HYATT PLACE HOTEL EXPANSION AND OLD DAVIS ROAD EXTENSION

Tiered Initial Study

The following Initial Study has been prepared in compliance with CEQA.

Prepared By:

ENVIRONMENTAL STEWARDSHIP AND SUSTAINABILITY

University of California
One Shields Avenue
436 Mrak Hall
Davis, California 95616

March 2011

Contact:  A. Sidney England, Assistant Vice Chancellor for Environmental Stewardship and Sustainability
530-752-2432
# TABLE OF CONTENTS

1 PROJECT INFORMATION 1

2 INTRODUCTION 2
   2.1 Initial Study 2
   2.2 Tiering Process 2
   2.3 Public and Agency Review 3
   2.4 Project Approvals 4
   2.5 Organization of the Initial Study 4

3 PROJECT DESCRIPTION 5
   3.1 Regional Location 5
   3.2 Project Overview 5
   3.3 Project Site 11
   3.4 Project Need and Objectives 12
   3.5 Project Elements 12
   3.6 Construction Schedule and Staging 14

4 CONSISTENCY WITH THE 2003 LRDP AND 2003 LRDP EIR 15
   4.1 2003 LRDP Scope of Development 15
   4.2 2003 LRDP Land Use Designation 15
   4.3 2003 LRDP Population Projections 16
   4.4 2003 LRDP Objectives 16
   4.5 2003 LRDP EIR Cumulative Impacts Analyses 17

5 ENVIRONMENTAL RESOURCES POTENTIALLY AFFECTED 18

6 DETERMINATION 19

7 EVALUATION OF ENVIRONMENTAL IMPACTS 20
   7.1 Aesthetics 21
   7.2 Agricultural and Forestry Resources 25
   7.3 Air Quality 27
   7.4 Biological Resources 33
   7.5 Cultural Resources 40
   7.6 Geology, Soils, & Seismicity 47
   7.7 Greenhouse Gas Emissions 51
   7.8 Hazards & Hazardous Materials 53
   7.9 Hydrology & Water Quality 59
   7.10 Land Use & Planning 71
LIST OF FIGURES

Figure 1. Regional Location 7
Figure 2  Project Location 8
Figure 3  Project Site 9
Figure 4  Hotel Expansion and Site Design 10

LIST OF TABLES

Table 7.11.2: Thresholds of Significance for Noise Evaluations 76
1 PROJECT INFORMATION

Project title:

Hyatt Place Hotel Expansion and Old Davis Road Extension

Project location:

University of California, Davis
Yolo County

Lead agency’s name and address:

The Regents of the University of California
1111 Franklin Street
Oakland, CA 94607

Contact person:

A. Sidney England, Assistant Vice Chancellor for Environmental
Stewardship and Sustainability, 530-752-2432

Project sponsor’s name and address:

Environmental Stewardship and Sustainability
University of California
One Shields Avenue
436 Mrak Hall
Davis, CA 95616-8678

Location of administrative record:

See project sponsor.

Identification of previous documents relied upon for tiering purposes:

This environmental analysis is tiered from the Environmental Impact Report (EIR) for the UC Davis 2003 Long Range Development Plan (2003 LRDP) (State Clearinghouse No. 2002102092). The 2003 LRDP is a comprehensive land use plan that guides physical development on campus to accommodate projected enrollment increases and expanded and new program initiatives through the 2015-16 academic year. Section 2.2 provides additional information about the tiering process. The 2003 LRDP and its EIR are available for review at the following locations:

- UC Davis Office of Environmental Stewardship and Sustainability, 436 Mrak Hall on the UC Davis campus
- Reserves at Shields Library on the UC Davis campus
- Yolo County Public Library at 315 East 14th Street in Davis
2 INTRODUCTION

2.1 INITIAL STUDY

Pursuant to Section 15063 of the California Environmental Quality Act (CEQA) Guidelines (Title 14, California Code of Regulations, Sections 15000 et seq.), an Initial Study is a preliminary environmental analysis that is used by the lead agency as a basis for determining whether an EIR, a Mitigated Negative Declaration, or a Negative Declaration is required for a project. The CEQA Guidelines require that an Initial Study contain a project description, description of environmental setting, identification of environmental effects by checklist or other similar form, explanation of environmental effects, discussion of mitigation for significant environmental effects, evaluation of the project’s consistency with existing, applicable land use controls, and the name of persons who prepared the study.

2.2 TIERING PROCESS

The CEQA concept of "tiering" refers to the evaluation of general environmental matters in a broad program-level EIR, with subsequent focused environmental documents for individual projects that implement the program. This environmental document incorporates by reference the discussions in the 2003 LRDP EIR (the Program EIR) and concentrates on project-specific issues. CEQA and the CEQA Guidelines encourage the use of tiered environmental documents to reduce delays and excessive paperwork in the environmental review process. This is accomplished in tiered documents by eliminating repetitive analyses of issues that were adequately addressed in the Program EIR and by incorporating those analyses by reference.

Section 15168(d) of the State CEQA Guidelines provides for simplifying the preparation of environmental documents on individual parts of the program by incorporating by reference analyses and discussions that apply to the program as a whole. Where an EIR has been prepared or certified for a program or plan, the environmental review for a later activity consistent with the program or plan should be limited to effects that were not analyzed as significant in the prior EIR or that are susceptible to substantial reduction or avoidance (CEQA Guidelines Section 15152[d]).

This Initial Study is tiered from the UC Davis 2003 LRDP EIR in accordance with Sections 15152 and 15168 of the CEQA Guidelines and Public Resources Code Section 21094. The 2003 LRDP EIR is a Program EIR that was prepared pursuant to Section 15168 of the CEQA Guidelines. The 2003 LRDP is a comprehensive land use plan that guides physical development on campus to accommodate projected enrollment increases and expanded and new program initiatives through the 2015-16 academic year. The 2003 LRDP EIR analyzes full implementation of uses and physical development proposed under the 2003 LRDP, and it identifies measures to mitigate the significant adverse program-level and cumulative impacts associated with that growth. The proposed project is an element of the growth that was anticipated in the 2003 LRDP and evaluated in the 2003 LRDP EIR.

By tiering from the 2003 LRDP EIR, this Tiered Initial Study will rely on the 2003 LRDP EIR for the following:

- a discussion of general background and setting information for environmental topic areas;
- overall growth-related issues;
- issues that were evaluated in sufficient detail in the 2003 LRDP EIR for which there is no significant new information or change in circumstances that would require further analysis; and
- assessment of cumulative impacts.
This Initial Study will evaluate the potential environmental impacts of the proposed project with respect to the 2003 LRDP EIR to determine what level of additional environmental review, if any, is appropriate. As shown in the Determination in Section 6 of this document, and based on the analysis contained in this Initial Study, it has been determined that the proposed project may have potentially significant effects on the environment that were not previously addressed or adequately addressed in the 2003 LRDP EIR, or may have environmental effects that are less-than-significant but have been selected for further analysis and disclosure. Therefore, an EIR will be prepared.

This Initial Study concludes that many potentially significant project impacts are addressed by the measures that have been adopted as part of the approval of the 2003 LRDP. Therefore, those 2003 LRDP EIR mitigation measures that are related to, and may reduce the impacts of, this project will be identified in this Initial Study. Since these mitigation measures are already being carried out as part of implementation of the 2003 LRDP, they will not be readopted, but rather are incorporated as part of the project and the impact analysis assumes implementation for purposes of determining the significance of any project impact. The benefits of these mitigation measures will be achieved independently of considering them as specific mitigation measures of this project. Nothing in this Initial Study in any way alters the obligations of the campus to implement the LRDP mitigation measures.

2.3 PUBLIC AND AGENCY REVIEW

This Initial Study will be circulated for public and agency review from March 23, 2011 to April 21, 2011. Copies of this document, the 2003 LRDP, and the 2003 LRDP EIR are available for review at the following locations:

- UC Davis Office of Environmental Stewardship and Sustainability in 436 Mrak Hall on the UC Davis campus
- Reserves at Shields Library on the UC Davis campus
- Yolo County Public Library at 315 East 14th Street in Davis

Comments on this Initial Study must be received by 5:00 PM on April 21, 2011 and can be e-mailed to medulcich@ucdavis.edu or sent to:

A. Sidney England  
Assistant Vice Chancellor – Environmental Stewardship and Sustainability  
University of California  
One Shields Avenue  
436 Mrak Hall  
Davis, CA 95616

Comments received on this Initial Study will be considered during the preparation of the upcoming EIR for the proposed project. In addition, the Draft EIR will include a copy of all the public and agency comments.
2.4 **PROJECT APPROVALS**

As a public agency principally responsible for approving or carrying out the proposed project, the University of California is the Lead Agency under CEQA and is responsible for reviewing and certifying the adequacy of the environmental document and approving the proposed project. It is anticipated that the Committee on Grounds and Building for the Board of Regents of the University of California (The Regents) may consider approval of the proposed Hyatt Place Hotel Expansion project in July 2011 and the campus also may consider approval of the road expansion as early as July 2011.

2.5 **ORGANIZATION OF THE INITIAL STUDY**

This Initial Study is organized into the following sections:

**Section 1 – Project Information:** provides summary background information about the proposed project, including project location, lead agency, and contact information.

**Section 2 – Introduction:** summarizes the Initial Study's relationship to the 2003 LRDP EIR, the scope of the document, the project's review and approval processes, and the document's organization.

**Section 3 – Project Description:** includes a description of the proposed project, including the need for the project, the project's objectives, and the elements included in the project.

**Section 4 – Consistency with the 2003 LRDP:** describes the consistency of the proposed project with the 2003 LRDP and 2003 LRDP EIR.

**Section 5 – Environmental Factors Potentially Affected:** identifies which environmental factors, if any, involve at least one significant or potentially significant impact that has not been previously addressed in the 2003 LRDP EIR and cannot be reduced to a less-than-significant level.

**Section 6 – Determination:** indicates whether impacts associated with the proposed project are significant, and what, if any, additional environmental documentation is required.

**Section 7 – Evaluation of Environmental Impacts:** contains the Environmental Checklist form for each resource area. The checklist is used to assist in evaluating the potential environmental impacts of the proposed project with respect to the 2003 LRDP EIR. This section also presents a background summary for each resource area, the standards of significance, relevant impacts and mitigation measures from the 2003 LRDP EIR, and an explanation of all checklist answers.

**Section 8 – Fish and Game Determination:** indicates if the project has a potential to impact wildlife or habitat and if an associated Fish and Game filing fee would be paid.

**Section 9 – References:** lists references used in the preparation of this document.

**Section 10 – Agencies and Persons Consulted:** provides the names of individuals contacted in preparation of this document.

**Section 11 – Report Preparers:** lists the names of individuals involved in the preparation of this document.
3 PROJECT DESCRIPTION

3.1 REGIONAL LOCATION

The approximately 5,300 acre UC Davis campus is located in Yolo and Solano Counties approximately 72 miles northeast of San Francisco, 15 miles west of the City of Sacramento, and adjacent to the City of Davis (see Figure 3.1). The campus is comprised of four campus units: the central campus, the south campus, the west campus, and Russell Ranch. Most academic and extracurricular activities occur within the central campus. The central campus is bounded generally by Russell Boulevard to the north, State Route 113 (SR 113) to the west, Interstate 80 (I-80) and the Union Pacific Railroad tracks to the south, and A Street to the east. The south campus is located south of I-80 and north of the South Fork of Putah Creek. The west campus is bounded by SR 113 to the east, Putah Creek to the south, Russell Boulevard to the north, and extends approximately one-half mile west of County Road 98. The south and west campus units are contiguous with the central campus, and are used primarily for field teaching and research. The approximately 1,600 acre Russell Ranch portion of the campus lies to the west, separated from the west campus by approximately one and one-half miles of privately owned agricultural land. Russell Ranch was purchased in 1990 for campus uses including large-scale agricultural and environmental research, study of sustainable agricultural practices, and habitat mitigation. Russell Ranch is bordered roughly by County Road 96 on the east, Putah Creek on the south, Covell Boulevard on the north, and Russell Boulevard and privately owned agricultural land on the west and northwest.

3.2 PROJECT OVERVIEW

UC Davis proposes two projects on the south portion of the central campus. The first project would expand the existing campus hotel by adding 52 rooms to the existing 75 rooms which would result in a total hotel capacity of 127 rooms. The existing Hyatt Place hotel at UC Davis was completed in 2010 and is built and operated by a third-party developer. The hotel expansion would take place on a landscaped area within the developed parcel of the hotel to the north and east of the existing building. The existing parking lot for the hotel has sufficient capacity to accommodate the proposed expansion and would not need to be expanded. The expanded hotel building would result in an additional 30,000 square feet of building area and, like the existing facility, would be four stories tall. The design of the hotel expansion would match the architecture and height of the existing building.

The second project proposed for the south portion of UC Davis is the extension of Old Davis Road from its existing terminus east of the existing hotel to the southern terminus of A Street. The proposed extension of Old Davis Road has been previously identified as a component of the long-term UC Davis roadway plans and the road was partially extended by 800 feet in 2009 with the conference center and hotel projects. The proposed extension would construct approximately 1,100 feet of new roadway and would connect to the south side of Parking Lot 5 allowing through access on the connected roadway. Once connected, the road extension would provide an alternate route to the existing Old Davis Road alignment. UC Davis eventually would convert the existing Old Davis Road along the south side of the UC Davis Arboretum to a bike and pedestrian path with emergency vehicle and service vehicle access.

The road extension would include two-lanes for motorized traffic (one lane in each direction) and a bike lane adjacent to the road curb. The project would include a sidewalk on the north side of the road and landscaping along the road. A 15 foot-wide corridor south of the road would be designated as a future planning corridor for underground utilities. The extended road would replace the existing road connection located between Mrak Hall Drive and A Street.
Figure 3
Project Site
Aerial photo shows existing hotel development with expansion area at east side of building. Architectural renderings show existing building with completed addition.
3.3 PROJECT SITE

Hotel Expansion:
The hotel expansion site is approximately 8,000 square feet immediately adjacent to the east side of the existing hotel building. The project site was used for construction staging during construction of the existing four-story hotel building and was landscaped with turf and shrubs upon completion of the hotel building. The proposed construction would take place entirely within the previously developed area at the hotel site. The site planning for the original hotel included arrangement of the hotel driveway, parking area and visitor circulation to accommodate the potential future expansion of the hotel.

The hotel expansion site is in the southern portion of the central campus at UC Davis in Yolo County where UC Davis has built new buildings and infrastructure during the last 10 years. Previous projects in this area include the Mondavi Institute for Wine and Food Science, the South Entry Parking Structure, Parking Lots 1 and 2, the Mondavi Center for the Performing Arts, Vanderhoef Quad, Gallagher Hall for the Graduate School of Management, the Conference Center Building, and the existing hotel which was completed in 2010. Additional new infrastructure in this portion of campus includes the road and utilities that have been completed to serve these new buildings.

In total the site of the existing hotel is approximately three acres including the hotel, parking lot, driveways, and landscaping. The proposed expansion would take place within this three acre area in an area of approximately 8,000 square feet.

To the north of the hotel site is the environmental horticulture teaching and research area consisting of small one-story buildings and greenhouses and surrounding garden space for horticultural teaching and research. To the east of the hotel site is an undeveloped field and further east is the community garden for the Solano Park housing area. To the south of the site is Old Davis Road and further south are the Union Pacific Railroad tracks (approximately 250 feet from the hotel building) and Interstate 80 (approximately 1,000 feet from the hotel building). To the west of the hotel site is the Conference Center building and Gallagher Hall.

The UC Davis 2003 LRDP designates the project site and these surrounding areas as areas intended for Academic and Administrative land uses, a designation that intended for uses that fulfill the teaching, research, and public service mission of university and business/service activities that support the University mission.

Old Davis Road Extension:
The Old Davis Road Extension would take place from the current roadway terminus south of the existing hotel in a north and east direction for approximately 1,100 feet. The road extension would occupy land that is predominantly a field kept in turf. A portion of the roadway and utility corridor also would extend through a portion of an area used as residential garden space by students living in the UC Davis Solano Park Housing complex. A portion of the area for the road extension is covered with mowed lawn and the project would also displace an outdoor basketball court. Land uses to the north of the road extension include a lawn area between the Environmental Horticulture buildings and the Nelson Hall Art Gallery (formerly the University Club). No off-campus land uses would be directly affected by the proposed road extension.

The 2003 LRDP documented the planned extension of Old Davis Road in the proposed alignment. The proposed project is consistent with the 2003 LRDP and helps to implement the circulation patterns that were anticipated in the 2003 LRDP. The 2003 LRDP designated the land area north of the road extension for Academic and Administrative land uses. The 2003 LRDP designated the land area south of the road extension for Community Gardens and PE/ICA/Recreation uses.
3.4 **PROJECT NEED AND OBJECTIVES**

The proposed project will provide needed improvements to UC Davis facilities and infrastructure. The specific need and objectives for each project component is provided below.

**Hotel Expansion:**

The Hotel Expansion will provide needed capacity for overnight accommodations in close proximity to the UC Davis conference center. The expanded capacity is expected to improve the ability of UC Davis to host academic conferences in furtherance of the teaching, research, and public service mission of the University. Project objectives include:

- Expanded overnight accommodations in close proximity to the UC Davis conference center.
- Opportunities to attract larger conferences to the UC Davis Conference Center and the Davis area through the provision of additional hotel rooms in the Davis area.
- Additional hotel rooms under the same management and operational control of the existing campus hotel to minimize the management costs and site development costs of hotel operations.
- Minimize traffic impacts and associated contributions to global warming by enabling conference participants to minimize automobile travel between off-site hotel locations and the existing conference center.

**Old Davis Road Extension:**

The Old Davis Road Extension will implement a long-planned change to circulation at UC Davis. The project objectives are to:

- Simplify the routing and experience for new visitors to the UC Davis campus. The proposed project will make route-finding simpler and more intuitive so that new visitors better understand the concept of the campus loop road and the traffic flow along the loop road.
- Improve the connection between the UC Davis Mondavi Center for the Performing Arts and the UC Davis Conference Center and the City of Davis downtown area. The proposed project will improve the roadway connection so that visitors can easily connect a visit to the performing arts center with shopping or dining opportunities in downtown Davis.
- Allow future conversion of the existing road alignment to a bike and pedestrian facility to facilitate these modes of travel, to expand the campus bicycle network and to enhance the exposure for arboretum uses by shifting motorized vehicles south, away from the arboretum.

3.5 **PROJECT ELEMENTS**

3.5.1 **Building Addition**

The addition to the existing hotel would consist of approximately 30,000 square feet of new building space. The addition would consist of four floors to match the height of the existing building and each floor would provide approximately 6,900 square feet of space and 14 hotel rooms for a total addition of 52 new hotel rooms.
The architecture of the building addition would match the style, colors, and height of the existing building and is designed to ensure that the completed addition would appear as an integrally designed portion of the existing building.

### 3.5.2 Landscaping

The proposed hotel addition would not include new landscaping at the project site. Upon completion of the original hotel building and parking lot, the area was landscaped with trees, shrubs, and groundcover.

The road extension project will include landscaping along the sides of the road to provide street trees and groundcover.

### 3.5.3 Parking and Roadways

The proposed project includes no parking or roadway changes associated with the hotel expansion.

The parking and roadway modifications associated with the road realignment include the following:

- **Road Extension.** The project includes extension of the roadway from its existing terminus east of the hotel site to A Street at Parking Lot 5. The road will include one lane in each direction, bike lanes, curb, gutter, street lighting, landscaping and a sidewalk on the north side of the road.

- **Modifications to Parking Lot 5.** Within Parking Lot 5, approximately 25 parking spaces will be removed to allow a portion of existing parking lot to function as a road corridor with bike lanes and sufficient width for motorized vehicles. The proposed design would utilize the existing curb and gutter within the parking lot driveway to function as a roadway. Additional driveway modifications may also be provided for Parking Lot 5 as part of the project completion.

- **Modifications to Nelson Hall exterior.** Nelson Hall (previously the University Club) would be accessed directly from the road extension instead of the existing Old Davis Road and modifications to the driveway drop-off and turnaround area for Nelson Hall would be provided as part of the proposed project.

- **Modifications to the existing Old Davis Road.** Upon completion of the road extension, UC Davis may also modify the existing segment of Old Davis Road between Mrak Hall Circle and A Street for improved bike and pedestrian access.

### 3.5.4 Utilities and Infrastructure

As discussed briefly below and analyzed in Section 7.16, the proposed project would require connections to campus utilities and infrastructure including domestic water, utility water, sanitary sewer, storm drainage, electricity, natural gas, and telecommunications.

- **Domestic Water:** Domestic water for the hotel building addition will be provided from the campus domestic water system and the building addition will connect to an existing water supply main within the project site. The road extension project will not affect domestic water supply.

- **Utility Water:** The hotel building addition will not utilize water from the campus utility water system. The road extension project will use utility water for roadway landscaping and will connect to an existing water supply main within the project site.
- **Sanitary Sewer**: The hotel building addition will connect to an existing sanitary sewer line within the project site. The sewer line is served by the campus wastewater treatment facility. The road extension project will not connect to the campus sanitary sewer system and will not generate demand for the sanitary sewer system.

- **Storm Drainage**: The hotel addition and the road extension will connect to the campus storm drainage system so that stormwater runoff from the project is directed to underground drains that would flow to the UC Davis arboretum waterway. For the hotel building addition, the existing drains at the project site would be utilized. For the road extension project, new project drain inlets would connect to a new underground drainage pipe that would extend from the road extension northward, past the west side of Nelson Hall and would then empty into the arboretum waterway.

- **Electricity**: The hotel addition and the road extension will connect to the campus grid at an existing connection point within each project site. The hotel addition will use electrical power for lighting and cooling. The road extension project will use electrical power for streetlights.

- **Natural Gas**: The hotel addition will connect to the Pacific Gas and Electric (PG&E) natural gas system at an existing connection point within the project site. The road extension would not utilize natural gas. No off-site trenching will be needed to utilize natural gas.

- **Chilled Water**: The hotel addition and the road extension will not utilize chilled water from the campus utility system.

- **Steam**: The hotel addition and the road extension will not utilize steam from the campus utility system.

- **Telecommunications**: The hotel addition will connect to the AT&T telecommunication infrastructure for network and telephone service. The project will utilize existing connections within the hotel building to obtain service. The road extension would not utilize telecommunications services.

### 3.5.5 Population

The project would result in additional employment from the building addition so that employment at UC Davis would increase by approximately 12 people.

### 3.6 Construction Schedule and Staging

Construction of the proposed project is anticipated to begin in Fall 2011 and end in Summer of 2012. Construction staging and contractor parking associated with the proposed project would occur on the developed portion of the existing hotel parking lot.
4 CONSISTENCY WITH THE 2003 LRDP AND 2003 LRDP EIR

In order to determine the proposed project’s consistency with the 2003 LRDP and 2003 LRDP EIR, the following questions must be answered:

- Is the proposed project included in the scope of the development projected in the 2003 LRDP?
- Is the proposed location of the project in an area designated for this type of use in the 2003 LRDP?
- Are the changes to campus population associated with the proposed project included within the scope of the 2003 LRDP’s population projections?
- Are the objectives of the proposed project consistent with the objectives adopted for the 2003 LRDP?
- Is the proposed project within the scope of the cumulative analysis in the 2003 LRDP EIR?

The following discussion describes the proposed project’s relationship to and consistency with the development projections, population projections, land use designations, objectives, and cumulative impacts analyses contained in the 2003 LRDP and the 2003 LRDP EIR.

4.1 2003 LRDP SCOPE OF DEVELOPMENT

The 2003 LRDP anticipates academic and administrative space on campus will increase to approximately 7,175,000 asf through 2015-16. In fall 2002, the campus had only approximately 4,475,000 asf of academic and administrative space. The proposed project, with 30,000 asf of academic/administrative space, in combination with other recently approved and currently proposed projects, would not increase academic and administrative building space on campus to levels that would exceed those projected for 2015-16. Therefore, the proposed project is well within the 2003 LRDP's scope of academic and administrative development.

4.2 2003 LRDP LAND USE DESIGNATION

The UC Davis 2003 LRDP designates the project site and these surrounding areas as areas intended for Academic and Administrative land uses, a designation that intended for uses that fulfill the teaching, research, and public service mission of university and business/service activities that support the University mission. These include classrooms; research laboratories and research support areas; faculty, student and staff offices; libraries; program support facilities; student activity space; meeting rooms; space for public service, outreach and cultural activities; and business/service activities that support the University mission. While most facilities may be occupied by University programs, some may be occupied by University-related public or private partnerships. The Academic/Administrative High Density designation also includes setbacks, landscaping, paths, on-site utility services, sidewalks, small parking lots (under 100 spaces), and roads associated with facilities. Therefore, the hotel expansion is consistent with this land use designation.

The 2003 LRDP documented the planned extension of Old Davis Road in the proposed alignment. The proposed project is consistent with the 2003 LRDP and helps to implement the circulation patterns that were anticipated in the 2003 LRDP. The 2003 LRDP designated the land area north of the road extension for Academic and Administrative land uses. The 2003 LRDP designated the land area south of the road extension for Community Gardens and PE/ICA/Recreation uses.
4.3 2003 LRDP Population Projections

The 2003 LRDP projects that, through 2015-16, the on-campus population will increase to include approximately 30,000 students, 14,500 faculty and staff, and 3,240 non-UC employees\(^1\). In addition, the total number of household members associated with students and employees living in on-campus housing is expected to increase to approximately 29,803. The fall 2010 on-campus faculty and staff headcount was approximately 11,300, and the 2009-10 three-quarter average on-campus student population was approximately 28,879 (UC Davis ORMP 2003a and b). The proposed project, would not introduce new student or faculty but would increase the employment at UC Davis by approximately 12 people. This increase of 12 employees in combination with other recently approved and currently proposed campus projects would not increase the overall campus population to the projected 2015-16 in the 2003 LRDP EIR. Therefore, the proposed project is well within the 2003 LRDP’s on-campus population projections.

4.4 2003 LRDP Objectives

The primary objective of the 2003 LRDP is to plan for the Davis campus’ share of the University of California’s short- and long-term enrollment demands. In addition, the 2003 LRDP aims to:

- create a physical framework to support the teaching, research, and public service mission of the campus;
- manage campus lands and resources in a spirit of stewardship for the future; and
- provide an environment that enriches campus life and serves the greater community.

The proposed project would support these main 2003 LRDP objectives by expanding the options to host conferences at UC Davis with increased hotel rooms and by improving the campus loop road to allow more intuitive navigation around the central campus.

In addition, the 2003 LRDP includes specific objectives that are relevant to the proposed project, including the following:

**South Entry District**: Continue to develop the South Entry District as the main regional entrance to UC Davis. Add land between I-80 and Old Davis Road to enable academic activities in a location that connects the campus to the region, and offers the public a welcoming, active educational and cultural center. *LRDP Academic and Administrative Land Use Objectives, Page 59 of the 2003 LRDP.*

The proposed project relates to the South Entry District objective by improving the opportunities to offer the public a welcoming, active educational and cultural center by providing additional hotel rooms within the South Entry District.

**Perimeter Road Improvements**: Realign Old Davis Road to the south to create better pedestrian and bicycle connections to lands south of the Arboretum. Extend the perimeter road from the Mondavi Center

---

\(^1\) The on-campus population includes students and employees on the UC Davis main campus and at other University owned and operated facilities in the City of Davis. The campus population is determined based on headcount, a method of counting faculty, staff, and students in which each person is counted as one unit regardless of whether he or she is employed or studying full-time or part-time. Student population figures represent student headcount averaged over the primary three academic quarters (i.e., fall, winter, spring).
for the Arts to the east to connect to A Street. *LRDP Transportation and Parking System Objectives, Page 78 of the 2003 LRDP.*

The proposed project implements the Perimeter Road Improvements objective described above by completing the identified road improvement so that the road from the Mondavi Center to A Street is directly connected.

**Old Davis Road Bike Path:** Convert Old Davis Road along the south bank of the Arboretum to a bike path as campus uses extend to the south of the existing road, and a new perimeter location for Old Davis Road is built. *LRDP Transportation and Parking System Objectives, Page 78 of the 2003 LRDP.*

The proposed project would allow the future conversion of the existing Old Davis Road on the south side of the UC Davis Arboretum to a bike and pedestrian path.

### 4.5 2003 LRDP EIR Cumulative Impacts Analyses

In addition to evaluating the environmental effects directly associated with projected campus development, the 2003 LRDP EIR evaluates the cumulative effects of campus development combined with off-campus development through 2015-16. The cumulative context considered in the 2003 LRDP EIR varies, depending on the nature of the issue being studied, to best assess each issue’s geographic extent. For example, the cumulative impacts on water and air quality can be best analyzed within the boundaries of the affected resources, such as water bodies and air basins. For other cumulative impacts, such as hazard risks, traffic, and the need for new public service facilities, the cumulative impact is best analyzed within the context of the population growth and associated development that are expected to occur in the region.

As discussed in Sections 4.1 through 4.4 above, the proposed project is within the scope of campus development projected in the 2003 LRDP EIR. In addition, the campus is unaware of any changes to local growth plans or other changes in the region since certification of the 2003 LRDP EIR that would substantially change the document’s conclusions regarding cumulative impacts. Therefore, the proposed project would incrementally contribute to, but would not exceed, the cumulative impacts analyses included in the 2003 LRDP EIR.
5 ENVIRONMENTAL RESOURCES POTENTIALLY AFFECTED

The following environmental resources, if checked below, would be potentially affected by this project and would involve at least one impact that is a significant or potentially significant impact that has not been previously addressed in the 2003 LRDP EIR. Therefore, an EIR will be prepared for the project. The EIR will analyze the potential impacts of the proposed project on the topics of Aesthetics, Air Quality, Cultural Resources, Greenhouse Gas Emissions, Noise, and Transportation and Circulation.

☑ Aesthetics ☐ Agriculture and Forestry Resources ☑ Air Quality

☐ Biological Resources ☑ Cultural Resources ☐ Geology and Soils

☑ Greenhouse Gas Emissions ☐ Hazards & Hazardous Materials ☐ Hydrology & Water Quality

☐ Land Use & Planning ☐ Mineral Resources ☑ Noise

☐ Population & Housing ☐ Public Services ☐ Recreation

☑ Transportation & Circulation ☐ Utilities/Service Systems ☐ Mandatory Findings of Significance
6 DETERMINATION

On the basis of this initial evaluation:

☐ The proposed project COULD NOT have a significant effect on the environment that has not been previously addressed in the 2003 LRDP EIR, and no new mitigation measures, other than those previously identified in the 2003 LRDP EIR, are required. A NEGATIVE DECLARATION will be prepared.

☐ Although the proposed project COULD have a significant effect on the environment, the project impacts were adequately addressed in an earlier document or there will not be a significant effect in this case because revisions in the project have been made that will avoid or reduce any potential significant effect to a less-than-significant level. A MITIGATED NEGATIVE DECLARATION will be prepared.

☑ The proposed project MAY have a potentially significant effect on the environment that was not previously addressed in the 2003 LRDP EIR. A TIERED ENVIRONMENTAL IMPACT REPORT will be prepared to address new impacts not previously identified in the 2003 LRDP EIR.

_________________________________________  _______________
A. Sidney England       Date
Assistant Vice Chancellor – Environmental Stewardship and Sustainability
7 EVALUATION OF ENVIRONMENTAL IMPACTS

Introduction

The University has defined the column headings in the Initial Study as follows:

- **Impact to be Analyzed in the EIR**: This column is checked when an impact that may or may not be significant will be addressed in the project EIR. The effect may be a less than significant impact that will be addressed to provide a more comprehensive analysis, an impact for which further analysis is necessary or desirable before a determination about significance can be made, an impact that is potentially significant but may be reduced to a less than significant level with the adoption of mitigation measures, or an impact that may be significant and unavoidable.

- **No Additional Analysis Required**: This column is checked when implementation of the proposed project clearly would clearly not result in an impact, or would clearly result in a less than significant impact under CEQA criteria, and may result in a significant impact but that was adequately analyzed in the 2003 LRDP EIR no additional analysis beyond that provided in the 2003 LRDP EIR or the Initial Study is necessary.
7.1 AESTHETICS

7.1.1 Background

Section 4.1 of the 2003 LRDP EIR addresses the aesthetics effects of campus growth under the 2003 LRDP. The following discussion summarizes information presented in the ‘Setting’ subsection of Section 4.1 of the 2003 LRDP EIR.

Campus

The campus is surrounded by extensive agricultural uses to the west and south, and by residential, institutional, and commercial land uses in the City of Davis to the north and east. Views within the Davis area are generally of two types: open views of agricultural land and supporting facilities with views of hills to the west, and views of developed areas within UC Davis and the City of Davis.

UC Davis consists of four general land units that have distinct visual characters. The central campus is the most developed area of campus and is characterized by varied architectural styles, large trees, and formal landscaping. The west and south campus units and Russell Ranch primarily include teaching and research fields with agricultural buildings (although the west and south campus units also include more developed areas including campus support facilities and academic and administrative facilities).

The 2003 LRDP identifies the following as valued visual elements of the central campus: the large, open lawn of the Quad at the heart of the campus; the framework of tree-lined streets, particularly around the Quad where the street tree branches arch to create a canopy overhead; the Arboretum, with its large trees and variety of landscapes along the waterway; the shingle-sided buildings from the founding years of the University Farm; buildings from the second era of campus development such as Hart Hall and Walker Hall; green open spaces that face the community along Russell Boulevard and A Street; bicycles as a distinct and valued visual emblem on campus; and the South Entry area, including the new entrance quad and the Robert and Margrit Mondavi Center for the Performing Arts.

Design review of campus development projects takes place during the project planning, design, review, and approval processes to sustain valued elements of the campus’ visual environment, to assure new projects contribute to a connected and cohesive campus environment, and to otherwise minimize adverse aesthetics effects as feasible. Formal design review by the campus Design Review Committee takes place for every major capital project. This Committee includes standing members from the Offices of Campus Planning, Design and Construction Management, Grounds, and other departments concerned with potential aesthetic effects, as well as program representatives and invited design professionals with expertise relevant to the project type. Campus design standards and plans that provide the basis for design review include the 2003 LRDP, the Campus Design Framework Plan, the Campus Standards and Design Guide manual, the campus Architectural Design Guidelines, and the Campus Core Study.

Project Site

The project sites are both in the South Entry District of the UC Davis central campus. The hotel addition project would be located east of and adjacent to the existing hotel building. The roadway extension project would be located from the existing hotel site north and east to A Street. This area of the campus is visible from Interstate 80 and is characterized as having a combination of old and new buildings with some areas of mature trees that obscure long views into the central campus.
7.1.2 2003 LRDP EIR Standards of Significance

The 2003 LRDP EIR considers an aesthetic impact significant if growth under the 2003 LRDP would:

- Have a substantial adverse effect on a scenic vista.
  
  A scenic vista is defined as a publicly accessible viewpoint that provides expansive views of a highly valued landscape. On campus, the open view across agricultural lands west to the Coast Range is considered a scenic vista. This vista is primarily viewed from public viewpoints along SR 113, Hutchison Drive, La Rue Road, and Russell Boulevard.

- Substantially degrade the existing visual character or quality of the site and its surroundings.
  
  For the campus, this standard is interpreted in terms of the effect of development under the 2003 LRDP on the valued elements of the visual landscape identified in the LRDP, or the effect associated with allowing incompatible development in or near areas with high visual quality such as Putah Creek and the Arboretum Waterway.

- Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area.

An additional standard from the CEQA Guidelines’ Environmental Checklist (—b in the checklist below) was found not applicable to campus growth under the 2003 LRDP.

7.1.3 2003 LRDP EIR Impacts and Mitigation Measures

Impacts of campus growth under the 2003 LRDP through 2015-16 on aesthetics are evaluated in Section 4.1 of the 2003 LRDP EIR. The proposed project is within the scope of analysis in the 2003 LRDP EIR. Significant and potentially significant aesthetics impacts identified in the 2003 LRDP EIR that are relevant to the proposed project are presented below with their corresponding levels of significance before and after application of mitigation measures identified in the 2003 LRDP EIR.

<table>
<thead>
<tr>
<th>2003 LRDP EIR Impacts</th>
<th>Level of Significance Prior to Mitigation</th>
<th>Level of Significance After Mitigation</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1-3</td>
<td>Development under the 2003 LRDP could create substantial light or glare on campus that could adversely affect daytime or nighttime views in the area.</td>
<td>PS</td>
</tr>
<tr>
<td>4.1-6</td>
<td>Implementation of the 2003 LRDP together with cumulative development in the region would create new sources of light and glare that could adversely affect daytime or nighttime views in the region.</td>
<td>S</td>
</tr>
</tbody>
</table>

Levels of Significance: LS=Less than Significant, S=Significant, PS=Potentially Significant, SU=Significant and Unavoidable

Mitigation measures in the 2003 LRDP EIR that are applicable to the proposed project are presented below. Since these mitigation measures are already being carried out as part of implementation of the 2003 LRDP, they are considered part of the project description and will not be readopted in this Initial Study or EIR. Nothing in this Initial Study in any way alters the obligations of the campus to implement 2003 LRDP EIR mitigation measures.
2003 LRDP EIR Mitigation Measures

AESTHETICS

4.1-3(a) Design for specific projects shall provide for the use of textured nonreflective exterior surfaces and nonreflective glass.

4.1-3(b) Except as provided in LRDP Mitigation 4.1-3(c), all new outdoor lighting shall utilize directional lighting methods with shielded and cutoff type light fixtures to minimize glare and upward directed lighting.

4.1-3(c) Non-cutoff, non-shielded lighting fixtures used to enhance nighttime views of walking paths, specific landscape features, or specific architectural features shall be reviewed by the Campus Design Review Committee prior to installation to ensure that: (1) the minimum amount of required lighting is proposed to achieve the desired nighttime emphasis, and (2) the proposed illumination creates no adverse effect on nighttime views.

4.1-3(d) The campus will implement the use of the specified lighting design and equipment when older lighting fixtures and designs are replaced over time.

4.1-6(a) Implement LRDP Mitigation 4.1-3(a) and (b).

4.1-6(b) The City of Davis and other surrounding jurisdictions can and should adopt (if necessary) and implement development standards and guidelines, which support the minimal use of site lighting for new developments.

7.1.4 Environmental Checklist and Discussion

<table>
<thead>
<tr>
<th>AESTHETICS</th>
<th>Impact to be Analyzed in the EIR</th>
<th>No Additional Analysis Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Would the project…</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Have a substantial adverse effect on a scenic vista?</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>c) Substantially degrade the existing visual character or quality of the site and its surroundings?</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?</td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>

a) The 2003 LRDP EIR defined a scenic vista as an expansive view of a highly valued landscape from a publicly accessible viewpoint, and identified the only scenic vista on the UC Davis campus to be the view west across agricultural land to the Coast Range. On and near campus, publicly accessible viewpoints along SR 113, Hutchison Drive, La Rue Road, and Russell Boulevard provide scenic vistas to the west across agricultural land to the Coast Range. The proposed project site is not located along these roadways and would not have an effect on scenic vistas and no further analysis is required. No impact would occur.

b) The campus is not located near a state scenic highway and does not contain designated scenic resources. Therefore, the proposed project would not damage scenic resources, either within or outside of a state scenic highway, and no additional analysis is required. No impact would occur.

c) The proposed project would construct a building addition and roadway extension. The building addition would match the existing building in terms of design, height, color, materials, and lighting. The site planning for the original building included sufficient site area for a future addition and the proposed addition would fit within the area originally reserved for a potential expansion. While the site of the building addition is visible from adjacent areas including Old Davis Road and Interstate 80, the proposed structure would not block views to or from these areas and, if constructed, would appear...
as a planned and cohesively designed development. Similarly, the road extension project would not block or restrict views from the project site. Accordingly, the project components would not substantially degrade the visual character or quality of the site or its surroundings.

The proposed project would introduce additional hotel rooms to the Davis area and these additional rooms may affect occupancy rates at other hotels in the Davis area. To evaluate the potential effects of these changes, the campus will conduct an economic impact assessment to determine whether the proposed project could cause any closures, whether there are potential alternative uses for properties that could be affected, and whether the project could create physical blight in the community.

d) The 2003 LRDP EIR found that development on campus under the 2003 LRDP could create substantial light or glare that could adversely affect daytime or nighttime views in the area (LRDP Impact 4.1-3). The proposed project consists of an addition to an existing building and the new addition would include exterior lighting that could contribute to nighttime glare. In compliance with LRDP Mitigation 4.1-3(a), the project would use textured nonreflective exterior surfaces and nonreflective glass. The exterior lighting would be limited to building entrances and low-level lighting along walkways. In compliance with LRDP Mitigation 4.1-3(b-c), and to prevent light spill and light pollution per LEED requirements, new outdoor lighting associated with the project would use directional lighting methods with shielded and cutoff-type light fixtures to minimize glare and upward directed lighting. In compliance with this measure, the Campus Design Review Committee will also review the proposed project’s use of non-directional lighting design to ensure that no adverse effects on nighttime views occur. With implementation of LRDP Mitigation 4.1-3(a-c), which is included in the proposed project, the project’s impact associated with light and glare would be less than significant.
7.2 AGRICULTURAL AND FORESTRY RESOURCES

7.2.1 Background

Section 4.2 of the 2003 LRDP EIR addresses the agricultural resources effects of campus growth under the 2003 LRDP. The following discussion summarizes information presented in the ‘Setting’ subsection of Section 4.2 of the 2003 LRDP EIR.

Campus

As discussed in the 2003 LRDP EIR, of the approximately 5,300 acres of campus land, the California Department of Conservation’s Farmland Mapping and Monitoring Program (FMMP) designates approximately 3,700 acres as Prime Farmland and approximately 90 acres as Farmland of Local Importance. The FMMP designates the remaining 1,520 acres of campus land as Urban and Built-Up (approximately 1,400 acres) and Other Land (approximately 120 acres). Most of the campus’ agricultural lands are located on the west and south campuses and at Russell Ranch. The central campus includes land primarily designated as Urban and Built-Up, but small areas within the central campus that are used for teaching and research fields and community gardens are designated as Prime Farmland.

The 2003 LRDP EIR identifies that development under the 2003 LRDP through 2015-16 could result in conversion of approximately 745 acres of campus land that is considered prime farmland by the California Department of Conservation to nonagricultural uses. Approximately 330 acres of this land would be converted to habitat at Russell Ranch, which would not result in an irreversible loss of prime soil. Mitigation under the 2003 LRDP EIR requires the conservation of prime farmland at a one-to-one (1:1) ratio for prime farmland converted to developed uses and a one-third–to–one (1/3:1) ratio for prime farmland converted to habitat at Russell Ranch.

Project Site

The project site is located within the Central Campus at UC Davis and is designated as Urban and Built-Up Land in the FMMP.

7.2.2 2003 LRDP EIR Standards of Significance

The 2003 LRDP EIR considered an agricultural impact significant if growth under the 2003 LRDP would:

- Convert prime farmland, unique farmland or farmland of statewide importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency to nonagricultural use.
- Involve other changes in the existing environment which, due to their location or nature, could result in conversion of farmland considered prime, unique, or of statewide importance to nonagricultural use.
- Conflict with existing zoning for agricultural use or a Williamson Act contract.
- Result in the loss of forest land or conversion of forest land to non-forest use.
7.2.3 2003 LRDP EIR Impacts and Mitigation Measures

Impacts of campus growth under the 2003 LRDP through 2015-16 on agricultural resources are evaluated in Section 4.2 of the 2003 LRDP EIR. As discussed in Section 4 of this Initial Study, the proposed project is within the scope of analysis in the 2003 LRDP EIR. However, the significant agricultural impacts identified in the 2003 LRDP EIR are not relevant to the proposed project because the proposed project would not result in the conversion of farmland and no mitigation measures would be required.

7.2.4 Environmental Checklist and Discussion

<table>
<thead>
<tr>
<th>AGRICULTURAL RESOURCES</th>
<th>Impact to be Analyzed in the EIR</th>
<th>No Additional Analysis Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>d) Result in the loss of forest land or conversion of forest land to non-forest use?</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest uses?</td>
<td>☐</td>
<td>☑</td>
</tr>
</tbody>
</table>

a) The FMMP designates the project site as Urban and Built-Up Land. The proposed project would not convert Farmland to non-agricultural use. No further analysis is required. No impact would occur.

b) Campus lands are state lands and are not eligible for Williamson Act agreements, nor are they subject to local zoning controls. The project site is designated as Urban and Built-Up Land by FMMP and Academic/Administrative High Density by the 2003 LRDP EIR. Therefore, the proposed project would not conflict with existing zoning for agricultural use or a Williamson Act contract, and no impact would occur.

c) None of the campus lands are zoned as forest land or timberland. The proposed project would not conflict with existing zoning or result in rezoning of forest or timberlands. No impact would occur.

d) There are no forest lands on or adjacent to the project site. Therefore, the proposed project would not result in the loss of forest land or the conversion of forest land to non-forest use. No impact would occur.

e) The project site is not adjacent to agricultural, or forest land or timberland. Therefore, the proposed project would not involve any changes that could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use. No impact would occur.
7.3 AIR QUALITY

7.3.1 Background

Section 4.3 of the 2003 LRDP EIR addresses the air quality effects of campus growth under the 2003 LRDP on air quality. The following discussion summarizes information presented in the ‘Setting’ subsection of Section 4.3 of the 2003 LRDP EIR, updated with current data as necessary.

Campus

The campus is subject to air quality regulation programs under both the federal Clean Air Act (CAA) and the California Clean Air Act (CCAA). Both the federal and state statutes provide for ambient air quality standards to protect public health, timetables for progressing toward achieving and maintaining ambient standards, and the development of plans to guide the air quality improvement efforts of state and local agencies. Within the campus vicinity, air quality is monitored, evaluated, and controlled by the U.S. Environmental Protection Agency (EPA), the California Air Resources Board (CARB), and the Yolo-Solano Air Quality Management District (YSAQMD). The YSAQMD is one of five air districts located in the Sacramento Valley Air Basin (SVAB) and has jurisdiction over air quality in the Yolo County and the northeastern portion of Solano County.

Historically, air quality laws and regulations have divided air pollutants into two broad categories: —criteria pollutants” and —toxic air contaminants.” Federal and state air quality standards have been established for the following ambient air pollutants, the criteria pollutants: ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), particulate matter less than 10 microns in diameter (PM_{10}), lead (Pb), and particulate matter less than 2.5 microns in diameter (PM_{2.5}). Ozone is evaluated by assessing emissions of its precursors: reactive organic gases (ROG) and NO_x.

Toxic air contaminants (TACs) are airborne pollutants for which there are no air quality standards but which are known to have adverse human health effects. TACs are regulated under federal and state statutes, primarily with control technology requirements for stationary and mobile sources and mitigation established following human health risk assessments. TAC’s are generated by a number of sources, including stationary sources such as dry cleaners, gas stations, combustion sources, and laboratories; mobile sources such as automobiles and construction vehicles; and area sources such as farms, landfills, construction sites, and residential areas.

Air quality on campus on any given day is influenced by both meteorological conditions and pollutant emissions. In general, meteorological conditions vary more than pollutant emissions from day to day, and tend to have a greater influence on changes in measured ambient pollutant concentrations. Ambient concentrations of CO and PM_{10}, however are particularly influenced by local emission sources. The EPA has classified the entire SVAB, which includes the campus, as a nonattainment area for O_3. Districts in the SVAB have requested a voluntary bump-up designation to —severe,” which would result in an attainment deadline of 2018. [The EPA approval of the voluntary bump-up is still pending]. The CARB has also designated the area as being in nonattainment under the state ambient air quality standards for O_3 and PM_{10}. The designation of an area as attainment or nonattainment is based on monitored data throughout the SVAB.
Project Site

The project site is approximately 1,000 feet from the UC Davis Solano Park family housing complex which provides housing for UC Davis students and their children. For purposes of this analysis, the housing complex (with children) can be regarded as a sensitive receptor.

7.3.2 2003 LRDP EIR Standards of Significance

The 2003 LRDP EIR considers an air quality impact significant if growth under the 2003 LRDP would:

Criteria Pollutants

- Conflict with or obstruct implementation of the applicable air quality plan.
- Violate any air quality standard or contribute substantially to an existing or projected air quality violation. (According to the YSAQMD, emissions of NOx and ROG in excess of 10 tons per year, PM10 emissions of 80 pounds a day, or CO emissions violating a state ambient air standard for CO would be considered significant.)
- 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors).
- Expose sensitive receptors to substantial pollutant concentrations.
- Create objectionable odors affecting a substantial number of people.

Toxic Air Contaminants

- Contribute to the probability of contracting cancer for the Maximally Exposed Individual (MEI) exceeding the AB 2588 and Proposition 65 threshold of 10 in one million.
- Result in a noncarcinogenic (chronic and acute) health hazard index greater than the AB 2588 threshold of 1.0.

7.3.3 2003 LRDP EIR Impacts and Mitigation Measures

Air quality impacts of campus growth under the 2003 LRDP through 2015-16 on air quality are evaluated in Section 4.3 of the 2003 LRDP EIR. As analyzed in Section 4 of this Initial Study, the proposed project is within the scope of analysis in the 2003 LRDP EIR. Significant and potentially significant air quality impacts identified in the 2003 LRDP EIR that are relevant to the proposed project are presented below with their corresponding levels of significance before and after application of mitigation measures identified in the 2003 LRDP EIR.

<table>
<thead>
<tr>
<th>2003 LRDP EIR Impacts</th>
<th>Level of Significance Prior to Mitigation</th>
<th>Level of Significance After Mitigation</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIR QUALITY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.3-1</td>
<td>Implementation of the 2003 LRDP would result in daily operational emissions above the YSAQMD thresholds that may contribute substantially to a violation of air quality standards or hinder attainment of the regional air quality plan.</td>
<td>S</td>
</tr>
<tr>
<td>4.3-3</td>
<td>Emissions from construction activities associated with the 2003 LRDP would</td>
<td>S</td>
</tr>
</tbody>
</table>
Mitigation measures in the 2003 LRDP EIR that are applicable to the proposed project are presented below. Because these previously adopted mitigation measures are already being carried out as part of implementation of the 2003 LRDP, they are considered part of the project description and will not be readopted, and are assumed as part of the project-level impact analysis. Nothing in this Initial Study in any way alters the obligations of the campus to implement 2003 LRDP EIR mitigation measures.

### 2003 LRDP EIR Mitigation Measures

#### AIR QUALITY

4.3-1(a) Vehicular Sources. The following measures will be implemented to reduce emissions from vehicles, as feasible.

- The campus shall continue to actively pursue Transportation Demand Management to reduce reliance on private automobiles for travel to and from the campus.

- Provide pedestrian-enhancing infrastructure to encourage pedestrian activity and discourage vehicle use.

- Provide bicycle facilities to encourage bicycle use instead of driving.

- Provide transit-enhancing infrastructure to promote the use of public transportation.

- Provide facilities to accommodate alternative-fuel vehicles such as electric cars and CNG vehicles.

- Improve traffic flows and congestion by timing of traffic signals to facilitate uninterrupted travel.

- When the campus purchases new vehicles, the campus will evaluate the practicality and feasibility of acquiring low-pollution vehicles that are appropriate for the task and will purchase these types of vehicles when practical and feasible. When replacing diesel engines in existing equipment, the campus will install up-to-date technology.

4.3-1(b) Area Sources. The following measures will be implemented to reduce emissions from area sources, as feasible.

- Use solar or low-emission water heaters in new or renovated buildings.

- Orient buildings to take advantage of solar heating and natural cooling and use passive solar designs.

- Increase wall and attic insulation in new or renovated buildings.

- For fireplaces or wood-burning appliances, require low-emitting EPA certified wood-burning appliances, or residential natural-gas fireplaces.

- Provide electric equipment for landscape maintenance.

4.3-1(c) The campus will work with the YSAQMD to ensure that emissions directly and indirectly associated with the campus are adequately accounted for and mitigated in applicable air quality planning efforts. The YSAQMD can and should adopt adequate measures consistent with applicable law to ensure that air quality standard violations are avoided.
The campus shall include in all construction contracts the measures specified below to reduce fugitive dust impacts, including but not limited to the following:

- All disturbed areas, including storage piles, which are not being actively utilized for construction purpose, shall be effectively stabilized of dust emissions using water, 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 chemical stabilizer/suppressant.
- 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 up to six stories in height, all exterior surfaces of the building shall be wetted during demolition.
- When materials are transported off-site, all material shall be covered, effectively wetted to limit visible dust emissions, or at least two feet of freeboard space from the top of the container shall be maintained.
- All operations shall limit or expeditiously remove the accumulation of mud or dirt from adjacent public streets at least once every 24 hours when operations are occurring. The use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust emissions. Use of blower devices also is expressly forbidden.
- 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 chemical stabilizer/suppressant.

The campus shall include in construction contracts for large construction projects near receptors, the following control measures:

- Limit traffic speeds on unpaved roads to 15 mph.
- Install sandbags or other erosion control measures to prevent silt runoff to public roadways from sites with a slope greater than one percent.
- To the extent feasible, limit area subject to excavation, grading, and other construction activity at any one time.
- Limit the area subject to excavation, grading, and other construction activity at any one time.

The campus shall implement the following control measures to reduce emissions of ozone precursors from construction equipment exhaust:

- To the extent that equipment is available and cost effective, the campus shall encourage contractors to use alternate fuels and retrofit existing engines in construction equipment.
- Minimize idling time to a maximum of 5 minutes when construction equipment is not in use.
- To the extent practicable, manage operation of heavy-duty equipment to reduce emissions.
- To the extent practicable, employ construction management techniques such as timing construction to occur outside the ozone season of May through October, or scheduling equipment use to limit unnecessary concurrent operation.

Implement LRDP Mitigation 4.3-1(a-c).

EPA and CARB are expected to continue the development and implement programs to reduce air toxics, and UC Davis will continue its efforts in this area.
Environmental Checklist and Discussion

### AIR QUALITY

<table>
<thead>
<tr>
<th>Would the project…</th>
<th>Impact to be Analyzed in the EIR</th>
<th>No Additional Analysis Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Conflict with or obstruct implementation of the applicable air quality plan?</td>
<td>☑</td>
<td>☐</td>
</tr>
<tr>
<td>b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?</td>
<td>☑</td>
<td>☐</td>
</tr>
<tr>
<td>c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?</td>
<td>☑</td>
<td>☐</td>
</tr>
<tr>
<td>d) Expose sensitive receptors to substantial pollutant concentrations?</td>
<td>☑</td>
<td>☐</td>
</tr>
<tr>
<td>e) Create objectionable odors affecting a substantial number of people?</td>
<td>☐</td>
<td>☑</td>
</tr>
</tbody>
</table>

**Construction**

The 2003 LRDP EIR found that construction activities under the 2003 LRDP could exceed YSAQMD thresholds (LRDP Impact 4.3-3). The state 24-hour PM$_{10}$ standards could be violated when multiple construction projects (especially those involving ongoing grading or excavation activities) occur simultaneously in the same area. Housing or other sensitive receptors located adjacent to construction areas could be affected by high concentrations of PM$_{10}$. In addition, exhaust pollutants would be emitted during use of construction equipment.

The project site is located as close as 200 feet from the nearest sensitive receptors. Construction activities would occur for about one year and would involve on-site emissions of fugitive dust from grading and exhaust from operation of construction equipment. There would also be a limited number of off-site construction vehicle trips associated with project construction. LRDP Mitigation 4.3-3(a) (requiring campus construction contracts to include measures to reduce fugitive dust impacts), 4.3-3(b) (requiring additional specific dust control measures), and 4.4-3(c) (requiring control measures to reduce emissions of ozone precursors from construction equipment exhaust) are relevant to the proposed project. Although this impact was analyzed in the 2003 LRDP EIR, vehicular and stationary source emissions associated with the proposed project will be evaluated in the project EIR.

The 2003 LRDP EIR found that the impact of the cumulative emissions from the totality of projects under construction at any given time under the 2003 LRDP would be significant and unavoidable. The impact was adequately analyzed in the 2003 LRDP EIR and was fully addressed in the Findings and Statement of Overriding Considerations adopted by The Regents in connection with its approval of the 2003 LRDP, and no new project-level mitigation measures have been identified that would further reduce the impact.

**Operation**

**Criteria Pollutants**

The 2003 LRDP EIR found that operational emissions at full development of the campus under the 2003 LRDP could substantially contribute to violation of ambient state and federal air quality standards or hinder the attainment of the regional air quality plan (LRDP Impact 4.3-1). The project
would contribute to this impact. The campus is located in an area that is in nonattainment of \( \text{O}_3 \) and \( \text{PM}_{10} \) standards. The region is processing the 8 hour attainment plan for the Sacramento Valley Air Basin (SVAB), which is intended to implement regulations for ozone emissions and attainment of the federal air quality standard by 2018. LRDP Mitigation 4.3-1 (a-b), which includes measures that encourage alternative transportation and no- or low-emission building designs and operations, would help reduce daily emissions from campus vehicular and stationary sources. LRDP Mitigation 4.3-1(c) would ensure that the campus will coordinate with the YSAQMD during the update of the Clean Air Plan and other applicable air quality planning efforts. However, given the likelihood of exceedance of \( \text{O}_3 \) standards even with mitigation, it appears that the implementation of the 2003 LRDP, including the proposed project, could potentially hinder the attainment of the regional air quality plan. The impact is, therefore, considered significant and unavoidable at the LRDP program level. Although this impact was adequately analyzed in the 2003 LRDP EIR, vehicular and stationary source emissions associated with the proposed project will be evaluated in the project EIR.

**Toxic Air Contaminants**

Health Risk Assessment (HRA) calculations performed as part of the 2003 LRDP EIR predicted that the cancer risk from campus operations through academic year 2015-16 will be below 10 in one million for both the off-campus and on-campus Maximally Exposed Individual, assuming a 70-year exposure period for residential population. The non-cancer health risk was calculated in terms of a hazard index and was determined to be below 1.0. Therefore, the 2003 LRDP EIR concluded that development under the 2003 LRDP would not exceed either health risk standard, and the impact associated with TAC generation would be less than significant. Although this program level impact was adequately analyzed in the 2003 LRDP EIR, TAC emissions associated with the proposed project will be evaluated in the project EIR.

**Cumulative Development**

The 2003 LRDP EIR found that implementation of the 2003 LRDP, in conjunction with other regional development, would contribute to emissions of criteria pollutants for which the region is in non-attainment status and could hinder attainment efforts (LRDP Impact 4.3-6). The YSAQMD has accounted for a certain amount of regional growth in the existing Sacramento Regional Clean Air Plan. The LRDP EIR noted that the Regional Clean Air Plan was being updated to extend beyond the year 2005, and that campus growth under the 2003 LRDP would be incorporated into the updated plan update. LRDP Mitigation 4.3-6, included in the proposed project, requires implementation of LRDP Mitigation 4.3-1 (a-c). Regardless, because the YSAQMD remains a nonattainment area for ozone, this cumulative impact is considered significant and unavoidable. This impact was adequately analyzed in the 2003 LRDP EIR and was fully addressed in the Findings and Statement of Overriding Considerations adopted by The Regents in connection with its approval of the 2003 LRDP.

e) The proposed project would not produce unusual odors because the hotel expansion and the road extension would not use result in industrial processing or large-scale manufacturing operations such as food processing, agricultural waste processing, or storage of products with unusual odors. No impact would occur.
7.4 Biological Resources

7.4.1 Background

Section 4.4 of the 2003 LRDP EIR addresses the effects of campus growth under the 2003 LRDP on biological resources. The following discussion summarizes information presented in the ‘Setting’ subsection of Section 4.4 of the 2003 LRDP EIR.

Campus

The 5,300-acre campus is located in a region that is composed primarily of urban areas and agricultural lands that include remnant riparian areas. Habitat types on campus can be classified as Agricultural Lands (including Cropland/Pasture, and Orchard/Vineyard), Valley Foothill Riparian Woodland, Ruderal/Annual Grassland, Open Water Ponds, Riverine, and Urban Landscaping/Developed.

The 2003 LRDP EIR considers special status species to be those taxa that are: (1) listed as threatened or endangered under either the California or Federal Endangered Species Acts; (2) candidates for either state or federal listing; (3) species afforded protection under the Fish and Game Code of California; (4) federal and California Department of Fish and Game (CDFG) —Species of Special Concern”; (5) CDFG —Species of Special Concern” highest and second priority lists; or (6) California Native Plant Society (CNPS) List 1-3 plants.

A database search identified 15 special status plant species, 8 special status invertebrates, 11 special status fish, 3 special status amphibians, 3 special status reptiles, 26 special status birds, and 7 special status mammals that have the potential to occur on or within a 10-mile radius of the campus. However, only a few of these species are known to occur on campus or have potential habitat present on campus, including: northern California black walnut, burrowing owl, Swainson’s hawk, valley elderberry longhorn beetle, California tiger salamander, chinook salmon, giant garter snake, steelhead, and northwestern pond turtle.

Project Site

The proposed project site is approximately 8,000 square feet of landscaped area within the developed portion of the existing hotel and the road and utility corridor that would be developed as the roadway extension project from the south side of the existing hotel to A Street. A survey was conducted to screen for elderberry shrubs that are potential habitat for the valley longhorn elderberry beetle. One elderberry shrub was detected north of the road extension project area along the UC Davis Arboretum more than 40 feet from the area that would be used to route the storm drain line from the road extension project.

Habitat

Urban Landscaping/Developed. Urban habitat includes landscaped areas that are vegetated with trees, shrubs, and maintained grassy areas. While the University Arboretum contains a significant collection of botanical specimens, it is included within this habitat designation because it is essentially a landscaped park with many non-native plantings, and is subject to regular maintenance as well as high frequency use by people (picnicking, jogging, walking, etc.).

Central campus landscaped areas, with their abundance of mature trees, provide wildlife habitat values (food and cover) within the developed areas of central campus. Many species of birds (including the Swainson’s hawk) are known to nest in central campus trees. Other resident and migratory hawks, owls,
songbirds, and woodpeckers are also known to use landscaped areas on the campus for nesting, food, and cover.

**Special Status Species**

Swainson’s Hawk. The Swainson’s hawk (*Buteo swainsoni*) is listed as a threatened species under the California Endangered Species Act and is also fully protected against take pursuant to Section 3503.5 of the Fish and Game Code of California. The Swainson’s hawk is a relatively large bird of prey that typically nests in large trees in riparian corridors as well as isolated trees remaining in or adjacent to agricultural fields in the Central Valley. However, in the City of Davis, and on the central campus, these hawks also nest in the large trees among buildings, roads, and dwellings.

This species forages in open grassland habitats and has adjusted to foraging in certain types of agricultural lands. The value of foraging habitat can be affected by a variety of characteristics, including density and availability of prey, proximity to disturbing features, and distance to nesting territories. Published information indicates these raptors typically forage within a 10 mile radius of nest sites but may range up to 18 miles from a nest site in search of suitable foraging habitat and available prey. Formal studies have shown that Swainson’s hawks will spend the majority of foraging time in close proximity to the nest site when high quality foraging habitat (measured by the abundance and availability of prey) is present.

The occurrence of the Swainson’s hawk in and around the campus is well documented. UC Davis conducted yearly surveys for Swainson’s hawk nests on the campus and within one half mile of the campus from 1991 through 1998. Project-specific surveys have been conducted annually since 1998. The results of these surveys documented approximately 20 active nests per year and a total of approximately 50 total nests within one-half mile of the campus over the decade. Most of the Swainson’s hawk nests are located in the Putah Creek riparian corridor.

**Trees**

A tree survey of the proposed site was conducted in accordance with the campus practice for identifying trees to preserve during a development or redevelopment project. The hotel addition site contains no trees. The tree survey identified seven trees that would be removed during construction of the road extension. The survey found that none of the trees were high ranking trees and none were heritage or specimen trees.

### 7.4.2 2003 LRDP EIR Standards of Significance

The 2003 LRDP EIR considers a biological resources impact significant if growth under the 2003 LRDP would:

- Result in 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 U.S. Fish and Wildlife Service (USFWS).
- Result in the “take” (defined as kill, harm, or harass) of any listed threatened or endangered species or the habitat of such species.
- Result in a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFG or USFWS.
- Result in a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, or coastal wetland) through direct removal, filling, hydrological interruption, or other means.

- 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.

- Conflict with any applicable local policies protecting biological resources such as a tree protection policy or ordinance.

An additional standard from the CEQA Guidelines' Environmental Checklist (“f” in the checklist below) was found not applicable to campus growth under the 2003 LRDP.

### 2003 LRDP EIR Impacts and Mitigation Measures

Impacts of campus growth under the 2003 LRDP through 2015-16 on biological resources are evaluated in Section 4.4 of the 2003 LRDP EIR. The proposed project is within the scope of analysis in the 2003 LRDP EIR and the significant and potentially significant biological resources impacts identified in the 2003 LRDP EIR that are relevant to the proposed project are presented below with their corresponding levels of significance before and after application of mitigation measures identified in the 2003 LRDP EIR. Mitigation measures are included to reduce the magnitude of LRDP cumulative impact 4.4-12 but this impact is identified as significant and unavoidable because the feasibility and/or implementation of mitigation falls within other jurisdictions and therefore cannot be guaranteed by the University of California.

<table>
<thead>
<tr>
<th>2003 LRDP EIR Impacts</th>
<th>Level of Significance Prior to Mitigation</th>
<th>Level of Significance After Mitigation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BIOLOGICAL RESOURCES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.4-4</td>
<td>Development allowed under the 2003 LRDP could result in the failure of nesting efforts by nesting raptors, including Swainson’s hawks or other birds of prey.</td>
<td>PS</td>
</tr>
<tr>
<td>4.4-5</td>
<td>Development allowed under the 2003 LRDP would result in the loss of active nest sites for Swainson’s hawk.</td>
<td>PS</td>
</tr>
<tr>
<td>4.4-7</td>
<td>Development allowed under the 2003 LRDP could result in the loss of potential habitat for the northwestern pond turtle from drainage improvement projects, bank stabilization measures and landscape maintenance activities within Riverine habitat along Putah Creek and the Arboretum Waterway.</td>
<td>PS</td>
</tr>
</tbody>
</table>
| 4.4-11                | Development under the 2003 LRDP could result in the removal of trees recognized to meet the campus' standards for important trees, including:  
  a. Heritage Trees: Healthy valley oak trees with trunk diameters of 33 inches or greater at a height of 54 inches from the ground.  
  b. Specimen Trees: Healthy trees or stands of trees that are of high value to the campus due to their size, species, extraordinary educational and research value, and/or other exceptional local importance. | PS | a. SU  
  b. LS |
| 4.4-12                | Development allowed under the 2003 LRDP would contribute 550 acres to the cumulative loss in the region of over 1,500 acres of Agricultural Land and Ruderal/Annual Grassland habitat for resident and migratory wildlife species including Swainson’s hawks and burrowing owls. | S | SU |

Levels of Significance: LS=Less than Significant, S=Significant, PS=Potentially Significant, SU=Significant and Unavoidable
Mitigation measures in the 2003 LRDP EIR that are applicable to the proposed project are presented below. Since these mitigation measures are already being carried out as part of implementation of the 2003 LRDP, they are considered part of the project description for purposes of project-level impact analysis and will not be readopted in this Initial Study or EIR. Nothing in this Initial Study in any way alters the obligations of the campus to implement 2003 LRDP EIR mitigation measures.

### 2003 LRDP EIR Mitigation Measures

#### BIOLOGICAL RESOURCES

- **4.4-4(a)** The campus shall conduct a pre-construction survey of trees on and adjacent to a project site during the raptor breeding season (approximately March 1 to August 31). Additionally, the campus shall conduct surveys within a ½-mile radius of the site to determine the presence or absence of any nesting Swainson’s hawks. The surveys shall be conducted by a qualified biologist during the same calendar year that the proposed activity is planned to begin to determine if any nesting birds-of-prey would be affected. If phased construction procedures are planned for the proposed activity, the results of the above survey shall be valid only for the season when it is conducted.
  
  • If any Swainson’s hawks are nesting within a one-half-mile radius of the project site or if other raptors are nesting in, on or adjacent to the project site, a qualified biologist shall determine the potential for disturbance to nesting raptors, including Swainson’s hawks. If the biologist determines that there is a significant potential for disturbance, the campus shall implement feasible changes in the construction schedule or make other appropriate adjustments to the project in response to the specific circumstances. If feasible project changes are not readily identifiable, the campus will consult with CDFG to determine what actions should be taken to protect the nesting efforts. If, after five years, a previously recorded nest site remains unoccupied by a Swainson’s hawk, it will no longer be considered as a Swainson’s hawk nest site subject to this mitigation.

- **4.4-4(b)** The campus shall continue to conduct annual surveys to determine the location of nesting Swainson’s hawks and other birds of prey on the campus outside the Putah Creek corridor. If nesting Swainson’s hawks are found during the survey at a previously unknown location within one-half mile of a project site and/or at a location closer to the project or more visually exposed to the project site than a nearby previously documented site, a qualified biologist shall, prior to project construction, determine the potential for disturbance to nesting Swainson’s hawks. If the biologist determines that there is a significant potential for disturbance, the campus shall implement feasible changes in the construction schedule or make other appropriate adjustments to the project in response to the specific circumstances (e.g. relocating noisy equipment or creating temporary sound barriers).

The implementation of LRDP Mitigations 4.4-4(a) and (b) shall be conducted under the supervision of a biologist whose qualifications include:

• A bachelor’s degree in biology or a related field;

• Two years of field experience related to nesting raptors; and

• Prior construction monitoring experience.

Further:

• All decisions of the qualified biologist shall be made in consultation with the California Department of Fish and Game;

• Monitoring shall be conducted for a sufficient time (minimum of 3 consecutive days following the initiation of construction) to verify that the nesting pair does not exhibit significant adverse reaction to construction activities (i.e., changes in behavioral patterns, reactions to construction noise, etc.); and

Nest site monitoring will continue for a minimum of once a week through the nesting cycle at that nest.

- **4.4-5** Mitigation 4.4-4(a) and (b) will be implemented, including pre-construction survey of trees on and adjacent to a project site during the raptor breeding season (approximately March 1 to August 31). If a Swainson’s hawk nest tree is present, the tree will be removed outside the nesting season (March-May).

- **4.4-7** The campus shall implement avoidance and minimization measures for the northwestern pond turtle, including but not limited to:
2003 LRDP EIR Mitigation Measures

BIOLICAL RESOURCES

- Pre-construction surveys prior to any disturbance of the project site
- Installation of silt fencing to prevent any pond turtles from entering the construction area

If work is performed in the water, seining of the area surrounding the site to relocate any northwestern pond turtles present

4.4-11 Before a project is approved under the 2003 LRDP, the campus will perform a tree survey of the project site. Grounds, the Office of Environmental Stewardship and Sustainability, and the Office of Design and Construction Management will provide input about tree classifications and will modify project design to avoid important trees if feasible. If a project cannot avoid an important tree, the following will apply:

a. If a project would necessitate removal of a Heritage Tree, no mitigation would be available to fully mitigate the impact, and the impact would be significant and unavoidable. However, implementation of Mitigation 4.4-2 would restore Valley Foothill Riparian Woodland habitat at Russell Ranch, and plantings in this area would include valley oaks.

b. If a project would necessitate removal of a Specimen Tree, the project would relocate the tree if feasible, or would replace the tree with the same species or species of comparable value (relocation or replacement should occur within the project area if feasible). This would reduce the impact to a less-than-significant level.

4.4-12 Implementation of LRDP Mitigations 4.4-1(a), (b), and (c); 4.4-2(a) and (b); 4.4-3(a) and (b); and 4.4-7(a) in combination with the Yolo County NCCP and Solano County HCP, including compliance with the regulatory and permitting requirements imposed by the USFWS and the CDFG.

7.4.4 Environmental Checklist and Discussion

BIOLOGICAL RESOURCES

Would the project…

<table>
<thead>
<tr>
<th>Impact to be Analyzed in the EIR</th>
<th>No Additional Analysis Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) 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 or U.S. Fish and Wildlife Service?</td>
<td>☐</td>
</tr>
<tr>
<td>b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?</td>
<td>☐</td>
</tr>
<tr>
<td>c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?</td>
<td>☐</td>
</tr>
<tr>
<td>d) 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?</td>
<td>☐</td>
</tr>
<tr>
<td>e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?</td>
<td>☐</td>
</tr>
<tr>
<td>f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?</td>
<td>☐</td>
</tr>
</tbody>
</table>
a) **Plants**

The 2003 LRDP EIR found that development under the 2003 LRDP could result in the loss of special-status plant species (LRDP Impact 4.4-1). Because the project site is heavily disturbed from past activities and is compacted and covered by lawn, asphalt, concrete, or horticultural garden, the site does not provide suitable habitat for special-status plant species, no plant survey was required under LRDP Mitigation 4.4-1(a). No effect to special-status plant species would occur and no further analysis is required.

**Wildlife**

The project site and its immediate vicinity do not contain appropriate habitat for any of the special status species that are noted in the 2003 LRDP EIR as known to occur on campus or have potential habitat present on campus, including: northern California black walnut, burrowing owl, Swainson's hawk, valley elderberry longhorn beetle, California tiger salamander, chinook salmon, giant garter snake, steelhead, and northwestern pond turtle. Although Swainson’s hawks may use the agricultural fields and open grassland areas on the campus for foraging, such habitat is not present on the project site including the areas that would be disturbed in conjunction with the road extension and the utility connections. No suitable Swainson’s hawk’s nesting habitat is located on or immediately adjacent to the project site. Swainson’s hawks have nested within ½ mile of the project site, but all locations are over ¼ mile away, are screened by existing trees and buildings, and are in areas with high-levels of human activity. In accordance with LRDP Mitigation 4.4-4(a), the campus shall conduct a pre-construction survey for nesting Swainson’s hawk and then implement any necessary avoidance measures (as specified in LRPD Mitigation 4.4-4 (a)) to ensure that the nesting efforts of Swainson’s hawks are not disturbed. Project development would therefore result in no impacts on special status wildlife species and no further analysis is required.

The construction of a new storm drain outfall for the road extension project into the Arboretum Waterway would result in minor disturbances in the gabion wall on the south margin of the waterway. This area is potential habitat for northwestern pond turtles. Northwestern pond turtles are known to occur along Putah Creek and the North Fork Cutoff, and could be present in the suitable habitat of the Arboretum Waterway. Storm drain construction would involve minor excavation in the Arboretum bank and possible the incidental deposition of a small quantity of silt in the water. In compliance with LRDP Mitigation 4.4-7, the campus would perform a preconstruction survey for pond turtles at the storm drain outfall site; install silt fencing to exclude pond turtles; and if work is to be performed in the water, seine the waters around the construction site to capture any turtles that may be present and relocate them outside of the impact area. Implementation of these measures would reduce the potential impact to a less-than-significant level. No further analysis is required.

b,c) There are no riparian habitat or wetland areas within the immediate vicinity of the project site. No effect to riparian habitat or wetland areas would occur and no further analysis is required.

d) The Putah Creek corridor, which is the southern boundary of the campus, is the principal corridor for the movement of native resident and migratory fish and wildlife through the UC Davis campus. It is the regional connection between the hills in western Yolo County and the Sacramento River. The project is approximately 1 mile north of the Putah Creek corridor. Therefore, the project would not 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. No impact would occur and no further analysis is required.
e) The campus performs a tree survey of every project site that contains trees prior to project approval, and modifies the project design to the extent feasible to avoid tree removal or provide additional mitigation if removal of heritage or specimen trees cannot be avoided. There are no trees on the hotel expansion site and therefore no survey was necessary. There are seven trees on the project site for the road extension that would be removed during construction and a survey confirmed that these trees are not heritage or specimen trees. No impacts on heritage or specimen trees would occur, and no further analysis is required.

f) The campus does not fall within the boundaries of, nor is it adjacent to, an adopted regional Habitat Conservation Plan (HCP) or Natural Community Conservation Plan (NCCP). The campus has implemented two low-effects HCPs for Valley Elderberry Longhorn Beetle at Russell Ranch. However, the project site is not located at Russell Ranch. Therefore, the proposed project would not conflict with an adopted HCP or NCCP and no further analysis is required.
7.5  CULTURAL RESOURCES

7.5.1  Background

Section 4.5 of the 2003 LRDP EIR addresses the effects of campus growth under the 2003 LRDP on cultural resources. The following discussion summarizes information presented in the ‘Setting’ subsection of Section 4.5 of the 2003 LRDP EIR.

Campus

Cultural resources on campus include prehistoric and historic resources. Prehistoric resources are those sites and artifacts associated with the indigenous, non-Euroamerican population, generally dating prior to contact with people of European descent. Historic resources include structures, features, artifacts, and sites that date from Euroamerican settlement of the region.

Archaeological Resources

The campus lies in the ethnographic territory of the Patwin. Since 1991, extensive archaeological investigations (survey, testing, monitoring, and/or excavation) have been conducted on campus in conjunction with the development of campus projects (Nadolski 2003). Patwin sites, including burials, have been identified at several locations on the central campus. Areas within 800 feet of the banks of the historic channel of Putah Creek and its tributaries and slough channels, and within 800 feet of specific known archaeological sites, have been identified as archaeologically sensitive zones on campus.

Historic Resources

The earliest direct historic contacts in the Davis area probably occurred during 1806 to 1808. Farming on a large scale began in the Davis area in the 1850s. A “university farm” was established at Davis in 1906, classes began in 1909, and Davis became a general University of California campus in 1959. No properties within the campus are listed on the National Register of Historic Places. Six properties on or near the campus have been recorded with the California Inventory of Historic Resources. Historic architectural features typically must be at least 50 years of age to be considered for listing on the California Register of Historical Resources (CRHR).

Project Site

Cultural resource surveys have previously been conducted on and around the project area. The results of the prior surveys have indicated the potential for significant cultural resources in this portion of the UC Davis campus. As part of the evaluation in upcoming the project EIR, UC Davis will compile the results of the prior surveys and conduct additional surveys to evaluate all of the areas that could be disturbed by the proposed project.

7.5.2  2003 LRDP EIR Standards of Significance

In addition to the following archaeological and historical standards of significance identified in the 2003 LRDP EIR, an additional standard from the CEQA Guidelines’ Environmental Checklist ((propertyName in the checklist below) was found not applicable to campus growth under the 2003 LRDP.
Archaeological Resources

The 2003 LRDP EIR considers an impact on archaeological resources significant if growth under the 2003 LRDP would:

- Cause a substantial adverse change in the significance of a unique archaeological resource pursuant to CEQA Guideline § 15064.5.
- Disturb any human remains, including those interred outside of formal cemeteries.

A “unique archaeological resource” is defined under CEQA through Public Resources Code Section 21083.2(g). A unique archaeological resource implies an archaeological artifact, object, or site about which it can be clearly demonstrated that there is a high probability that it meets one of the following criteria:

- The archaeological artifact, object, or site contains information needed to answer important scientific questions and there is a demonstrable public interest in that information, or
- The archaeological artifact, object, or site has a special and particular quality, such as being the oldest of its type or the best available example of its type, or
- The archaeological artifact, object, or site is directly associated with a scientifically recognized important prehistoric or historic event or person.

For a resource to qualify as a unique archaeological resource, the agency must determine that there is a high probability that the resource meets one of these criteria without merely adding to the current body of knowledge (PRC § 21083.2(g)). An archaeological artifact, object, or site that does not meet the above criteria is a nonunique archaeological resource (PRC § 21083.2(h)). An impact on a nonunique resource is not a significant environmental impact under CEQA (CEQA Guidelines § 15064.5(c)(4)). If an archaeological resource qualifies as a historical resource under CRHR or other criteria, then the resource is treated as a historical resource for the purposes of CEQA (CEQA Guidelines § 15064.5(c)(2)).

Section 15064.5 of the CEQA Guidelines assigns special importance to human remains and specifies procedures to be used when Native American remains are discovered. These procedures are detailed under PRC § 5097.98. California Health and Safety Code § 7050.5(b) prohibits disturbance of human remains uncovered by excavation until the Coroner has made a finding relative to PRC § 5097 procedures.

Historical Resources

For the purposes of this EIR, as mandated by PRC § 21083.2, impacts of the proposed project on an historical resource would be considered significant if it would:

- cause a significant adverse change in the significance of a historical resource as defined in CEQA Guidelines § 15064.5.

The standards of significance for historical resources are based on Appendix G and § 15064.5 of the CEQA Guidelines. Accordingly, historical resources include resources listed in, or determined to be eligible for listing in, the CRHR; resources included in a qualifying local register (such as the City of Davis Register of Historic Resources); and resources that the lead agency determines to meet the criteria for listing in the CRHR. These criteria may apply to any historic built environmental feature, and to
historic or prehistoric archaeological sites. Properties or sites that are eligible for inclusion in the CRHR are termed—historical resources.” Under the provisions of CEQA Guidelines § 15064.5(a)(3), generally a lead agency should find that a property is historically significant if it determines that the property meets one or more of the criteria for listing on the CRHR, which extend to any building, structure, feature or site that:

- is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage;
- is associated with lives of persons important in our past;
- embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
- has yielded, or may be likely to yield, information important in prehistory or history

With few exceptions, to qualify as a historical resource a property must be at least 50 years old and also must retain physical integrity and integrity to its period of significance. For historic structures and buildings, significantly altering the setting, remodeling, or moving the structure may diminish or destroy its integrity. However, under some conditions, a building that has been moved or altered may still retain its historic significance. Landscaping or landscape features may in some cases contribute to the significance of an historic architectural property. Such elements would be assessed as part of the evaluation of the related historic architectural property. Archaeological sites may also qualify as historical resources under CEQA Guideline Section 15064.5(a)(3). Archaeological sites most often are assessed relative to CRHR Criterion D (for potential to yield data important to history or prehistory). An archaeological deposit that has been extensively disturbed and archaeological artifacts found in isolation may not be eligible for listing on the CRHR, because the lack of stratigraphic context may reduce the potential for the resource to yield significant data. A resource that does not meet one of the criteria for eligibility to the CRHR is not a historical resource under CEQA, and impacts to such a property are not significant.

### 7.5.3 2003 LRDP EIR Impacts and Mitigation Measures

Cultural resources impacts of campus growth under the 2003 LRDP through 2015-16 on cultural resources are evaluated in Section 4.5 of the 2003 LRDP EIR. The proposed project will be evaluated to determine whether it is within the scope of analysis in the 2003 LRDP EIR. The following summarizes the impacts and adopted mitigation measures from the 2003 LRDP EIR. These need for and the efficacy of the 2003 LRDP EIR mitigation measures will be assessed in the EIR.

<table>
<thead>
<tr>
<th>2003 LRDP EIR Impacts</th>
<th>Level of Significance Prior to Mitigation</th>
<th>Level of Significance After Mitigation</th>
</tr>
</thead>
<tbody>
<tr>
<td>CULTURAL RESOURCES</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.5-1  Implementation of the 2003 LRDP could damage or destroy an archaeological resource or historic building or structure as the result of grading, excavation, ground disturbance or other project development.</td>
<td>PS</td>
<td>LS</td>
</tr>
<tr>
<td>4.5-2  Implementation of the LRDP could cause a substantial adverse change in the significance of a historical resource or unique archaeological resource, as defined in CEQA guidelines 15064.5, as the result of ground disturbance, alteration, removal or demolition associated with project development.</td>
<td>PS</td>
<td>LS</td>
</tr>
<tr>
<td>4.5-3  Implementation of the LRDP could cause a substantial adverse change in the significance of a historical resource or unique archaeological resource, as defined</td>
<td>S</td>
<td>SU</td>
</tr>
</tbody>
</table>
### 2003 LRDP EIR Impacts

#### CULTURAL RESOURCES

<table>
<thead>
<tr>
<th>Level of Significance Prior to Mitigation</th>
<th>Level of Significance After Mitigation</th>
</tr>
</thead>
<tbody>
<tr>
<td>in CEQA guidelines 15064.5, and the values that contribute to the significance of the resource cannot be preserved through documentation and data recovery.</td>
<td></td>
</tr>
<tr>
<td>4.5-4 Implementation of the 2003 LRDP could disturb human remains, including those interred outside of formal cemeteries.</td>
<td>PS LS</td>
</tr>
<tr>
<td>4.5-5 Development under the 2003 LRDP would contribute to cumulative damage to and loss of the resource base of unique archaeological resources and historical resources (including archaeological sites and historic buildings and structures) in Yolo and Solano counties.</td>
<td>S SU</td>
</tr>
</tbody>
</table>

Levels of Significance: LS=Less than Significant, S=Significant, PS=Potentially Significant, SU=Significant and Unavoidable

Mitigation measures from the 2003 LRDP EIR are presented below.

### 2003 LRDP EIR Mitigation Measures

#### CULTURAL RESOURCES

<table>
<thead>
<tr>
<th>4.5-1(a)</th>
<th>As early as possible in the project planning process, the campus shall define the project’s area of potential effects (APE) for archaeological resources and, if structures are present on the site, for historic structures. The campus shall determine the potential for the project to result in cultural resource impacts, based on the extent of ground disturbance and site modification anticipated for the proposed project. Based on this information, the campus shall:</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) Prepare an inventory of all buildings and structures within the APE that will be 50 years of age or older at the time of project construction for review by a qualified architectural historian. If no structures are present on the site, there would be no impact to historic built environment resources from the project. If potentially historic structures are present, LRDP Mitigation 4.5-1(c) shall be implemented.</td>
<td></td>
</tr>
<tr>
<td>(ii) Determine the level of archaeological investigation that is appropriate for the project site and activity, as follows:</td>
<td></td>
</tr>
<tr>
<td>• Minimum: excavation less than 18 inches deep and in a relatively small area (e.g., a trench for lawn irrigation, tree planting, etc.). Implement LRDP Mitigation 4.5-1(b)(i).</td>
<td></td>
</tr>
<tr>
<td>• Moderate: excavation below 18 inches deep and/or over a large area on any site that has not been characterized and is not suspected to be a likely location for archaeological resources. Implement LRDP Mitigation 4.5-1(b)(i) and (ii).</td>
<td></td>
</tr>
<tr>
<td>• Intensive: excavation below 18 inches and/or over a large area on any site that is within 800 feet of the historic alignment of Putah Creek, or that is adjacent to a recorded archaeological site. Implement LRDP Mitigation 4.5-1(i), (ii) and (iii).</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4.5-1(b)</th>
<th>During the planning phase of the project, the campus shall implement the following steps to identify and protect archaeological resources that may be present in the APE:</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) For project sites at all levels of investigation, contractor crews shall be required to attend an informal training session prior to the start of earth moving, regarding how to recognize archaeological sites and artifacts. In addition, campus employees whose work routinely involves disturbing the soil shall be informed how to recognize evidence of potential archaeological sites and artifacts. Prior to disturbing the soil, contractors shall be notified that they are required to watch for potential archaeological sites and artifacts and to notify the campus if any are found. In the event of a find, the campus shall implement item (vi), below.</td>
<td></td>
</tr>
<tr>
<td>(ii) For project sites requiring a moderate or intensive level of investigation, a surface survey shall be conducted by a qualified archaeologist during project planning and design and prior to soil disturbing activities. For sites requiring moderate investigation, in the event of a surface find, intensive investigation will be implemented, as per item (iii), below. Irrespective of findings, the qualified archaeologist shall, in consultation with the campus, develop an archaeological monitoring plan to be implemented during the construction phase of the project. The frequency and duration of monitoring shall be adjusted in accordance with the findings and recommendations of the archaeologist.</td>
<td></td>
</tr>
</tbody>
</table>
CULTURAL RESOURCES

with survey results, the nature of construction activities, and results during the monitoring period. In the event of a discovery, the campus shall implement item (vi), below.

(iii) For project sites requiring intensive investigation, irrespective of subsurface finds, the campus shall retain a qualified archaeologist to conduct a subsurface investigation of the project site, to ascertain whether buried archaeological materials are present and, if so, the extent of the deposit relative to the project’s area of potential effects. If an archaeological deposit is discovered, the archaeologist will prepare a site record and file it with the California Historical Resource Information System.

(iv) If it is determined through step (iii), above, that the resource extends into the project’s area of potential effects, the resource will be evaluated by a qualified archaeologist, who will determine whether it qualifies as a historical resource or a unique archaeological resource under the criteria of CEQA Guidelines § 15064.5. If the resource does not qualify, or if no resource is present within the project area of potential effects (APE), this will be noted in the environmental document and no further mitigation is required unless there is a discovery during construction (see (vi), below).

(v) If a resource within the project APE is determined to qualify as an historical resource or a unique archaeological resource (as defined by CEQA), the campus shall consult with the qualified archaeologist 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 will permit avoidance or substantial preservation in place of the resource. If avoidance or substantial preservation in place is not possible, the campus shall implement LRDP Mitigation 4.5-2(a).

(vi) If a resource is discovered during construction (whether or not an archaeologist is present), all soil disturbing work within 100 feet of the find shall cease. The campus 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. LRDP Mitigation 4.5-1(b), steps (iii) through (vii) shall be implemented.

(vii) A written report of the results of investigations will be prepared by a qualified archaeologist and filed with the appropriate Information Center of the California Historical Resources Information System.

4.5-2(a) For an archaeological site that has been determined by a qualified archaeologist to qualify as an historical resource or a unique archaeological resource through the process set forth under LRDP Mitigation 4.5-1(b), and where it has been determined under LRDP Mitigation 4.5-1(b) that avoidance or preservation in place is not feasible, a qualified archaeologist, in consultation with the campus, shall:

(i) Prepare a research design and archaeological data recovery plan for the recovery that will 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.

(ii) 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.

(iii) If, in the opinion of the qualified archaeologist and in light of the data available, the significance of the site is such that data recovery cannot capture the values that qualify the site for inclusion on the CRHR, the campus shall reconsider project plans in light of the high value of the resource, and implement more substantial modifications to the proposed project that would allow the site to be preserved intact, such as project redesign, placement of fill, or project relocation or abandonment. If no such measures are feasible, the campus shall implement LRDP Mitigation 4.5-3.

4.5-3 If a significant historic resource or unique archaeological resource cannot be preserved intact, before the property is damaged or destroyed the campus shall ensure that the resource is appropriately documented, as follows.

(i) For a built environment feature, appropriate documentation is described under LRDP 4.5-2 (b)

(ii) For an archaeological site, a program of research-directed data recovery shall be conducted and reported, consistent with LRDP Mitigation 4.5-2(a).

4.5-4(a) Implement LRDP Mitigation 4.5-1, 4.5-2 and 4.5-3 to minimize the potential for disturbance or destruction of human remains in an archaeological context and to preserve them in place, if feasible.

4.5-4(b) Provide a representative of the local Native American community an opportunity to monitor any excavation
### 2003 LRDP EIR Mitigation Measures

#### CULTURAL RESOURCES

<table>
<thead>
<tr>
<th>Impact to be Analyzed in the EIR</th>
<th>No Additional Analysis Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Would the project…</td>
<td></td>
</tr>
<tr>
<td>a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?</td>
<td>☐</td>
</tr>
<tr>
<td>b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?</td>
<td>☑</td>
</tr>
<tr>
<td>c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?</td>
<td>☐</td>
</tr>
<tr>
<td>d) Disturb any human remains, including those interred outside of formal cemeteries?</td>
<td>☑</td>
</tr>
</tbody>
</table>

a) Project activities would result in no disturbance to historic resources. The hotel expansion site is a landscaped area that was recently graded and used for construction staging. It includes no structures and no structures would be affected by construction of the hotel expansion. The road extension with utility installations and roadway modifications would take place in an area with no buildings and no structures. Accordingly, the road extension components would have no effect on historic resources. No impact would occur.

b,d) The proposed hotel expansion would take place on an area that was recently excavated and graded as part of the construction for the existing hotel. The proposed project would excavate these soils a second time to construction the foundation for the hotel expansion. The proposed excavation for the hotel would not remove previously disturbed soils in the hotel area. During construction of the hotel, archaeological monitoring during the ground disturbing activities found no presence of archaeological
resources at the hotel site. Accordingly, the hotel expansion would have no effect on archaeological resources.

Project activities for the road extension and would result in soil excavation in areas that could contain archaeological resources. The impacts from the proposed excavation will be evaluated in the project EIR.

c) Project activities would result in soil excavation on the UC Davis campus in soils that are alluvial deposits. These soils do not contain paleontological resources or unique geologic features. The UC Davis campus is more than 100 years old and the on-going excavation projects at UC Davis have not resulted in discoveries of paleontological resources or unique geologic features. No impact would occur.
7.6 GEOLOGY, SOILS, & SEISMICITY

7.6.1 Background

Section 4.6 of the 2003 LRDP EIR addresses the geology, soils, and seismicity effects of campus growth under the 2003 LRDP. The following discussion summarizes information presented in the ‘Setting’ subsection of Section 4.6 of the 2003 LRDP EIR.

Campus

The campus is located within the Putah Creek Plain of California’s Great Valley geomorphic province. Except for the somewhat raised elevation along the levee adjacent to Putah Creek, the campus is topographically flat. Soils on campus generally contain a high amount of silt and clay, and as a result, are moderately to slowly permeable and have slow runoff rates, minimal erosion hazards, and moderate to high shrink-swell potential (the potential for soil volume to change with a loss or gain in moisture). The predominant soil constraint to construction on campus is soil shrink-swell potential.

A series of low foothills, including the Dunnigan Hills, the Capay Hills, and the English Hills, lie approximately 20 miles west of the campus at the eastern base of the Coast Range. The presence of subsurface thrust faults within these regional foothills and within 100 miles of the campus indicates the potential for seismic ground shaking in the Davis region. The Davis region is not located within an Alquist-Priolo Fault Zone as defined in the Alquist-Priolo Earthquake Fault Zoning Act, which is designed to prohibit the construction of new structures for human occupancy across active faults. According to the California Geological Survey’s Probabilistic Seismic Hazard Assessment for the State of California, the peak ground acceleration with a 10 percent probability of being exceeded in 50 years is 0.2 to 0.3g on the central campus, increasing to 0.3 to 0.4g on the western portion of Russell Ranch (CDOC 1996). By comparison, in most parts of the San Francisco Bay Area, the peak ground acceleration is 0.5g or greater. Likely effects of ground shaking during a probable maximum intensity earthquake for the area could include structural damage to stucco, masonry walls, and chimneys, which could expose people to risks associated with falling objects and potential building collapse.

Project Site

The engineering and design process for the project facilities will incorporate the findings from the geotechnical survey to ensure adequate design for compliance with the California Building Code.

7.6.2 2003 LRDP EIR Standards of Significance

The 2003 LRDP EIR considers an impact related to geology, soils, and seismicity significant if growth under the 2003 LRDP would:

- Expose people or structures to potential substantial adverse effects involving strong seismic ground shaking.
- Expose people or structures to potential substantial adverse effects involving seismic-related ground failure.
- Result in substantial soil erosion or the loss of topsoil. (Impacts associated with the effect of erosion on water quality are addressed in Section 7.9 Hydrology & Water Quality.)
• Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse.
• Be located on expansive soil, creating substantial risks to life or property.
• Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater.

Additional standards from the CEQA Guidelines’ Environmental Checklist (a,i) and (a,iv) in the checklist below) were found not applicable to campus growth under the 2003 LRDP.

7.6.3 2003 LRDP EIR Impacts and Mitigation Measures

Geology, soils, and seismicity impacts of campus growth under the 2003 LRDP through 2015-16 related to geology, soils, and seismicity are evaluated in Section 4.6 of the 2003 LRDP EIR. As analyzed in Section 4 of this Initial Study, the proposed project is within the scope of analysis in the 2003 LRDP EIR. No significant impacts identified in the 2003 LRDP EIR related to geology, soils, and seismicity are relevant to the proposed project.

7.6.4 Environmental Checklist and Discussion

<table>
<thead>
<tr>
<th>GEOLOGY, SOILS, &amp; SEISMICITY</th>
<th>Impact to be Analyzed in the EIR</th>
<th>No Additional Analysis Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:</td>
<td>☐</td>
<td>✓</td>
</tr>
<tr>
<td>i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.</td>
<td>☐</td>
<td>✓</td>
</tr>
<tr>
<td>ii) Strong seismic ground shaking?</td>
<td>☐</td>
<td>✓</td>
</tr>
<tr>
<td>iii) Seismic-related ground failure, including liquefaction?</td>
<td>☐</td>
<td>✓</td>
</tr>
<tr>
<td>iv) Landslides?</td>
<td>☐</td>
<td>✓</td>
</tr>
<tr>
<td>b) Result in substantial soil erosion or the loss of topsoil?</td>
<td>☐</td>
<td>✓</td>
</tr>
<tr>
<td>c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?</td>
<td>☐</td>
<td>✓</td>
</tr>
<tr>
<td>d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?</td>
<td>☐</td>
<td>✓</td>
</tr>
<tr>
<td>e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?</td>
<td>☐</td>
<td>✓</td>
</tr>
</tbody>
</table>

a,i) The UC Davis campus and the surrounding area are not located within an Alquist-Priolo Earthquake Fault Zone, and the closest known active fault rupture zones are over 30 miles away. Therefore, no impact would occur and no further analysis is required.
a,ii) The campus is located in a seismically active area that could experience ground shaking, liquefaction, and settlement. The peak ground acceleration for the main campus is estimated to be 0.2 to 0.3g, and 0.3 to 0.4g on the western portion of Russell Ranch. This intensity of seismic ground shaking has the potential to dislodge objects from shelves and to damage or destroy buildings and other structures. In the case of such a seismic event, people on campus and in the area would be exposed to these hazards.

The campus minimizes hazards associated with damage or destruction to buildings and other structures by reviewing and approving all draft building plans for compliance with the California Building Code (CBC), which includes specific structural seismic safety provisions. The campus also adheres to the University of California Seismic Safety Policy, which requires anchorage for seismic resistance of nonstructural building elements such as furnishings, fixtures, material storage facilities, and utilities that could create a hazard if dislodged during an earthquake. Therefore, the project-level impact associated with risks due to seismic ground shaking would be less than significant. No further analysis is required.

In addition, it is reasonable to assume that all regional jurisdictions would enforce the seismic provisions of the CBC, and therefore the cumulative impact is also considered less than significant. No further analysis is required.

a,iii) See the discussion in item (c) below.

a,iv) The UC Davis campus and the surrounding area are characterized by flat topography and therefore would not be subject to landslides. No impact would occur and no further analysis is required.

b) The soil types that occur on the UC Davis campus generally, including the project site, contain a high amount of silt and clay, and these soil types have minimal erosion hazard associated with them (see pages 4.6-1,2 and Figure 4.6-1 of the 2003 LRDP EIR). Therefore, this impact was determined to be less than significant in the 2003 LRDP EIR (2003 LRDP EIR, page 4.6-8 and 4.8-32). The potential for soil erosion during construction is addressed in items (a) and (c) in Section 7.9 Hydrology & Water Quality. Once the proposed building, roadway, and associated utility connections are constructed, the site soils would be underneath pavement or landscaping, and there would be minimal potential for soil erosion. The impact is considered less than significant and no further analysis is required.

c) The potential for liquefaction on the campus is generally low because the depth to groundwater is relatively large (30 to 80 feet, depending on the season). Furthermore, as discussed above for (a,ii), campus policy requires compliance with the CBC and the University of California Seismic Safety Policy, which include structural and nonstructural seismic safety provisions. Complying with the provisions of the CBC requires that a geotechnical investigation be performed to provide data for the architect and/or engineer to responsibly design the project. Geotechnical investigations address the potential for liquefaction, lateral spreading, and other types of ground failure. Therefore, because the project will comply with the CBC and the University of California Seismic Safety Policy, impacts associated with seismic-related ground failure would be less than significant. No further analysis is required.

The Davis area subsided by approximately 2 inches between 1999 and 2002. Because the subsidence is regional, unlike local differential settlement, it would not affect building foundations. Subsidence can adversely affect utilities such as storm drains which rely on gradient for gravity-driven flow if the differential subsidence across the length of the pipeline causes the gradient of the pipelines to change direction. On the campus, the differential subsidence is about 0.4 inch per mile. Thus, over a period of 10 years, the gradient of a pipeline could change by as much as 4 inches per mile. Gravity-driven
pipelines typically used for wastewater and storm water are designed with gradients between 0.5 and 1 percent (27 to 53 feet drop per mile). Given these gradients, the small potential change of about 4 inches per mile over a period of 10 years would not affect the functioning of existing and proposed storm drains or other utilities. For the same reasons presented above and the short lengths of the project’s utility connections, regional subsidence would not result in adverse impacts on project facilities. No further analysis is required.

d) The soils in several areas of the campus have high shrink/swell potential and could, on a site-specific basis, have the potential to create risk to life or property. Campus policy requires compliance with the CBC, which includes provisions for construction on expansive soils such as proper fill selection, moisture control, and compaction during construction. Complying with the provisions of the CBC requires that a geotechnical investigation be performed to provide data for the architect and/or engineer to responsibly design the project. The project will comply with the CBC, which will ensure that this impact is less than significant. No further analysis is required.

e) The 2003 LRDP EIR identifies that an impact would result if soils are incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems. No septic tanks or alternative wastewater disposal systems are included in the proposed project, and there would be no impact. No further analysis is required.
7.7 **GREENHOUSE GAS EMISSIONS**

7.7.1 **Background**

Since the publication of the 2003 LRDP EIR, checklist questions related to greenhouse gas emission have been added to Appendix G of the CEQA Guidelines as new Section VII, which require an evaluation of the potential of the proposed project to generate greenhouse gases that may contribute significantly to global climate change. Global climate change refers to any significant change in climate measurements, such as temperature, precipitation, or wind, lasting for an extended period (i.e., decades or longer).Climate change may result from:

- Natural factors, such as changes in the sun’s intensity or slow changes in the Earth’s orbit around the sun;
- Natural processes within the climate system (e.g., changes in ocean circulation, reduction in sunlight from the addition of GHG and other gases to the atmosphere from volcanic eruptions); and
- Human activities that change the atmosphere’s composition (e.g., through burning fossil fuels) and the land surface (e.g., deforestation, reforestation, urbanization, desertification).

The primary effect of global climate change has been a rise in the average global tropospheric temperature of 0.2° Celsius per decade, determined from meteorological measurements worldwide between 1990 and 2005. Climate change modeling using 2000 emission rates shows that further warming is likely to occur, which would induce further changes in the global climate system during the current century.

The term ―greenhouse gases” (GHGs) is used for human activity-generated gases that are considered as contributing to climate change. State law defines GHGs to include carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF6).

**Campus**

The UC Davis campus has several sources of GHG emissions, including stationary combustion sources such as a central plant, boilers, and emergency generators; mobile combustion sources (fleet vehicles and buses); purchased electricity; faculty, staff and student commute trips; agricultural operations; landscape and building maintenance; a landfill; and a wastewater treatment plant.

UC Davis has prepared the 2009-2010 Climate Action Plan (CAP) for both the Davis and Sacramento campuses, as well as outlying facilities. The CAP describes and addresses policy and regulatory requirements of: (1) the UC Policy on Sustainable Practices; (2) AB 32; (3) the American College and University Presidents Climate Commitment; (4) CEQA; and (5) US EPA reporting requirements.

The CAP provides documentation of how campus GHG emissions are calculated, a report of current (2008) emissions, estimates of past (to 1990) and future emissions (to 2020), a statement of GHG

---

4 Ibid.
emission reduction goals, a characterization of options and methods to reduce emissions, and a blueprint for future action.

The CAP focuses on emissions related to campus operations, instead of commuting and air travel, because emissions related to commuting and air travel are less than one-quarter those of campus operations. The CAP provides an analysis of commuting and air travel reduction options, but does not quantify emissions reductions for those options.

Calculated emissions for all of UC Davis, excluding commuting and air travel, for 2000 are 246,000 MTCO2e and for 1990 are 142,000 MTCO2e. In 2008, inventoried emissions (in CCAR), excluding commuting and air travel, totaled 239,000, indicating that UC Davis had already met the 2014 target. Thus, the CAP defined a new emissions target of 210,000 MTCO2e, almost 15 percent below the 2000 emissions, as the new 2014 target. The 2020 target, to reach 1990 emissions, is about 40 percent below the 1990 emissions.

Project Site

The project site footprint portion of the hotel addition and the roadway extension are currently vacant, and do not generate any direct or indirect GHG emissions.

7.7.2 2003 LRDP EIR Standards of Significance

The 2003 LRDP EIR did not evaluate the impacts of campus growth on global climate as this potential impact was not considered in CEQA documents at that time.

7.7.3 2003 LRDP EIR Impacts and Mitigation Measures

Not applicable.

7.7.4 Environmental Checklist and Discussion

<table>
<thead>
<tr>
<th>Greenhouse Gas Emissions</th>
<th>Impact to be Analyzed in the EIR</th>
<th>No Additional Analysis Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Would the project…</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?</td>
<td>✔️</td>
<td>❌</td>
</tr>
<tr>
<td>b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?</td>
<td>✔️</td>
<td>❌</td>
</tr>
</tbody>
</table>

a,b) Project activities would result in greenhouse gas emissions from construction equipment and long-term operation of the project. Although the project's emissions are anticipated to be low, the impact from these emissions will be evaluated in the project EIR.
7.8 HAZARDS & HAZARDOUS MATERIALS

7.8.1 Background

Section 4.7 of the 2003 LRDP EIR addresses the hazards and hazardous materials effects of campus growth under the 2003 LRDP. The following discussion summarizes information presented in the ‘Setting’ subsection of Section 4.7 of the 2003 LRDP EIR.

Campus

A variety of hazardous materials are used on campus during the course of daily operations. Hazardous chemicals used on campus include: chemical solvents, reagents, and aromatic hydrocarbons that are used in campus laboratories; pesticides, fungicides, and herbicides used by agricultural programs and in landscape maintenance; relatively small amounts of solvents, paints, and acids used by fine arts programs; gasoline and diesel fuels, oils and lubricants, antifreeze, cleaning solvents and corrosives, paints and paint thinners, and freon refrigerants used in vehicle and building maintenance. In addition, radioactive materials, biohazardous materials, and laboratory animals are used in teaching and research activities. The use of hazardous materials on campus generates hazardous byproducts that must eventually be handled and disposed of as hazardous wastes.

Generation, transportation, and disposal of hazardous wastes are regulated by various agencies. The lead federal regulatory agency is the Environmental Protection Agency. The State Department of Toxic Substances Control (DTSC) has primary state regulatory responsibility but can delegate enforcement authority to local jurisdictions that enter into agreements with the state agency, as it did with Yolo County Department of Environmental Health (YCDEH) under the Certified Unified Program Agency (CUPA) program.

The campus’ Office of Environmental Health and Safety (EH&S) coordinates most local, state, and federal regulatory compliance functions related to the campus’ health, safety, and environmental issues. EH&S performs safety education and training, regulatory interpretation and applicability, approval of potentially hazardous procedures, resolution of safety problems, surveillance, and monitoring. In addition, EH&S provides guidance for several campus safety programs, including: the Chemical Inventory System, which tracks inventory and use of hazardous materials on campus; the CUPA Self-Audit Program, which complies with the terms of an agreement with the YCDEH; development of laboratory-specific Chemical Hygiene Plans; the Radiation and X-Ray Safety Programs; and the Biological Safety Administrative Advisory Committee. EH&S is also a working partner in such campus administrative advisory groups as the Chemical Safety Committee, the Radiation Safety Committees, the Animal Use and Care Committee, and the Biological Safety Committee. External administrative and benchmarking reviews of the EH&S programs are conducted periodically to identify means of further improving the programs.

The proposed hotel addition will utilize cleaning and building maintenance products such as bleach, paint, grease, and hydraulic fluid that could be hazardous and would be subject to applicable handling, transportation, and disposal regulations.

Project Site

The proposed project site for the hotel addition is currently a landscaped area adjacent to the existing hotel building. The site of the hotel addition and the site for the roadway improvements will be screened for potential environmental contamination prior to project approval.
7.8.2 2003 LRDP EIR Standards of Significance

The 2003 LRDP EIR considers a hazards and hazardous materials impact significant if growth under the 2003 LRDP would:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.
- 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.
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within ¼ mile of an existing or proposed school.
- Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment.
- For a project within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, result in a safety hazard for people residing or working in the project area.
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

Additional standards from the CEQA Guidelines’ Environmental Checklist (“f” and “h” in the checklist below) were found not applicable to campus growth under the 2003 LRDP.

7.8.3 2003 LRDP EIR Impacts and Mitigation Measures

Impacts of campus growth under the 2003 LRDP through 2015-16 related to hazards and hazardous materials are evaluated in Section 4.7 of the 2003 LRDP EIR. The proposed project is within the scope of analysis in the 2003 LRDP EIR and potentially significant hazards and hazardous materials impacts identified in the 2003 LRDP EIR that are relevant to the proposed project are presented below with their corresponding levels of significance before and after application of mitigation measures identified in the 2003 LRDP EIR. In addition, LRDP Impact 4.7-12, presented below, are considered less than significant prior to mitigation, but the 2003 LRDP EIR identified mitigation to further reduce the significance of these impacts. Less than significant impacts without mitigation measures are not presented here.

<table>
<thead>
<tr>
<th>2003 LRDP EIR Impacts</th>
<th>Level of Significance Prior to Mitigation</th>
<th>Level of Significance After Mitigation</th>
</tr>
</thead>
<tbody>
<tr>
<td>HAZARDS &amp; HAZARDOUS MATERIALS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.7-10</td>
<td>Implementation of the 2003 LRDP would increase use of hazardous materials by non-UC entities on campus, which could create hazards to the public or the environment under routine and upset conditions.</td>
<td>PS</td>
</tr>
<tr>
<td>4.7-12</td>
<td>Construction activities on campus under the 2003 LRDP would not expose construction workers and campus occupants to contaminated soil or groundwater.</td>
<td>LS</td>
</tr>
<tr>
<td>4.7-17</td>
<td>Campus development under the 2003 LRDP could physically interfere with the campus’ Emergency Operations Plan.</td>
<td>PS</td>
</tr>
</tbody>
</table>

Levels of Significance: LS=Less than Significant, S=Significant, PS=Potentially Significant, SU=Significant and Unavoidable
Mitigation measures in the 2003 LRDP EIR that are applicable to the proposed project are presented below. Since these mitigation measures are already being carried out as part of implementation of the 2003 LRDP, they are considered part of the project description, and assumed as part of the impact analysis and will not be readopted in this Initial Study or EIR. Nothing in this Initial Study in any way alters the obligations of the campus to implement 2003 LRDP EIR mitigation measures.

### 2003 LRDP EIR Mitigation Measures

**HAZARDS & HAZARDOUS MATERIALS**

**4.7-10** For projects proposed by non-UC entities on campus that involve laboratory space, non-UC entities shall be required, through contracts and agreements, to implement programs and controls that provide the same level of protection required of campus laboratories and departments. The following project-specific mitigation measures would be implemented for non-UCD tenants:

(i) Non-UC entities shall submit the qualifications of designated laboratory directors to UC Davis EH&S Office prior to commencing laboratory operations. Such documentation shall be in the form of educational and professional qualifications/experience.

(ii) Non-UC entities shall submit certification of compliance with NIH biosafety principles to the UC Davis EH&S Office prior to commencing on-site research or pilot plant manufacturing activities. Non-UC entities shall submit copies of completed medical waste management plans, biosafety management plans, inventories of infectious or genetically modified agents, applicable permits and updates.

(iii) If hazardous material quantities are proposed to be increased above applicable threshold quantities as defined in California Code of Regulations, Title 19, Division 2, Chapter 4.5, non-UC entities shall implement a Risk Management Plan/California Accidental Release Prevention Plan (RMP/Cal-ARP), which discusses the handling and storage of acutely hazardous materials on site. The RMP/Cal-ARP shall be approved by the CUPA and filed with the UC Davis EH&S Office prior to commencing proposed operations.

(iv) Non-UC entities shall submit certification to the UC Davis EH&S to verify that applicable requirements for handling and disposal of hazardous wastes have been met prior to commencing on-site research or pilot plant manufacturing activities. Non-UC entities shall submit copies of management plans for handling and disposal of hazardous wastes, and written verification of contracts with licensed waste disposal firms.

(v) Non-UC entities shall provide to campus EH&S copies of all required environmental reports to local, state, and federal environmental and safety regulators.

**4.7-12** The campus shall perform due diligence assessments of all sites where ground-disturbing construction is proposed.

**4.7-17** To the extent feasible, the campus shall maintain at least one unobstructed lane in both directions on campus roadways. At any time only a single lane is available due to construction-related road closures, the campus shall 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, the campus shall provide appropriate signage indicating alternative routes. To ensure adequate access for emergency vehicles when construction projects would result in temporary lane or roadway closures, the campus shall inform emergency services, including the UC Davis Police and Fire Departments, and American Medical Response, of the closures and alternative travel routes.
7.8.4 Environmental Checklist and Discussion

<table>
<thead>
<tr>
<th>HAZARDS &amp; HAZARDOUS MATERIALS</th>
<th>Impact to be Analyzed in the EIR</th>
<th>No Additional Analysis Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Would the project…</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>b) 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?</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?</td>
<td>☐</td>
<td>☑</td>
</tr>
</tbody>
</table>

a,b) Hazardous Chemicals

The proposed hotel addition will utilize cleaning and building maintenance products such as bleach, paint, grease, and hydraulic fluid that could be hazardous and would be subject to applicable handling, transportation, and disposal regulations. The hotel will be managed by a non-UC entity and the managing entity would be responsible for complying with all applicable regulations. The road extension components of the project would involve use of hazardous materials during construction such as gasoline, diesel fuel, and other petroleum based substances by the construction contractor to operate the construction equipment. The issue of non-UC entities utilizing hazardous materials on campus was addressed in the 2003 LRDP EIR in LRDP Mitigation 4.7-10(v) requiring non-UC entities to comply with and provide copies of all required environmental reports to the campus EH&S. The proposed project would comply with this requirement to ensure that hazardous chemicals are appropriately stored, handled, and transported. With implementation of 4.7(v), the potential impact would be less than significant.

The road extension components of the project would involve use of hazardous materials during construction such as gasoline, diesel fuel, and other petroleum based substances to operate the construction equipment.
Given the campus’ and local jurisdiction’s existing policies and compliance with state and federal regulations, the 2003 LRDP EIR found that cumulative impacts related to the use and transport of hazardous materials and the generation of hazardous waste are less than significant.

**Biohazardous Materials**

The project would not generate or use of biohazardous materials. No impact would occur.

**Laboratory Animals**

The project would not involve laboratory animals. No impact would occur.

c) There are no existing schools within ¼ mile of the project site. Childcare centers are currently located on the central campus but none are located within ¼ mile of the proposed project site. Therefore, the impact to those attending existing or proposed schools would be less than significant.

d) The Laboratory for Energy Related Research/South Campus Disposal site is the only campus site that is listed as a hazardous materials site pursuant to Government Code Section 65962.5. The proposed project would not disturb this site.

The 2003 LRDP EIR found that construction activities under the 2003 LRDP would not expose construction workers and campus occupants to contaminated soil or groundwater (Impact 4.7-12). Campus policy requires that due diligence surveys be performed for all proposed project sites as part of the project planning process. An updated search of federal, state, and local agency databases will be obtained as part of EIR preparation. Federal and state regulations require that workers who may be exposed to contaminants during the course of their jobs know of the presence of contamination and be properly trained. In addition, these regulations require that appropriate engineering and administrative controls and protective equipment be provided to reduce exposure to safe levels. The current campus due diligence policy and Cal/OSHA regulations minimize the exposure of construction workers to contaminants. In addition, if contaminants are identified on project sites, the campus would coordinate site remediation. No contamination has been identified on the project site or adjacent sites. Therefore, the impacts would be less than significant. To ensure that due diligence surveys are performed and to further reduce this less-than-significant impact, LRDP Mitigation 4.7-12 will be implemented as part of the proposed project.

e) The project site is located more than two miles from the University airport. No impact would occur.

f) The University Airport is a public use airport, not a private airstrip. No other airport facilities are within the immediate vicinity of the campus. No impact would occur and no further analysis is required. Refer to item e) above for a discussion of potential safety hazards associated with the University airport, a local public use airport.

g) The 2003 LRDP EIR found that implementation of the 2003 LRDP could interfere with the campus’ Emergency Operations Plan through construction-related road closures (LRDP Impact 4.7-17). Implementation of LRPD Mitigation 4.7-17 (requiring an open lane for emergency vehicles) will ensure that emergency vehicles are not delayed due to construction projects. No other potential impacts associated with interference of an adopted emergency response plan or emergency evacuation plan would occur. Accordingly, the potential impact would be less than significant.

h) Areas along Putah Creek are the only areas on campus that could be susceptible to wildland fires. Urbanization will not occur in close proximity to these areas under the 2003 LRDP because land
along Putah Creek is designated for Open Space and Teaching and Research Fields, and land adjacent to these open areas is designated primarily for Teaching and Research Fields and low density development. The project site is located approximately 1 mile north of Putah Creek. Therefore, no impact would occur and no further analysis is required.
7.9 HYDROLOGY & WATER QUALITY

7.9.1 Background

Section 4.8 of the 2003 LRDP EIR addresses the hydrology and water quality effects of campus growth under the 2003 LRDP. The following discussion summarizes information presented in the ‘Setting’ subsection of Section 4.8 of the 2003 LRDP EIR.

Campus

Surface Water Resources

The UC Davis campus is located in the Lower Sacramento watershed. Putah Creek, the principal waterway in the Davis area, originates from springs in the Mayacamas Mountains northwest of the campus, flows into Lake Berryessa, through Winters, along the southern boundary of Russell Ranch, along the southern boundary of UC Davis’ west and south campuses, and eventually into the Yolo Bypass, an overflow channel for the Sacramento River. The North Fork Cutoff and the Arboretum Waterway on campus follow the historic channel of Putah Creek, but currently have no natural flow. The North Fork Cutoff is a typically dry stream channel on the west campus that is currently occupied by sheep and cattle programs in the Department of Animal Science. The Arboretum Waterway serves as the storm water detention basin for the central campus.

UC Davis is a member of the Solano Project, and currently has rights to purchase 4,000 acre-feet of Putah Creek water from Lake Berryessa per year, although reductions in deliveries can occur during drought conditions. The water is delivered to the southwest corner of the campus via an underground pipeline. UC Davis also has rights to surface water from Putah and Cache Creeks. The campus has not used this water in the recent past, but the tenant farmer at Russell Ranch uses approximately 3,750 acre-feet of water per year from Putah and Cache Creeks (via Willow Canal) for irrigation of commercial crops.

The quantity and quality of flows in Putah Creek are highly variable and depend on releases from Lake Berryessa, precipitation, storm water runoff, and treated effluent discharge. The campus’ tertiary level Wastewater Treatment Plant (WWTP) is the largest discharger of treated effluent to Putah Creek. The plant is regulated under a National Pollutant Discharge Elimination System (NPDES) Waste Discharge Requirement (WDR) permit issued by the Central Valley Regional Water Quality Control Board (CVRWQCB).

Groundwater Resources

The campus is underlain by sand and gravel alluvial deposits that include deep and shallow/intermediate depth aquifers. Deep gravel and sand aquifers underlie the campus between 600 to 1,500 feet below ground surface and supply the campus domestic/fire system. Historic annual domestic water use on campus over the past three decades has ranged from less than 600 million gallons per year (mgy) during drought conditions to nearly 900 mgy (UC Davis 1997). Despite the campus’ significant growth in recent decades, the campus’ deep aquifer demands have not significantly increased since the late 1960s (Ludorff and Scalmanini 2003), a trend that reflects the success of the campus’ water conservation efforts.

Shallow/intermediate depth sand and gravel aquifers underlie the campus at depths from 150 to 800 feet below ground surface and supply the campus utility water system, main campus agricultural water needs, and campus and tenant farmer irrigation needs at Russell Ranch. Over the past ten years, an average of approximately 2,657 acre-feet per year of shallow/intermediate aquifer water was used for agricultural purposes on campus, including approximately 1,813 acre-feet on the main campus and approximately 844
acre-feet at Russell Ranch (UC Davis Agricultural Services 2003, UC Davis ORMP 2003c). Water levels in the shallow/intermediate aquifer vary seasonally and strongly correlate to precipitation. A generally upward recharge trend over the period from 1957 to 2002 indicates that there has not been long-term overdraft of the shallow/intermediate depth aquifers (Ludorff and Scalmanini 2003).

Regional groundwater quality is generally characterized as having high mineral content. Calcium, magnesium, and sulfates have been identified as the dominant problematic constituents.

Flooding & Drainage

On campus, the South Fork of Putah Creek, the North Fork Cutoff, and the Arboretum Waterway channels are designated as FEMA 100-year floodplain areas. In addition, a portion of Russell Ranch along County Road 31 and a portion of the west campus along County Road 98 are also subject to flooding during a 100-year storm event.

The central campus drainage system intercepts and collects runoff and directs this water via underground pipes to the Arboretum Waterway. During large storm events, water rises in the Arboretum Waterway, overtops the weir at the west end of the waterway, and flows into the pump pond located north of the weir. From the pump pond, water is pumped through an underground storm drain to the South Fork of Putah Creek. The peak discharge from the Arboretum Waterway to Putah Creek since December 1999 was 65 cubic feet per second (cfs). The majority of land in the west and south campuses and at Russell Ranch is used as teaching and research fields and is not drained by a storm drainage system. Irrigation practices on campus teaching and research fields typically do not generate surface runoff. However, large storm events may result in shallow overland flows that flow to temporary shallow ponds in places such as road and field edges. In addition, developed areas on the west and south campuses include storm water conveyance systems that drain to Putah Creek.

To protect the quality of storm water on campus that ultimately drains to Putah Creek, UC Davis construction and industrial activities are subject to the NPDES storm water requirements. Routine maintenance and minor construction activities on campus are subject to the campus’ Phase II Storm Water Management Plan (SWMP).

Project Site

The site for the hotel addition currently drains to the storm drain infrastructure system that was installed with development of the hotel. This system is part of the campus storm drain system and provides adequate capacity for the existing level of development. The site experiences no ponding or flooding during storm events. The site for the road extension is a community garden, an open field, and an existing driveway through Parking Lot 5. The undeveloped parts experience occasional ponding for stormwater following storms. During periods of large storms, sheet flow of stormwater to the lower elevation spots within the open field area or at the margins of the field area are filled with standing water.

7.9.2 2003 LRDP EIR Standards of Significance

The 2003 LRDP EIR considers a hydrology and water quality impact significant if growth under the 2003 LRDP would:

- Violate any water quality standards or waste discharge requirements.
- Substantially deplete groundwater supplies 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.

- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on site or off site.

- Substantially alter the existing drainage pattern 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 flooding on site or off site.

- Create or contribute runoff water that would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff.

- Otherwise substantially degrade water quality.

- Place within a 100-year flood hazard area structures that would impede or redirect flood flows.

- Expose people or structures to a significant risk of loss, injury, or death involving flooding.

Additional standards from the CEQA Guidelines' Environmental Checklist (— and “i” in the checklist below) were found not applicable to campus growth under the 2003 LRDP.

### 7.9.3 2003 LRDP EIR Impacts and Mitigation Measures

Impacts of campus growth under the 2003 LRDP through 2015-16 on hydrology and water quality are evaluated in Section 4.8 of the 2003 LRDP EIR. The proposed project is within the scope of analysis in the 2003 LRDP EIR and significant and potentially significant hydrology and water quality impacts identified in the 2003 LRDP EIR that are relevant to the proposed project are presented below with their corresponding levels of significance before and after application of mitigation measures identified in the 2003 LRDP EIR. In addition, Impact 4.8-1, presented below, is considered less than significant prior to mitigation, but mitigation measures were identified in the 2003 LRDP EIR to further reduce the significance of this impact. Other less than significant impacts that do not include mitigation measures are not presented here.

<table>
<thead>
<tr>
<th>2003 LRDP EIR Impacts</th>
<th>Level of Significance Prior to Mitigation</th>
<th>Level of Significance After Mitigation</th>
</tr>
</thead>
<tbody>
<tr>
<td>HYDROLOGY &amp; WATER QUALITY</td>
<td>LS</td>
<td>LS</td>
</tr>
<tr>
<td>4.8-1 Campus construction activities associated with implementation of the 2003 LRDP would not contribute substantial loads of sediment or other pollutants in storm water runoff that could degrade receiving water quality.</td>
<td>PS</td>
<td>LS</td>
</tr>
<tr>
<td>4.8-2 Development under the 2003 LRDP would increase impervious surface on the campus and could alter drainage patterns, thereby increasing runoff and loads of pollutants in storm water, which could affect water quality.</td>
<td>PS</td>
<td>LS</td>
</tr>
<tr>
<td>4.8-3 Implementation of the 2003 LRDP could alter drainage patterns in the project area and increase impervious surfaces, which could exceed the capacity of storm water drainage systems and result in localized flooding and contribution to offsite flooding.</td>
<td>PS</td>
<td>LS</td>
</tr>
<tr>
<td>4.8-4 Campus growth under the 2003 LRDP would increase discharge of treated effluent from the campus wastewater treatment plant into the South Fork of Putah Creek, which could exceed waste discharge requirements and degrade receiving water quality.</td>
<td>PS</td>
<td>LS</td>
</tr>
</tbody>
</table>
### 2003 LRDP EIR Impacts

**HYDROLOGY & WATER QUALITY**

<table>
<thead>
<tr>
<th>Level of Significance Prior to Mitigation</th>
<th>Level of Significance After Mitigation</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.8-5 Campus growth under the 2003 LRDP would increase the amount of water extracted from the deep aquifer and would increase impervious surfaces. This could result in a net deficit in the deep aquifer volume or a lowering of the local groundwater table but would not interfere substantially with recharge of the deep aquifer.</td>
<td>S SU</td>
</tr>
<tr>
<td>4.8-6 Campus growth under the 2003 LRDP could increase the amount of water extracted from the shallow/intermediate aquifer and would increase impervious surfaces. Extraction from the shallow/intermediate aquifer could deplete groundwater levels and could contribute to local subsidence, and increased impervious coverage could interfere substantially with recharge. This could result in a net deficit in the intermediate aquifer volume or a lowering of the local groundwater table.</td>
<td>SU SU</td>
</tr>
<tr>
<td>4.8-9 Development under the 2003 LRDP could place non-residential structures within a 100-year floodplain, which could expose people and structures to risks associated with flooding and/or impede or redirect flows, contributing to flood hazards.</td>
<td>PS LS</td>
</tr>
<tr>
<td>4.8-10 Development under the 2003 LRDP, in conjunction with construction activities, increased impervious surfaces, and alterations to drainage patterns associated with other development in the region that would increase impervious surface coverage in the watershed, could increase storm water runoff, and could provide substantial sources of polluted runoff, which could affect receiving water quality.</td>
<td>S SU</td>
</tr>
<tr>
<td>4.8-11 Implementation of the 2003 LRDP in combination with regional development could alter drainage patterns and increase the rate or amount of surface runoff, which could exceed the capacity of storm water drainage systems and result in flooding within the Putah Creek watershed.</td>
<td>PS LS</td>
</tr>
<tr>
<td>4.8-12 Growth under the 2003 LRDP and other development in the region would increase discharge of treated effluent to the Putah Creek watershed, which could degrade receiving water quality.</td>
<td>PS LS</td>
</tr>
<tr>
<td>4.8-13 Growth under the 2003 LRDP and other development in the region would increase the amount of water extracted from the deep aquifer and increase impervious surfaces. This could result in a net deficit in the deep aquifer volume or a lowering of the local groundwater table but would not interfere substantially with recharge of the deep aquifer.</td>
<td>S SU</td>
</tr>
<tr>
<td>4.8-14 Growth under the 2003 LRDP and other development in the region would increase the amount of water extracted from shallow/intermediate aquifers and increase impervious surfaces. This could contribute to local subsidence, substantially deplete groundwater supplies, and could interfere substantially with recharge of the shallow/intermediate depth aquifer, resulting in a net deficit in the shallow/intermediate aquifer volume or a lowering of the local groundwater table.</td>
<td>S SU</td>
</tr>
</tbody>
</table>

Levels of Significance: LS=Less than Significant, S=Significant, PS=Potentially Significant, SU=Significant and Unavoidable

Mitigation measures in the 2003 LRDP EIR that are applicable to the proposed project are presented below. Since these mitigation measures are already being carried out as part of implementation of the 2003 LRDP, they are considered part of the project description and will not be readopted in this Initial Study or EIR. Nothing in this Initial Study in any way alters the obligations of the campus to implement 2003 LRDP EIR mitigation measures.
2003 LRDP EIR Mitigation Measures  
HYDROLOGY & WATER QUALITY

4.8-1 The campus shall continue to comply with the NPDES state-wide General Permit for Discharge of Storm Water Associated with Construction Activity by implementing control measures and BMPs required by project-specific SWPPPs and with the Phase II SWMP to eliminate or reduce non-storm and storm water discharges to receiving waters.

4.8-2 The campus shall comply with the measures in the Phase II SWMP to ensure that project design includes a combination of BMPs, or equally effective measures as they become available in the future, to minimize the contribution of pollutants to receiving waters.

4.8-3(a) Prior to approval of specific projects under the 2003 LRDP, the campus shall perform a drainage study to evaluate each specific development to determine whether project runoff would exceed the capacity of the existing storm drainage system, cause ponding to worsen, and/or increase the potential for property damage from flooding.

4.8-3(b) If it is determined that existing drainage capacity would be exceeded, ponding could worsen, and/or risk of property damage from flooding could increase, the campus shall design and implement necessary and feasible improvements. Such improvements could include, but would not be limited to, the following:

(i) The expansion or modification of the existing storm drainage system.

(ii) Single-project detention or retention basins incorporated into project design with features including but not limited to: small onsite detention or retention basins; rooftop ponding; temporary flooding of parking areas, streets and gutters; landscaping designed to temporarily retain water; and gravel beds designed to collect and retain runoff.

(iii) Multi-project storm water detention or retention basins.

4.8-3(c) Campus development west of County Road 98 shall incorporate single- or multi-project basins in order to reduce storm event drainage flows to the Covell Drain.

4.8-4(a) The campus shall continue to monitor and modify its pretreatment program, WWTP operation, and/or treatment processes as necessary to comply with WDRs.

4.8-4(b) The campus shall implement a monitoring program specifically targeted at the following constituents: copper, cyanide, iron and nitrate + nitrite, and make appropriate modifications as necessary to the campus pretreatment program to avoid exceedance of permit limits for these constituents.

4.8-5(a) The campus shall continue to implement water conservation strategies to reduce demand for water from the deep aquifer. Domestic water conservation strategies shall include the following or equivalent measures:

(i) Install water efficient shower heads and low-flow toilets that meet or exceed building code conservation requirements in all new campus buildings, and where feasible, retrofit existing buildings with these water efficient devices.

(ii) Continue the leak detection and repair program.

(iii) Continue converting existing single-pass cooling systems to cooling tower systems.

(iv) Use water-conservative landscaping on the west and south campuses where domestic water is used for irrigation.

(v) Replace domestic water irrigation systems on the west and south campuses with an alternate water source (shallow/intermediate or reclaimed water), where feasible.

(vi) Install water meters at the proposed neighborhood to encourage residential water conservation.

(vii) Identify and implement additional feasible water conservation strategies and programs including a water awareness program focused on water conservation.

4.8-5(b) The campus shall continue hydrogeologic monitoring and evaluation efforts to determine the long-term production and quality trends of the deep aquifer.

4.8-5(c) To the extent feasible, new water supply wells in the deep aquifer should be located on the west campus in sands and gravels that are not used by or available to the City of Davis for deep water extraction.

4.8-5(d) If continued hydrogeologic monitoring and evaluation efforts identify constraints in the deep aquifer’s ability to provide for the campus’ long-term water needs, the campus will treat shallow/intermediate aquifer and/or surface...
water from the Solano Project to serve domestic water demand.

4.8-6(a) The campus shall continue to implement water conservation strategies to reduce demand for water from the intermediate aquifer. Utility water conservation strategies shall include the following or equivalent measures:

   (i) Landscape, where appropriate, with native, drought resistant plants and use lawns only where needed for pedestrian traffic, activity areas, and recreation.

   (ii) Install efficient irrigation systems including centrally controlled automatic irrigation systems and low-flow spray systems.

   (iii) Apply heavy applications of mulch to landscaped areas to reduce evaporation

   (iv) Use treated wastewater for landscape irrigation where feasible.

4.8-6(b) The campus shall continue to monitor shallow/intermediate aquifer water elevations at existing campus wells to ascertain whether there is any long-term decline in water levels.

4.8-6(c) The campus shall continue to participate in regional subsidence monitoring, including by installing an extensometer, to determine the vertical location of local subsidence.

4.8-6(d) If shallow/intermediate aquifer monitoring or subsidence monitoring indicate that campus water use from the intermediate aquifer is contributing to a net deficit in aquifer volume and/or significant subsidence, the campus will reduce use of water from the aquifer by using surface water and/or treated wastewater effluent to irrigate campus recreation fields.

4.8-6(e) The campus shall incorporate the following or equally effective measures into project designs under the 2003 LRDP where feasible, to increase percolation and infiltration of precipitation into the underlying shallow/intermediate aquifers:

   (i) Minimize paved surfaces.

   (ii) Use grassy swales, infiltration trenches, or grass filter strips to intercept storm water runoff.

   (iii) Implement LRDP Mitigation 4.8-3(b), which specifies construction of detention and infiltration facilities in those areas that do not discharge storm water to the Arboretum.

4.8-9(a) Prior to final design, the campus will review the plans for all structures to be constructed in the 100-year floodplain for compliance with the following FEMA requirements for non-residential structures:

   (i) Elevate the lowest floor (including the basement) to or above the base flood level; or

   (ii) Together with attendant utility and sanitary facilities, design so that below the base flood level, the structure is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy; and

   (iii) Require that fully enclosed areas below the lowest floor that are subject to flooding be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for entry and exit of flood waters.

4.8-9(b) For structures placed within the 100-year floodplain, flood control devices will be designed to direct flows toward areas where flood hazards will be minimal.

4.8-10(a) Implement LRDP Mitigation 4.8-1 and 4.8-2.

4.8-10(b) Jurisdictions within the Putah Creek watershed should comply with Phase II NPDES Municipal Storm Water Permit requirements for small municipalities in order to minimize the contribution of sediment and other pollutants associated with development in the region.

4.8-10(c) Comprehensive SWPPPs and monitoring programs should be implemented by all storm water dischargers associated with specified industrial and construction activities, in compliance with the state's General Permits. Such plans shall include BMPs or equally effective measures.

4.8-11 The campus shall implement LRDP Mitigation 4.8-3(a-c) in order to prevent flooding on campus.

4.8-12 The campus shall implement LRDP Mitigation 4.8-4(a) and (b) to minimize the potential for degradation of receiving water quality.
2003 LRDP EIR Mitigation Measures
HYDROLOGY & WATER QUALITY

4.8-13(a) Implement LRDP Mitigation 4.8-5(a-d).

4.8-13(b) The City of Davis is expected to implement measures to reduce the amount of water withdrawn from the deep aquifer consistent with policies adopted in its General Plan.
   - Give priority to demand reduction and conservation over additional water resource development (Policy WATER 1.1)
   - Require water conserving landscaping (Policy WATER 1.2)
   - Provide for the current and long-range water needs of the Davis Planning Area, and for protection of the quality and quantity of groundwater resources (Policy WATER 2.1)
   - Manage groundwater resources so as to preserve both quantity and quality (Policy WATER 2.2)
   - Research, monitor and participate in issues in Yolo County and the area of origin of the City’s groundwater that affect the quality and quantity of water (Policy WATER 4.1)

4.8-14(a) The campus should implement LRDP Mitigation 4.8-6(a-e) to minimize its withdrawal from the shallow/intermediate aquifer and maximize the potential for infiltration.

4.8-14(b) Consistent with current water planning policies, the City of Davis is expected to implement measures to reduce impervious surfaces and reduce the amount of water withdrawn from the shallow/intermediate aquifer, consistent with, but not limited to, the water policies listed in LRDP Mitigation 4.8-13(b).

7.9.4 Environmental Checklist and Discussion

HYDROLOGY & WATER QUALITY

<table>
<thead>
<tr>
<th>Would the project…</th>
<th>Impact to be Analyzed in the EIR</th>
<th>No Additional Analysis Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Violate any water quality standards or waste discharge requirements?</td>
<td>☐</td>
<td>✓</td>
</tr>
<tr>
<td>b) Substantially deplete groundwater supplies 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)?</td>
<td>☐</td>
<td>✓</td>
</tr>
<tr>
<td>c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?</td>
<td>☐</td>
<td>✓</td>
</tr>
<tr>
<td>d) Substantially alter the existing drainage pattern 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 flooding on- or off-site?</td>
<td>☐</td>
<td>✓</td>
</tr>
<tr>
<td>e) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?</td>
<td>☐</td>
<td>✓</td>
</tr>
<tr>
<td>f) Otherwise substantially degrade water quality?</td>
<td>☐</td>
<td>✓</td>
</tr>
<tr>
<td>g) 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?</td>
<td>☐</td>
<td>✓</td>
</tr>
<tr>
<td>h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?</td>
<td>☐</td>
<td>✓</td>
</tr>
<tr>
<td>i) 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?</td>
<td>☐</td>
<td>✓</td>
</tr>
</tbody>
</table>
a. Inundation by seiche, tsunami, or mudflow?

b) Deep Aquifer

Construction

The 2003 LRDP EIR found that construction on campus under the 2003 LRDP construction would not contribute substantial loads of sediment or other pollutants to storm water runoff (Impact 4.8-1). Construction on campus is covered under the NPDES state-wide General Permit for Discharge of Storm Water Associated with Construction Activity. As part of this permit, campus construction projects managed by outside contractors and/or disturbing over one acre (including the proposed project) must implement Storm Water Pollution Prevention Plans (SWPPPs), which specify Best Management Practices (BMPs) to reduce the contribution of sediments, spilled and leaked liquids from construction equipment, and other construction-related pollutants to storm water runoff. All routine maintenance activities and any construction projects disturbing less than one acre that are not managed by outside contractors are covered under the campus’ Phase II Municipal Storm Water Management Plan, which requires BMPs to reduce contribution of pollutants to storm water runoff. Because the UC Davis campus is required to comply with the NPDES state-wide permit and Phase II requirements, the water quality effects associated with construction activities on campus are considered to be less than significant. In addition, LRDP Mitigation 4.8-1, included as part of the project, requires the campus to implement BMPs to reduce construction-related water quality impacts. No further analysis is required.

Operation

The 2003 LRDP EIR found that campus growth under the 2003 LRDP would increase discharge of treated effluent from the campus WWTP into the South Fork of Putah Creek, which could exceed waste discharge requirements and degrade receiving water quality (LRDP Impact 4.8-4). With current and future discharge control programs and possible operational changes, the increased discharge from the WWTP associated with the proposed project as well as other projects under the 2003 LRDP is expected to comply with NPDES regulations, and therefore will not cause degradation of receiving water quality. The campus will continue to monitor effluent discharge in compliance with the applicable WDRs for the WWTP, and if effluent limits are exceeded, the campus will modify its pretreatment program and WWTP operation as appropriate. These practices are further confirmed in LRDP Mitigation 4.8-4(a), which is included as part of the project. In compliance with LRDP Mitigation 4.8-4(b), the campus will target monitoring and pretreatment for the contaminants specifically identified as of potential concern by the CVRWQCB. These measures would reduce the impact to a less-than-significant level.

The 2003 LRDP EIR found that growth under the 2003 LRDP and other development in the region would increase the cumulative discharge of treated effluent to the Putah Creek watershed, which could degrade receiving water quality (LRDP Impact 4.8-12). However, UC Davis is currently the largest discharger of treated effluent to Putah Creek, and no other major dischargers are expected in the future. LRDP Mitigation 4.8-12, included as part of the project, requires implementation of LRDP Mitigation 4.8-4(a-b), discussed above, which would reduce the impact of increased effluent discharge from the campus WWTP to Putah Creek to a less-than-significant level. Therefore, with implementation of LRDP Mitigation 4.8-12, which is included in the proposed project, the cumulative impact would be less than significant.
The proposed project would increase the demand for domestic and fire water on the campus by through the addition of 52 hotel rooms. This expected amount is well within the total increase in water demand analyzed in the 2003 LRDP EIR. As noted above, domestic, fire and irrigation water for use on the west campus is obtained from on-campus wells screened in the deep aquifer. The 2003 LRDP EIR found that campus growth under the 2003 LRDP would increase the amount of water extracted from the deep aquifer and would increase impervious surfaces, which could result in a net deficit in the deep aquifer volume or a lowering of the local groundwater table but would not interfere substantially with recharge of the deep aquifer (LRDP Impact 4.8-5). The deep aquifer is confined with limited lateral and vertical recharge and is overlain by thick clay layers that are relatively impermeable. Because of these characteristics, increased impervious surfaces associated with development under the 2003 LRDP will not significantly affect the recharge capacity of the deep aquifer. The 2001 demand for water from the deep aquifer was approximately 2,671 acre-feet. The annual demand for deep aquifer water under the 2003 LRDP, including demand associated with the proposed project, is expected to increase to approximately 5,301 acre-feet through 2015-16 (UC Davis ORMP 2003c). Based on 2010 data, the campus use of deep aquifer water has decreased to approximately 2,300 acre-feet per year. With the decreased usage, the campus growth since 2003 has not impacted the deep aquifer and the proposed project would use a very small amount of water annually. In total, the existing use of approximately 2,300 acre-feet and the proposed use from the project would remain below 2001 baseline year of 2,671 acre-feet. Accordingly the project contribution of water use from the deep aquifer would be less-than-significant.

Shallow/Intermediate Aquifer

The approximately 8,000 square foot hotel addition site is covered with turf and the approximately 44,000 square feet for the road extension is covered with grass and trees. These surfaces allow water to infiltrate and potentially contribute to recharge of the shallow/intermediate aquifer. The addition of impervious surfaces associated with the proposed project (the hotel addition and the road extension) would change the conditions at the site by reducing the overall amount of groundwater recharge. In addition, the road extension project would utilize a small amount of shallow/intermediate aquifer water by drawing from the campus utility water system for irrigation of the landscaping proposed along the road edge. The 2003 LRDP EIR found that the campus’ extraction from shallow/intermediate aquifers could deplete groundwater levels and could contribute to local subsidence. In addition, increased impervious coverage could interfere with recharge of the shallow/intermediate aquifers. This could result in a net deficit in the intermediate aquifer volume or a lowering of the local groundwater table (LRDP Impact 4.8-6).

The 2001 baseline annual campus demand (including irrigation demand associated with the tenant farmer at Russell Ranch) for water from the shallow/intermediate aquifers was approximately 3,827 acre-feet. Under the 2003 LRDP, due to conversion of teaching and research fields to other uses with reduced irrigation requirements, overall annual demand for water from the shallow/intermediate aquifers is anticipated to decrease to approximately 3,362 acre-feet through 2015-16 (UC Davis ORMP 2003c). However, these projections do not address the potential identified in LRDP Mitigation 4.8-5(d) for intermediate aquifer water to be used to serve the campus’ domestic water needs. If this mitigation is implemented, demand for water from the intermediate aquifer could increase. In addition, monitoring efforts indicate subsidence in the campus vicinity. Due to the short history of subsidence monitoring in the area, the extent and cause of this subsidence is currently unknown, however, extraction from the shallow/intermediate aquifer could be a contributing factor. Additionally, development under the 2003 LRDP, including the proposed project, would increase the amount of impervious surfaces on campus. Because the soils underlying the campus generally have low permeability and would provide limited recharge, however, new impervious surfaces are not
likely to significantly reduce the amount and rate of groundwater recharge. Most recharge in the area is associated with streams and waterways, which would not be affected by the project.

LRDP Mitigation 4.8-6(a-c), included as part of the proposed project, would require continued utility water conservation efforts, monitoring of the intermediate aquifer, and subsidence monitoring efforts. Furthermore, implementation of LRDP Mitigation 4.8-6(e), included in the proposed project, would encourage project designs on campus that increase percolation and infiltration to the shallow/intermediate aquifer. If the monitoring efforts required by LRDP Mitigation 4.8-6(b) or (c) identify that campus intermediate aquifer use is contributing to a net deficit in aquifer volume or significant subsidence, LRDP Mitigation 4.8-6(d) would be implemented to reduce campus utility water use by requiring use of Solano Project surface water and/or tertiary treated wastewater effluent from the campus WWTP for irrigation of campus recreation fields. Regardless of mitigation, the combination of effects from continued demand for water from the shallow/intermediate aquifer, local subsidence trends, and increased coverage could potentially result in a significant impact on intermediate aquifer groundwater levels. Therefore, LRDP Impact 4.8-6 is considered significant and unavoidable. This impact was adequately analyzed in the 2003 LRDP EIR and was fully addressed in the Findings and Statement of Overriding Considerations adopted by The Regents in connection with its approval of the 2003 LRDP. No conditions have changed and no new information has become available since certification of the 2003 LRDP EIR that would alter this previous analysis.

The 2003 LRDP EIR found that growth under the 2003 LRDP and other development in the region would cumulatively increase the amount of water extracted from shallow/intermediate aquifers and would increase impervious surfaces. This could contribute to local subsidence, substantially deplete groundwater supplies, and could interfere substantially with recharge of the shallow/intermediate depth aquifer, resulting in a net deficit in the shallow/intermediate aquifer volume or a lowering of the local groundwater table (LRDP Impact 4.8-14). Although campus extraction of water from the shallow/intermediate aquifers is anticipated to continue to decrease through 2015-16, a potential increase in extraction in the Davis area could cause well levels to decrease. In addition, extraction from these aquifers could be causing subsidence that has been observed in the area, and increases in impervious surfaces could impede the amount of groundwater recharge. Implementation of LRDP Mitigation 4.8-13(a) and (b) would reduce the campus and City extractions from the shallow/intermediate aquifers, would reduce the amount of new impervious surfaces in the area, and would continue groundwater level and subsidence monitoring efforts. Regardless of mitigation, the combination of effects from continued local demand for water from the shallow/intermediate aquifers, local subsidence trends, and increased coverage could result in a significant and unavoidable impact on the aquifers. This impact was adequately analyzed in the 2003 LRDP EIR and was fully addressed in the Findings and Statement of Overriding Considerations adopted by The Regents in connection with its approval of the 2003 LRDP. No conditions have changed and no new information has become available since certification of the 2003 LRDP EIR that would alter this previous analysis.

c) The project would increase impervious surfaces on the hotel addition site and on the road extension site. The increased runoff from the hotel addition site would be routed to the existing stormwater drainage system within the existing hotel complex. Stormwater from the road addition would be routed to drain inlets that would be constructed along the gutters of the new road. The drain inlets would connect to a new underground stormwater pipe that would extend north from the road extension to empty into the Arboretum Waterway.

The 2003 LRDP EIR found that development under the 2003 LRDP would increase impervious surfaces on the campus and could alter drainage patterns, thereby increasing runoff and loads of pollutants in storm water, which could adversely affect surface water quality (LRDP Impact 4.8-2). Discharge of storm water to the Arboretum Waterway is covered under a NPDES Phase II permit for
small municipal storm water systems, which requires BMPs to reduce pollutants in storm water discharge to the maximum extent practicable. LRDP Mitigation 4.8-2 requires the campus to comply with Phase II regulations. As described in item (a) above, both construction and operation activities are required to employ BMPs. With implementation of Phase II requirements, increases in storm water runoff and levels of contaminants in runoff associated with implementation of the 2003 LRDP, including the proposed project, would have a less than significant impact on receiving waters.

The 2003 LRDP EIR found that development under the 2003 LRDP, in conjunction with construction activities, increased impervious surfaces, and alterations to drainage patterns associated with other development in the watershed could increase storm water runoff and could provide substantial sources of polluted runoff, which could adversely affect receiving water quality (Impact 4.8-10). LRDP Mitigations 4.8-10 (a-c) require the campus and regional jurisdictions to comply with NPDES Phase II requirements and implement SWPPPs for specified industrial and construction activities. However, implementation of LRDP Mitigation 4.8-10(b) and (c) cannot be guaranteed by the University of California because it falls within other jurisdictions to enforce and monitor. Therefore, the impact is was considered significant and unavoidable. This impact was adequately analyzed in the 2003 LRDP EIR and was fully addressed in the Findings and Statement of Overriding Considerations adopted by The Regents in connection with its approval of the 2003 LRDP. No conditions have changed and no new information has become available since certification of the 2003 LRDP EIR that would alter this previous analysis. Effective July 1, 2010, all dischargers are required to obtain coverage under the Construction General Permit Order 2009-0009-DWQ adopted on September 2, 2009. The new Construction General Permit requires the development and implementation of a SWPPP. Section A of the Construction General Permit describes the elements that must be contained in a SWPPP. The SWPPP should contain a site map(s) which shows the construction site perimeter, existing and proposed buildings, lots, roadways, storm water collection and discharge points, general topography both before and after construction, and drainage patterns across the project. The SWPPP must list the BMPs the discharger will use to protect storm water runoff and the placement of those BMPs. Additionally, the SWPPP must contain a visual monitoring program, a chemical monitoring program for "non-visible" pollutants to be implemented if there is a failure of BMPs, and a sediment monitoring plan if the site runoff discharges directly to a water body listed on the 303(d) list for sediment. All new projects which are over 1 acre in size and which are not already covered by the current storm water permit will have to calculate the proper classification as either a Risk Level 1, 2 or 3 based on risk calculations. Risk Level 1 has the least stringent requirements and is not subject to either the Numeric Action Limits (NALs) or Numeric Effluent Limits (NELs) that have been established for pH and turbidity. Risk Level 2 and 3 projects will be subject to NALs or NELs. Because the new Construction General Permit is more stringent than the former Construction General Permit, compliance with the new permit will ensure that water quality impacts are minimized. However, this would not change the conclusion of the LRDP EIR with respect to the cumulative impact on water quality.

d,e) The 2003 LRDP EIR found that implementation of the 2003 LRDP would alter drainage patterns in the project area and would increase impervious surfaces, which could exceed the capacity of storm water drainage systems and result in localized flooding and contribution to offsite flooding (Impact 4.8-3). The proposed project is not located within a floodway designated by the California Department of Water Resources and is not within 10 feet of the levees along the South Fork of Putah Creek. Therefore, the project does not require an encroachment permit from the Reclamation Board. Campus runoff is not expected to significantly increase peak flows in Putah Creek under the 2003 LRDP because anticipated development represents only a minor increase in the percentage of impervious area in the watersheds. Campus discharges from the Arboretum Waterway to Putah Creek are not expected to exceed the existing pumping capacity of approximately 80 cfs (the current NPDES permit has a maximum discharge limit of 130 cfs). Pursuant to the campus Stormwater
Management Plan, the current campus standard for storm water management is a 10-year storm event (Wengler 2005). However, under existing conditions, localized flooding on some portions of the campus occurs during a 2-year storm event. In most cases, this flooding consists of temporary water ponding at storm drain inlets and along roads that does not result in property damage or other serious consequences. Without any improvements, increased runoff associated with development under the 2003 LRDP, including the proposed project, would increase the likelihood of localized flooding (West Yost & Associates 2000). In accordance with LRDP Mitigation 4.8-3(a), included in the project, a drainage evaluation has been performed for the proposed project and has determined that, with the proposed new connection from the road extension to the Arboretum Waterway, the existing storm drainage system is adequate.

The 2003 LRDP EIR also found that implementation of the 2003 LRDP in combination with regional development could alter drainage patterns and increase the rate or amount of surface runoff, which could cumulatively exceed the capacity of storm water drainage systems and result in flooding within the Putah Creek watershed (LRDP Impact 4.8-11). In most cases, this flooding consists of temporary water ponding at storm drain inlets and along roads that does not result in property damage or other serious consequences.

Storm water runoff pollution is evaluated further in items (a,f) and (c) above.

g) Under the 2003 LRDP, housing (including on-campus student housing and housing within the proposed neighborhood) would be constructed outside the 100-year flood zones on campus (see 2003 LRDP EIR, Figure 4.8-4, 100-Year Floodplain). The proposed project does not include housing. Therefore, no impact would occur and no further analysis is required.

h, i) The 2003 LRDP EIR found that development under the 2003 LRDP could place non-residential structures within a 100-year floodplain, which could expose people and structures to risks associated with flooding and/or could impede or redirect flows, contributing to flood hazards (LRDP Impact 4.8-9). However, the project site is not located within the 100-year floodplain, and no further analysis is required.

The campus is located approximately 23 miles downstream of the Monticello Dam (forming Lake Berryessa) and approximately 15 miles downstream of the Putah Diversion Dam. An inundation study prepared by the U.S. Bureau of Reclamation shows that, in the highly unlikely case of a dam breach, the campus (as well as the City of Davis) would be inundated under a maximum of 3 to 9 feet of water approximately 3.5 to 4 hours following the breach (USBR 1998). However, the probability of such a release is far less than one in one million (USBR 2000). As of June 2000, Monticello Dam was determined to be in satisfactory condition, and the dam exhibited no unusual cracks, seeps, or deformations. In addition, the State Department of Dam Safety evaluates dams regularly, which would give adequate time to respond to any deterioration in the safety of the structure. Therefore, the risk of flooding on campus as a result of a dam failure is considered to be a less-than-significant impact. No additional analysis is required.

j) The campus is not subject to inundation by seiche, tsunami, or mudflow. The campus is generally flat and is not located in close proximity to any large water bodies. Therefore, no impact would occur and no further analysis is required.
7.10 LAND USE & PLANNING

7.10.1 Background

Section 4.9 of the 2003 LRDP EIR addresses the land use and planning effects of campus growth under the 2003 LRDP. The following discussion summarizes information presented in the ‘Setting’ subsection of Section 4.9 of the 2003 LRDP EIR.

Campus

The approximately 5,300-acre UC Davis campus is located within Yolo and Solano counties. Local land use is predominantly agricultural, with small cities and towns. The campus is surrounded by extensive agricultural uses to the west and south and by residential, institutional, and commercial land uses in the City of Davis, to the north and east. The City of Davis is a university-oriented community with over 62,000 residents. The UC Davis campus consists of four general units: the central campus, the south campus, the west campus, and Russell Ranch. In addition, the University of California owns several properties in the City of Davis, including buildings in downtown Davis and buildings and vacant parcels in the South Davis Research Park, located south of I-80.

As a state entity, UC Davis is not subject to municipal policies such as the City of Davis General Plan. Nevertheless, such policies are of interest to the campus. The campus has a tradition of working cooperatively with the local communities and it is University policy to seek consistency with local plans and policies, where feasible.

The 2003 LRDP is the campus’ primary land use planning guide. It designates campus lands for the following uses through 2015-16: Academic and Administrative (High and Low Density); Teaching and Research Fields; Teaching and Research Open Space; Parking; Physical Education, Intercollegiate Athletics, and Recreation (PE/ICA/Recreation); Research Park (High and Low Density); Formal Open Space; Community Gardens; Faculty/Staff Housing, Student Housing; Mixed Use Housing; and Elementary School.

Project Site

The hotel addition and the road extension project sites are designated for Academic/Administrative High Density uses under the 2003 LRDP. The Academic/Administrative High Density category typically designates areas for large, multi-story facilities that facilitate the teaching, research, and public service mission of the University of California. These include: classrooms; research laboratories and research support areas; faculty, student and staff offices; libraries; program support facilities; student activity space; meeting rooms; space for public service, outreach and cultural activities; and business/service activities that support the University mission.

7.10.2 2003 LRDP EIR Standards of Significance

The 2003 LRDP EIR considers a land use and planning impact significant if growth under the 2003 LRDP would:

- 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.
- Result in development of land uses that are substantially incompatible with existing adjacent land uses or with planned uses.
• Conflict with any applicable habitat conservation plan or natural community conservation plan.

An additional standard from the CEQA Guidelines’ Environmental Checklist (—ã in the checklist below) was found not applicable to campus growth under the 2003 LRDP.

7.10.3 2003 LRDP EIR Impacts and Mitigation Measures

Land use and planning impacts of campus growth under the 2003 LRDP through 2015-16 related to land use and planning are evaluated in Section 4.9 of the 2003 LRDP EIR. As analyzed in Section 4 of this Initial Study, the proposed project is within the scope of analysis in the 2003 LRDP EIR. The 2003 LRDP EIR did not identify any potentially significant or significant land use and planning impacts. The less than significant land use and planning impacts identified in the 2003 LRDP EIR do not require mitigation.

7.10.4 Environmental Checklist and Discussion

<table>
<thead>
<tr>
<th>LAND USE &amp; PLANNING</th>
<th>Impact to be Analyzed in the EIR</th>
<th>No Additional Analysis Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Would the project…</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Physically divide an established community?</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>c) Conflict with any applicable habitat conservation plan or natural community conservation plan?</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>d) Result in development of land uses that are substantially incompatible with existing adjacent land uses or with planned uses?</td>
<td>☐</td>
<td>☑</td>
</tr>
</tbody>
</table>

a) The proposed project would have no potential to physically divide an established community. The hotel addition and the road extension would augment the existing facilities and improve the circulation options. No impact would occur and no additional analysis is required.

b) The applicable land use plan for the campus is the 2003 LRDP. The project site is designated for Academic/Administrative High Density uses under the 2003 LRDP. The proposed project would include the hotel addition which would expand the hotel use at UC Davis. This use is consistent with the Academic/Administrative High Density land use designation because it helps to provide outreach and cultural opportunities for the public to visit and learn about UC Davis teaching, research, and public service efforts. The road extension was identified as part of the long term roadway changes proposed with the 2003 LRDP. The land uses designated in the 2003 LRDP assumed future implementation of the road extension project and these designations were considered appropriate and compatible in the 2003 LRDP EIR.

The road extension project would match the road extension designed for the 2003 LRDP and helps to implement the 2003 LRDP land uses. The proposed implementation of the road extension would result in a completed roadway with through traffic in close proximity to the existing Solano Park housing area. The proximity of the road would allow easy access to the roadway from the residential area. The roadway extension would result in removal of approximately one-half of the garden plots at the Solano Park community garden area. The current number of plots exceeds the demand and the demand for garden plots is anticipated to match the reduced size of the community garden area. The proposed project is not expected to disrupt the operations, internal activities or circulation within the
Solano Park housing and would not affect the on-going use of the area as a student residential development. The proposed project would be consistent with the applicable land use plan. No impact would occur. No additional analysis is required.

c) The campus does not fall within the boundaries of, nor is it adjacent to, an adopted regional HCP or NCCP. The campus has implemented two low-effects HCPs for Valley Elderberry Longhorn Beetle at Russell Ranch. The project is located more than three miles from the Russell Ranch low-effect areas. Therefore, the proposed project would not conflict with an adopted HCP or NCCP. No impact would occur and no additional analysis is required.

d) The 2003 LRDP EIR identifies that an impact could result if land uses are developed under the 2003 LRDP EIR that are substantially incompatible with existing adjacent land uses or with planned uses. The proposed project of expanding the hotel and extending the road is related to and consistent with the planned uses of the land and the existing adjacent uses in the South Entry area of the UC Davis Central Campus. As described above in item (b), the proposed road extension project implements a portion of the roadway modifications planned with the 2003 LRDP. No impact would occur and no additional analysis is required.
7.11 MINERAL RESOURCES

7.11.1 Background

Section 4.6, Geology, Soils, and Seismicity, of the 2003 LRDP EIR briefly addresses mineral resources issues. The 2003 LRDP EIR concludes that development on campus would not impede extraction or result in the loss of availability of mineral resources.

Sand and gravel are important mineral resources in the region (CDOC 2000). However, natural gas is the only known or potential mineral resource that has been identified on campus. Natural gas can be extracted at wells placed considerable distances from deposits. No other known or potential mineral resources have been identified on the UC Davis campus. Therefore, development on campus would not impede extraction or result in the loss of availability of mineral resources.

7.11.2 2003 LRDP EIR

Because development on campus would not impede extraction or result in the loss of availability of mineral resources, the 2003 LRDP EIR did not identify any standards of significance, impacts, or mitigation measures associated with mineral resources. As analyzed in Section 4 of this Initial Study, the proposed project is within the scope of analysis in the 2003 LRDP EIR.

7.11.3 Environmental Checklist and Discussion

<table>
<thead>
<tr>
<th>MINERAL RESOURCES</th>
<th>Impact to be Analyzed in the EIR</th>
<th>No Additional Analysis Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Would the project…</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a)</td>
<td>Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?</td>
<td>☐</td>
</tr>
<tr>
<td>b)</td>
<td>Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?</td>
<td>☐</td>
</tr>
</tbody>
</table>

a, b) Natural gas is the only known or potential mineral resource that has been identified on campus. Natural gas can be extracted at wells placed considerable distances from deposits. Therefore, development on campus would not impede extraction or result in the loss of availability of a known mineral resource. No impact would occur and no further analysis is required.
7.12 Noise

7.12.1 Background

Section 4.10 of the 2003 LRDP EIR addresses the noise effects of campus growth under the 2003 LRDP. The following discussion summarizes information presented in the “Setting” subsection of Section 4.10 of the 2003 LRDP EIR.

Campus

The primary noise source in the vicinity of the campus is vehicular traffic using I-80, SR 113, and local roads. Other sources of noise include occasional aircraft over-flights associated with the University Airport located on the west campus and another small airport in the vicinity, agricultural activities, railroads, and landscaping activities. Land use surrounding the campus is primarily agricultural, with residential, commercial, and other uses concentrated along the northern and eastern boundaries of the main campus.

Sound is technically described in terms of amplitude (loudness) and frequency (pitch). The standard unit of sound amplitude measurement is the decibel (dB), and the decibel scale adjusted for A-weighting (dBA) is a special frequency-dependent rating scale that relates to the frequency sensitivity of the human ear. Community noise usually consists of a base of steady “ambient” noise that is the sum of many distant and indistinguishable noise sources, as well as more distinct sounds from individual local sources. A number of noise descriptors are used to analyze the effects of community noise on people, including the following:

- $L_{eq}$, the equivalent energy noise level, is the average acoustic energy content of noise, measured during a prescribed period, typically one hour.
- $L_{dn}$, the Day-Night Average Sound Level, is a 24-hour-average $L_{eq}$ with a 10 dBA “penalty” added to noise occurring during the hours of 10:00 PM to 7:00 AM to account for greater nocturnal noise sensitivity.
- CNEL, the Community Noise Equivalent Level, is a 24-hour-average $L_{eq}$ with a “penalty” of 5 dB added to evening noise occurring between 7:00 PM and 10:00 PM, and a “penalty” of 10 dB added to nighttime noise occurring between 10:00 PM and 7:00 AM.

Noise monitoring over a 24-hour period in 2003 at sites located in urban areas on and adjacent to the campus (including areas next to freeways, roads, residences, and academic buildings) reflected CNEL levels ranging from 63 to 65 dBA CNEL. Ambient noise levels measured over a short period at various urban sites on campus varied from 49 to 63 dBA $L_{eq}$.

Project Site

The project sites include the hotel addition site and the roadway extension corridor. These sites currently experience very similar levels of noise from sources that include the nearby railroad, Interstate 80, and noise from local traffic on adjacent roadways.

7.12.2 2003 LRDP EIR Standards of Significance

The 2003 LRDP EIR considers a noise impact significant if growth under the 2003 LRDP would result in the following:
- Exposure of persons to or generation of noise levels in excess of levels set forth in Table 7.11.2.

Table 7.11.2: Thresholds of Significance for Noise Evaluations

<table>
<thead>
<tr>
<th>Noise Source</th>
<th>Criterion Noise Level</th>
<th>Substantial Increase in Noise Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Road Traffic and Other Long-Term</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sources</td>
<td>65 dBA CNEL</td>
<td>&gt;=3 dBA if CNEL w/project is &gt;= 65 dBA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&gt;=5 dBA if CNEL w/project is 50–64 dBA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&gt;=10 dBA if CNEL w/project is &lt; 50 dBA</td>
</tr>
<tr>
<td>Railroad</td>
<td>Within 750 feet of railroad line</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Construction (temporary)</td>
<td>80 dBA L_{eq(8h)}</td>
<td></td>
</tr>
<tr>
<td></td>
<td>daytime (7:00 a-7:00 p)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>80 dBA L_{eq(8h})</td>
<td></td>
</tr>
<tr>
<td></td>
<td>evening (7:00 p-11:00 p)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>70 dBA L_{eq(8h)}</td>
<td></td>
</tr>
<tr>
<td></td>
<td>nighttime (11:00 p-7:00 a)</td>
<td></td>
</tr>
</tbody>
</table>

Source: 2003 LRDP EIR

- The 2003 LRDP would not substantially increase rail activity; therefore, a threshold of significance for rail noise is not included in this table.
- At noise-sensitive land use unless otherwise noted. Noise-sensitive land uses include residential and institutional land uses.
- L_{eq(h)} is an average measurement over a one-hour period.
- Screening analysis distance criterion from FTA 1995.
- L_{eq(8h)} is an average measurement over an eight-hour period.

- Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels.
- A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.
- A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.
- For a project within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, exposure of people residing or working in the project area to excessive noise levels.

7.12.3 2003 LRDP EIR Impacts and Mitigation Measures

Impacts of campus growth under the 2003 LRDP through 2015-16 related to noise are evaluated in Section 4.10 of the 2003 LRDP EIR. The proposed project is within the scope of analysis in the 2003 LRDP EIR and significant and potentially significant noise impacts identified in the 2003 LRDP EIR that are relevant to the proposed project are presented below with their corresponding levels of significance before and after application of mitigation measures identified in the 2003 LRDP EIR.

<table>
<thead>
<tr>
<th>2003 LRDP EIR Impacts</th>
<th>Level of Significance Prior to Mitigation</th>
<th>Level of Significance After Mitigation</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.10-1</td>
<td>PS</td>
<td>LS</td>
</tr>
<tr>
<td>Construction of campus facilities pursuant to the 2003 LRDP could expose nearby receptors to excessive groundborne vibration and airborne or groundborne noise.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.10-2</td>
<td>S</td>
<td>SU</td>
</tr>
<tr>
<td>Implementation of the 2003 LRDP would result in increased vehicular traffic on the regional road network, which would substantially increase ambient noise levels at some locations.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### 2003 LRDP EIR Impacts

<table>
<thead>
<tr>
<th>Level of Significance Prior to Mitigation</th>
<th>Level of Significance After Mitigation</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.10-4 Implementation of the 2003 LRDP could potentially expose noise-sensitive land uses to significant rail noise.</td>
<td>PS</td>
</tr>
<tr>
<td>4.10-5 The 2003 LRDP development in combination with other regional development would increase ambient noise levels.</td>
<td>S</td>
</tr>
</tbody>
</table>

Levels of Significance: LS=Less than Significant, S=Significant, PS=Potentially Significant, SU=Significant and Unavoidable

Mitigation measures in the 2003 LRDP EIR that are applicable to the proposed project are presented below. Since these mitigation measures are already being carried out as part of implementation of the 2003 LRDP, they are considered part of the project description, are assumed in the project-level impact analysis, and will not be readopted in this Initial Study or EIR. Nothing in this Initial Study in any way alters the obligations of the campus to implement 2003 LRDP EIR mitigation measures.

### 2003 LRDP EIR Mitigation Measures

**NOISE**

<table>
<thead>
<tr>
<th>4.10-1 Prior to initiation of construction, the campus shall approve a construction noise mitigation program including but not limited to the following:</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Construction equipment shall be properly outfitted and maintained with feasible noise-reduction devices to minimize construction-generated noise.</td>
</tr>
<tr>
<td>- Stationary noise sources such as generators or pumps shall be located 100 feet away from noise-sensitive land uses as feasible.</td>
</tr>
<tr>
<td>- Laydown and construction vehicle staging areas shall be located 100 feet away from noise-sensitive land uses as feasible.</td>
</tr>
<tr>
<td>- Whenever possible, academic, administrative, and residential areas that will be subject to construction noise shall be informed a week before the start of each construction project.</td>
</tr>
<tr>
<td>- Loud construction activity (i.e., construction activity such as jackhammering, concrete sawing, asphalt removal, and large-scale grading operations) within 100 feet of a residential or academic building shall not be scheduled during finals week.</td>
</tr>
<tr>
<td>- Loud construction activity as described above within 100 feet of an academic or residential use shall, to the extent feasible, be scheduled during holidays, Thanksgiving breaks, Christmas break, Spring break, or Summer break.</td>
</tr>
<tr>
<td>- Loud construction activity within 100 feet of a residential or academic building shall be restricted to occur between 7:30 AM and 7:30 PM.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4.10-2(a) For noise-sensitive uses adjacent to Russell Boulevard between Arlington Boulevard and Arthur Street, the existing soundwall (approximately 6.5 feet in height) could be increased slightly in height and extended to include the daycare center to the east.</th>
</tr>
</thead>
<tbody>
<tr>
<td>For noise-sensitive uses adjacent to Russell Boulevard between Arthur Street and SR 113, and from SR 113 to La Rue/Anderson Road and from La Rue Road to Oak Street, soundwalls may be constructed for exterior residential and recreational land uses within approximately 100 feet of the centerline of Russell Boulevard, where construction of such walls would not interfere with driveway access.</td>
</tr>
<tr>
<td>The campus shall reimburse the City of Davis the campus’ fair share of the cost of a City of Davis’ noise abatement program for reducing interior noise levels in homes along Russell Boulevard that are significantly affected by noise from 2003 LRDP-related traffic growth. The campus’ contribution to the City’s noise abatement program could be used to extend sound walls as described above or for other noise abatement measures such as retrofit of homes. The campus’ fair share shall be determined based on the volume of traffic added to Russell Boulevard by the campus as a result of 2003 LRDP implementation and the percentage that 2003 LRDP-related...</td>
</tr>
</tbody>
</table>
2003 LRDP EIR Mitigation Measures

NOISE

Traffic increases constitute of the average daily traffic on the roadway.

4.10-2(b) For components of the 2003 LRDP having future noise-sensitive land uses such as the Neighborhood and Research Park, building and area layouts shall incorporate noise control as a design feature; including increased setbacks, landscaped berms, and using building placement to shield noise-sensitive exterior areas from direct roadway views.

4.10-4 Residential and academic uses proposed within 750 feet of the centerline of a rail line shall be evaluated using the Federal Transit Administration Noise and Vibration guidelines. Following the evaluation, as appropriate, facilities shall be designed and constructed to achieve an interior noise and vibration level within the standards recommended by the guidelines.

4.10-5 Implement LRDP Mitigations 4.10-1 and 4.10-2.

7.12.4 Environmental Checklist and Discussion

<table>
<thead>
<tr>
<th>Noise</th>
<th>Impact to be Analyzed in the EIR</th>
<th>No Additional Analysis Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?</td>
<td>☑</td>
<td>☐</td>
</tr>
<tr>
<td>d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?</td>
<td>☐</td>
<td>☑</td>
</tr>
</tbody>
</table>

a,b,d) The project site for the road extension is located approximately 100 feet from the nearest sensitive receptors in the Solano Park Housing area. The hotel addition would be adjacent to the existing hotel and would be approximately 500 feet from the Solano Park Housing area. The proposed construction would involve standard roadway and building construction techniques. Pile driving, blasting, or other special construction techniques are not anticipated. The 2003 LRDP EIR found that construction of campus facilities pursuant to the 2003 LRDP could expose nearby receptors to excessive groundborne vibration and airborne or groundborne noise (LRDP Impact 4.10-1). Construction under the 2003 LRDP, including the proposed project, would require temporary construction activities using conventional construction techniques and equipment that would not generate substantial levels of vibration or groundborne noise. Routine noise levels from conventional construction activities (with the normal number of equipment operating on the site) range from 75 to 86 dBA Leq at a distance of 50 feet, from 69 to 80 dBA Leq at a distance of 100 feet, and from 55 to 66 dBA Leq at a distance of 500 feet, (although noise levels would likely be lower due to additional attenuation from ground effects, air absorption, and shielding from miscellaneous intervening structures). Noise levels at the nearest sensitive receptors (at a distance of approximately 100 feet from the source) would therefore
be below the significance criteria of 80 dBA Leq daytime and evening and 70 dBA Leq nighttime. However, noise from construction would be audible and would temporarily elevate the local ambient noise level to some degree at distances greater than 100 feet from construction. LRDP Mitigation 4.10-1, included in the proposed project, would be implemented to control construction noise and the potential impact would be less than significant. No additional mitigation or analysis is required.

c) Generation of noise levels on or adjacent to the project site associated with vehicle trips and mechanical equipment would contribute to ambient noise levels. The 2003 LRDP EIR found that implementation of the 2003 LRDP would result in increased vehicular traffic on the regional road network, which would substantially increase ambient noise levels at the following locations through 2015-16: Russell Boulevard, just west of Arlington; the west campus neighborhood site adjacent to SR 113; and on Hutchison Drive west of SR 113 (LRDP Impact 4.10-2). The relatively small number of new vehicle trips generated by the proposed project and associated with approximately twelve new employees could add a small number of vehicles to these locations; however, the increase would be well within average daily fluctuations in traffic volume and would not result in a perceptible increase in road volumes. Noise from the hotel addition’s mechanical equipment would be designed to achieve low noise levels through placement on roof-tops which would minimize effects on hotel guests and would not adversely affect any nearby receptors.

The road extension project would shift the existing Old Davis Road closer to the Solano Park residential area. The new alignment, with the road as close as 200 feet from the residential buildings, could increase noise levels within the Solano Park area. The EIR will evaluate the potential increased noise levels associated with the new roadway alignment.

e) The project site is located approximately two miles from the University Airport. The 2003 LRDP, including the proposed project, does not propose changes to University Airport operations, nor does it propose occupied uses within the airport’s 65 CNEL noise contour. Therefore, the project would not expose people to excessive noise levels associated with this public use airport, and the impact is less than significant and no additional analysis is required.

f) The University Airport is a public use airport, not a private airstrip. No other private airport facilities are within the immediate vicinity of the campus. No impact would occur and no additional analysis is required. Refer to item e) above for discussion of potential noise impacts associated with the campus’ public use airports.
7.13  POPULATION & HOUSING

7.13.1  Background

Section 4.11 of the 2003 LRDP EIR addresses the population and housing effects of campus growth under the 2003 LRDP. The following discussion summarizes information presented in the _Setting_ subsection of Section 4.11 of the 2003 LRDP EIR.

The on-campus population at UC Davis includes students, faculty/staff, and non-UC Davis affiliates working on campus. The current and projected campus population figures are presented in Table 1 of this Tiered Initial Study. As of 2003, approximately 80 percent of the student population and 50 percent of the employee population lived in the Davis area, and approximately 94 percent of students and 90 percent of employees lived within the three-county area of Yolo, Solano, and Sacramento counties. Outside the City of Davis, the predominant residence locations of students and employees are Woodland, West Sacramento, Winters, Dixon, Vacaville, and Fairfield (UC Davis ORMP 2003d).

Vacancy rates in the City of Davis are considered low, and housing costs in the City are generally higher than those elsewhere in the region. Since 1994, the campus has been working toward the goals of maintaining a UC Davis housing supply that can accommodate 25 percent of the on-campus enrolled students and can offer housing to all eligible freshmen. The 2003 LRDP focuses on providing additional on-campus student housing that will accommodate a total of approximately 7,800 students on the core campus (or 26 percent of the peak student enrollment through 2015-16) and an additional 3,000 students in a west campus neighborhood. The campus currently offers one faculty and staff housing area (Aggie Village), which includes 21 single-family units (17 of which have cottages) and 16 duplexes. The 2003 LRDP plans to provide an additional 500 faculty and staff housing units within the west campus neighborhood through 2015-16.

**Project Site**

The project site is currently a landscaped area adjacent to the existing hotel.

7.13.2  2003 LRDP EIR Standards of Significance

The 2003 LRDP EIR considers an impact related to population and housing significant if growth under the 2003 LRDP would:

- Directly induce substantial population growth in the area by proposing new housing and employment.
- Create a demand for housing that could not be accommodated by local jurisdictions.
- Induce substantial population growth in an area indirectly (for example, through extension of roads or other infrastructure).

Additional standards from the CEQA Guidelines’ Environmental Checklist (—b and “c” in the checklist below) was found not applicable to campus growth under the 2003 LRDP.

7.13.3  2003 LRDP EIR Impacts and Mitigation Measures

Impacts of campus growth under the 2003 LRDP through 2015-16 related to population and housing are evaluated in Section 4.11 of the 2003 LRDP EIR. As analyzed in Section 4 of this Initial Study, the proposed project is within the scope of analysis in the 2003 LRDP EIR. A significant population and
housing impact identified in the 2003 LRDP EIR that is relevant to the proposed project is presented below with its corresponding levels of significance. No mitigation was available to reduce the magnitude of this LRDP impact, so the impact LRDP implementation was considered significant and unavoidable.

<table>
<thead>
<tr>
<th>2003 LRDP EIR Impacts</th>
<th>Level of Significance Prior to Mitigation</th>
<th>Level of Significance After Mitigation</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.11-1</td>
<td>S</td>
<td>SU</td>
</tr>
</tbody>
</table>

    Implementation of the 2003 LRDP would directly induce substantial population growth in the area by proposing increased enrollment and additional employment.¹

Levels of Significance: LS=Less than Significant, S=Significant, PS=Potentially Significant, SU=Significant and Unavoidable

¹ No mitigation is available to reduce the magnitude of this impact.

7.13.4 Environmental Checklist and Discussion

<table>
<thead>
<tr>
<th>POPULATION &amp; HOUSING</th>
<th>Impact to be Analyzed in the EIR</th>
<th>No Additional Analysis Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) 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)?</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>d) Create a demand for housing that cannot be accommodated by local jurisdictions?</td>
<td>☐</td>
<td>☑</td>
</tr>
</tbody>
</table>

a) The proposed project would result in an increase in the campus population of approximately twelve persons. The 2003 LRDP EIR found that implementation of the 2003 LRDP would directly induce substantial population growth in the area by proposing increased enrollment and additional employment (LRDP Impact 4.11-1). The impact analyses for all of the resource areas covered in this Initial Study address the campus population increases associated with the project. Where possible, this document mitigates associated environmental impacts to the extent feasible. In certain circumstances, impacts that are associated with campus population growth are identified as significant and unavoidable. Accordingly, the effect of direct population growth associated with the 2003 LRDP, including the proposed project, is also considered a significant and unavoidable impact. This impact was adequately analyzed in the 2003 LRDP EIR and was fully addressed in the Findings and Statement of Overriding Considerations adopted by The Regents in connection with its approval of the 2003 LRDP. No conditions have changed and no new information has become available since certification of the 2003 LRDP EIR that would alter this previous analysis.

The proposed project includes the extension of roads and other infrastructure. This project component is not expected to induce population because the road extension would augment and existing road connection and would not provide roadway capacity to an area of land that is currently undeveloped and unserved by area roads. The 2003 LRDP EIR found that implementation of the 2003 LRDP, including the proposed project, would not induce substantial population growth in the area indirectly through the extension of roads or other infrastructure because these extensions would not
be provided with excess capacity in an area where lack of infrastructure is an obstacle to growth. No additional analysis is required.

b) The proposed project would not displace any existing housing. Therefore, no impact would occur and no additional analysis is required.

c) The proposed project would not displace substantial numbers of people. Therefore, no impact would occur and no additional analysis is required.

d) The 2003 LRDP EIR found that future housing in the region is anticipated to adequately accommodate population growth associated with the 2003 LRDP, including the proposed project, as well as other population growth in the region. Therefore, the 2003 LRDP EIR found that the potential for campus growth to create a demand for housing that could not be accommodated by local jurisdictions is a less than significant impact.
7.14 PUBLIC SERVICES

7.14.1 Background

Section 4.12 of the 2003 LRDP EIR addresses the public services effects of campus growth under the 2003 LRDP. The following discussion summarizes information presented in the ‘Setting’ subsection of Section 4.13 of the 2003 LRDP EIR.

In accordance with the CEQA Guidelines, this Public Services analysis evaluates the environmental effects associated with any physical changes required to meet increases in demand for public services, including police, fire protection, schools, and libraries. Project-level public services impacts are addressed by evaluating the effects of on-campus population growth on public services that directly serve the on-campus population (primarily UC Davis services). Cumulative public services impacts are addressed by evaluating the effects of off-campus population growth on the public services in the Cities of Davis, Dixon, Winters, and Woodland.

UC Davis provides most public services needed on campus, including fire protection, police protection, and library services. The Davis Joint Unified School District serves the City of Davis and portions of Yolo and Solano counties. These services are discussed further below:

- **Fire Protection:** The UC Davis Fire Department provides primary fire response and prevention, natural disaster response, hazardous materials incident response, and emergency medical service to the main campus. The fire department’s goal is to respond to 90 percent of campus emergency calls within 6 minutes (Trauernicht 2010). As of 2010, the UC Davis Fire Department achieves its stated standard of response (Trauernicht 2010).

- **Police:** In 2009-2010, the UC Davis Police Department employed 38 sworn officers to provide 24-hour service to the Davis and Sacramento campuses and facilities owned and leased by UC Davis. 19 officers provide law enforcement services at the Davis Campus with an estimated daytime population of 40,185 (including UC and non-UC employees, students, and dependents living in on-campus housing). Although the campus does not currently rely on any level-of-service standards, the Police Department has indicated that it would like to reach and maintain 1 sworn officer per 1,000 population on the Davis Campus. The Police Department is currently staffed at a level of approximately 0.5 officers per 1,000 on the Davis Campus (Souza 2010).

- **Schools:** In 2001-02 prior to adoption of the 2003 LRDP EIR, a total of approximately 8,677 students were enrolled in the DJUSD’s nine elementary schools, two junior high schools, two high schools, one continuation high school, and one independent study program. The DJUSD estimates student enrollment based on a rate of 0.69 student per single-family residential unit and 0.44 student per multi-family residential unit in its service area. Since 2003, enrollment has decreased slightly with the 2008-09 academic year containing a total enrollment of 8,573 students.

- **Libraries:** UC Davis currently has four main libraries, distributed among the academic centers of the central campus, which serve students, faculty, staff, and the general public, including: Shields Library (the main campus library located centrally on the core campus), the Carlson Health Sciences Library, the Law Library, and the Physical Sciences and Engineering Library.

Project Site

The project site is within the South Entry District of the UC Davis Central Campus is currently used for landscaping adjacent to the existing hotel and as an open field and garden area along the proposed
roadway corridor. There are no existing or planned public service facilities (fire, police, schools or libraries) on or adjacent to the site.

7.14.2 2003 LRDP EIR Standards of Significance

The 2003 LRDP EIR considers a public services impact significant if growth under the 2003 LRDP would:

- Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services.

Effects associated with recreation services are evaluated in Section 7.15, Recreation, and effects associated with the capacity of the domestic fire water system to provide adequate fire protection are evaluated in Section 7.17, Utilities.

7.14.3 2003 LRDP EIR Impacts and Mitigation Measures

Impacts on public services of campus growth under the 2003 LRDP through 2015-16 on public services are evaluated in Section 4.12 of the 2003 LRDP EIR. As analyzed in Section 4 of this Initial Study, the proposed project is within the scope of analysis in the 2003 LRDP EIR. Significant public services impacts identified in the 2003 LRDP EIR associated with implementation of the 2003 LRDP—including the project, are presented below with their corresponding levels of significance before and after application of mitigation measures identified in the 2003 LRDP EIR.

<table>
<thead>
<tr>
<th>2003 LRDP EIR Impacts</th>
<th>Level of Significance Prior to Mitigation</th>
<th>Level of Significance After Mitigation</th>
</tr>
</thead>
<tbody>
<tr>
<td>PUBLIC SERVICES</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.12-6</td>
<td>Implementation of the 2003 LRDP, in conjunction with regional growth, could generate a cumulative demand for new or expanded police and fire service facilities in the region, the construction of which could result in significant adverse environmental impacts to prime farmland and habitat.</td>
<td>S</td>
</tr>
<tr>
<td>4.12-7</td>
<td>Implementation of the 2003 LRDP, in conjunction with regional growth, would increase the number of school-age children living in the area. This could generate a cumulative demand for new school facilities, the construction of which could result in significant environmental impacts to agricultural prime farmland and habitat.</td>
<td>S</td>
</tr>
</tbody>
</table>

Levels of Significance: LS=Less than Significant, S=Significant, PS=Potentially Significant, SU=Significant and Unavoidable

Mitigation measures in the 2003 LRDP EIR that are applicable to the proposed project are presented below. Because these previously adopted mitigation measures are already being carried out as part of implementation of the 2003 LRDP, they are considered part of the project description and will not be readopted. Nothing in this Initial Study in any way alters the obligations of the campus to implement 2003 LRDP EIR mitigation measures.

<table>
<thead>
<tr>
<th>2003 LRDP EIR Mitigation Measures</th>
<th>Level of Significance Prior to Mitigation</th>
<th>Level of Significance After Mitigation</th>
</tr>
</thead>
<tbody>
<tr>
<td>PUBLIC SERVICES</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

84 HOTEL EXPANSION AND ROAD EXTENSION
2003 LRDP EIR Mitigation Measures
PUBLIC SERVICES

4.12-6 If documented unmitigated significant environmental impacts are caused by the construction of police or fire facilities in the Cities of Davis, Dixon, Woodland, and/or Winters that are needed in part due to implementation of the 2003 LRDP, UC Davis shall negotiate with the appropriate local jurisdiction to determine the campus’ fair share (as described in Section 4.12.2.3) of the costs to implement any feasible and required environmental mitigation measures so long as the unmitigated impacts have not been otherwise reduced to less-than-significant levels through regulatory requirements, public funding, or agreements. This mitigation measure shall not apply to any other costs associated with implementation of public service facilities.

4.12-7 If documented unmitigated significant environmental impacts are caused by the construction of school facilities in the Cities of Davis, Dixon, Woodland, and/or Winters that are needed in part due to implementation of the 2003 LRDP, UC Davis shall negotiate with the appropriate local jurisdiction to determine the campus’ fair share (as described in Section 4.12.2.3) of the costs to implement any feasible and required environmental mitigation measures so long as the unmitigated impacts have not been otherwise reduced to less-than-significant levels through regulatory requirements, public funding, or agreements. This mitigation measure shall not apply to any other costs associated with implementation of public service facilities.

7.14.4 Environmental Checklist and Discussion

PUBLIC SERVICES

<table>
<thead>
<tr>
<th>Would the project…</th>
<th>Impact to be Analyzed in the EIR</th>
<th>No Additional Analysis Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>i) Fire protection?</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>ii) Police protection?</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>iii) Schools?</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>iv) Parks?</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>v) Other public facilities?</td>
<td>☐</td>
<td>☑</td>
</tr>
</tbody>
</table>

a, i&ii) UC Davis Fire and Police Protection

The proposed project would increase the population in the Central Campus by about twelve people. Therefore, the project would incrementally contribute to the demand for campus fire and police services that is anticipated under the 2003 LRDP. Under the 2003 LRDP, The 2003 LRDP EIR identified that full implementation of the 2003 LRDP could result in the need for additional fire and police facilities to provide adequate service. To date, the existing facilities provide adequate resources to serve the existing population and the small increase of an additional 12 people with the proposed project would not trigger the need for additional facilities. No impact would occur. No additional analysis is required.

a, iii) Schools

The proposed project would contribute about twelve people to the campus population, which would incrementally contribute to the number of school-age person living in the region. The 2003 LRDP EIR recognized that implementation of the 2003 LRDP, in conjunction with regional growth, would
increase the number of school-age children living in the area. With recent decreases in local population, the area school facilities currently have sufficient capacity to absorb the potential increase in students that would result from the proposed project. No additional new school facilities would need to be constructed in association with the proposed project. No impact would occur. No additional analysis is needed.

a, iv) Effects associated with parks are evaluated in Section 7.15, Recreation.

a, v) Libraries

The proposed project would contribute about twelve people to the campus population, which would incrementally contribute to use of local libraries. UC Davis provides extensive academic library facilities in four general libraries that serve students, faculty, staff, and the general public, as well as in specialized libraries on campus. With its extensive existing libraries and ongoing update processes, UC Davis has adequate facilities to provide sufficient library services to serve the campus and general population’s needs through 2015-16. Therefore, construction of additional library facilities on campus as the result of campus growth under the 2003 LRDP is not anticipated. Furthermore, due to the small scale and infill nature of minor library expansions and renovations that could occur in the Cities of Davis, Dixon, Woodland, and Winters to serve cumulative growth through 2015-16, significant environmental impacts are not anticipated to result. Therefore, project-level and cumulative impacts associated with library services are considered less than significant. No additional analysis is required.
7.15 RECREATION

7.15.1 Background

Section 4.13 of the 2003 LRDP EIR addresses the environmental effects associated with modifying recreational resources to meet campus growth under the 2003 LRDP. The following discussion summarizes information presented in the ‘Setting’ subsection of Section 4.13 of the 2003 LRDP EIR.

UC Davis contains many park-like areas and recreation facilities. Park facilities at UC Davis range in size from small picnic and landscaped areas within campus housing areas to extensively landscaped areas in the academic core of the central campus, such as the Arboretum. Areas such as the Quad, the landscaped areas along A Street and Russell Boulevard, the Putah Creek Riparian Reserve in the west campus, and many areas within the Arboretum are used regularly by members of the UC Davis campus and visitors to the campus.

Recreation facilities on the campus include structures, bike paths, and fields used for physical education, intercollegiate athletics, intramural sports, sports clubs, and general recreation. Recreation structures include Hickey Gym, Recreation Hall, the Recreation Swimming Pool, and Recreation Lodge. In addition, two major campus recreation facilities have been completed since the adoption of the 2003 LRDP: the Activities and Recreation Center and the Schaal Aquatic Center. The general public may purchase privilege cards to use some campus recreation facilities, or may join community or campus organizations that have access to some facilities.

Project Site

The project site is in the South Entry District of the UC Davis Central Campus and is currently a landscaping area adjacent to the existing hotel and is an open field and garden area along the proposed road corridor. Along the road corridor, the existing community garden area would be partially removed to accommodate the proposed project. The garden area is used by residents of the Solano Park Housing area for small-plot gardening.

7.15.2 2003 LRDP EIR Standards of Significance

The 2003 LRDP EIR considers a recreation impact significant if growth under the 2003 LRDP would:

- Increase the use of existing neighborhood and regional parks or other recreation facilities such that substantial physical deterioration of the facility would occur or be accelerated.
- Propose the construction of recreation facilities or require the expansion of recreation facilities, which might have an adverse physical effect on the environment.

7.15.3 2003 LRDP EIR Impacts and Mitigation Measures

Impacts on recreation of campus growth under the 2003 LRDP through 2015-16 associated with recreation are evaluated in Section 4.13 of the 2003 LRDP EIR. As analyzed in Section 4 of this Initial Study, the proposed project is within the scope of analysis in the 2003 LRDP EIR. A significant recreation impact identified in the 2003 LRDP EIR that is relevant to the proposed project is presented below with its corresponding levels of significance before and after application of mitigation measures identified in the 2003 LRDP EIR. Mitigation measures are included to reduce the magnitude of cumulative impact 4.13-2 but this impact is identified as significant and unavoidable because it cannot be fully mitigated.
Mitigation measures in the 2003 LRDP EIR that are applicable to the proposed project are presented below. Because these previously adopted mitigation measures are already being carried out as part of implementation of the 2003 LRDP, they are considered part of the project description and will not be readopted. Nothing in this Initial Study in any way alters the obligations of the campus to implement 2003 LRDP EIR mitigation measures.

2003 LRDP EIR Mitigation Measures

4.13-2 If documented unmitigated significant environmental impacts are caused by the construction of recreation facilities in the Cities of Dixon, Woodland, and/or Winters that are needed in part due to implementation of the 2003 LRDP, UC Davis shall negotiate with the appropriate local jurisdiction to determine the campus’ fair share (as described in Section 4.12.2.3) of the costs to implement any feasible and required environmental mitigation measures so long as the unmitigated impacts have not been otherwise reduced to less-than-significant levels through regulatory requirements, public funding, or agreements. This mitigation measure shall not apply to any other costs associated with implementation of recreation facilities.

7.15.4 Environmental Checklist and Discussion

Would the project...

<table>
<thead>
<tr>
<th>Impact to be Analyzed in the EIR</th>
<th>No Additional Analysis Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Would the project 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?</td>
<td>☐</td>
</tr>
<tr>
<td>b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?</td>
<td>☐</td>
</tr>
</tbody>
</table>

a,b) The proposed project would not include recreational facilities, but would add about twelve people to the campus population, which would incrementally contribute to demand for parks and recreation facilities on and off campus.

The 2003 LRDP EIR found that increased population at UC Davis under the 2003 LRDP, including the population growth associated with the proposed project, is expected to result in increased demand for and usage of campus recreation facilities. However, to counteract the effects of increased usage, it is campus practice to increase maintenance levels of recreation facilities in response to increases in demand. In addition, the 2003 LRDP designates approximately 18 acres of land west of SR 113 for future recreation fields. The 2003 LRDP also designates land for greenbelts to the west of SR 113, expansion of the campus Arboretum, expansion of the Putah Creek Riparian Reserve, and enhanced formal open space (garden walks and formal courtyards) within the central campus. The construction of new facilities would take place when warranted by increased demand and when financially...
feasible. The campus practice of increasing maintenance activities and the planned construction of new facilities would prevent the deterioration of existing recreation facilities, resulting in a less than significant impact.

The proposed project would contribute approximately 12 people to the regional population and this potential increase would not result in the construction of new recreational facilities.

The potential increase is part of the growth planned under the 2003 LRDP. The 2003 LRDP EIR found that implementation of the 2003 LRDP, together with other regional growth, could result in the development of parks and recreation facilities off-campus that could result in significant environmental impacts (Impact 4.13-2). Depending on the site, development of new parks and recreation facilities in the cities of Dixon, Winters, and Woodland could result in impacts such as loss of prime farmland or valuable habitat. However, environmental impacts are too speculative to determine at this time. In adopting LRDP Mitigation 4.13-2, the campus agreed to negotiate with respective jurisdictions to determine the University's fair share of costs for feasible mitigation to reduce associated significant environmental impacts, if any. Due to the speculative nature of this cumulative impact, it was considered significant and unavoidable. This impact was adequately analyzed in the 2003 LRDP EIR and was fully addressed in the Findings and Statement of Overriding Considerations adopted by The Regents in connection with its approval of the 2003 LRDP. No conditions have changed and no new information has become available since certification of the 2003 LRDP EIR that would alter this previous analysis.
7.16 TRANSPORTATION, CIRCULATION, & PARKING

7.16.1 Background

Section 4.14 of the 2003 LRDP EIR addresses the transportation, circulation, and parking effects of campus growth under the 2003 LRDP. The following discussion summarizes information presented in the ‘Setting’ subsection of Section 4.14 of the 2003 LRDP EIR.

Campus

UC Davis is served by six main campus roadways or —gateway” that connect the campus to residential and downtown areas in the City of Davis, and two gateways that provide direct access to regional freeways (I-80 and SR 113). Circulation within the central campus is accommodated primarily by the campus “loop” roadway system, which includes Russell Boulevard, A Street, New and Old Davis Roads, California Avenue, and La Rue Road. Other roadways within the core campus area are restricted to transit and emergency vehicles, bicyclists, and pedestrians. Primary vehicular access to the south campus is provided by Old Davis Road, to the west campus by Hutchison Drive, and to Russell Ranch by Russell Boulevard.

Level of service (LOS) is a general measure of traffic operating conditions whereby a letter grade, from A (the best) to F (the worst), is assigned to roadway intersections. These grades represent the comfort and convenience associated with driving from the driver's perspective. To assess the worst-case traffic conditions, LOS is measured during morning (7 to 9 AM) and afternoon (4 to 6 PM) peak commute times. The LOS of campus roadways varies. Monitoring of campus intersections during peak hours in Fall 2001 and Fall 2002 found that the Hutchison Drive/Health Sciences Drive intersection (with LOS E during the PM peak hour) was the only study intersection to operate below the campus' operation standard (standards are identified in the following section). The campus is planning on installing a traffic signal at this intersection by fall 2006.

Bicycles are a major component of the transportation system at UC Davis and in the City of Davis. UC Davis has an extensive system of bicycle paths, which makes bicycles a popular form of travel on campus. The UC Davis Bicycle Plan (UC Davis 2002) estimates that 15,000 to 18,000 bicycles travel to the campus on a typical weekday during the Fall and Spring sessions when the weather is good.

Parking at UC Davis is provided by a combination of surface lots and parking structures. UC Davis Transportation and Parking Services (TAPS) oversees parking services on campus including selling parking passes, providing traffic control at special events, ticketing violators, and measuring parking utilization throughout campus on a quarterly basis. Approximately 11,500 parking spaces were provided on campus as in Fall of 2008.

Project Site

The proposed road extension component would extend the existing roadway approximately 1,100 feet to connect with the south side of Parking Lot 5 and provide a new connection between the South Entry District and A Street.

7.16.2 2003 LRDP EIR Standards of Significance

The 2003 LRDP EIR considers a transportation, circulation, and parking impact significant if growth under the 2003 LRDP would:
Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit.

Conflict with an applicable congestion management program, including, but not limited to level of service standards established by the county congestion management agency for designated roads and highways.

- Cause an increase in the traffic that may be substantial in relation to the existing roadway capacity of the street system as indicated by LOS standards for congestion at intersections.

The addition of project traffic causing a LOS change from acceptable to unacceptable would have a significant impact. The following LOS thresholds apply to the study intersections.

- LOS D is the minimum acceptable LOS for UC Davis.
- LOS E is the minimum acceptable LOS for the City of Davis. LOS F is acceptable for the City of Davis Core Area.
- LOS E is the minimum acceptable LOS for I-80 and its associated interchanges.
- LOS C is the minimum acceptable LOS for SR 113 and its associated interchanges.

In addition, the project would have a significant impact if the project adds 10 or more vehicles to the volume of a study intersection that is expected to operate unacceptably without the project. For intersections that operate unacceptably without the project, even a small amount of additional traffic could increase the delay. For the 2003 LRDP EIR, future volumes were rounded to the nearest 10; therefore, 10 vehicles is the minimum amount of traffic that could be added to an intersection already operating at an unacceptable level.

Increased intersection congestion would also be a significant impact if it would exceed a LOS standard established by the county congestion management agency (or any affected agency or jurisdiction) for designated roads or highways.

- LOS E is the minimum acceptable LOS for roadways and intersections in Solano County.
- LOS E is the minimum acceptable LOS for I-80 and its associated interchanges between the Solano County limit and Olive Drive.
- LOS E is the minimum acceptable LOS for SR 113 and its associated interchanges within the Davis city limits.
- LOS E is the minimum acceptable LOS for Russell Boulevard between SR 113 and B Street.
- LOS E is the minimum acceptable LOS for Richards Boulevard between First Street and I-80.
- LOS E is the minimum acceptable LOS for First Street between B Street and Richards Boulevard.
- LOS E is the minimum acceptable LOS for B Street between First Street and 5th Street.

- Conflict with applicable adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks).

Impacts related to safety risks associated with the UC Davis airport and emergency access are discussed in Section 7.7 Hazards and Hazardous Materials. The 2003 LRDP would make only
limited changes to the roadway network and would not create or increase hazards due to design features such as dangerous intersections.

7.16.3 2003 LRDP EIR Impacts and Mitigation Measures

Impacts of campus growth under the 2003 LRDP through 2015-16 on traffic, circulation, and parking are evaluated in Section 4.14 of the 2003 LRDP EIR. The proposed project is within the scope of analysis in the 2003 LRDP EIR and significant and potentially significant traffic, circulation, and parking impacts identified in the 2003 LRDP EIR that are relevant to the proposed project are presented below with their corresponding levels of significance before and after application of mitigation measures identified in the 2003 LRDP EIR. Mitigation measures were included to reduce the magnitude of impact 4.14-2, but this LRDP impact was identified as significant and unavoidable because mitigation falls within other jurisdictions to enforce and monitor and therefore cannot be guaranteed by the University of California.

<table>
<thead>
<tr>
<th>2003 LRDP EIR Impacts</th>
<th>Level of Significance Prior to Mitigation</th>
<th>Level of Significance After Mitigation</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.14-1</td>
<td>Implementation of the 2003 LRDP would cause unacceptable intersection operations at on-campus intersections.</td>
<td>S</td>
</tr>
<tr>
<td>4.14-2</td>
<td>Implementation of the 2003 LRDP would cause unacceptable intersection and freeway LOS operations at off-campus facilities, including facilities contained in the Yolo County and Solano County Congestion Management Plans.</td>
<td>S</td>
</tr>
<tr>
<td>4.14-4</td>
<td>Implementation of the 2003 LRDP would increase demand for transit services.</td>
<td>PS</td>
</tr>
<tr>
<td>4.14-5</td>
<td>Growth in population levels in the core area of the central campus would result in increased conflicts between bicyclists, pedestrians, and transit vehicles, causing increased congestion and safety problems.</td>
<td>PS</td>
</tr>
</tbody>
</table>

Levels of Significance: LS=Less than Significant, S=Significant, PS=Potentially Significant, SU=Significant and Unavoidable

Mitigation measures in the 2003 LRDP EIR that are applicable to the proposed project are presented below. Since these mitigation measures are already being carried out as part of implementation of the 2003 LRDP, they are considered part of the project description and will not be readopted in this Initial Study or EIR. Nothing in this Initial Study in any way alters the obligations of the campus to implement 2003 LRDP EIR mitigation measures.

<table>
<thead>
<tr>
<th>2003 LRDP EIR Mitigation Measures</th>
<th>Transportation, Circulation, &amp; Parking</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.14-1(a)</td>
<td>UC Davis shall continue to actively pursue Transportation Demand Management strategies to reduce vehicle-trips to and from campus.</td>
</tr>
<tr>
<td>4.14-1(b)</td>
<td>UC Davis shall continue to monitor AM and PM peak hour traffic operations at critical intersections and roadways on campus.</td>
</tr>
<tr>
<td>4.14-1(c)</td>
<td>UC Davis shall review individual projects proposed under the 2003 LRDP as they advance through the environmental clearance phase of development to determine if intersection or roadway improvements are needed with the additional traffic generated by the proposed project. If intersection operations are found to degrade to unacceptable levels, UC Davis shall construct physical improvements such as adding traffic signals or roundabouts at affected study intersections.</td>
</tr>
<tr>
<td>4.14-2(a)</td>
<td>UC Davis shall continue to actively pursue Transportation Demand Management strategies to reduce vehicle-trips</td>
</tr>
</tbody>
</table>
to and from campus.

4.14-2(b) UC Davis shall continue to monitor AM and PM peak hour traffic operations at critical intersections and roadways in the campus vicinity at least every three years to identify locations operating below UC Davis, City of Davis, Yolo County, Solano County, or Caltrans LOS thresholds and to identify improvements to restore operations to an acceptable level.

4.14-2(c) UC Davis shall review individual projects proposed under the 2003 LRDP as they advance through the environmental clearance phase of development to determine if intersection or roadway improvements are needed with the additional traffic generated by the proposed project. If intersection operations are found to degrade to unacceptable levels, UC Davis shall contribute its fair share towards roadway improvements at affected study intersections.

4.14-4 UC Davis shall monitor transit ridership to identify routes operating over capacity with increased campus growth. UC Davis shall work with transit providers to identify additional service required with campus growth or new transit routes needed to serve future development areas.

4.14-5 UC Davis shall monitor core area pedestrian and bike activity and accidents. UC Davis shall improve bike and pedestrian facilities or alter transit operations to avoid increased bicycle accident rates or safety problems.

---

7.16.4 Environmental Checklist and Discussion

<table>
<thead>
<tr>
<th>TRANSPORTATION, CIRCULATION, &amp; PARKING</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Impact to be Analyzed in the EIR</strong></td>
</tr>
<tr>
<td>----------------------------------------</td>
</tr>
<tr>
<td>a) Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?</td>
</tr>
<tr>
<td>b) Conflict with an applicable congestion management program, including, but not limited to level of service standards established by the county congestion management agency for designated roads and highways?</td>
</tr>
<tr>
<td>c) 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?</td>
</tr>
<tr>
<td>d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?</td>
</tr>
<tr>
<td>e) Result in inadequate emergency access?</td>
</tr>
<tr>
<td>f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?</td>
</tr>
</tbody>
</table>

a,b,d,e,f) Project activities would result in traffic and circulation effects from expansion of the hotel and from the proposed realignment of Old Davis Road. The impact from these effects will be evaluated in the project EIR.
c) The proposed project would result in no change to air traffic patterns. The UC Davis airport is the closest airport and the proposed project would have no effect on the number of flights or the operation of the airport. No impact would occur.
7.17 Utilities & Service Systems

7.17.1 Background

Section 4.15 of the 2003 LRDP EIR addresses the effects of campus growth on utility systems under the 2003 LRDP. The campus provides the following utility and service systems to campus projects:

- Domestic/Fire Water
- Utility Water
- Agricultural Water
- Storm Drainage
- Wastewater
- Solid Waste
- Chilled Water
- Steam
- Electricity
- Natural Gas
- Telecommunications

Project Site

The proposed project would use campus utilities and service systems including: domestic water, utility water, sanitary sewer, storm drainage, electricity, natural gas, and telecommunications. These utilities and service systems are discussed below:

- **Domestic Water:** The campus’ domestic/fire water system obtains water from six deep aquifer wells to serve the needs of campus buildings, landscape irrigation on the west and south campuses, and heating and cooling systems at the Central Heating and Cooling Plant (CHCP). The system includes approximately 144,000 linear feet of distribution pipelines, a water tower and a ground storage tank with a combined capacity of approximately 500,000 gallons, an underground storage reservoir with a capacity of approximately 1.3 million gallons, and a booster pump station. In 2007-08, annual domestic water consumption was approximately 2,419 acre-feet and peak demand was 3,100 gpm. Domestic water for the hotel building addition will be provided from the campus domestic water system and the building addition will connect to an existing water supply main within existing hotel site. The road extension project will not affect domestic water supply.

- **Utility Water:** The campus’ utility water system obtains water from six intermediate-depth aquifer wells to provide water for landscape irrigation, greenhouse irrigation, and some laboratories. The system includes one 100,000-gallon water tower. In 2007-08, annual utility water consumption was approximately 493 acre-feet and peak demand was 1.0 mgd. The hotel building addition will not utilize water from the campus utility water system. The road extension project will use utility water for roadway landscaping and will connect to an existing water supply main within the project site.

- **Wastewater:** UC Davis operates a campus wastewater conveyance and treatment system that is independent from regional facilities. The campus Wastewater Treatment Plant (WWTP) is located in the south campus, and treated effluent from the plant discharges to Putah Creek. The peak month capacity of the campus WWTP, as regulated under the existing NPDES permit issued by the CVRWQCB, is 2.7 mgd average dry weather month. Recent upgrades have raised the capacity to 3.85 mgd average dry weather monthly. The maximum monthly inflow in 2007 was 2.4 mgd. The hotel building addition will connect to an existing sanitary sewer line within the project site. The sewer line is served by the campus wastewater treatment facility. The road extension project will not connect to the campus sanitary sewer system and will not generate demand for the sanitary sewer system.
• **Storm Drainage:** The central campus and developed parts of the west and south campuses are served by campus storm water drainage systems. The central campus drainage system involves a system of underground pipes that drain to the Arboretum Waterway (providing the only major detention storage in the system), from which storm water is pumped to the South Fork of Putah Creek during large storm events. The hotel addition and the road extension will connect to the campus storm drainage system so that stormwater runoff from the project is directed to underground drains that would flow to the UC Davis Arboretum Waterway. For the hotel building addition, the existing drains at the project site would be utilized. For the road extension project, new project drain inlets would connect to a new underground drainage pipe that would extend from the road extension northward, past the west side of Nelson Hall and would then empty into the arboretum waterway.

• **Solid Waste:** UC Davis provides solid waste collection and recycling services for the campus. All nonrecycled and nonhazardous solid wastes collected on campus are disposed at the campus owned and operated Class III sanitary landfill located in the west campus west of County Road 98 and north of Putah Creek. In 2007, the Davis campus sent approximately 8,100 tons of solid waste to the campus landfill per year (approximately 34 tons per working day). In addition, approximately 3,700 tons of wastes from the UC Davis Medical Center in Sacramento are disposed at the landfill each year. The permitted capacity of the landfill is 500 tons per day, and the landfill unit currently being used has anticipated capacity to serve the campus needs through 2023. In 2007-08, approximately 14,300 tons of materials were diverted for recycling and reuse. The amount of materials diverted represents approximately 60 percent of the total waste generated on the Davis campus.

• **Electricity:** The main campus currently receives electricity from the Western Area Power Administration (WAPA) through PG&E transmission lines at the campus substation located south of I-80. The campus electrical system has an available capacity of 64.4 megawatts (MW). Annual electrical usage on campus in 2007-08 was approximately 235 million kilowatt-hours (KWh) per year. The hotel addition and the road extension will connect to the campus at an existing connection point within each project site. The hotel addition will use electric power for lighting and cooling. The road extension project will use electrical power for streetlights.

• **Natural Gas:** The campus purchases natural gas from outside vendors and provides it to the campus facilities through PG&E pipelines. The hotel addition will connect to the Pacific Gas and Electric (PG&E) natural gas system at an existing connection point within the project site. The road extension would not utilize natural gas. No off-site trenching will be needed to utilize natural gas.

• **Telecommunications:** The majority of all telephone, data, video, and wireless infrastructure and facilities on campus are owned by the campus and operated by the UC Davis Communications Resources Department. The main campus switching facility is located in the Communications Building. As new buildings are constructed, the Communications Resources Department coordinates with the UC Davis Office of Architects and Engineers to design and direct the installation of intra- and inter-building telecommunications facilities in accordance with established standards. The hotel addition will connect to the AT&T telecommunication infrastructure for network and telephone service. The project will utilize existing connections within the hotel building to obtain service. The road extension would not utilize telecommunications services.
7.17.2 2003 LRDP EIR Standards of Significance

The 2003 LRDP EIR considers a utilities and service systems impact significant if growth under the 2003 LRDP would:

- Exceed the Central Valley Regional Water Quality Control Board's wastewater treatment requirements.
- Require or result in the construction or expansion of water or wastewater treatment facilities, which would cause significant environmental effects.
- Require or result in the construction or expansion of storm water drainage facilities, which could cause significant environmental effects.
- Result in the need for new or expanded water supply entitlements.
- Exceed available wastewater treatment capacity.
- Be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs.
- Fail to comply with applicable federal, state, and local statutes and regulations related to solid waste.
- Require or result in the construction or expansion of electrical, natural gas, chilled water, or steam facilities, which would cause significant environmental impacts.
- Require or result in the construction or expansion of telecommunication facilities, which would cause significant environmental impacts.

7.17.3 2003 LRDP EIR Impacts and Mitigation Measures

Impacts of campus growth under the 2003 LRDP through 2015-16 on utilities and service systems are evaluated in Section 4.15 of the 2003 LRDP EIR. As analyzed in Section 4 of this Initial Study, the proposed project is within the scope of analysis in the 2003 LRDP EIR. Significant and potentially significant utilities and service systems impacts identified in the 2003 LRDP EIR that are relevant to the proposed project are presented below with their corresponding levels of significance before and after application of mitigation measures identified in the 2003 LRDP EIR. In addition, impacts 4.15-1, 4.15-2, 4.15-3, 4.15-4, and 4.15-6 presented below, are considered less than significant prior to mitigation, but mitigation measures were identified in the 2003 LRDP EIR to further reduce the significance of these impacts. Less than significant impacts that do not include mitigation are not presented here. A mitigation measure is included to reduce the magnitude of LRDP cumulative impact 4.15-10, but this impact is identified as significant and unavoidable because it cannot be fully mitigated.

<table>
<thead>
<tr>
<th>2003 LRDP EIR Impacts Utilities &amp; Service Systems</th>
<th>Level of Significance Prior to Mitigation</th>
<th>Level of Significance After Mitigation</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.15-1 Implementation of the 2003 LRDP would require the expansion of campus domestic/fire water extraction and conveyance systems, which would not cause significant environmental impacts.</td>
<td>LS</td>
<td>LS</td>
</tr>
<tr>
<td>4.15-2 Implementation of the 2003 LRDP would require the expansion of campus utility water extraction and conveyance systems, which would not cause significant environmental impacts.</td>
<td>LS</td>
<td>LS</td>
</tr>
</tbody>
</table>
### 2003 LRDP EIR Impacts

**Utilities & Service Systems**

<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
<th>Level of Significance Before Mitigation</th>
<th>Level of Significance After Mitigation</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.15-3</td>
<td>Implementation of the 2003 LRDP would require the expansion of wastewater treatment and conveyance facilities, the construction and operation of which would not result in significant environmental impacts.</td>
<td>LS</td>
<td>LS</td>
</tr>
<tr>
<td>4.15-4</td>
<td>Implementation of the 2003 LRDP would require the expansion of campus storm drainage conveyance and detention facilities, which would not result in significant environmental impacts.</td>
<td>LS</td>
<td>LS</td>
</tr>
<tr>
<td>4.15-6</td>
<td>Implementation of the 2003 LRDP would require the expansion of the campus electrical system, which would not result in significant adverse environmental impacts.</td>
<td>LS</td>
<td>LS</td>
</tr>
<tr>
<td>4.15-7</td>
<td>Implementation of the 2003 LRDP would require the expansion of natural gas transmission systems, which would result in environmental impacts.</td>
<td>LS</td>
<td>LS</td>
</tr>
<tr>
<td>4.15-10</td>
<td>Implementation of the 2003 LRDP together with other regional development could generate a cumulative demand for wastewater treatment facilities in the region, the construction of which could result in significant environmental impacts on habitat.</td>
<td>S</td>
<td>SU</td>
</tr>
</tbody>
</table>

**Levels of Significance:** LS=Less than Significant, S=Significant, PS=Potentially Significant, SU=Significant and Unavoidable

Mitigation measures in the 2003 LRDP EIR that are applicable to the proposed project are presented below. Since these mitigation measures are already being carried out as part of implementation of the 2003 LRDP, they are considered part of the project description and will not be readopted in this Initial Study or EIR. Nothing in this Initial Study in any way alters the obligations of the campus to implement 2003 LRDP EIR mitigation measures.

### 2003 LRDP EIR Mitigation Measures

**Utilities & Service Systems**

<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.15-1(a)</td>
<td>Once preliminary project design is developed, the campus shall review each project to determine if existing domestic/fire water supply is adequate at the point of connection. If domestic/fire water is determined inadequate, the campus will upgrade the system to provide adequate water flow and pressure to the project site before constructing the project.</td>
</tr>
<tr>
<td>4.15-1(b)</td>
<td>Implement domestic water conservation strategies as indicated in LRDP Mitigation 4.8-5(a) (see Section 7.8 Hydrology and Water Quality of this Tiered Initial Study).</td>
</tr>
<tr>
<td>4.15-2(a)</td>
<td>Once preliminary project design is developed, the campus shall review each project to determine whether existing utility water supply is adequate at the point of connection. If the utility water supply is determined to be inadequate, the campus will upgrade the system to provide adequate water flow to the project site prior to occupation or operation.</td>
</tr>
<tr>
<td>4.15-2(b)</td>
<td>Implement utility water conservation strategies as indicated in LRDP Mitigation 4.8-6(a) (see Section 7.8 Hydrology and Water Quality of this Tiered Initial Study).</td>
</tr>
<tr>
<td>4.15-3</td>
<td>Once preliminary project design is developed, the campus shall review each project to determine whether existing capacity of the sanitary sewer line at the point of connection is adequate. If the capacity of the sewer line is determined inadequate, the campus will upgrade the system to provide adequate service to the project site prior to occupation or operation.</td>
</tr>
<tr>
<td>4.15-4</td>
<td>Once preliminary project design is developed, the campus shall review each project to determine whether existing storm drainage system is adequate at the point of connection. If the storm drainage system is determined inadequate, the campus will upgrade the system to provide adequate storm water drainage and/or detention prior to occupation or operation.</td>
</tr>
</tbody>
</table>
2003 LRDP EIR Mitigation Measures

Utilities & Service Systems

4.15-6(a) Once preliminary project design is developed, the campus shall review each project to determine whether the existing electrical system is adequate at the point of connection. If the electrical system is determined inadequate, the campus will upgrade the system to provide adequate service to the project prior to occupation or operation.

4.15-6(b) The campus would continue to meet or exceed Title 24 energy conservation requirements for new buildings, and it would continue to incorporate energy efficient design elements outlined in the UC Davis Campus Standards & Design Guide in new construction and retrofit projects. These energy conservation standards may be subject to modification as more stringent standards are developed.

4.15-7(a) Once preliminary project design is developed, the campus shall review each project to determine whether existing capacity of the natural gas supply pipeline at the point of connection is adequate. If the capacity of the pipeline is determined inadequate, the system will be updated to provide adequate service to the project site prior to occupation or operation.

4.15-7(b) To minimize disturbance to archaeological resources associated with CA-Yol-118, PG&E can and should implement directional drilling or other alternative means to trenching, or should have a qualified archaeological monitor present and provide a representative of the local Native American community an opportunity to monitor during construction.

4.15-10 If documented unmitigated significant environmental impacts are caused by the construction of wastewater treatment facilities in the Cities of Davis, Dixon, Woodland, and/or Winters that are needed in part due to implementation of the 2003 LRDP, UC Davis shall negotiate with the appropriate local jurisdiction to determine the campus’ fair share (as described in Section 4.12.2.3) of the costs to implement any feasible and required environmental mitigation measures so long as the unmitigated impacts have not been otherwise reduced to less-than-significant levels through regulatory requirements, public funding, or agreements. This mitigation measure shall not apply to any other costs associated with implementation of utilities or service systems.

7.17.4 Environmental Checklist and Discussion

Utilities & Service Systems

<table>
<thead>
<tr>
<th>Would the project…</th>
<th>Impact to be Analyzed in the EIR</th>
<th>No Additional Analysis Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project’s projected demand in addition to the providers existing commitments?</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>g) Comply with federal, state, and local statutes and regulations related to solid waste?</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>h) Require or result in the construction or expansion of electrical, natural gas, chilled water, or steam facilities, which would cause significant environmental impacts?</td>
<td>☐</td>
<td>☑</td>
</tr>
</tbody>
</table>
i) Require or result in the construction or expansion of telecommunication facilities, which would cause significant environmental impacts?  

a) The proposed project would add approximately twelve people and new building space to the campus which would result in a minor increase to the total amount of wastewater generated on the campus. The proposed project includes new hotel rooms that would be similar to typical hotel rooms and would therefore not involve any atypical sources of pollutants. The permitted peak monthly average capacity of the campus WWTP is currently 2.7 mgd, and growth under the 2003 LRDP, including the proposed project, is anticipated to increase the volume of discharge to 3.85 mgd through 2015-16. Recently completed upgrades to the plant increased its capacity to 3.85 mgd. As discussed further in item —a,|In Section 7.9, Hydrology and Water Quality, with continuation of current practices and implementation of 2003 LRDP EIR mitigation measures, the campus anticipates meeting the WWTP’s permit requirements. Therefore, the project is not expected to exceed wastewater treatment requirements and no further analysis is required. No impact would occur.

b) Domestic Water Facilities

The proposed point of connection for the project would be at the existing water main within the hotel site that was recently installed to serve the hotel project. The 2003 LRDP EIR identified that campus development under the 2003 LRDP would require the expansion of campus domestic/fire water extraction and conveyance systems, the construction of which would not cause significant environmental impacts (LRDP Impact 4.15-1). However, the domestic water line associated with the project is currently built and no domestic water utility extensions would be necessary. No additional analysis is required and no impact would occur.

Utility Water Facilities

The hotel expansion would not utilize utility water and would not connect to the campus utility water system. Utility water would be utilized to water the roadway landscaping that is planned for the road extension component. The road extension component would connect to an existing water main within the project site. No extensions would be necessary, and there would be no impact related to utility water facilities. No impact would occur.

Wastewater Facilities

The proposed hotel expansion would contribute wastewater to the campus sanitary sewer system from the addition of 52 new hotel rooms and would connect to the existing sewer main located adjacent to the building site. The road extension project would not generate wastewater. The 2003 LRDP EIR identified that implementation of the 2003 LRDP, including the proposed project, would require the expansion of campus wastewater treatment and conveyance facilities, the construction and operation of which would not result in significant environmental impacts (LRDP Impact 4.15-3). Future expansion of the existing WWTP and installation of new sanitary sewer conveyance lines would primarily occur on previously disturbed ground. In addition, the campus would survey the site before construction and perform monitoring during construction (in compliance with 2003 LRDP Mitigations 4.4-1 and 4.5-1) to avoid inadvertent biological and cultural resource impacts. Therefore, this impact would be less than significant. LRDP Mitigation 4.15-3, included in the proposed project, would further reduce the significance of this impact by ensuring the campus practice of reviewing projects to determine if there is adequate capacity to provide sanitary sewer service, and to upgrade the system as necessary.
The proposed project would add approximately twelve people to the campus, some who would potentially relocate into nearby communities such as Davis, Woodlands, Dixon and Winters, in order to be close to work. While the number of persons added by the proposed project to any community would be small, the added population would contribute to the cumulative demand for wastewater treatment facilities in the region, which the 2003 LRDP EIR recognized could result in significant environmental impacts (LRDP Impact 4.15-10). Because expansion of wastewater treatment facilities in local jurisdictions could require development on agricultural land, loss of farmland and/or habitat could result. To the extent that an increase in off-campus population associated with the 2003 LRDP, including the proposed project, could contribute to the demand for wastewater treatment, in compliance with LRDP Mitigation 4.15-10, the campus would negotiate with the affected jurisdictions to determine the University’s fair share of costs for feasible mitigation to reduce associated significant environmental impacts. The campus’ contribution to mitigation could include implementation of preservation mechanisms for on-campus prime farmland and/or habitat conservation. However, impacts associated with an irreversible loss of prime farmland and habitat could not be mitigated to less-than-significant levels. Therefore, the cumulative impacts related to wastewater treatment facility construction in the Cities of Davis, Winters, Dixon, and Woodland would be significant and unavoidable. This impact was adequately analyzed in the 2003 LRDP EIR, and was fully addressed in the Findings and Statement of Overriding Considerations adopted by The Regents in connection with its approval of the 2003 LRDP. No conditions have changed and no new information has become available since certification of the 2003 LRDP EIR that would alter this previous analysis.

c) Storm water from the hotel addition would be collected by an existing storm drain which discharges into the campus storm drain system. Stormwater from the road extension would be collected in the roadway gutter and would flow into drainage inlets. The drainage inlets would be connected to a new underground storm drain pipe that would constructed for this project. The new piping improvements would extend from the roadway area north toward the Arboretum Waterway and would discharge the collected stormwater into the Arboretum Waterway. The 2003 LRDP EIR identified that implementation of the 2003 LRDP would require the expansion of storm drainage conveyance and detention facilities, the construction and operation of which would not result in significant environmental impacts (Impact 4.15-4). In addition, the campus would survey the site before construction and perform monitoring during construction (in compliance with 2003 LRDP Mitigations 4.4-1 and 4.5-1) to avoid inadvertent biological and cultural resource impacts. LRDP Mitigation 4.15-4, included in the proposed project, would further reduce this less-than-significant impact by ensuring the campus practice of reviewing projects to determine if there is adequate capacity to provide storm water drainage service for the proposed project, and to upgrade the system as necessary. Therefore, the impact associated with storm drain improvements would be less than significant and no further analysis is required.

d) The project’s demand for domestic, fire and utility water would be served by the on-campus groundwater wells screened in the deep aquifer. Impacts associated with the project’s demand for water from the deep and shallow/intermediate aquifers are addressed in item (b) in Section 7.9, Hydrology and Water Quality. To date, campus use of water from the deep aquifer has decreased in recent years and the project contribution to deep water demand would be below the baseline level analyzed in the LRDP EIR. UC Davis would need no additional water entitlements to serve the project or the growth planned under the 2003 LRDP. The proposed project would not contribute to demand for additional entitlements. No impact would occur.

e) The campus’ WWTP would provide wastewater treatment for the proposed project. As discussed in item (b) above, LRDP Mitigation 4.15-3, included in the proposed project, would ensure the campus practice of reviewing projects to determine if there is adequate capacity to provide sanitary sewer
service, and to upgrade the system as necessary. Therefore, the impact associated with sanitary sewer system improvements would be less than significant and no additional analysis is required.

f) The waste disposal needs of the proposed project would be served by the campus landfill and would be a minor contributor of solid waste. As identified in the 2003 LRDP EIR, given the demands anticipated under the 2003 LRDP (including the proposed project), the life expectancy of the campus landfill is to 2023. Therefore, the campus landfill would have adequate capacity to serve the proposed project and the impact would be less than significant.

g) Hazardous wastes generated by the proposed project are discussed in Section 7.8, Hazards and Hazardous Materials in this Initial Study and will be evaluated in further detail in the project EIR. The non-hazardous solid waste generated by the project would be typical of a hotel building. The proposed project would comply with all applicable statutes and regulations related to solid waste. Therefore, no impact would occur.

h) The 2003 LRDP EIR identified that growth under the 2003 LRDP would require the expansion of the campus electrical system. Electrical utility extensions required by the proposed project would be constructed within a previously disturbed area. In addition, the campus would perform monitoring during construction (in compliance with 2003 LRDP Mitigation 4.5-1) to avoid inadvertent cultural resource impacts. Therefore, environmental effects associated with utility extensions would be less than significant. LRDP Mitigations 4.15-6(a,b), 4.15-7(a), and 4.15-8, included in the proposed project, would further reduce the significance of this impact by requiring the campus to continue to incorporate energy efficient design elements, meet or exceed Title 24 energy conservation requirements, and review the project to determine if the relevant utility supply is adequate at the point of connection and if any upgrades to the utility system are required. The potential impact would be less than significant.

i) The project would connect to a private provider of telecommunications facilities. The project would connect to a point within the existing hotel building and no new trenching or off-site upgrades would be necessary to serve the proposed project. No additional telecommunications facilities would be required and there would be no environmental effect related to the expansion of telecommunications infrastructure.
### Mandatory Findings of Significance

<table>
<thead>
<tr>
<th>Would the project…</th>
<th>Impact to be Analyzed in the EIR</th>
<th>No Additional Analysis Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) 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?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>b) Does the project have impacts that are individually limited, but cumulatively considerable? (&quot;Cumulatively considerable&quot; means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

- **a)** The proposed project would not significantly affect fish or wildlife habitat. The issue of potential impacts to archaeological resources will be addressed in the EIR.

- **b,c)** The cumulatively considerable project impacts will be assessed and summarized in the EIR. In addition, the potential for the project to have adverse environmental effects on human beings will be described in the EIR.
8  FISH & GAME DETERMINATION

Based on the information presented in this Tiered Initial Study, the project has a potential to adversely affect wildlife or the habitat upon which wildlife depend. Therefore, a filing fee will be paid.

___ Certificate of Fee Exemption

__X__ Pay Fee
REFERENCES


California Environmental Protection Agency (Cal EPA), Climate Action Team. 2006. Climate Action Team Report to Governor Schwarzenegger and the Legislature.

Chandler, Mike, UC Davis Fire Chief. 2003, February 27. Personal communication with Sarah Mattern; regarding achievement of stated standard of response.


UC Davis. 2002. UC Davis Bicycle Plan.

UC Davis. 1997, October. UC Davis Water Management Plan.

UC Davis Agricultural Services. 2003. UC Davis Irrigation Database (from Irrigation Services Billing) for crops and aquaculture.


UC Davis ORMP. 2003c. Campus Water Balance.

UC Davis ORMP. 2003d. Fall 2002 UC Davis Travel Behavior Survey.


U.S. Environmental Protection Agency (U.S. EPA). n.d.(a) —High GWP Gases and Climate Change,”

U.S. Environmental Protection Agency (U.S. EPA). n.d.(b) —Methane: Sources and Emissions,”


Wengler, Kurt. 2005, March 16. Telephonic communication with Camille Kirk, UC Davis Office of
Resource Management and Planning; regarding design standards for stormwater management.


Impacts and Mitigation.
10  AGENCIES & PERSONS CONSULTED

None

11  REPORT PREPARED

Matt Dulcich, Assistant Director, Environmental Planning, UC Davis

Sid England, Assistant Vice Chancellor, Environmental Stewardship and Sustainability, UC Davis

Ardie Dehghani, Design and Construction Management, UC Davis