1-19	Restrict the use of water for cleaning outdoor surfaces and vehicles.	<i>n/a this phase, operational measure</i>
GCC-1-20	Implement low-impact development practices that maintain the existing hydrologic character of the site to manage storm water and protect the environment. (Retaining storm water runoff on-site can drastically reduce the need for energy-intensive imported water at the site.)	<i>Stormwater will be better controlled through use of permeable surfaces but there is no plan to retain and re-use runoff on site.</i>
GCC-1-21	Devise a comprehensive water conservation strategy appropriate for the project and location. The strategy may include many of the specific items listed above, plus other innovative measures that are appropriate to the specific project.	
GCC-1-22	Provide education about water conservation and available programs and incentives.	<i>Yes. RSSP has existing programs to educate student residents about water conservation.</i>
Solid Waste Measures		
GCC-1-23	Reuse and recycle construction and demolition waste (including, but not limited to, soil, vegetation, concrete, lumber, metal, and cardboard).	<i>Yes. Project scope does not require demolition of an existing structure but will include recycling of other demolition waste to the best extent feasible.</i>
GCC-1-24	Provide interior and exterior storage areas for recyclables and green waste and adequate recycling containers located in public areas.	<i>Yes. Recycling & composting containers accommodated in all trash rooms.</i>
GCC-1-25	Recover by-product methane to generate electricity.	<i>n/a</i>
GCC-1-26	Provide education and publicity about reducing waste and available recycling services.	<i>Yes. RSSP has existing programs to educate student residents about recycling, re-use & composting.</i>

ID	Attorney General Project-Specific Climate Change Suggested Mitigation Measures	Implemented by project?
Land Use Measures		
GCC-1-27	Include mixed-use, infill, and higher density in development projects to support the reduction of vehicle trips, promote alternatives to individual vehicle travel, and promote efficient delivery of services and goods.	<i>Yes. The Anna Head West Student Housing project intensifies use at an existing developed site that is part of a greater transit and street system.</i>
GCC-1-28	Educate the public about the benefits of well-designed, higher density development.	<i>This project is an example of high-density, sustainable development.</i>
GCC-1-29	Incorporate public transit into project design.	<i>Yes. The project is located within walking distance of public transit.</i>
GCC-1-30	Preserve and create open space and parks. Preserve existing trees, and plant replacement trees at a set ratio.	<i>Yes. Specimen tree replaced at 3 to 1 ratio; non-specimen trees replaced at 2to 1 ratio.</i>
GCC-1-31	Develop “brownfields” and other underused or defunct properties near existing public transportation and jobs.	<i>Yes. The project is utilizing a surface parking lot for high density housing within walking distance of campus, transit and services.</i>
GCC-1-32	Include pedestrian and bicycle-only streets and plazas within developments. Create travel routes that ensure that destinations may be reached conveniently by public transportation, bicycling or walking.	<i>Yes. Project includes covered secure bike storage for 20% of the building residents (more bike storage is under consideration) Showers provided for 100% or more of bldg residents.</i>
Transportation and Motor Vehicles		
GCC-1-33	Limit idling time for commercial vehicles, including delivery and construction vehicles.	<i>Yes. This is part of any project implementing the 2020 LRDP.</i>
GCC-1-34	Use low or zero-emission vehicles, including construction vehicles.	<i>Yes and no. Campus exploring use of low emission fleet vehicles. RSSP fleet includes 4 electric vehicles. Not currently part of campus construction requirements.</i>
GCC-1-35	Promote ride sharing programs e.g., by designating a certain percentage of parking spaces for ride sharing vehicles, designating adequate passenger loading and unloading and waiting areas for ride sharing vehicles, and providing a web site or message board for coordinating rides.	<i>Project does not provide parking on site. Campus implements and promotes ridesharing programs.</i>
GCC-1-36	Create car sharing programs. Accommodations for such programs include providing parking spaces for the car share vehicles at convenient locations accessible by public transportation.	<i>Campus supports car sharing programs, provides parking and promotion</i>
GCC-1-37	Create local “light vehicle” networks, such as neighborhood electric vehicle (NEV) systems.	n/a

ID	Attorney General Project-Specific Climate Change Suggested Mitigation Measures	Implemented by project?
GCC-1-38	Provide the necessary facilities and infrastructure to encourage the use of low or zero-emission vehicles (e.g., electric vehicle charging facilities and conveniently located alternative fueling stations.	n/a
GCC-1-39	Increase the cost of driving and parking private vehicles by, e.g., imposing tolls and parking fees.	n/a
GCC-1-40	Build or fund a transportation center where various public transportation modes intersect.	n/a
GCC-1-41	Provide shuttle service to public transit.	<i>No. Public transit is within walking distance of project.</i>
GCC-1-42	Provide public transit incentives such as free or low-cost monthly transit passes.	<i>Yes. Students can purchase a Class Pass which provides reduced cost access to AC Transit. Campus subsidizes transit for employees.</i>
GCC-1-43	Promote “least polluting” ways to connect people and goods to their destinations.	<i>Yes. Project includes bicycle parking and showers. Project locates housing within walking/bicycling distance of campus and services.</i>
GCC-1-44	Incorporate bicycle lanes and routes into street systems, new subdivisions, and large developments.	<i>The project site is bordered by two streets that have bicycle lanes, including lanes connecting to and from the campus. The campus Parking & Transportation website provides comprehensive information for campus bicyclists, see; http://pt.berkeley.edu/around/bike/info</i>
GCC-1-45	Incorporate bicycle-friendly intersections into street design.	<i>There is a 4-way stop at Channing Way and Bowditch, where bicycle lanes intersect.</i>
GCC-1-46	For commercial projects, provide adequate bicycle parking near building entrances to promote cyclist safety, security, and convenience. For large employers, provide facilities that encourage bicycle commuting, including, e.g., locked bicycle storage or covered or indoor bicycle parking.	<i>Yes Project includes bicycle parking, as described above.</i>
GCC-1-47	Create bicycle lanes and walking paths directed to the location of schools, parks and other destination points.	<i>Yes. Pathways within project scope are designed to encourage safe street crossing.</i>
GCC-1-48	Work with the school district to restore or expand school bus services.	n/a
GCC-1-49	Institute a telecommute work program. Provide information, training, and incentives to encourage participation. Provide incentives for equipment purchases to allow high-quality teleconferences.	<i>n/a for this project, however, campus expects to upgrade infrastructure for teleconferencing.</i>

ID	Attorney General Project-Specific Climate Change Suggested Mitigation Measures	Implemented by project?
GCC-1-50	Provide information on all options for individuals and businesses to reduce transportation-related emissions. Provide education and information about public transportation.	<i>Yes. Public transportation information is available to student residents. All students can obtain low-cost yearly bus passes.</i>

2. Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?

Further Analysis Required

2020 LRDP EIR Analysis Sufficient



In July 2009 the University adopted an amendment to the UC Berkeley 2020 LRDP to address climate change. That amendment includes the policy “Design all aspects of new projects to achieve campus short and long term climate change emissions targets established in the campus climate action plan.” See <http://tinyurl.com/UCBClimate>.

Embodied GHG emissions are emissions that are created through the extraction, processing, transportation, construction and disposal of building materials as well as emissions created through landscape disturbance (by both soil disturbance and changes in above ground biomass). The Anna Head West Student Housing project would construct a new four to six story housing project, including landscape and site finishes: each aspect of construction would entail emission of greenhouse gases.

A February 2009 report from the federal Environmental Protection Agency⁶ notes that

Greenhouse gas emissions from the construction industry result from a wide range of activities by hundreds of thousands of companies and sites across the country, producing 6% of all U.S. industrial GHG emissions in 2002. Although aggregate emissions from this large sector are high, no single construction site or company is a significant contributor. (p. 29)

As part of the LRDP EIR addendum prepared in accordance with CEQA to consider the LRDP climate change amendment, construction period (including demolition) emissions for UC Berkeley were calculated, assuming 1 million gross square feet of new space under development, or 45.9 acres are under construction at UC Berkeley over a twelve-month period. Modeling shows that annual CO₂ emissions of 1,264 metric tons results from construction activities of this scale. For comparison, emissions associated with campus water consumption were 1,955 metric tons of carbon dioxide equivalent in 2007. Construction at the site could mean 142,000 square feet under construction at one time; however, this is well within the one million square feet of new space under development analyzed in the 2020 LRDP EIR Addendum #5.

⁶ <http://www.epa.gov/sectors/pdf/construction-sector-report.pdf>

The Anna Head West Student Housing project is planned, designed and would be managed to comply with the University policy on sustainable practices, as partially outlined in the table “Attorney General Project-Specific Climate Change Suggested Mitigation Measures” above. The Anna Head West project would implement the 2020 LRDP as amended, which includes compliance with emission targets established in the Campus Climate Action Plan. See <http://tinyurl.com/UCBClimate>.

HAZARDOUS MATERIALS

SETTING

The setting for hazardous materials use on campus is presented in the 2020 LRDP EIR (Section 4.6). The UC Berkeley Office of Environment, Health, and Safety (EH&S) has primary responsibility for coordinating the management of hazardous materials on campus in compliance with applicable laws, regulations, and standards. Prior to any demolition or renovation work in an existing building, all hazardous building materials are removed, and EH&S then performs a confirmation survey for contamination resulting from the use of hazardous materials.

2020 LRDP & 2020 LRDP EIR

The 2020 LRDP does not contain specific policies about hazardous materials.

MITIGATION MEASURES & CONTINUING BEST PRACTICES

Design and construction of the Project would be performed in conformance with the 2020 LRDP. The 2020 LRDP EIR includes mitigation measures and continuing best practices developed to reduce the effect of the implementation of the 2020 LRDP related to hazardous materials. Where applicable, the Project would incorporate the following mitigation measures and/or continuing best practices:

Continuing Best Practice HAZ-4: UC Berkeley shall continue to perform site histories and due diligence assessments of all sites where ground-disturbing construction is proposed, to assess the potential for soil and groundwater contamination resulting from past or current site land uses at the site or in the vicinity. The investigation will include review of regulatory records, historical maps and other historical documents, and inspection of current site conditions. UC Berkeley would act to protect the health and safety of workers or others potentially exposed should hazardous site conditions be found.

HAZARDOUS MATERIALS

Would the Anna Head West Student Housing project:

	Further Analysis Required	2020 LRDP EIR Analysis Sufficient
1. Create a significant hazard to the public or the environment through the routine transport, use, production, or disposal of hazardous materials?		●

The Anna Head West Student Housing project would house student residences and student support services, and would not significantly expand hazardous materials use, would not release hazardous materials in the event of upset or accident conditions, would not handle or emit hazardous materials within one-quarter mile of an existing or proposed school, and would not be located on a hazardous materials site.

<p>2. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?</p>	<p>Further Analysis Required</p>	<p>2020 LRDP EIR Analysis Sufficient</p> <p style="text-align: center;">●</p>
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See previous item.

<p>3. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?</p>	<p>Further Analysis Required</p>	<p>2020 LRDP EIR Analysis Sufficient</p> <p style="text-align: center;">●</p>
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See previous item.

<p>4. Be located on a hazardous materials site as listed on the ‘Cortese List’ (compiled pursuant to Government Code Section 65962.5) and as a result create a significant hazard to the public or the environment?</p>	<p>Further Analysis Required</p>	<p>2020 LRDP EIR Analysis Sufficient</p> <p style="text-align: center;">●</p>
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The Project would not be located on a known hazardous materials site. Potential exposure of construction workers and campus occupants or the general public to potentially unknown contaminated soil or groundwater, however, would be minimized through the implementation of campus continuing best practices prescribed in the 2020 LRDP EIR, which require site histories and due diligence assessments of all sites where ground disturbing construction is proposed (Best Practice HAZ-4).

SUMMARY OF HAZARDOUS MATERIALS ANALYSIS

The 2020 LRDP EIR concluded that projects implementing the 2020 LRDP, incorporating existing best practices and 2020 LRDP EIR mitigation measures, would not result in new significant hazardous materials-related impacts (2020 LRDP EIR Vol 1 p. 4.6-20 to 4.6-35). The Project is consistent with the 2020 LRDP as analyzed and described in the 2020 LRDP EIR and through its incorporation of applicable LRDP mitigation measures would not introduce any new potential hazardous materials impacts, and no changed circumstance or new information is present that would alter the conclusions of the 2020 LRDP EIR analysis, as described above. No Project revisions or additional mitigation measures are required and the 2020 LRDP EIR analysis is sufficient and comprehensive to address hazardous materials impacts of the Project. The Project would not result in new or more severe impacts than analyzed in the 2020 LRDP EIR, SCH #2003082131, nor contribute to cumulatively significant adverse effects related to hazardous materials.

HYDROLOGY AND WATER QUALITY

SETTING

The hydrology and water quality setting of the campus is described in the 2020 LRDP EIR (Section 4.7).

2020 LRDP & 2020 LRDP EIR

The 2020 LRDP would influence hydrology and water quality by guiding the location, scale, form and design of new University projects.

MITIGATION MEASURES & CONTINUING BEST PRACTICES

Design and construction of the Project would be performed in conformance with the 2020 LRDP. The 2020 LRDP EIR includes mitigation measures and continuing best practices developed to reduce the effect of the implementation of the 2020 LRDP upon hydrology and water quality. Where applicable, the Project would incorporate the following mitigation measures and/or continuing best practices:

Continuing Best Practices HYD-1-a: During the plan check review process and construction phase monitoring, UC Berkeley (EH&S) will verify that the proposed project complies with all applicable requirements and BMPs.

Continuing Best Practice HYD-1-b: UC Berkeley shall continue implementing an urban runoff management program containing BMPs as published in the Strawberry Creek Management Plan, and as developed through the campus municipal Stormwater Management Plan (SWMP) completed for its pending Phase II MS4 NPDES permit. UC Berkeley will continue to comply with the NPDES stormwater permitting requirements by implementing construction and post construction control measures and BMPs required by project-specific SWPPPs and, upon its approval, by the Phase II SWMP to control pollution. Stormwater Pollution Prevention Plans (SWPPPs) would be prepared as required by the appropriate regulatory agencies including the Regional Water Quality Control Board and where applicable, according to the UC Berkeley Stormwater Pollution Prevention Specification to prevent discharge of pollutants and to minimize sedimentation resulting from construction and the transport of soils by construction vehicles.

Continuing Best Practice HYD-2-a: In addition to Hydrology Continuing Best Practices 1-a and 1-b above, UC Berkeley will continue to review each development project, to determine whether project runoff would increase pollutant loading. If it is determined that pollutant loading could lead to a violation of the Basin Plan, UC Berkeley would design and implement the necessary improvements to treat stormwater. Such improvements could include grassy swales, detention ponds, continuous centrifugal system units, catch basin oil filters, disconnected downspouts and stormwater planter boxes.

The project is replacing an asphalt parking lot for 205 cars with a building and pervious landscape. The amount of impervious area will be reduced from 95% to 50-60%.

Continuing Best Practice HYD-2-c: Landscaped areas of development sites shall be designed to absorb runoff from rooftops and walkways. The Campus Landscape Architect shall ensure open or porous paving systems be included in project designs wherever feasible, to minimize impervious surfaces and absorb runoff.

Continuing Best Practice HYD-2-d, Part 1: UC Berkeley shall continue to develop and implement the recommendations of the Strawberry Creek Management Plan and its updates, and construct improvements as appropriate. These recommendations include, but shall not be limited to, minimization of the amount of land exposed at any one time during construction as feasible; use of temporary vegetation or mulch to stabilize critical areas where construction staging activities must be carried out prior to permanent cover of exposed lands; installation of permanent vegetation and erosion control structures as soon as practical; protection and retention of natural vegetation; and implementation of post-construction structural and non-structural water quality control techniques.

Continuing Best Practice HYD-3: In addition to Best Practices 1-a, 1-b, 2-a and 2-c above, UC Berkeley will continue to review each development project, to determine whether rainwater infiltration to groundwater is affected. If it is determined that existing infiltration rates would be adversely affected, UC Berkeley would design and implement the necessary improvements to retain and infiltrate stormwater. Such improvements could include retention basins to collect and retain runoff, grassy swales, infiltration galleries, planter boxes, permeable pavement, or other retention methods. The goal of the improvement should be to ensure that there is no net decrease in the amount of water recharged to groundwater that serves as freshwater replenishment to Strawberry Creek. The improvement should maintain the volume of flows and times of concentration from any given site at pre-development conditions.

Continuing Best Practice HYD-4-b: For LRDP projects in the City Environs (excluding the Campus Park or Hill Campus) improvements would be coordinated with the City Public Works Department.

Continuing Best Practice HYD-4-e: UC Berkeley shall continue to manage runoff into storm drain systems such that the aggregate effect of projects implementing the 2020 LRDP is no net increase in runoff over existing conditions.

The Project will not result in an increase of runoff over existing conditions. The existing project site is 95% impermeable asphalt. As designed, the amount of impervious cover will decrease to 50%-60%. The site/landscape design replaces impermeable asphalt with lawn, plantings, and permeable pavement.

HYDROLOGY & WATER QUALITY

Would the Anna Head West Student Housing project:

1. Violate any water quality standards or waste discharge requirements?

**Further
Analysis
Required**

**2020 LRDP EIR
Analysis
Sufficient**



In the early 1990s UC Berkeley established a Wastewater Quality Program to manage discharges to the sanitary sewers using innovative educational outreach and waste minimization incentives. The program has served as a model to others: its success at preventing pollution was recognized in 2003 when the campus was one of two honorees to be awarded EBMUD’s Pollution Prevention Award for ‘exemplary performance in complying with discharge requirements’. The campus instituted the Drain Disposal Policy that prohibits use of drains for disposal of hazardous chemicals. (2020 LRDP EIR Vol 1, 4.7-23)

The Project includes no new land use not previously analyzed in the 2020 LRDP EIR that would significantly alter wastewater discharges from the campus, or violate water quality standards. The Project fits within the parameters of growth assessed in the 2020 LRDP EIR, which found the potential impact on water quality standards and waste discharge requirements to be less than significant, given existing campus practices. (Best Practices HYD-1-a through HYD-1-d)

<p>2. Substantially deplete groundwater supplies or quality, or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?</p>	<p>Further Analysis Required</p>	<p>2020 LRDP EIR Analysis Sufficient</p> <p style="text-align: center;">●</p>
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The Project will not deplete groundwater supplies or quality. It is not adjacent to a stream or wells. The Project will incorporate measures to reduce runoff. See Hydrology item #3.

<p>3. Substantially alter existing drainage patterns of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in substantial erosion, siltation or flooding on- or off- site?</p>	<p>Further Analysis Required</p>	<p>2020 LRDP EIR Analysis Sufficient</p> <p style="text-align: center;">●</p>
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Through a combination of on-site retention, pervious paving materials, and other measures as prescribed in the Project Design Guidelines, the Project would not result in an increase in the rate or amount of surface runoff. The 2020 LRDP EIR requires that new projects be sited and designed so the aggregate effect of projects under the 2020 LRDP is no net increase in runoff over existing conditions (Best Practice HYD-4-e)

The existing project site is 95% impermeable asphalt. As designed, the amount of impervious cover will decrease to 50%-60%. The site/landscape design replaces impermeable asphalt with lawn, plantings, and permeable pavement.

<p>4. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?</p>	<p>Further Analysis Required</p>	<p>2020 LRDP EIR Analysis Sufficient</p> <p style="text-align: center;">●</p>
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See Hydrology item 3.

<p>5. Otherwise substantially degrade water quality?</p>	<p>Further Analysis Required</p>	<p>2020 LRDP EIR Analysis Sufficient</p> <p style="text-align: center;">●</p>
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See Hydrology items 1-3.

<p>6. Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?</p>	<p>Further Analysis Required</p>	<p>2020 LRDP EIR Analysis Sufficient</p> <p>●</p>
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The Project is outside the 100-year flood zone, as illustrated on Figure 4.7-2 of the 2020 LRDP EIR Vol 1, 4.7-13.

<p>7. Place within a 100-year flood hazard area structures which would impede or redirect flood flows?</p>	<p>Further Analysis Required</p>	<p>2020 LRDP EIR Analysis Sufficient</p> <p>●</p>
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The Project is outside the 100-year flood zone, as illustrated on Figure 4.7-2 of the 2020 LRDP EIR Vol 1, 4.7-13.

<p>8. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?</p>	<p>Further Analysis Required</p>	<p>2020 LRDP EIR Analysis Sufficient</p> <p>●</p>
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The Campus Park, its surrounds, and the Hill Campus are outside the inundation hazard area for Berryman and Summit Reservoirs. The Project would therefore not expose people or structures to inundation as a result of dam or levee failure.

<p>9. Be subject to inundations by seiches, tsunamis, or mudflows?</p>	<p>Further Analysis Required</p>	<p>2020 LRDP EIR Analysis Sufficient</p> <p>●</p>
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The Project site is sufficiently inland and at a sufficiently high elevation that tsunamis and mudflows are not an anticipated risk. No large, open bodies of water that would represent a substantial seiche risk are located on or around the campus.

SUMMARY OF HYDROLOGY ANALYSIS

The 2020 LRDP EIR concluded that projects implementing the 2020 LRDP, incorporating existing best practices and 2020 LRDP EIR mitigation measures, would not result in new significant impacts upon hydrology and water quality (2020 LRDP EIR Vol 1, 4.7-24 to 4.7-35). The project site is already largely impervious. Through a combination of on-site and off-site retention and pervious paving materials, the Project is not expected to result in a significant increase in the rate or amount of surface runoff. The Project, which incorporates applicable LRDP mitigation measures, is consistent with the 2020 LRDP as analyzed and described in the 2020 LRDP EIR and would not introduce any new potential hydrology or water quality impacts, and no changed circumstance or new information is present that would alter the conclusions of the 2020 LRDP EIR analysis, as described above. No Project revisions or additional mitigation measures are required and the 2020 LRDP EIR analysis is sufficient and comprehensive to address hydrology or water quality impacts of the Project. The project would not result in new or more severe impacts than analyzed in the 2020 LRDP EIR, SCH #2003082131, nor contribute to cumulatively significant adverse hydrology or water quality effects.

LAND USE

SETTING

The land use setting of the campus is described in the 2020 LRDP EIR (Section 4.8). The following text summarizes context information for land use relevant to the Anna Head West Student Housing project.

The Project site is located three blocks south of the central campus in the Southside neighborhood of the city of Berkeley. It is bound by Channing Way, Bowditch Street, and Haste Street and commercial properties that face Telegraph Avenue. The site is a surface parking lot. The Anna Head School complex is part of the property and is used for University offices and a childcare program. A few mature trees exist within the parking lot, including a rare specimen tree.

The Southside area is a densely developed urban neighborhood with a mixture of institutional uses, commercial businesses, and multi-unit housing. To the north across Channing Way is the University's Channing/Bowditch student housing. Several nearby buildings are historically significant, including the First Church of Christ, Scientist, designed by Bernard Maybeck and the Baptist Theological Seminary, designed by Julia Morgan.

People's Park is located to the south of the project site. The Park is owned by the University and managed by the City of Berkeley. People's Park is a designated Berkeley Landmark. The Vedanta Society Building, located to the east of the Park at the corner of Haste and Bowditch Streets, is on the State Inventory of Historic Resources.

2020 LRDP & 2020 LRDP EIR

Review of individual projects under the 2020 LRDP would influence land use impacts by guiding the location, scale, form and design of new University projects. The 2020 LRDP includes a number of policies and procedures for individual project review to support the Objectives of the 2020 LRDP. While all the 2020 LRDP Objectives bear directly or indirectly on land use, the following are particularly relevant to the Project:

- **Plan every new project to represent the optimal investment of land and capital in the future of the campus.**
- **Plan every new project as a model of resource conservation and environmental stewardship.**
- **Plan every new project to respect and enhance the character, livability, and cultural vitality of our City Environs.**

The 2020 LRDP requires that while the design of each campus building should reflect its own time and place, it should also reflect the enduring values of elegance and quality, and contribute to a memorable identity for the University as a whole. Toward this goal, major capital projects would be reviewed at each stage of design by the UC Berkeley Design Review Committee, as prescribed by Best Practice AES-1-b.

The Continuing Best Practices prescribed in the 2020 LRDP EIR include the following requirements for all projects located in the 'City Environs', which includes the areas within Berkeley lying outside the 'Campus Park' and 'Hill Campus':⁷

⁷

UC Berkeley would make informational presentations on all major projects in the City Environs in Berkeley to the Berkeley Planning Commission and, if relevant, the Berkeley Landmarks Preservation Commission for comment prior to schematic design review by the UC Berkeley Design Review Committee ... Whenever a project in the City Environs is under consideration by the UC Berkeley DRC, a staff representative designated by the city in which it is located would be invited to attend and comment on the project. (Continuing Best Practice AES-1-e)

The subject Project is in the City Environs, and thus these practices are required by the 2020 LRDP EIR.

In 1997 the City of Berkeley and UC Berkeley signed a Memorandum of Understanding, which states 'the city and university will jointly participate in the preparation of a Southside Plan...the campus will acknowledge the Plan as the guide for campus developments in the Southside area'.

Project specific design guidelines (Attachment B) draw from the draft Southside Plan Design Guidelines. The building is designed to be a product of its own time while respecting the surrounding context by preserving primary views of the Anna Head School. The design seeks to contribute to the eclectic mix of low-rise and high-rise architecture in the neighborhood.

The 2020 LRDP also includes Location Guidelines (2020 LRDP Vol 3a, 3.1-60 to 3.1-61), which prescribe location priorities for the various campus functions by land use zone. The project site conforms to the Location Guidelines, which recommends that student housing be located within one mile of the center of campus.

MITIGATION MEASURES & CONTINUING BEST PRACTICES

Design and construction of the Anna Head West Student Housing project would be implemented in conformance with the 2020 LRDP. The 2020 LRDP EIR includes mitigation measures and continuing best practices developed to reduce the effect of the implementation of the 2020 LRDP upon land use. Where applicable, the Project would incorporate the following mitigation measures and/or continuing best practices:

Continuing Best Practice LU-2-b: UC Berkeley would make informational presentations of all major projects in the City Environs in Berkeley to the Berkeley Planning Commission and, if relevant the Berkeley Landmarks Preservation Commission for comment prior to schematic design review by the UC Berkeley Design Review Committee. Whenever a project in the City Environs is under consideration by the UC Berkeley DRC, a staff representative designated by the city in which it is located would be invited to attend and comment on the project.

2020 LRDP Continuing Best Practice LU-2-c: Each individual project built in the City Environs under the 2020 LRDP would be assessed to determine whether it could cause potential significant aesthetic impacts not anticipated in the 2020 LRDP, and if so, the project would be subject to further evaluation under CEQA. In general, a project in the City Environs would be assumed to have the potential for significant land use impacts if it:

- Includes a use that is not permitted within the city general plan designation for the project site, or
- Has a greater number of stories and/or lesser setback dimensions than could be permitted for a project under the relevant city zoning ordinance as of July 2003.

2020 LRDP Continuing Best Practice LU-2-d: Assuming the City adopts the Southside Plan without substantive changes, the University would as a general rule use, as its guide for the location and design of University projects implemented under the 2020 LRDP within the area of the Southside Plan, the design guidelines and standards prescribed in the Southside Plan, which would supersede provisions of the City’s prior zoning policy.

2020 LRDP Continuing Best Practice LU-2-e: To the extent feasible, University housing projects in the 2020 LRDP Housing Zone would not have a greater number of stories nor have setback dimensions less than could be permitted for a project under the relevant city zoning as of July 2003.

LAND USE

Would the Anna Head West Student Housing project:

1. Physically divide an established community?

Further
Analysis
Required

2020 LRDP EIR
Analysis
Sufficient



The City of Berkeley has developed around and in conjunction with the campus, and their social and physical histories are interwoven. The Project would construct student housing on an existing surface parking lot and would not have any divisive effect.

2. Conflict with any applicable land use plan, policy or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect ?

Further
Analysis
Required

2020 LRDP EIR
Analysis
Sufficient



The University of California is exempt from local land use plans and regulations when using its property in furtherance of its constitutional mission. However, the 2020 LRDP suggests that local plans will guide design and decision-making for capital projects in the City environs.

The 2003 Draft Southside Plan, in the Land use and Housing element, states the following key objectives (excerpts) (see <http://www.ci.berkeley.ca.us/contentdisplay.aspx?id=438>)

- Encourage creation of additional affordable housing in the Southside for students and for year-round residents, including UC employees and other area employees by the University, the private sector, student cooperatives, non-profits or a combination of these groups working in partnership;
- Encourage the construction of infill buildings, particularly new housing and mixed-use developments, on currently underutilized sites such as surface parking lots and vacant lots;
- Protect and conserve the unique physical, historic, and social character of the Southside;
- Protect and enhance historic and architecturally significant buildings, and ensure that new development complements the existing architectural character of the area through design review; and
- Encourage reinvestment in deteriorating housing stock to improve the overall physical quality of the neighborhood;
- Enhance the pedestrian orientation of the Southside.

- Encourage a land use pattern in the Southside which provides for a high density residential and commercial mixed-use edge to the University of California Campus and “spine” along Telegraph Avenue. The high density edge and spine are filled in with less dense areas which progressively become less dense and more residential in use and provide a buffer and transition to the lower density residential areas to the east and south of the Southside Area.

The proposed project responds to key objectives of the draft Southside Plan and shared goals of the City and University with regard to use of University-owned properties in the Southside. While the proposed project does not strictly adhere to the 6 story / 65 foot maximums under existing zoning nor the 5 story / 60 foot maximums under proposed Southside Plan zoning, site planning provides setback to the existing Anna Head complex, an important historic resource in the City of Berkeley, and accomplishes residential densities sought by the City in plan and policy documents.

<p>3. Conflict with any applicable habitat conservation plan or natural community conservation plan?</p>	<p>Further Analysis Required</p>	<p>2020 LRDP EIR Analysis Sufficient</p> <p style="text-align: center;">●</p>
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The Project is not located within any area designated for an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved conservation plan.

SUMMARY OF LAND USE ANALYSIS

The 2020 LRDP EIR concluded that projects implementing the 2020 LRDP, incorporating existing best practices and 2020 LRDP EIR mitigation measures, would not result in new significant land use impacts (2020 LRDP EIR Vol 1, 4.8-15 to 4.8-21). The Project is consistent with the 2020 LRDP as analyzed and described in the 2020 LRDP EIR and would not introduce any new potential land use impacts, and no changed circumstance or new information is present that would alter the conclusions of the 2020 LRDP EIR analysis, as described above. With the incorporation of all applicable LRDP EIR mitigation measures and best practices, described above, the Project will not result in any new land use impact. No Project revisions or additional mitigation measures are required and the 2020 LRDP EIR analysis is sufficient and comprehensive to address land use impacts of the Project. The project would not result in new or more severe impacts than analyzed in the 2020 LRDP EIR, SCH #2003082131, nor contribute to cumulatively significant adverse land use effects.

NOISE

SETTING

The noise setting of the campus is described in the 2020 LRDP EIR (Section 4.9). The following text summarizes context information for noise relevant to the Anna Head West Student Housing project.

The Project is located within the Southside neighborhood within the City of Berkeley. The noise environment in the project area results primarily from vehicular traffic on the adjacent street network, such as buses and trucks on Telegraph Avenue (1/2 block to the west) and Durant Avenue (one block to the north). Intermittent noise resulting from jet aircraft over-flights contribute to the noise environment to a lesser extent. Noise-sensitive uses within the vicinity of the project include apartments, churches, and offices.

2020 LRDP & 2020 LRDP EIR

Noise impacts resulting from development and operation of the 2020 LRDP were assessed in the 2020 LRDP EIR using several methods. Analyses were conducted using baseline noise levels quantified using noise measurements conducted in March-April, 2001 and February-March, 2003. Noise and vibration impacts resulting from construction activities were calculated based on generic construction noise and vibration levels and assessed with respect to existing ambient levels, limits proposed in local ordinances, and other thresholds to protect against vibration effects.

The campus office of EH&S works with construction project teams to implement noise reduction measures and performs noise monitoring at any specific site, upon the request of the campus community.

MITIGATION MEASURES & CONTINUING BEST PRACTICES

Design and construction of Anna Head West Undergraduate Student Housing project would be performed in conformance with the 2020 LRDP. The 2020 LRDP EIR includes mitigation measures and continuing best practices developed to reduce the effect of the implementation of the 2020 LRDP upon the noise environment. Where applicable, the Project would incorporate the following mitigation measures and/or continuing best practices:

Continuing Best Practice NOI-2: Mechanical equipment selection and building design shielding would be used, as appropriate, so that noise levels from future building operations would not exceed the City of Berkeley Noise Ordinance limits for commercial areas or residential zones as measured on any commercial or residential property in the area surrounding a project proposed to implement the 2020 LRDP. Controls that would typically be incorporated to attain this outcome include selection of quiet equipment, sound attenuators on fans, sound attenuator packages for cooling towers and emergency generators, acoustical screen walls, and equipment enclosures.

Continuing Best Practice NOI-4-a: The following measures would be included in all construction projects:

- Construction activities will be limited to a schedule that minimizes disruption to uses surrounding the project site as much as possible. Construction outside the Campus Park area will be scheduled within the allowable construction hours designated in the noise ordinance of the local jurisdiction to the full feasible extent, and exceptions will be avoided except where necessary.
- As feasible, construction equipment will be required to be muffled or controlled.
- The intensity of potential noise sources will be reduced where feasible by selection of quieter equipment (e.g. gas or electric equipment instead of diesel powered, low noise air compressors).
- Functions such as concrete mixing and equipment repair will be performed off-site whenever possible.

For projects requiring pile driving:

- With approval of the project structural engineer, pile holes will be pre-drilled to minimize the number of impacts necessary to seat the pile.
- Pile driving will be scheduled to have the least impact on nearby sensitive receptors.
- Pile drivers with the best available noise control technology will be used. For example, pile driving noise control may be achieved by shrouding the pile hammer point of impact, by placing resilient padding directly on top of the pile cap, and/or by reducing exhaust noise with a sound-absorbing muffler.
- Alternatives to impact hammers, such as oscillating or rotating pile installation systems, will be used where possible.

Continuing Best Practice NOI-4-b: UC Berkeley would continue to precede all new construction projects with community outreach and notification, with the purpose of ensuring that the mutual needs of the particular construction project and of those impacted by construction noise are met, to the extent feasible.

LRDP Mitigation Measure NOI-3: The University would comply with building standards that reduce noise impacts to residents of University housing to the full extent feasible; additionally, any housing built in areas where noise exposure levels exceed 60 Ldn would incorporate design features to minimize noise exposure to occupants.

LRDP Mitigation Measure NOI-4: UC Berkeley will develop a comprehensive construction noise control specification to implement additional noise controls, such as noise attenuation barriers, siting of construction laydown and vehicle staging areas, and the measures outlined in Continuing Best Practice NOI-4-a as appropriate to specific projects. The specification will include such information as general provisions, definitions, submittal requirements, construction limitations, requirements for noise and vibration monitoring and control plans, noise control materials and methods. This documentation will be modified as appropriate for a particular construction project and included within the construction specification.

LRDP Mitigation Measure NOI-5: The following measures would be implemented to mitigate construction vibration:

- UC Berkeley will conduct a pre-construction survey prior to the start of pile driving. The survey will address susceptibility ratings of structures, proximity of sensitive receivers and equipment/operations, and surrounding soil conditions. This survey will document existing conditions as a baseline for determining changes subsequent to pile driving. UC Berkeley will establish a vibration checklist for determining whether or not vibration is an issue for a particular project.
- Prior to conducting vibration-causing construction, UC Berkeley will evaluate whether alternative methods are available, such as:
- Using an alternative to impact pile driving such as vibratory pile drivers or oscillating or rotating pile installation methods.
- Jetting or partial jetting of piles into place using a water injection at the tip of the pile.
- If vibration monitoring is deemed necessary, the number, type, and location of vibration sensors would be determined by UC Berkeley.

INITIAL STUDY : NOISE

Would the Anna Head West Student Housing project:

	Further Analysis Required	2020 LRDP EIR Analysis Sufficient
1. Expose people to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies, without mitigation?		●

The Project is proposed to be constructed of a concrete mat slab, and concrete floor slabs, columns and shear walls. There is no proposed pile driving as part of the Project.

As prescribed in the 2020 LRDP EIR, mechanical equipment selection and shielding would be utilized to ensure noise levels from future Project operations do not cause City of Berkeley Noise Ordinance limits to be violated within the Project vicinity. Measures to be incorporated to achieve this requirement include selection of quiet equipment, sound attenuators on equipment, and architectural enclosure of roof top equipment (Best Practice NOI-2).

<p>2. Result in a substantial permanent increase in ambient noise levels in the project vicinity, without appropriate mitigation?</p>	<p>Further Analysis Required</p>	<p>2020 LRDP EIR Analysis Sufficient</p> <p style="text-align: center;">●</p>
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A substantial permanent increase in ambient noise levels is not anticipated in the project vicinity. See Noise item 1.

<p>3. Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity, without appropriate mitigation?</p>	<p>Further Analysis Required</p>	<p>2020 LRDP EIR Analysis Sufficient</p> <p style="text-align: center;">●</p>
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The 2020 LRDP EIR found noise resulting from demolition and construction activities would, in some instances, cause a substantial temporary or periodic increase in noise levels above local standards prescribed in the City of Berkeley Noise Ordinance: this was determined to be a significant and unavoidable impact for the 2020 LRDP program as a whole. The Project would not introduce any new potential noise impacts not already assessed in the 2020 LRDP EIR, and the measures prescribed in the 2020 LRDP EIR would minimize these impacts to the greatest extent feasible. (Best Practices NOI-4-a and NOI 4-b).

<p>Expose people to or generate excessive ground-borne vibration or ground-borne noise levels, without mitigation?</p>	<p>Further Analysis Required</p>	<p>2020 LRDP EIR Analysis Sufficient</p> <p style="text-align: center;">●</p>
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Construction activities could expose nearby receptors to ground borne vibrations or ground borne noise levels. The Project would not introduce any new potential impacts not already assessed in the 2020 LRDP EIR, and the measures prescribed in the 2020 LRDP EIR would ensure these impacts are less than significant. (Mitigation NOI-5)

SUMMARY OF NOISE ANALYSIS

The 2020 LRDP EIR concluded that projects implementing the 2020 LRDP, even with incorporation of existing best practices and 2020 LRDP EIR mitigation measures, could result in significant noise impacts resulting from demolition and construction activities (2020 LRDP EIR Vol 1, 4.9-16 to 4.9-25). The Project is consistent with the 2020 LRDP as analyzed and described in the 2020 LRDP EIR and would not introduce any new potential noise impacts, and no changed circumstance or new information is present that would alter the conclusions of the 2020 LRDP EIR analysis, as described above. Further, the Project incorporates all applicable mitigation measures and best practices prescribed in the 2020 LRDP EIR. No additional mitigation measures or project revisions have been identified that would further lessen any previously identified significant impact. Therefore, the Final EIR and is sufficient and comprehensive to address the noise impacts of the proposed Project. The analysis contained in this Environmental Assessment indicates that the proposed Project may incrementally contribute to significant environmental impacts previously identified in the 2020 LRDP EIR, SCH #2003082131, but will not result in those impacts being more severe than as described in the 2020 LRDP EIR.

POPULATION

SETTING

The population setting of the campus is described in the 2020 LRDP EIR (Section 4.10). The following text summarizes context information for population relevant to the Anna Head West Student Housing project.

The 2020 LRDP describes campus population growth in terms of campus headcount. Campus headcount is the number of individuals enrolled or employed at UC Berkeley, plus an estimate of average daily visitors and vendors. Students make up the largest percentage of campus headcount, followed by nonacademic staff, academic staff, and faculty; the academic staff category includes postdoctoral fellows and visiting scholars. The staff figures are adjusted to exclude student workers in order to avoid double-counting. Under the 2020 LRDP, regular term campus headcount is projected to increase by up to 12 percent over what it was in 2001-2002, compared to a projected increase of 6 percent in the city of Berkeley population, and 20 percent in the regional population, during the period 2000-2020.

2020 LRDP & 2020 LRDP EIR

The 2020 LRDP would influence population and housing by guiding the location, scale, form and design of new University projects. The 2020 LRDP includes a number of policies and procedures for individual project review to support the Objectives of the 2020 LRDP. 2020 LRDP Objectives particularly relevant to population and housing include:

- **Provide the housing, access, and services we require to support a vital intellectual community and promote full engagement in campus life.**
- **Plan every new project to respect and enhance the character, livability, and cultural vitality of our city environs.**

POPULATION

Would the Anna Head West Student Housing project:

	Further Analysis Required	2020 LRDP EIR Analysis Sufficient
1. Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?		●

The 2020 LRDP EIR determined population growth associated with increased enrollment and employment at UC Berkeley under the 2020 LRDP program would be accommodated in the Bay Region without significant adverse impacts (2020 LRDP EIR, section 4.10). The Project meets an existing need to provide housing for existing students and does not itself induce expanded enrollment. The Project would not introduce any new potential impacts not already assessed in the 2020 LRDP EIR.

	Further Analysis Required	2020 LRDP EIR Analysis Sufficient
2. Displace substantial numbers of existing housing or people, necessitating the construction of replacement housing elsewhere?		●

The Project does not entail any displacement of existing housing.

SUMMARY OF POPULATION ANALYSIS

The 2020 LRDP EIR concluded that projects implementing the 2020 LRDP, incorporating existing best practices and 2020 LRDP EIR mitigation measures, would not result in new significant impacts upon related to population and housing (2020 LRDP EIR Vol 1 p. 4.10-10 to 4.10-19). The Project, which incorporates applicable LRDP best practices and mitigation measures as discussed above, is consistent with the 2020 LRDP as analyzed and described in the 2020 LRDP EIR and would not introduce any new potential population impacts, and no changed circumstance or new information is present that would alter the conclusions of the 2020 LRDP EIR analysis, as described above. No Project revisions or additional mitigation measures are required and the 2020 LRDP EIR analysis is sufficient and comprehensive to address population impacts of the Project. The project would not result in new or more severe impacts than analyzed in the 2020 LRDP EIR, SCH #2003082131, nor contribute to cumulatively significant adverse population effects.

PUBLIC SERVICES**SETTING**

The public services setting of the campus is described in the 2020 LRDP EIR (Section 4.11). The following text summarizes context information for public services relevant to the Anna Head West Student Housing project.

Police services in the Campus Park and City Environs are primarily provided by the University of California Police Department (UCPD). In emergency situations that require an immediate response, the City of Berkeley Police Department assists the UCPD as necessary through a mutual aid agreement. The plan check and design review process would continue to minimize police service impacts of development under the 2020 LRDP. Through this process, the UCPD completes a plan review of all proposed University buildings to maximize public safety features in and around proposed buildings.

The Berkeley Fire Department (BFD) provides fire protection and emergency medical services to the western half of the Campus Park and to the Adjacent Blocks and Southside. Primary response to the campus area from BFD comes from Station Number 2 at 2129 Berkeley Way. Stations 3 and 5 at 2710 Russell Street and 2680 Shattuck Avenue, respectively, offer supplemental support. The average BFD response time throughout the city is four minutes.⁷ The BFD services include fire fighting and rescue and emergency response services for immediate threats to life, as well as fire prevention and training and hazardous materials control.

UC Berkeley directly employs fire marshals who are responsible for fire prevention activities, including fire and life safety inspections of campus buildings for code compliance, fire and evacuation drills, and development of self-help educational materials for use by residence halls and campus departments. Fire marshals also assist in arson investigations and also serve as liaisons between responding agencies at the local, state and federal levels.⁸

The UC Berkeley Environmental Health and Safety Department Emergency Response Team (ERT), staffed by health and safety professionals, hazardous materials technicians, and licensed hazardous materials drivers, responds to most hazardous materials incidents reported on campus. Currently, the ERT is able to respond to an incident within 15 minutes. In the infrequent cases when outside assistance is required, the ERT may request assistance from other nearby agencies, including the BFD and Alameda County Fire Department, or from emergency response contractors.

The Office of Emergency Preparedness supports the Berkeley campus community by implementing programs and projects in emergency planning, training, response, and recovery. The mission is to prepare the campus to respond to and recover from any type of emergency or disaster.

MITIGATION MEASURES & CONTINUING BEST PRACTICES

Design and construction of the Anna Head West Student Housing project would be performed in conformance with the 2020 LRDP. The 2020 LRDP EIR includes mitigation measures and continuing best practices developed to reduce the effect of the implementation of the 2020 LRDP upon public services. Where applicable, the Project would incorporate the following mitigation measures and/or continuing best practices:

Continuing Best Practice PUB-2.3: UC Berkeley would continue its partnership with LBNL, ACFD, and the City of Berkeley to ensure adequate fire and emergency service levels to the campus and UC facilities.

Continuing Best Practices PUB-2-4: To the extent feasible, for all projects in the City Environs, the University would include the undergrounding of surface utilities along project street frontages, in support of the Berkeley General Plan Policy S-22.

LRDP Mitigation Measure PUB-2.4-a: In order to ensure adequate access for emergency vehicles when construction projects would result in temporary lane or roadway closures, campus project management staff would consult with the UCPD, campus EH&S, the BFD and ACFD to evaluate alternative travel routes and temporary lane or roadway closures prior to the start of construction activity. UC Berkeley will ensure the selected alternative travel routes are not impeded by UC Berkeley activities.

LRDP Mitigation Measure PUB-2.4-b: To the extent feasible, the University would maintain at least one unobstructed lane in both directions on campus roadways at all times, including during construction. At any time only a single lane is available due to construction-related road closures, the University would provide a temporary traffic signal, signal carriers (i.e. flagpersons), or other appropriate traffic controls to allow travel in both directions. If construction activities require the complete closure of a roadway, UC Berkeley would provide signage indicating alternative routes.

PUBLIC SERVICES

POLICE PROTECTION

Would the Anna Head West Student Housing project:

1. Result in the need for new or physically altered police facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, service times, or other performance objectives for police protection?

Further
Analysis
Required

2020 LRDP EIR
Analysis
Sufficient



Police protection services for the Berkeley campus and projects in the City Environs are provided by the University of California Police Department and the City of Berkeley Police Department. The 2020 LRDP EIR concluded that projects implementing the 2020 LRDP could increase the demand for police services, but are not anticipated to result in construction of new or altered facilities. The Project would not introduce any new potential impacts not already assessed in the 2020 LRDP EIR.

FIRE AND EMERGENCY PROTECTION

Would the Anna Head West Student Housing project:

1. Result in the need for new or physically altered fire or emergency medical services facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, service times or other performance objectives for fire and emergency protection?

Further
Analysis
Required

2020 LRDP EIR
Analysis
Sufficient



The 2020 LRDP EIR determined that implementation of the 2020 LRDP could have direct effects on the need for fire and emergency services as a result of new University facilities and the people they accommodate. The 2020 LRDP EIR found that growth anticipated at UC Berkeley is a fraction of growth anticipated within the City of Berkeley in its General Plan EIR (2020 LRDP EIR Vol 1, 4.11-13). Measures prescribed in the 2020 LRDP EIR include continuing the campus partnership with Lawrence Berkeley National Laboratory, the Alameda County Fire Department station at LBNL, and the City of Berkeley to ensure adequate fire and emergency service levels (Best Practice PUB-2.3).

As further support of this partnership, in May of 2005 the Chancellor and the Mayor of the City of Berkeley signed an agreement earmarking \$600,000 annually in campus funds to the City of Berkeley to support emergency and fire protection. The Project would not introduce any new potential impacts not already assessed in the 2020 LRDP EIR.

2. Expose people or structures to a significant risk of loss, injury or death involving wildland fires?

Further
Analysis
Required

2020 LRDP EIR
Analysis
Sufficient



The project site, located in the City Environs, is presently urbanized and is not subject to wildland fires.

3. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Further
Analysis
Required

2020 LRDP EIR
Analysis
Sufficient



As required by the California Building Code, the Project would be designed to include adequate egress capacity and evacuation areas proximate to building load for decanting.

4. Result in inadequate emergency access?

Further
Analysis
Required

2020 LRDP EIR
Analysis
Sufficient



See previous item.

SCHOOLS

Would the Anna Head West Student Housing project:

1. Result in the need for new or physically altered school facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, service times or other performance objectives for schools?

**Further
Analysis
Required**

**2020 LRDP EIR
Analysis
Sufficient**



The 2020 LRDP EIR concluded any expanded demand for schools associated with expanded enrollment and employment at UC Berkeley under the 2020 LRDP would not create a need for new or altered facilities (2020 LRDP EIR Vol 1, 4.11-20). The Project meets an existing need to provide housing for existing students and does not itself expand employment or enrollment. The Project would not introduce any new potential impacts not already assessed in the 2020 LRDP EIR.

PARKS AND RECREATION

Would the Anna Head West Student Housing project:

1. Result in the need for new or physically altered parks and recreational facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, service times or other performance objectives?

**Further
Analysis
Required**

**2020 LRDP EIR
Analysis
Sufficient**



The 2020 LRDP EIR concluded any expanded demand for recreation under the 2020 LRDP would not increase the demand for recreation facilities to a point resulting in substantial physical deterioration of parks and recreation facilities, nor create the need for new or expanded facilities to maintain acceptable service ratios (2020 LRDP EIR Vol 1, 4.11-26). The Project would not introduce any new potential impacts not already assessed in the 2020 LRDP EIR.

2. Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

**Further
Analysis
Required**

**2020 LRDP EIR
Analysis
Sufficient**



See previous item.

3. Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?

**2020 LRDP EIR
Analysis
Sufficient**

**2020 LRDP EIR
Analysis
Sufficient**



The Project does not include outdoor recreational facilities, nor require their construction or expansion. A 1202 asf recreation/all purpose space and a 724 asf fitness room are planned as part of the common space.

SUMMARY OF PUBLIC SERVICES ANALYSIS

The 2020 LRDP EIR concluded that projects implementing the 2020 LRDP, incorporating existing best practices and 2020 LRDP EIR mitigation measures, would not result in new significant impacts upon public services (2020 LRDP EIR Vol 1, 4.11-11 to 4.11-15; 4.11-10; 4.11-26 to 4.11-28; 4.11-32 to 4.11-33). The Project does not alter assumptions of the 2020 LRDP with regard to recreational facilities, emergency access and emergency services demand, or schools. The Project, which incorporates applicable LRDP best practices and mitigation measures, as discussed above, is consistent with the 2020 LRDP as analyzed and described in the 2020 LRDP EIR and would not introduce any new potential public services impacts, and no changed circumstance or new information is present that would alter the conclusions of the 2020 LRDP EIR analysis, as described above. No Project revisions or additional mitigation measures are required and the 2020 LRDP EIR analysis is sufficient and comprehensive to address public services impacts of the Project. The Project would not result in new or more severe impacts than analyzed in the 2020 LRDP EIR, SCH #2003082131, nor contribute to cumulatively significant adverse public services effects.

TRANSPORTATION**SETTING**

The transportation setting of the campus is described in the 2020 LRDP EIR (Section 4.12), including bicycle, pedestrian and transit modes as well as automobiles.

2020 LRDP & 2020 LRDP EIR

Review of individual projects under the 2020 LRDP would influence circulation and parking impacts by guiding the location, scale, form and design of new University projects. While the 2020 LRDP includes an expansion of the campus parking supply, to address current unmet demand as well as the need created by future growth, it also includes a number of measures to manage parking demand.

MITIGATION MEASURES & CONTINUING BEST PRACTICES

Design and construction of the Anna Head West Student Housing project would be performed in conformance with the 2020 LRDP. The 2020 LRDP EIR includes mitigation measures and continuing best practices developed to reduce the effect of the implementation of the 2020 LRDP upon transportation and traffic. Where applicable, the Project would incorporate the following mitigation measures and/or continuing best practices:

Continuing Best Practice TRA-1-a: UC Berkeley will continue in partnership with the City of Berkeley to develop a City program to: (a) maintain the Southside area between College, Dana, Dwight and Bancroft in a clean and safe condition; and (b) provide needed public improvements to the area (e.g. traffic improvements, lighting, bicycle facilities, pedestrian amenities and landscaping).

The Berkeley campus has initiated a number of important programs to improve the cleanliness and livability of the Southside. See <http://communityrelations.berkeley.edu>. The proposed Project would include bicycle facilities and pedestrian lighting improvements.

Continuing Best Practice TRA-1-b: UC Berkeley will continue to do strategic bicycle access planning. Issues addressed include bicycle access, circulation and amenities with the goal of increasing bicycle commuting and safety. Planning considers issues such as bicycle access to the campus from adjacent streets and public transit; bicycle, vehicle, and pedestrian interaction; bicycle parking; bicycle safety; incentive programs; education and enforcement; campus bicycle routes; and amenities such as showers. The scoping and budgeting of individual projects will include consideration of improvements to bicycle access.

Bicycle parking is generously accommodated in the proposed Project.

Continuing Best Practice TRA-2: The following housing and transportation policies will be continued:

- Except for disabled students, students living in UC Berkeley housing would only be eligible for a daytime student fee lot permit or residence hall parking based upon demonstrated need, which could include medical, employment, academic and other criteria.
- An educational and informational program for students on commute alternatives would be expanded to include all new housing sites.

Students housed in the proposed Anna Head West Student Housing project would not be eligible for campus parking permits. Further, the Project would not provide dedicated parking.

LRDP Mitigation Measure TRA-2: The planned parking supply for University housing projects under the 2020 LRDP would comply with the relevant municipal zoning ordinance as of July 2003.

The development of the project without parking is consistent with the 2003 draft Southside Plan zoning map. See [http://www.ci.berkeley.ca.us/uploadedFiles/Planning_\(new_site_map_walk-through\)/Level_3_-_General/Map_Zoning1.pdf](http://www.ci.berkeley.ca.us/uploadedFiles/Planning_(new_site_map_walk-through)/Level_3_-_General/Map_Zoning1.pdf)

Continuing Best Practice TRA-3-a: Early in construction period planning UC Berkeley shall meet with the contractor for each construction project to describe and establish best practices for reducing construction-period impacts on circulation and parking in the vicinity of the project site.

Continuing Best Practice TRA-3-b: For each construction project, UC Berkeley will require the prime contractor to prepare a Construction Traffic Management Plan which will include the following elements:

- Proposed truck routes to be used, consistent with the City truck route map.
- Construction hours, including limits on the number of truck trips during the a.m. and p.m. peak traffic periods (7:00 – 9:00 a.m. and 4:00 – 6:00 p.m.), if conditions demonstrate the need.
- Proposed employee parking plan (number of spaces and planned locations).
- Proposed construction equipment and materials staging areas, demonstrating minimal conflicts with circulation patterns.
- Expected traffic detours needed, planned duration of each, and traffic control plans for each.

Continuing Best Practice TRA-3-c: UC Berkeley will manage project schedules to minimize the overlap of excavation or other heavy truck activity periods that have the potential to combine impacts on traffic loads and street system capacity, to the extent feasible.

Continuing Best Practice TRA-3-d: UC Berkeley will reimburse the City of Berkeley for its fair share of costs associated with damage to City streets from University construction activities, provided that the City adopts a policy for such reimbursements applicable to all development projects within Berkeley.

Construction period measures are incorporated into construction documents for implementation.

Continuing Best Practice TRA-5: The University shall continue to work to coordinate local transit services as new academic buildings, parking facilities, and campus housing are completed, in order to accommodate changing demand locations or added demand.

LRDP Mitigation Measure TRA-6-a through TRA-6-g and TRA-7: The University will work with the City of Berkeley to design and, on a fair share basis, implement intersection changes at the following intersections: Cedar Street/Oxford Street; Durant/Piedmont; Derby/Warring; Addison/Oxford; Allston/Oxford; Kittredge/Oxford; Bancroft/Ellsworth; Bancroft/Piedmont. The University will contribute fair share funding for a periodic (annual or biennial) signal warrant check at these intersections, to allow the city to determine when a signal and the associated improvements are warranted....

The campus completed signal warrant checks in accordance with the 2020 LRDP and the Underhill Area Projects EIR at Channing/Bowditch and Bowditch/Haste intersections in April 2008; the campus completed signal warrant checks for half of the intersections outlined above in 2008. According to the City, no new signals were warranted.

TRANSPORTATION AND TRAFFIC

Would the Anna Head West Student Housing project:

	Further Analysis Required	2020 LRDP EIR Analysis Sufficient
1. Cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	●	●

As noted in the 2020 LRDP EIR (see page F.1-8 and F.1-9 in Volume 2), the primary factor for estimating trip generation is an anticipated increase in population; the proposed project would not increase campus population, but would instead house existing populace closer to campus. The Project removes existing parking spaces. The Project would not cause an increase in traffic.

	Further Analysis Required	2020 LRDP EIR Analysis Sufficient
2. Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	●	●

The 2020 LRDP EIR found the 2020 LRDP program as a whole, if fully implemented, would cause seven Alameda County CMP and MTS designated roadways to exceed the level of service established by the Congestion Management Agency. No mitigations are feasible, and the impact was determined to be significant and unavoidable (2020 LRDP EIR Vol 1, 4.12-54). The Project would not contribute new traffic to this impact, nor introduce any new potential impacts not already assessed in the 2020 LRDP EIR.

	Further Analysis Required	2020 LRDP EIR Analysis Sufficient
3. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	●	●

The Project is not anticipated to affect or contribute to air traffic.

<p>4. Substantially increase hazards due to a design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? Create unsafe conditions for pedestrians or bicyclists?</p>	<p>Further Analysis Required</p>	<p>2020 LRDP EIR Analysis Sufficient</p> <p style="text-align: center;">●</p>
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The Project would not itself cause any significant change in the road or path system, nor introduce any new types of vehicles, that could create new hazards. In accordance with the 2020 LRDP EIR, intersections in the vicinity of the Project are monitored

<p>5. Result in inadequate parking capacity?</p>	<p>Further Analysis Required</p>	<p>2020 LRDP EIR Analysis Sufficient</p> <p style="text-align: center;">●</p>
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A 2009 survey showed peak period occupancy of Underhill was only 79%, with 205 spaces available (personal communication, Riggs, 9.09). The 2020 LRDP includes an increase in the campus parking inventory to accommodate the full program of campus growth anticipated in the plan. The Project displaces existing parking that was converted from campus parking to public parking in November 2008 due to reduced demand after the completion of the Underhill Parking Structure, located one block to the east. As of September 2009, the Underhill Parking Structure is not being used to its full capacity. The proposed project would not result in inadequate parking capacity.

<p>6. Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?</p>	<p>Further Analysis Required</p>	<p>2020 LRDP EIR Analysis Sufficient</p> <p style="text-align: center;">●</p>
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The 2020 LRDP describes alternative transportation modes and includes policies to promote and expand their use. Landscape improvements undertaken as part of the Project would encourage pedestrian activity, mobility, and wayfinding, and would include improved bikeways and bicycle parking. Further, 2020 LRDP EIR mitigation measure TRA-11 would limit the shift to driving by existing and potential future non-auto commuters that may result from expanded parking capacity.

SUMMARY OF TRANSPORTATION AND TRAFFIC ANALYSIS

The 2020 LRDP EIR concluded that projects implementing the 2020 LRDP, incorporating existing best practices and 2020 LRDP EIR mitigation measures, would as a whole result in some significant impacts upon traffic and transportation, specifically upon indicated intersections and roadways (2020 LRDP EIR Vol 1, 4.12-48 to 4.12-54). The Project does not include a component adding parking and would not contribute to these impacts. The campus has an existing deficit in parking supply generally, and the contribution of the project to that deficit would be minimal, and would not result in a significant new impact. Landscape improvements undertaken as part of the Project would encourage pedestrian activity, mobility, and wayfinding, and would provide secure bicycle parking.

The Project, which incorporates all applicable LRDP mitigation measures and best practices as described above, is consistent with the 2020 LRDP as analyzed and described in the 2020 LRDP EIR and would not introduce any new potential traffic/parking impacts, and no changed circumstance or new information is present that would alter the conclusions of the 2020 LRDP EIR analysis, as described above. No additional mitigation measures or project revisions have been identified that would further lessen any previously identified significant impact. With the incorporation of all applicable LRDP EIR mitigation measures and best practices, described above, the Project will not result in any new traffic or circulation impacts. The analysis contained in this Environmental Assessment indicates that the proposed Project would not contribute to significant environmental transportation and traffic impacts previously identified in the 2020 LRDP EIR, SCH #2003082131.

UTILITIES AND SERVICE SYSTEMS

SETTING

The utilities and service systems of the campus are described in the 2020 LRDP EIR (Section 4.13).

Water. Water supply and distribution to much of Alameda and Contra Costa County is provided by EBMUD. The campus is served by two water supply systems: the East System and the Central Campus system. The Central Campus system serves water to the area bounded by Bancroft, Oxford, Hearst Avenues and Gayley Road and is fed by six EBMUD stations, three on the east side of campus and three on the west side. EBMUD supplies water to the University-owned distribution system from its supply lines and meters along the periphery of the Campus Park. A 20-inch diameter EBMUD water main runs along Hearst Avenue, Gayley Road, Piedmont Avenue and Bancroft Way. A 48-inch diameter water main runs west under Hearst Avenue and Bancroft Way, and south along Oxford Street.⁹

Whenever UC Berkeley is in preliminary project design for a new development, the Physical Plant/Campus Services' Engineering and Utilities Department staff reviews each project to determine if the existing water supply is adequate at the point of connection.

EBMUD conducted a water supply assessment of the 2020 LRDP in January 2004. EBMUD indicated that, based on extensive forecasting in its water supply management program as well as recent land use based demand forecasting, the projected water demand of 277 mgd can be reduced to 229 mgd with successful water recycling and conservation programs in place. The 2020 LRDP would not change the EBMUD 2020 demand projection.¹⁰

Wastewater. Wastewater discharge is regulated under the National Pollutant Discharge Elimination System (NPDES) permit program for direct discharges into receiving waters and by the National Pretreatment Program for indirect discharges to a sewage treatment plant. Campus wastewater is treated by EBMUD which has an NPDES Direct Discharge permit to discharge treated wastewater into the San Francisco Bay. Under this permit, EBMUD imposes effluent guidelines and discharge limitations pursuant to the National Pretreatment Program on the campus via the local EBMUD ordinance and by the EBMUD discharge permit issued to the campus.¹¹

2020 LRDP & 2020 LRDP EIR

MITIGATION MEASURES & CONTINUING BEST PRACTICES

Design and construction of the Anna Head West Student Housing project would be performed in conformance with the 2020 LRDP. The 2020 LRDP EIR includes mitigation measures and continuing best practices developed to reduce the effect of the implementation of the 2020 LRDP upon utilities and service systems. Where applicable, the Project would incorporate the following mitigation measures and/or continuing best practices:

Continuing Best Practice USS-1.1: For campus development that increases water demand, UC Berkeley would continue to evaluate the size of existing distribution lines as well as pressure of the specific feed affected by development on a project-by-project basis, and necessary improvements would be incorporated into the scope of work for each project to maintain current service and performance levels. The design of the water distribution system, including fire flow, for new buildings would be coordinated among UC Berkeley staff, EBMUD, and the Berkeley Fire Department.

Continuing Best Practice USS-2.1-b: UC Berkeley will analyze water and sewer systems on a project-by-project basis to determine specific capacity considerations in the planning of any project proposed under the 2020 LRDP.

Continuing Best Practice USS-2.1-d: UC Berkeley will continue to incorporate specific water conservation measures into project design to reduce water consumption and wastewater generation. This could include the use of special air-flow aerators, water-saving shower heads, flush cycle reducers, low-volume toilets, drip irrigation systems, and the use of drought resistant plantings in landscaped areas.

Continuing Best Practice USS-3.1: UC Berkeley shall continue to manage runoff into storm drain systems such that the aggregate effect of projects implementing the 2020 LRDP is no net increase in runoff over existing conditions.

Continuing Best Practice USS-5.2: In accordance with the Regents-adopted *Policy on Sustainable Practices* and the policies of the LRDP, the University would develop a method to quantify solid waste diversion. Contractors working for the University would be required under their contracts to report their solid waste diversion according to the University’s waste management reporting requirements.

LRDP Mitigation Measure USS-5.2: Contractors on future UC Berkeley projects implemented under the 2020 LRDP will be required to recycle or salvage at least 50% of construction, demolition, or land clearing waste. Calculations may be done by weight or volume, but must be consistent throughout.

UTILITIES AND SERVICE SYSTEMS

WATER

Would the Anna Head West Student Housing project:

1. Exceed the capacity of existing and planned water entitlements and resources?

**Further
Analysis
Required**

**2020 LRDP EIR
Analysis
Sufficient**



The Anna Head West Student Housing project provides new housing units anticipated in the 2020 LRDP. The 2020 LRDP increase was found not to result in a significant impact on water entitlements and resources, nor warrant the construction of new or altered facilities (2020 LRDP EIR Vol 1, 4.13-5)

<p>2. Require or result in the construction of new or expansion of existing water facilities, the construction of which could cause significant adverse effects?</p>	<p>Further Analysis Required</p>	<p>2020 LRDP EIR Analysis Sufficient</p> <p style="text-align: center;">●</p>
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Please see response to Water item 1, above.

WASTEWATER

Would the Anna Head West Student Housing project:

<p>1. Result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?</p>	<p>Further Analysis Required</p>	<p>2020 LRDP EIR Analysis Sufficient</p> <p style="text-align: center;">●</p>
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The 2020 LRDP EIR determined the increased demand for wastewater treatment resulting from implementation of the 2020 LRDP would not result in significant impacts on capacity, and construction of new or altered wastewater collection facilities would not result in significant environmental impacts. (2020 LRDP EIR Vol 1, 4.13-10) However, the 2020 LRDP EIR also noted localized clusters of new development could exceed the capacity of individual sub-basins, and incorporated measures to minimize possible collection capacity impacts, including project-by-project analysis of sewer system capacity considerations (Best Practices USS-2.1-b and USS-2.1-d through USS-2.1-e).

The March 2008 Draft Southside Plan EIR noted that sanitary sewer subbasins 17-006, 17-500 and 17-502 cover the Southside area, including the site of the proposed Project. Approximately 60 percent of the sewer system has been replaced since 1990 (<http://www.ci.berkeley.ca.us/ContentDisplay.aspx?id=17998> see SSP4g-UtilitiesInfrastr.pdf, page. 211). The EIR notes "Sewer replacement and rehabilitation projects in the Southside area have included larger mains to provide additional sewer conveyance capacity in anticipation of increased residential development within the Southside." The EIR determined "The existing sewer mains have the capacity to serve the anticipated increase of 472 housing units and 638,290 square feet of commercial space (i.e., office and retail space) in the Southside area" (<http://www.ci.berkeley.ca.us/ContentDisplay.aspx?id=17998> see SSP4g-UtilitiesInfrastr.pdf, page. 227).

<p>2. Require or result in the construction of new or expansion of existing wastewater treatment facilities, the construction of which could cause significant adverse effects?</p>	<p>Further Analysis Required</p>	<p>2020 LRDP EIR Analysis Sufficient</p> <p style="text-align: center;">●</p>
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Please see response to Utilities and Service Systems Wastewater item 1, above.

<p>3. Exceed wastewater treatment requirements of the Regional Water Quality Control Board?</p>	<p>Further Analysis Required</p>	<p>2020 LRDP EIR Analysis Sufficient</p> <p style="text-align: center;">●</p>
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EBMUD regulates UC Berkeley's wastewater discharge to their treatment plant through a source control program designed to insure compliance with their NPDES permit conditions. UC Berkeley is required to comply with conditions of EBMUD's Ordinance 311 and the Main Campus Wastewater Discharge Permit issued by EBMUD's Source Control Division and applicable to all campus laboratory, construction and municipal operations. At the proposed Project site in the City Environs, the Project would meet wastewater treatment requirements determined applicable for the site.

STORMWATER

Would the Anna Head West Student Housing project:

<p>1. Require or result in the construction of new or expansion of existing stormwater drainage facilities, the construction of which could cause significant adverse effects?</p>	<p>Further Analysis Required</p>	<p>2020 LRDP EIR Analysis Sufficient</p> <p style="text-align: center;">●</p>
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Through a combination of on-site retention, pervious paving materials, and other measures as prescribed in the Project Design Guidelines, the Project would not result in an increase in the rate or amount of surface runoff. The 2020 LRDP EIR requires that new projects be sited and designed so the aggregate effect of projects under the 2020 LRDP is no net increase in runoff over existing conditions (Best Practice HYD-4-e)

The existing project site is 95% impervious asphalt. As designed, the amount of impervious cover will decrease to 50%-60%. The site/landscape design includes lawn, plantings, and pervious walkways.

SOLID WASTE

Would the Anna Head West Student Housing project:

<p>1. Violate any applicable federal, state, and local statutes and regulations related to solid waste?</p>	<p>Further Analysis Required</p>	<p>2020 LRDP EIR Analysis Sufficient</p> <p style="text-align: center;">●</p>
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The campus is committed through campus policy to continuing and improving waste reduction and minimization efforts. The Project represents less than six percent of the total net new academic and support program space anticipated under the 2020 LRDP, and the 2020 LRDP EIR found this growth would not result in solid waste impacts that would violate any applicable federal, state or local statute or regulation related to solid waste.

	Further Analysis Required	2020 LRDP EIR Analysis Sufficient
2. Exceed the permitted capacity of a landfill that serves the project's solid waste disposal needs?		●

UC Berkeley is exempt from county requirements to dispose of solid waste in the county, and therefore selects landfill sites based on lowest cost. In accordance with the Regents-adopted Policy on Sustainable Practices and the policies of the 2020 LRDP, contractors working for the University would be required to report their solid waste diversion according to the University's waste management reporting requirements. The Project is not anticipated to result in solid waste impacts that would violate any applicable federal, state or local statute or regulation related to solid waste. (2020 LRDP EIR Vol 1, 4.13-21 and 4.13-22)

ENERGY

Would the Anna Head West Student Housing project:

	Further Analysis Required	2020 LRDP EIR Analysis Sufficient
1. Require or result in the construction of new or expansion of existing energy production and/or transmission facilities, the construction of which could cause significant adverse effects?		●

The Project accomplishes net new housing growth as anticipated in the 2020 LRDP, and the 2020 LRDP EIR found this growth is not anticipated to result in the need for new or altered energy production and/or transmission facilities. (2020 LRDP EIR Vol 1, 4.13-25).

	Further Analysis Required	2020 LRDP EIR Analysis Sufficient
2. Would the project encourage the wasteful or inefficient use of energy?		●

UC Berkeley would continue to exceed Title 24 energy conservation requirements for new buildings by 20%, and incorporate energy efficient design elements, in accordance with existing policies and 2020 LRDP goals. (2020 LRDP EIR Vol 1, 4.13-26).

STEAM AND CHILLED WATER

Would the Anna Head West Undergraduate Student Housing:

	Further Analysis Required	2020 LRDP EIR Analysis Sufficient
1. Require or result in the construction of new or expansion of existing steam and/or chilled water facilities, the construction of which could cause significant adverse effects?		●

Due to its location off campus, the Project will not utilize the campus steam system. The campus would use natural gas or electricity for building heating and cooling and would not require the expansion of steam and/or chilled water facilities.

SUMMARY OF UTILITIES AND SERVICE SYSTEMS ANALYSIS

The 2020 LRDP EIR concluded that projects implementing the 2020 LRDP, incorporating existing best practices and 2020 LRDP EIR mitigation measures, would not result in new significant utilities and service systems impacts (2020 LRDP EIR Vol 1, 4.13-5, 4.13-10 to 4.13-12, 4.13-15 to 4.13-16, 4.13-18, 4.13-21 to 4.13-22, 4.13-25 to 4.13-28). The Project constructs near campus housing as anticipated in the 2020 LRDP, and the 2020 LRDP EIR found this growth is not anticipated to result in the need for new or altered steam and/or chilled water facilities, energy production and/or transmission facilities, wastewater or solid waste capacity concerns. Further, the Project is not expected to significantly increase the amount of built or paved surface or otherwise result in stormwater capacity concerns.

The Project, which incorporates all applicable mitigation measures and best practices prescribed in the 2020 LRDP EIR as described above, would not result in new or more severe impacts than analyzed in the 2020 LRDP EIR, SCH #2003082131, nor contribute to cumulatively significant adverse utilities and service systems effects.

The Project is consistent with the 2020 LRDP as analyzed and described in the 2020 LRDP EIR and would not introduce any new potential utilities and service systems impacts, and no changed circumstance or new information is present that would alter the conclusions of the 2020 LRDP EIR analysis, as described above. No additional mitigation measures or project revisions have been identified that would further lessen any previously identified significant impact. Therefore, the 2020 LRDP EIR is sufficient and comprehensive to address the utilities and service systems impacts of the proposed Project, which will not result in any new utilities or service systems impact. The project would not result in new or more severe impacts than analyzed in the 2020 LRDP EIR, SCH #2003082131, nor contribute to cumulatively significant adverse utilities and service systems effects.

MANDATORY FINDINGS OF SIGNIFICANCE

	Further Analysis Required	2020 LRDP EIR Analysis Sufficient
Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		●

The Project is development of an existing surface parking lot for student housing; the Project would not pose new environmental concerns not analyzed in the 2020 LRDP EIR. The Project is consistent with the 2020 LRDP as analyzed and described in the 2020 LRDP EIR and would not introduce any new potential impacts, and no changed circumstance or new information is present that would alter the conclusions of the 2020 LRDP EIR analysis, as described above. See also Chapter 6 of the 2020 LRDP EIR, Vol 1, CEQA-required assessment conclusions. No Project revisions or additional mitigation measures are required and the 2020 LRDP EIR analysis is sufficient and comprehensive for purposes of the Project.

	Further Analysis Required	2020 LRDP EIR Analysis Sufficient

Does the project have impacts that are individually limited but cumulatively considerable? ('Cumulatively considerable' means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other projects, and the effects of probable future projects)?

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Cumulative impacts of the 2020 LRDP are analyzed in the 2020 LRDP EIR beginning at the following pages: Aesthetics, 4.1-21; Air Quality, 4.2-29; Biological Resources, 4.3-33; Cultural Resources, 4.4-60; Geology, Seismicity and Soils, 4.5-22; Hazardous Materials, 4.6-32; Hydrology and Water Quality, 4.7-31; Land Use, 4.8-19; Noise, 4.9-23; Population and Housing, 4.10-17; Public Services, 4.11-29; Transportation and Traffic, 4.12-59; Utilities and Service Systems, 4.13-27. The 2020 LRDP EIR found significant cumulative impacts on the traffic network due to trips generated by implementation of the 2020 LRDP (see page 4.12-59 of the 2020 LRDP EIR, Vol 1); significant cumulative noise impacts due to construction noise exceedances of local standards (see page 4.9-24 of the 2020 LRDP EIR, Vol 1); potential significant cumulative impacts upon the resource base of historical or archaeological resources (see page 4.4-61 of the 2020 LRDP EIR, Vol 1); and a potential continuing cumulative exceedance of toxic air contaminant emissions (see page 4.2-34 of the 2020 LRDP EIR, Vol 1). The project may incrementally contribute to significant environmental impacts previously identified in the 2020 LRDP EIR, but will not result in those impacts being more severe than as described in the 2020 LRDP EIR, SCH #2003082131. No additional mitigation measures have been identified that would further lessen the previously identified impact, and no additional analysis is required. The incremental impacts of the Anna Head West Student Housing project are not cumulatively considerable and have been sufficiently addressed in the 2020 LRDP EIR.

Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

**Further
Analysis
Required**

**2020 LRDP
EIR Analysis
Sufficient**

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Potential adverse effects on human beings, directly or indirectly, are addressed in the 2020 LRDP EIR sections on Air Quality; Geology, Seismicity and Soils; Hydrology; Noise; Public Services – Fire and Emergency Protection; Transportation and Traffic. Implementation of the 2020 LRDP, including implementation of best practices and mitigation measures, is anticipated to reduce adverse effects on human beings. As the Project implements the 2020 Long Range Development Plan, this environmental analysis relies on the 2020 LRDP EIR program document for consideration of cumulatively considerable effects. See the 2020 LRDP EIR Vol 1, as revised by Vol 3a, within each topic area. The Project is consistent with the 2020 LRDP as analyzed and described in the 2020 LRDP EIR and would not introduce any new potential direct or indirect impacts to humans, and no changed circumstance or new information is present that would alter the conclusions of the 2020 LRDP EIR analysis, as described above. With the incorporation of all applicable LRDP EIR mitigation measures and best practices, described above, the Project will result in a less than significant impact. No Project revisions or additional mitigation measures are required and the 2020 LRDP EIR analysis is sufficient and comprehensive for purposes of the Project.

APPENDIX A

**MITIGATION MEASURES AND BEST PRACTICES INCORPORATED INTO
THE ANNA HEAD WEST STUDENT HOUSING PROJECT AS PROPOSED**

APPENDIX B
PROJECT SPECIFIC DESIGN GUIDELINES

APPENDIX C

APPENDIX D
ARBORIST REPORT

APPENDIX E
CUMULATIVE PROJECTS

REFERENCES

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- ¹ UC Berkeley, *2020 Long Range Development Plan*, 2005
 - ² UC Berkeley, *Long Range Development Plan Draft Environmental Impact Report*, January 1990, Mitigation Measures 4.4-1(a) through (d), page 4.4-19; and revised March 2004 by CLA Horner.
 - ³ Special-status species include: 1) listed (rare, threatened, or endangered) and candidate species for listing by the CDFG, 2) listed (threatened or endangered) and candidate species for listing by the USFWS, 3) Species considered to be rare or endangered under the conditions of Section 15380 of the CEQA Guidelines, such as certain of those species identified on lists 1A, 1B, and 2 in the Inventory of Rare and Endangered Plants of California by the California Native Plant Society (CNPS), and 4) possibly other species which are considered sensitive or of special concern due to limited distribution or lack of adequate information to permit listing or rejection for state or federal status, such as those identified as "California Special Concern" (CSC) species by the CDFG. California Special Concern species have no legal protective status under the California Endangered Species Act but are of concern to the CDFG because of severe decline in breeding populations in California. Source: Environmental Collaborative
 - ⁴ The federal Endangered Species Act (FESA) of 1973 declares that all federal departments and agencies shall utilize their authority to conserve endangered and threatened plant and animal taxa. The California Endangered Species Act (CESA) of 1984 parallels the policies of FESA and pertains to native California species. Source: Environmental Collaborative.
 - ⁵ Geomatrix Consultants, *Appendix One: Geologic Hazards Investigation,, Central Campus, University of California at Berkeley*, January 2000, page 4, prepared as part of *Economic Benefits of a Disaster Resistant University* by Dr. Mary Comerio, Institute of Urban and Regional Development, UC Berkeley, April 2000.
 - ⁶ UC Berkeley, *1997 Preliminary Seismic Evaluation, Phase 1*, Volume 1, September 1997, page 6.
 - ⁷ *City of Berkeley Draft General Plan EIR*, February 2001, page 68.
 - ⁸ UC Berkeley Fire Prevention Division website, <http://www.ehs.berkeley.edu/whoweaare/fireprev.html>, retrieved February 17, 2004.
 - ⁹ UC Berkeley, *Long Range Development Plan Draft Environmental Impact Report*, January 1990, page 4.13-4.
 - ¹⁰ EBMUD, *Water Supply Assessment – UC Berkeley 2020 Long Range Development Plan*, January 29, 2004.
 - ¹¹ National Pretreatment Program requirements are outlined in 40 CFR, Chap.1, Subchapter N.; UC Berkeley, *Guidelines for Drain Disposal of Chemicals at UCB*, <http://www.ehs.berkeley.edu/pubs/guidelines/draindispgls.html>, retrieved January 27, 2004.