



# **DUNDEE RESIDENCE HALL AND GLASGOW DINING PROJECT**

## **UCR Project # 950570**

Addendum No. 2  
to the 2005 UC Riverside Long Range Development Plan Environmental Impact Report

The following Addendum has been prepared in compliance with CEQA.

**Prepared for:**

Capital Asset Strategies - Campus Planning  
1223 University Avenue, Suite 240  
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**June 2018**



## 1.0 PROJECT INFORMATION

1. Project title:

Dundee Residence Hall and Glasgow Dining Project, UCR Project 950570

2. Lead agency name and address:

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

3. Contact person and phone number:

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Principal Environmental Planner  
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4. Project location:

University of California, Riverside  
Riverside County

5. Project sponsor's name and address:

See #2 & #3

6. Custodian of the administrative record for this project:

See #3 above

7. Identification of previous EIRs relied upon for tiering purposes (including all applicable LRDP and project EIRs and address where a copy is available for inspection.)

The 2005 UC Riverside Long Range Development Plan Environmental Impact Report (SCH No. 2005041164) and the UC Riverside LRDP Amendment 2 Environmental Impact Report (SCH No. 2010111034). Copies of both documents can be found at:

UC Riverside  
Capital Asset Strategies - Campus Planning  
1223 University Avenue, Suite 240  
Riverside, CA 92507

## 2.0 INTRODUCTION

The University of California (“University”), as the lead agency pursuant to the California Environmental Quality Act (“CEQA”), prepared the Final Environmental Impact Report (“Final EIR”) for the 2005 Long Range Development Plan (“LRDP”) for the University of California, Riverside (“UC Riverside”) (State Clearinghouse No. 2005041164). In November 2005, The Board of Regents of the University of California (“The Regents”) certified that the Final EIR was completed in compliance with the California Environmental Quality Act (“CEQA”) and adopted Findings and a Statement of Overriding Considerations in connection with its approval of the 2005 LRDP.

The Final EIR consists of the November 2005 Draft Environmental Impact Report (“Draft EIR”) and the Final Environmental Impact Report (“Final EIR”) (collectively referred to as the “2005 LRDP EIR”). The EIR assesses the potential environmental effects of campus development consistent with the 2005 LRDP, identifies means to eliminate or reduce potential adverse impacts, and evaluates a reasonable range of alternatives to the 2005 LRDP.

In 2006, UC Riverside amended the 2005 LRDP to allow a 3.25-acre deed restriction in the Agricultural Operations fields south of MLK (2005 LRDP Amendment 1). In 2011, UC Riverside put forth a proposal to amend the 2005 LRDP to allow for the location of a new School of Medicine (SOM) on the West Campus. That amendment, called the 2005 LRDP Amendment 2, revised the 2005 LRDP land use map to allow for the location of a new SOM, along with other land use map changes, and increased the maximum building space that could be built on the campus under the 2005 LRDP. A Final EIR, consisting of the August 2011 Draft EIR and Final EIR was prepared in October 2011 (collectively referred to as the “LRDP Amendment 2 EIR”) that evaluated and disclosed the potential environmental impacts of the 2005 LRDP Amendment 2 (State Clearinghouse No. 2010111034). The LRDP Amendment 2 EIR supplemented the 2005 LRDP EIR, focusing on the incremental environmental effects of LRDP Amendment 2. In 2013, the 2005 LRDP was amended (Amendment 3) to add an overlay to the land use designation of one 10-acre site on the West Campus for the siting of a solar array project.

The 2005 LRDP, as amended by Amendments 1, 2, and 3, is the land use planning document used by UC Riverside to guide the development of the campus to accommodate a projected student body of 25,000 full time equivalent (FTE) students which was estimated to be reached by 2020. The 2005 LRDP EIR, as augmented and updated by the 2011 LRDP Amendment 2 EIR, is the environmental document that provides a full evaluation of the environmental effects of campus development anticipated under the 2005 LRDP and is used by the Campus to conduct tiered environmental review of specific development projects proposed on the campus, pursuant to CEQA Guidelines Section 15152.

The Dundee Residence Hall and Glasgow Dining (Dundee-Glasgow) project is proposed by the Campus to provide more on-campus student housing. Enrollment at UC Riverside has grown more than 35 percent over the last decade, from 17,187 to 23,278 total students. During this period, the Campus built apartment-style housing, purchased two apartment complexes, and converted double occupancy rooms to triple occupancy, but was not able to keep up with demand. As of fall 2017, the Campus was providing 28 percent of UC Riverside students with on-campus housing. The Campus is now proposing to build a new student housing project on an existing parking lot on the East Campus to address the current and projected demand. The proposed project would utilize the system-wide public-private partnership model (P-3) in support of the President's Student Housing Initiative to construct two residence hall buildings and a standalone dining facility, and repurpose an existing dining hall. Implementation of the proposed project will enable UC Riverside to increase its student housing stock, eliminate some overflow bed spaces<sup>1</sup> in existing housing, replace the aging dining hall, and meet its commitments under the UC system-wide Housing Initiative.

Section 15164(a) of the CEQA Guidelines states that "The lead agency or responsible agency shall prepare an addendum to a previously certified EIR if some changes or additions are necessary but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred." As documented in Section 4.0 of this Addendum No. 2 to the 2005 LRDP EIR, construction and operation of the Dundee-Glasgow project would not trigger any of the conditions necessitating preparation of a subsequent or supplemental EIR or negative declaration; therefore, the preparation of an Addendum is the appropriate level of analysis to evaluate the environmental effects of the development of the Dundee-Glasgow project.

### **3.0 PROJECT DESCRIPTION**

The proposed Dundee-Glasgow project analyzed in this addendum is composed of:

- Two new residence hall buildings with approximately 820 new beds for first-year students, including ancillary support space (i.e., bathrooms, student lounges, lobbies, etc.) and approximately 13,500 square feet (sf) of living, learning and community spaces, including academic/classroom space;
- An approximately 830-seat standalone dining facility (including kitchen, storage, and support space); and

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<sup>1</sup> "Overflow" bed spaces refers to student bed spaces provided by converting lounges into bedrooms and converting double rooms into triple rooms.

- Re-purposing of the existing 500-seat (approximately 17,750 sf) dining facility (Aberdeen-Inverness dining hall) as multi-functional student support and service space.

The following sections present information with respect to the project site, followed by a detailed description of the different elements of the proposed project.

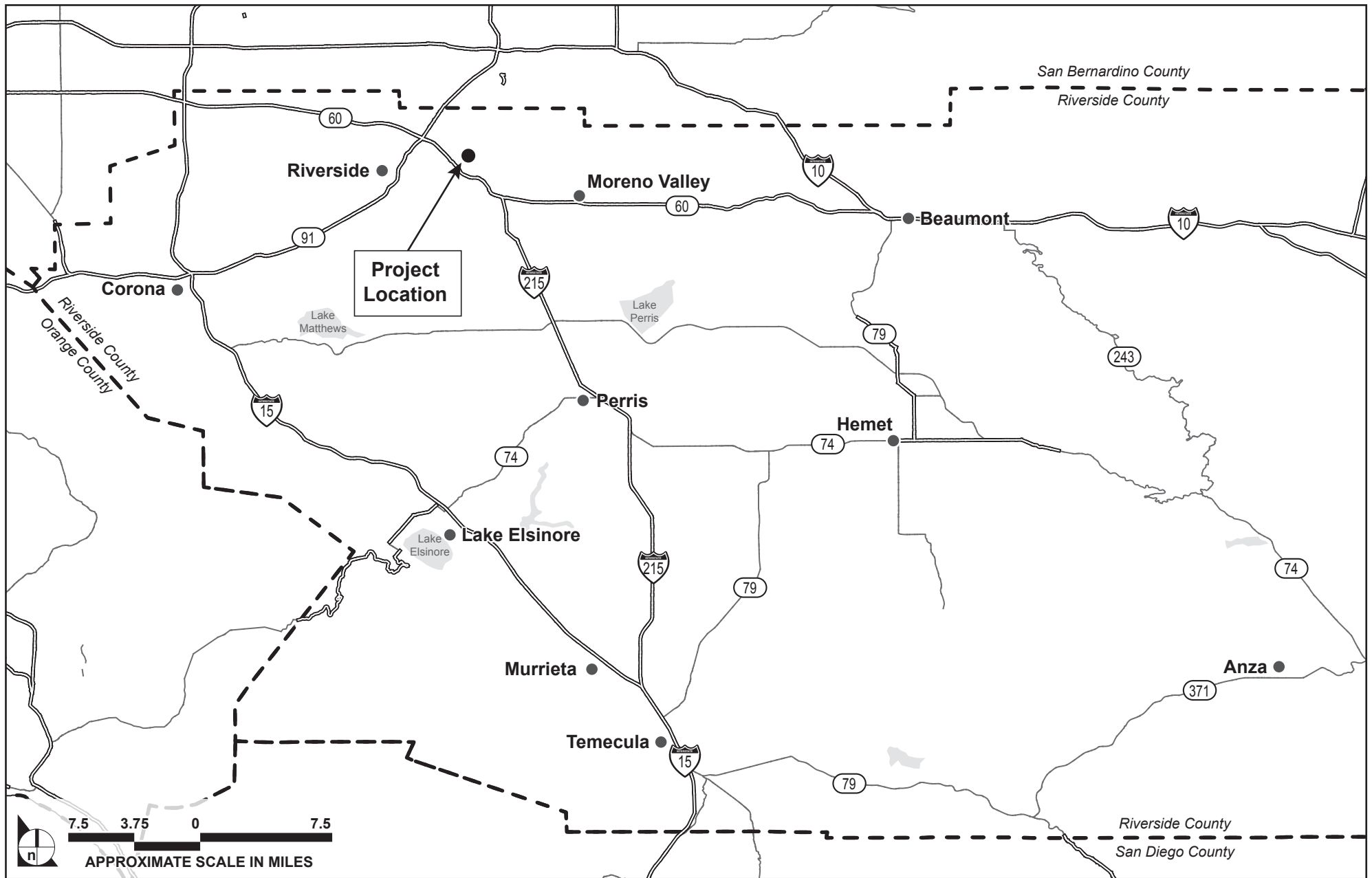
### 3.1 Project Location and Surrounding Land Uses

The proposed Dundee-Glasgow project site is located on the University of California, Riverside (UCR) campus in Riverside County, California (**Figure 3.0-1, Regional Location**). The campus is approximately 1,112 acres, of which approximately 601 acres are to the east of the Interstate 215/ State Route 60 (I-215/SR-60) and about 511 acres are to the west of I-215/SR 60. The area to the east of I-215/SR-60 is called the East Campus. The proposed Dundee-Glasgow project would be developed on an approximately 6.58-acre site located in the northern portion of East Campus, between the existing the Aberdeen-Inverness (A-I) Residence Hall and the Pentland Hills Residence Hall that serve first-year students (**Figure 3.0-2, Project Location**). The proposed project site is currently in use as a surface parking lot (Parking Lot 22).

The project site is surrounded by the vacated former Canyon Crest Family Student Housing, the existing KUCR radio station, and Parking Lot 23 to the north; Parking Lot 21 and Pentland Hills Residence Hall to the east; Parking Lot 15 and the Health Services Building to the south; and A-I Residence Hall to the west. Refer to **Figure 3.0-3, Limit of Work Plan**.

### 3.2 Description of the Dundee-Glasgow project

The proposed Dundee-Glasgow project would consist of approximately 227,000 sf of new building space (square footage breakdown detailed in **Table 3.0-1** below), and approximately 17,750 sf of renovated space in the A-I Residence Hall dining hall. All new buildings would be constructed to comply with University Policy on Sustainable Practices, including LEED Silver certification and would aim to meet LEED Gold certification.



SOURCE: Impact Sciences, 2018

FIGURE 3.0-1





Project Area



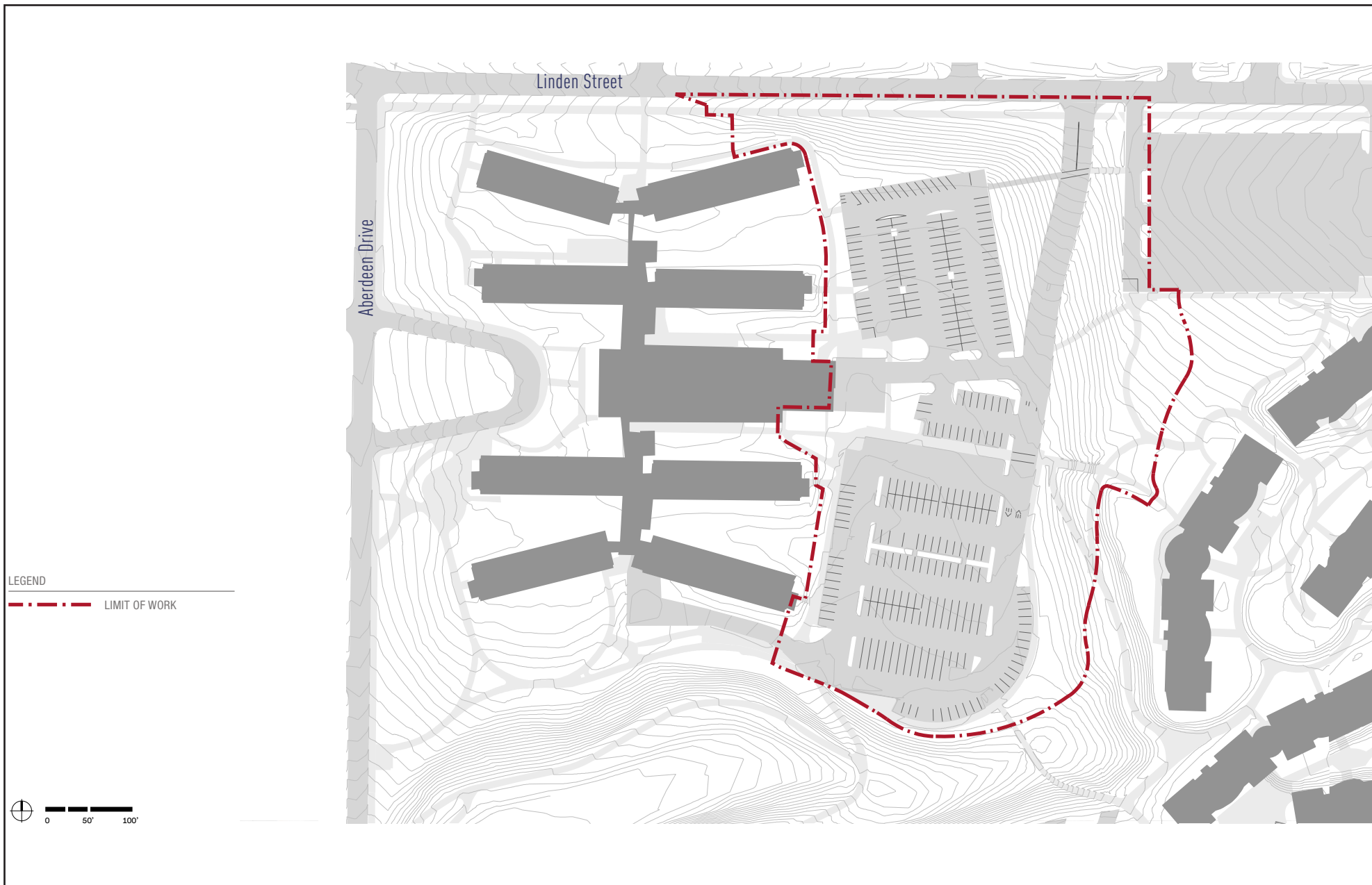
UCR Campus Boundary

SOURCE: Aerial Image, UCR, 2018

FIGURE 3.0-2

Proposed Project Location





SOURCE: Solomon, Cordwell, Buenz, 2018

FIGURE 3.0-3

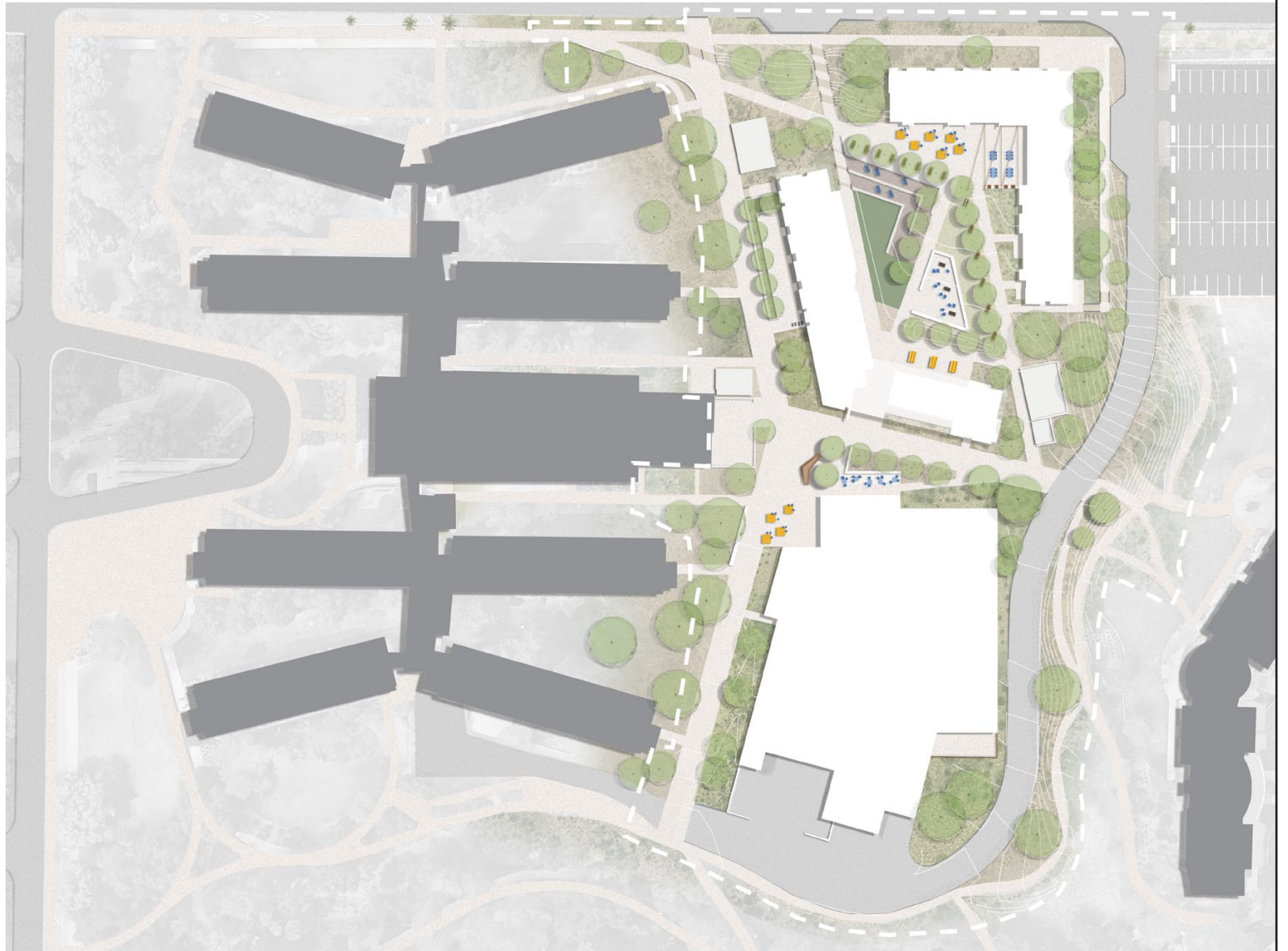
**Table 3.0-1  
Development Summary**

<b>Development Type</b>	<b>Estimated Square Footage</b>
<b>Dundee Residence Hall</b>	
Residential Space	90,300
Resident Amenity/ Support Spaces	8,400
Circulation, Mechanical and Structural	43,400
Community Bathrooms	18,700
Living, Learning, Community & Administration	13,150
Support and Maintenance	2,450
<b>Sub-Total</b>	<b>176,400</b>
<b>Glasgow Dining</b>	
830-Seat Dining facility	50,600
<b>Total Development Space for Dundee-Glasgow Project</b>	<b>227,000</b>

### ***Dundee Residence Hall***

The proposed Dundee Residence Hall would help the Campus satisfy the existing demand for residence hall beds for first-year students. The residence hall would provide approximately 820 new beds for first-year students within two 7-story L-shaped buildings, along with ancillary support space such as bathrooms, laundry areas, student lounges, lobbies, a movie room, and gym space (refer to **Figure 3.0-4, Project Site Plan, Figure 3.0-5, Proposed Residence Halls Ground Floor Plan, Figure 3.0-6, Proposed Project Residence Hall Typical Upper Floor Plan, Figures 3.0-7 and 3.0-8 Proposed Project Residence Hall Renderings, and Figure 3.0-9, Proposed Project Residence Hall Sections**). The unit mix and number of beds provided within the proposed Dundee Residence Hall is described in **Table 3.0-2** below.

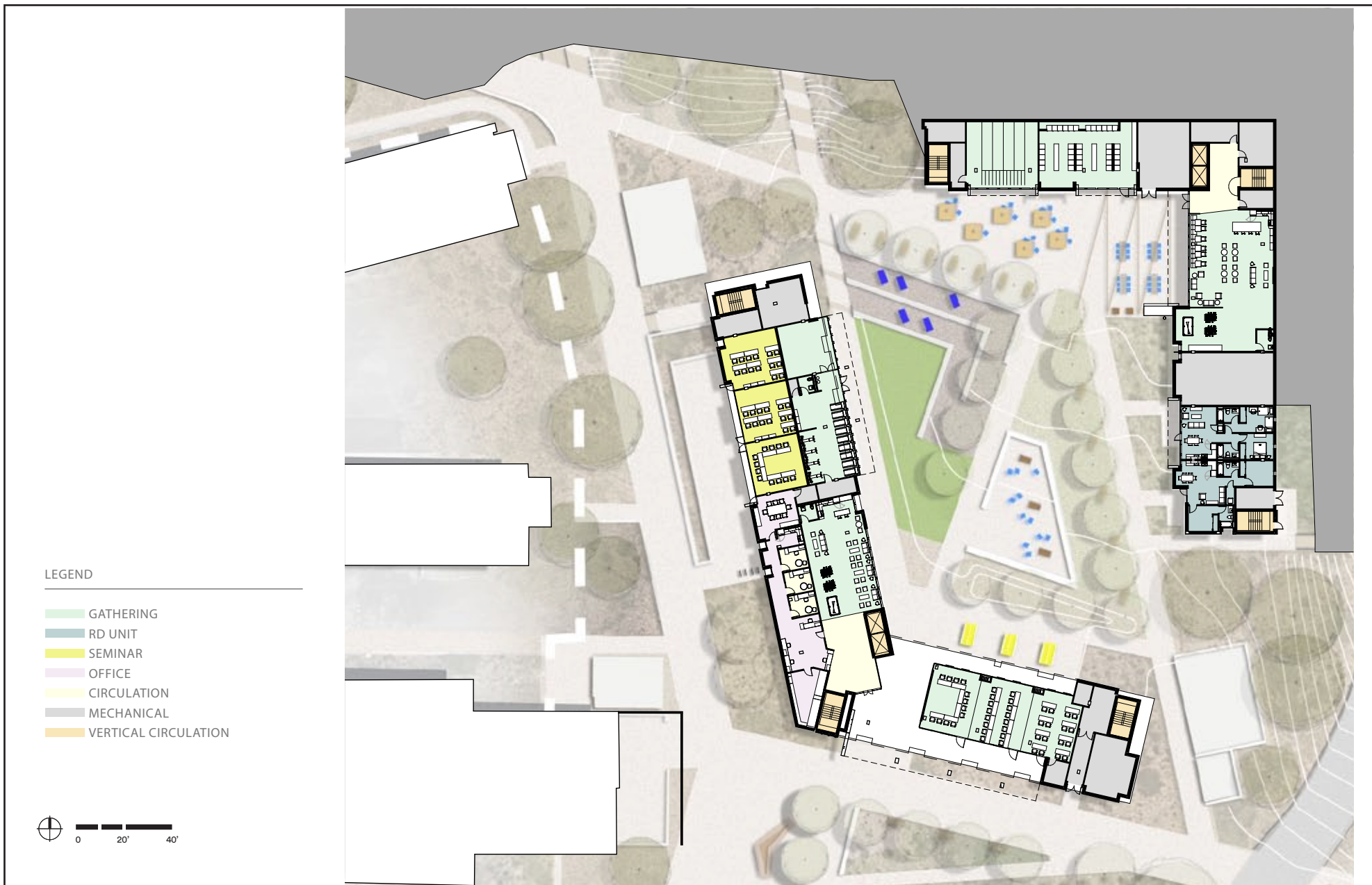




SOURCE: Solomon, Cordwell, Buenz, 2018

FIGURE 3.0-4

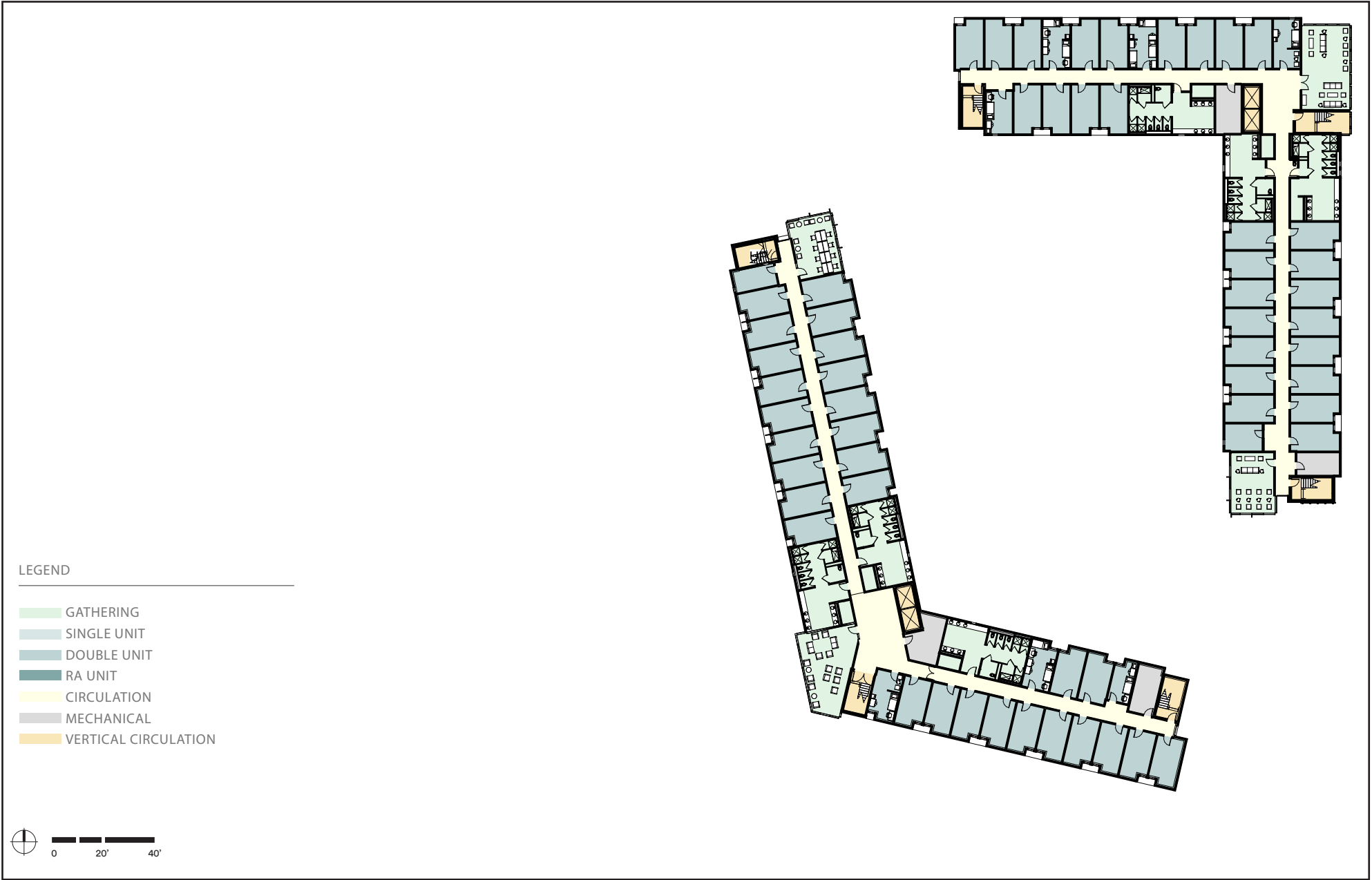
Proposed Project Site Plan



SOURCE: Solomon, Cordwell, Buenz, 2018

FIGURE 3.0-5

## Proposed Project Residence Halls Ground Floor Plan



SOURCE: Solomon, Cordwell, Buenz, 2018

FIGURE 3.0-6





SOURCE: Solomon, Cordwell, Buenz, 2018

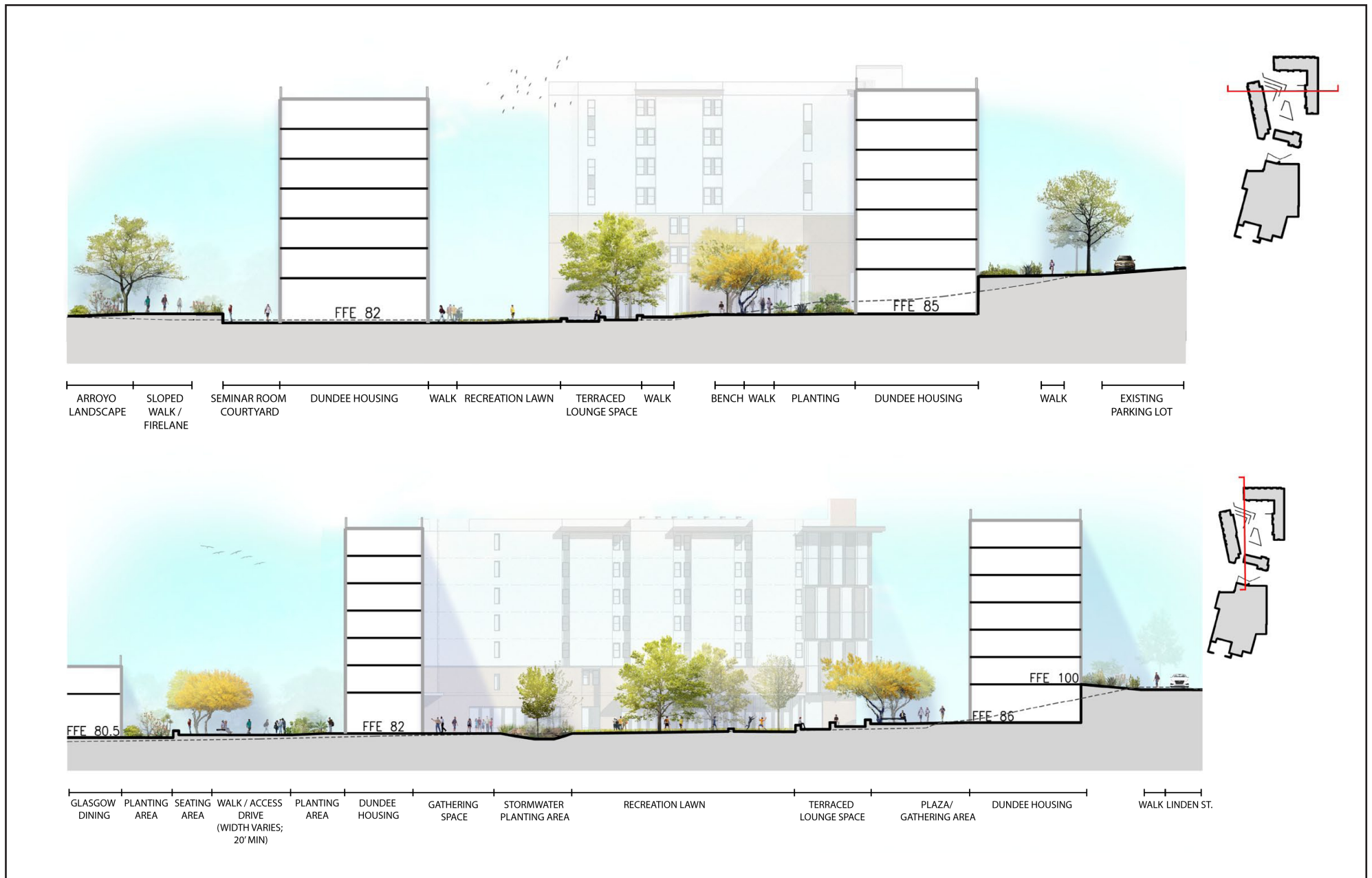
FIGURE **3.0-7**





SOURCE: Solomon, Cordwell, Buenz, 2018

FIGURE 3.0-8



SOURCE: Solomon, Cordwell, Buenz, 2018

FIGURE 3.0-9

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**Table 3.02**  
**Proposed Unit Mix and Number of Beds**

<b>Unit Type</b>	<b>No. of Units</b>	<b>No. of Beds</b>
Single Occupied Unit	16	16
Double Occupied Unit	300	600
Triple Occupied Unit	60	180
Single Occupied Unit (Resident Advisor Unit)	12	12
Single Occupied Unit (Program Coordinator)	8	8
2 Bedroom / 2 Bathroom Apartment (Resident Director)	2	4
<b>Total</b>	<b>398</b>	<b>820</b>

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The proposed Dundee Residence Hall would also include a 24/7 computer lab, television/gaming and study lounges, and centralized laundry facilities. In addition, the project would provide approximately 13,500 sf of living, learning, and community space distributed throughout the two residence hall buildings, including three academic classroom/seminar spaces in the southern residence hall building. The academic classroom space would provide continued support for the Campus to further its commitment to maintain and foster living-learning communities that connect the residential program to academic curriculum for UC Riverside students. No parking would be provided because per Campus policy parking permits are not sold to first-year residents.

### ***Glasgow Dining***

Increasing the number of campus residence hall beds would also increase demand for additional dining capacity. The existing 500-seat A-I dining hall was built in 1959 and would need major renovations in order to continue to serve student dining needs. Furthermore, a contemporary and efficient dining program would not work in its physically constrained footprint. The project proposes a standalone 830-seat dining facility that would serve the new Dundee Residence Hall, along with the existing A-I and Pentland Hills Residence Halls (**Figures 3.0-10 through 3.0-12**). The proposed 2-story Glasgow dining facility would be located south of the proposed Dundee Residence Hall. The first floor of the facility would include a dining room, main kitchen, storage and general support areas (such as lockers, office, and dry food storage), and platforms/food stations. The second floor would include a dining room, main kitchen, platforms/food stations, and a covered outdoor patio.





SOURCE: Solomon, Cordwell, Buenz, 2018

FIGURE 3.0-10





SOURCE: Solomon, Cordwell, Buenz, 2018

FIGURE **3.0-11**

## Dining Commons Ground Floor

### LEGEND

- DINING
- PLATFORMS
- MAIN KITCHEN & STORAGE
- GENERAL SUPPORT
- VERTICAL CIRCULATION



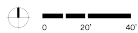
TRANSFORMER  
40 YD.  
COMPACTOR  
GENERATOR  
ROLLING GATE  
FOOD TRUCK  
PARKING



## Dining Commons Second Floor

### LEGEND

- DINING
- PLATFORMS
- MAIN KITCHEN & STORAGE
- GENERAL SUPPORT
- VERTICAL CIRCULATION



LINE OF  
ROOF ABOVE



SOURCE: Soloman Cordwell Buenz, 2017

FIGURE 3.0-12

## ***Existing Aberdeen-Inverness Dining Hall***

The existing A-I dining hall is approximately 17,750 sf and currently serves the following functions: food service, including the board meal program for A-I and Pentland residents, event space, and catering/mixed-use/conference space. Upon the opening of the proposed Glasgow Dining facility, the existing A-I dining hall would be renovated; the space would continue to be used as event and conference space.

## ***Outdoor Amenities and Landscaping***

Outdoor activity zones within the proposed project site include a main active plaza, a terraced lounge, lawn areas, a gathering space lounge, the plaza outside the multi-purpose room, and the dining hall entry area. Outdoor activity zones would have amenities such as clustered small tables, large gathering tables, hammocks, and covered seating areas (**Figure 3.0-4, Proposed Project Site Plan**).

Landscaping throughout the proposed project would consist of drought tolerant and native species selected for their beauty, climate appropriateness, and maintainability.

## ***Access***

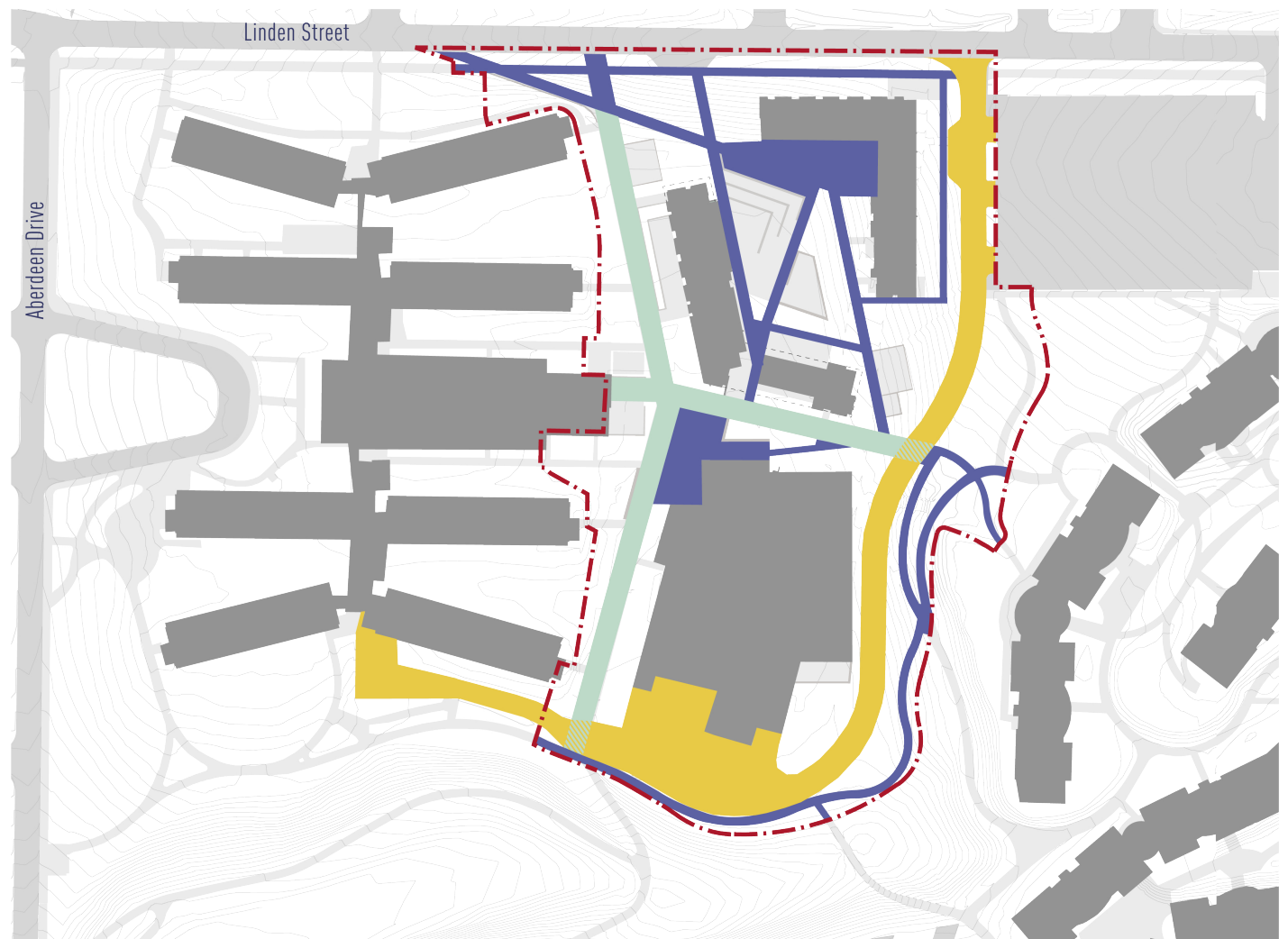
Vehicular access would be provided via Linden Street from the northeastern corner of the project site. The driveway would run southerly along the eastern border of the project site and then west along the southern border of the project site to the southern end of A-I Residence Hall. Emergency access, as well as service access, to the west side of the project area would be provided via a limited access route from a midpoint of the driveway (**Figure 3.0-13, Proposed Project Circulation Plan**).

Pedestrians would have multiple points of access to the site from Linden Street, Parking Lot 21, two pathways from Pentland Hills Residence Hall, and from the A-I Residence Hall. Pedestrian pathways within the project site would provide circulation from residence halls to the proposed Glasgow Dining facility.

## ***Utilities***

### **Water**

The City of Riverside supplies potable water to the UC Riverside campus. The water is supplied by pumping groundwater from 48 wells operated by Riverside Public Utilities (RPU). Existing water lines are located in Linden Street, Canyon Crest Drive, and Blaine Street. The proposed project would connect to the water line in Linden Street.



- LEGEND
- - - LIMIT OF WORK
  - PRIMARY VEHICULAR ROUTE
  - LIMITED ACCESS/ SERVICE VEHICULAR ROUTE
  - PEDESTRIAN ROUTE



SOURCE: Solomon, Cordwell, Buenz, 2018

FIGURE 3.0-13



## **Wastewater**

The City of Riverside owns and operates the Riverside's Regional Water Quality Control Plant (RRWQCP) which serves the campus. The RRWQCP currently treats 30 million gallons per day (mgd) and has a capacity of 40 mgd (UCR 2017). The proposed project will install sewer line extensions to the south west along the south edge of the project site to Aberdeen Drive, then south along Aberdeen Drive and will connect to an existing sewer line at North Campus Drive.

## **Stormwater**

Existing storm drains run in Linden Street, Aberdeen Drive, and on the east side of the A-I Residence Hall near the project site. The proposed storm drains would connect to an existing storm drain at the existing stormwater basin at the corner of Aberdeen Drive and North Campus Drive.

## **Solid Waste**

Non-hazardous municipal waste from the campus is handled by Burrtec Waste Industries. The waste is sent to the Badlands Landfill. The Campus implements a waste/source reduction and recycling program that includes separation of wastes through sorting to simplify the removal of recyclable materials, and the expansion of composting procedures associated with landscaping and agriculture to reduce the solid waste flow (UCR 2011).

## **Electricity and Natural Gas**

RPU provides electricity and the Southern California Gas Company would provide natural gas to the campus.

## ***Project Construction***

Overall, the construction of the proposed project would take place over a period of approximately 22 months. Construction mobilization would begin in Fall 2018 with building construction scheduled for completion in the Summer of 2020. Construction activities on the project site would commence with the demolition of the parking lot and installation of off-site utilities, including the water main and sewer lines. Following site grading, on-site utility infrastructure would be installed, roadways constructed, and foundation work would be completed. Subsequent construction phases would include building construction, completion of interior and exterior improvements, and installation of landscaping and hardscape. After construction of the buildings is complete, installation of equipment and furniture would occur to ready the buildings for occupancy by the end of September 2020 at the commencement of the Fall 2020 Quarter.

Construction laydown areas would be on the project site between the proposed residence hall buildings and south of the dining facility (**Figure 3.0-14, Proposed Project Construction Logistics Plan**). Construction workers would park on existing asphalt areas within the vacant Canyon Crest Family Student Housing site located to the northeast of the project site.

### **3.3 Project Objectives**

In January 2016, UC President Janet Napolitano announced the UC system-wide Student Housing Initiative, the two overarching goals of which are to (1) ensure that each of UC's campuses has sufficient housing for its growing student population; and (2) to keep housing as affordable as possible for UC students. The objective of the proposed Dundee-Glasgow project is to help address the need for on-campus housing and comply with the Housing Initiative. The proposed project would help relieve the current overcrowding and would support the 2005 LRDP goals to guarantee housing for freshman, provide 50 percent of students with on-campus housing, and to keep more students living, learning, and socializing in close proximity to the academic core.

Given the timeframe in which the housing needed to be completed and based on the experience of other UC campuses with student housing projects, the Campus determined that the best method of delivery for the proposed project would be via a private-public partnership (P3) agreement between the University and a private developer. In July 2017, UC Riverside issued a request for proposals (RFP) to solicit proposals from private development teams to design and construct the proposed project. The developer selection process was undertaken between April and October, and the preferred development team was selected in November.

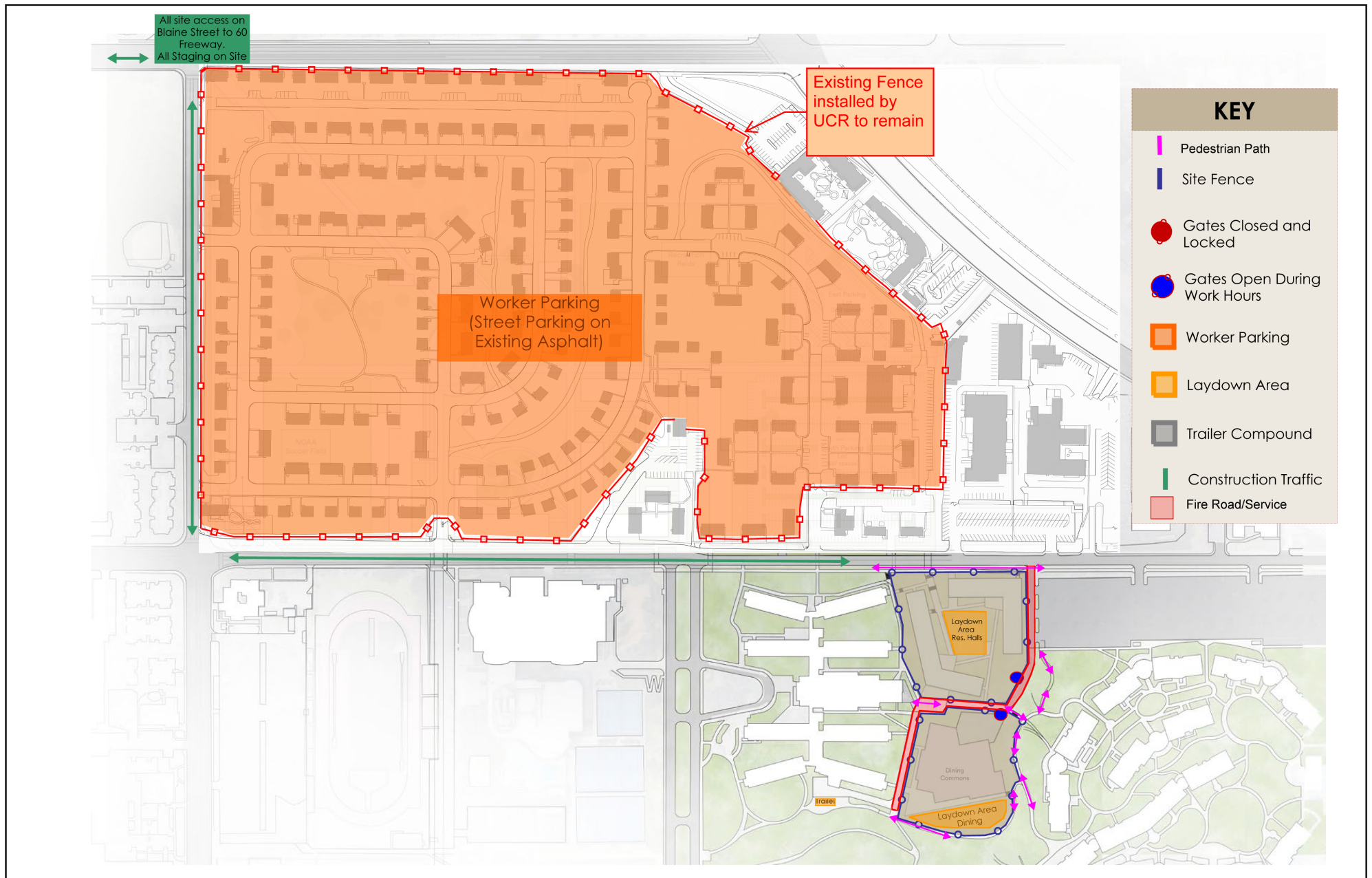
Implementation of the proposed project will enable UC Riverside to increase its student housing stock, eliminate some overflow bed spaces<sup>2</sup> in existing housing, replace the aging dining hall, and meet its commitments under the UC system-wide Housing Initiative.

### **3.4 Discretionary Approval Authority**

As a public agency principally responsible for approving or carrying out the Dundee-Glasgow project, the University of California is the Lead Agency under CEQA and must review and consider the

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<sup>2</sup> "Overflow" bed spaces refers to student bed spaces provided by converting lounges into bedrooms and converting double rooms into triple rooms.



SOURCE: Solomon, Cordwell, Buenz, 2018

FIGURE 3.0-14

environmental consequences of the proposed project, the implementation of which includes the following discretionary actions:

- Approval of the proposed project design; and
- Execution of all financing documents, the ground lease and dining operating and funding agreements and any other related documents.

If approved, the Campus anticipates construction of the Dundee-Glasgow project would commence in Fall 2018.

### **3.5 Consistency with the 2005 LRDP and 2005 LRDP Amendment 2**

As noted earlier, the 2005 LRDP has been amended three times, with Amendment 2 resulting in the most substantial changes to the 2005 LRDP, including changes in land use designations as well as an increase in the amount of building space authorized under the 2005 LRDP. The following discussion describes the proposed project's relationship to and consistency with the development projections, population projections, land use designations, and objectives contained in the 2005 LRDP, as amended.

#### ***3.5.1 LRDP Scope of Development***

The 2005 LRDP provided for the construction of an additional 11.8 million square feet of building space on the campus to accommodate an enrollment level of 25,000 FTE students. Amendment 2, which was approved in 2011, provided for the development of an additional 3.1 million square feet of building space on the campus to accommodate a new school of medicine. Therefore, the amended 2005 LRDP allows for the addition of 14.9 million square feet of building space to the campus to the baseline building space that existed in 2005. As of 2018, the Campus has developed 7 million square feet of the 14.9 million square feet of space authorized under the amended 2005 LRDP. The proposed project would add up to 227,000 square feet of building space on the campus which, combined with the existing building space, would not exceed the amount of building space authorized under the amended 2005 LRDP. Therefore, the project is within the 2005 LRDP scope of development, as amended.

#### ***3.5.2 LRDP Land Use Designation***

The 2005 LRDP land use map designates the long-term land uses of the proposed project site as *Residence Hall and Related Support*. Accordingly, the proposed Dundee-Glasgow project would be consistent with the land use designations of the project site under the 2005 LRDP and would not conflict with the existing adjacent campus land uses, which include residence halls, campus support, and open space.



### ***3.5.3 LRDP Population Projections***

The 2005 LRDP, as amended by Amendment 2, plans for a projected enrollment level of 25,000 FTE students by 2020. The proposed Dundee-Glasgow project would serve enrolled students by providing housing and dining facilities and would not cause campus enrollment to increase. Therefore, the project would not conflict with the 2005 LRDP's campus population projections.

### ***3.5.4 LRDP Objectives***

The primary objective of the 2005 LRDP is to plan for the Campus' share of the University of California's short- and long-term enrollment demands. Development of the Dundee-Glasgow project would support this LRDP objective by developing the necessary housing and dining facilities on the campus to support a projected enrollment level of 25,000 FTE students.

## **3.6 Relationship to the 2005 LRDP EIR and 2005 LRDP Amendment 2 EIR**

As noted in **Section 2.0**, the 2005 LRDP EIR, as augmented and updated by the 2005 LRDP Amendment 2 EIR (2011), is the environmental document that provides a full evaluation of the environmental effects of campus development anticipated under the 2005 LRDP and is used by the Campus to conduct tiered environmental review of specific development projects proposed on the campus, pursuant to CEQA Guidelines Section 15152. As the analysis of the proposed project's consistency with the 2005 LRDP (as amended by all amendments, included Amendment 2) above shows, the building space that would be added by the project is within the amount of building space included in the original and amended 2005 LRDP and analyzed in both EIRs. The proposed use of Parking Lot 22 site to develop student housing and dining facilities is consistent with the LRDP land use designation for the site. The proposed project would not increase enrollment and the total enrollment previously analyzed in the two EIRs for its environmental impacts would not be increased by the project. Therefore, the proposed project is within the scope of development analyzed in the 2005 LRDP EIR and the 2005 LRDP Amendment 2 EIR (2011).

Based on the analysis that follows, this Addendum No. 2 demonstrates that the environmental impacts from the construction and operation of the proposed project are adequately analyzed in the 2005 LRDP EIR and the 2005 LRDP Amendment 2 EIR (2011) and that under State CEQA Guidelines Section 15162, the project would not result in any new or substantially more severe significant adverse impacts as compared to those previously identified and disclosed in the 2005 LRDP and the 2005 LRDP Amendment 2 EIR. Furthermore, the proposed project would not require the adoption of any new or considerably different mitigation measures or alternatives. This Addendum, therefore, is a proper form of CEQA review for this project and that further review in a Subsequent EIR or Negative Declaration is not required (State CEQA Guidelines Section 15168(c)(2)).

CEQA Guidelines Section 15164(a) states that the lead agency shall prepare an addendum to a previously certified EIR for a project if some changes or additions are necessary but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred. Section 15164(d) provides that the decision-making body shall consider the addendum in conjunction with the EIR prior to making a decision on the project. Section 15164(e) requires documentation of the decision not to prepare a subsequent EIR pursuant to Section 15162. This Addendum No. 2 has been prepared pursuant to CEQA Guidelines, including Sections 15164(a), 15164(d), and 15164(e).

#### 4.0 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a “Potentially Significant Impact” as indicated by the checklist on the following pages.

<input type="checkbox"/>	Aesthetics	<input type="checkbox"/>	Agricultural and Forestry Resources	<input type="checkbox"/>	Air Quality
<input type="checkbox"/>	Biological Resources	<input type="checkbox"/>	Cultural Resources	<input type="checkbox"/>	Geology and Soils
<input type="checkbox"/>	Greenhouse Gas Emissions	<input type="checkbox"/>	Hazards and Hazardous Materials	<input type="checkbox"/>	Hydrology and Water Quality
<input type="checkbox"/>	Land Use and Planning	<input type="checkbox"/>	Minerals	<input type="checkbox"/>	Noise
<input type="checkbox"/>	Population and Housing	<input type="checkbox"/>	Public Services	<input type="checkbox"/>	Recreation
<input type="checkbox"/>	Traffic and Transportation	<input type="checkbox"/>	Tribal Cultural Resources	<input type="checkbox"/>	Utilities and Service Systems

## 5.0 DETERMINATION

On the basis of the initial evaluation that follows:

☐ I find that the proposed project could have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, and that these effects have not been adequately analyzed by an earlier EIR. An ENVIRONMENTAL IMPACT REPORT will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, all potentially significant effects (1) have been addressed adequately in an earlier environmental document pursuant to applicable standards, (2) either no changes or no substantial changes to the project are proposed, and no new information of substantial importance has been identified, and (3) no new mitigation measures are required. An ADDENDUM and FINDINGS will be prepared.

  
Tricia D. Thrasher, ASLA, LEED AP

Date

6/22/18

University of California, Riverside

Principal Environmental Project Manager

## **6.0 EVALUATION OF ENVIRONMENTAL IMPACTS**

As described in greater detail below and in the Environmental Checklist, as the proposed project is within the scope of growth and development under the 2005 LRDP, the Dundee-Glasgow project will contribute to the impacts of development evaluated in the 2005 LRDP EIR and the LRDP Amendment 2 EIR, but will not increase the severity of significant impacts previously identified in the EIRs, or cause any new significant environmental effects not previously analyzed and disclosed in the EIRs. All impacts associated with implementation of the 2005 LRDP, as amended, to which the Dundee-Glasgow project would contribute are identified in the Environmental Checklist, and were analyzed in the previous EIRs and listed in the EIR Findings. While the Dundee-Glasgow project will contribute to cumulative impacts previously identified in both EIRs associated with full implementation of the 2005 LRDP, it will not result in any new significant cumulative impacts, increase the severity of significant cumulative impacts previously identified in the EIRs, or cause any environmental effects not previously evaluated in the EIRs. All significant cumulative impacts to which the Dundee-Glasgow project would contribute are discussed in the Environmental Checklist.

Each of the impacts of the Dundee-Glasgow project is discussed separately below by environmental topic.

### **6.1 AESTHETICS**

#### ***6.1.1 Relevant Elements of the Dundee-Glasgow project***

The 2005 LRDP provides for the development of the project site with residence halls and related support uses. The proposed project site is currently in use as a surface parking lot (Parking Lot 22). The site is flanked on the east and west by existing residence halls. To the north of the site is the now vacant Canyon Crest Family Student Housing complex. The Box Springs Mountains are visible from the project site and adjacent areas. However, there are no specific buildings, scenes, settings, or features of interest visible within the portion of the Box Springs Mountains adjacent to the campus.

The proposed project includes the construction of two, seven-story residence hall buildings. Generally, the lower levels of the building exteriors would be lined with UCR-blend brick and all levels above would utilize stucco. Large glass panes would be utilized in common areas and apartment windows would be depressed to provide shade. Due to campus topography, the first floor of the northeastern residence hall would be partially below-grade, with retaining walls incorporated into the structure along its northern and eastern facades. The remaining structures are planned with ground levels at or near existing grades. The proposed dining facility would consist of one two-story building and would exhibit similar building design and character as the proposed Dundee Residence Hall. Large glass window panes

would make up the wall for several areas of the building. Landscaping would be provided along pedestrian pathways and in the planned gathering areas between the buildings.

### **6.1.2 Analysis of Project**

**Implementation of the Dundee-Glasgow project and relevant 2005 LRDP Planning Strategy and Program & Practice would not result in a new significant impact on scenic vistas or increase the severity of the LRDP impact on scenic vistas.**

Potential impacts on scenic vistas from development of the East Campus under the 2005 LRDP, including the project site, were evaluated in the 2005 LRDP EIR. The EIR noted that LRDP Planning Strategy *Open Space 5* and LRDP Program & Practice (PP) 4.1-1 would continue to be implemented as part of the 2005 LRDP, which dictates that Campus Design Guidelines shall be implemented to minimize impacts to scenic vistas. The analysis concluded that the impact from campus development under the 2005 LRDP to scenic vistas would be less than significant (UCR 2005).

Available scenic vistas on the East Campus include views of the Box Springs Mountains available from various vantage points. However, these views of the Box Springs Mountains from the East Campus are often interrupted by buildings, mature trees, and various landscaping. Furthermore, development of the project site under the 2005 LRDP allowed for residence hall buildings, support structures, and dining facilities on the site that could potentially obstruct the views of the Box Springs Mountains from portions of the campus. Furthermore, views are currently partially obstructed by existing 3 to 4-story Pentland Hills Residence Hall and trees. The proposed Dundee Residence Hall and Glasgow Dining facility are consistent with planned development under the 2005 LRDP and would not increase the intensity of development on the project site relative to what is allowed under the LRDP. Re-purposing of the existing A-I dining hall would occur within the building and would not impact scenic vistas. Furthermore, LRDP PP 4.1-1, which requires that the Campus Design Guidelines be followed, would be implemented as part of the proposed project (The full text of all LRDP Planning Strategies, PPs, and Mitigation Measures applicable to the proposed project are presented in **Appendix A**). Therefore, the Dundee-Glasgow project would not change the nature or magnitude of the impacts to scenic vistas or the conclusions in the 2005 LRDP EIR and will result in a less than significant impact on scenic vistas.

**Implementation of the Dundee-Glasgow project would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.**

The UC Riverside campus is not located near any state-designated scenic highways and there are no resources present on the site that would qualify as scenic resources. Therefore, the Dundee-Glasgow project would have no impact on scenic resources within a state scenic highway.

**Implementation of the Dundee-Glasgow project, which includes relevant LRDP Programs and Practices, would not result in a new significant impact or increase the severity of the LRDP impact on the visual quality and character of the site and its surroundings.**

The potential impacts to the visual quality and character of the project site and its surroundings from the development of the East Campus under the 2005 LRDP were evaluated in the 2005 LRDP EIR. The EIR noted that the LRDP Planning Strategies *Land Use 1 through 3, Open Space 1 through 7, Conservation 1 through 3, Development Strategies 1 through 3, Campus Community 1*, and PP 4.1-2(a) through PP 4.1-2(d) would continue to be implemented as part of the 2005 LRDP and would minimize the impacts to the visual quality and character of the project site. The 2005 LRDP EIR concluded that build-out of the East Campus would change the visual quality and character of the East Campus but would not degrade the existing visual character of the area, and campus development under the 2005 LRDP would have a less than significant impact on the visual quality and character of the area (UCR 2005).

The Dundee-Glasgow project site is currently a flat, surface parking lot with a small amount of vegetation present on the northern end and several trees throughout the parking lot. Developing buildings on the project site would alter the visual quality and character of the project site. However, this development would be consistent with the surrounding residence halls and related facilities. The Dundee-Glasgow project buildings would be designed and reviewed to ensure consistency with the Campus Design Guidelines and the Campus Landscape Master Plan. This would allow consistent scale, massing, and style in order to retain the underlying aesthetic character of the area. Mature trees would also be preserved or relocated whenever feasible. Furthermore, all re-purposing activities would occur within the existing A-I dining hall. Although redevelopment would change the visual character of the project site, the development would be consistent with the visual character of existing nearby residential facilities and similar to the conclusions of the 2005 LRDP EIR, a less than significant impact would occur.

**Implementation of the Dundee-Glasgow project, which includes relevant LRDP Planning Strategies and Programs and Practices, would not result in a new significant impact or increase the severity of the LRDP impact related to new sources of light and glare.**

Potential impacts associated with creating new sources of light and glare from campus development under the 2005 LRDP were evaluated in the 2005 LRDP EIR. The EIR noted that the continued implementation of LRDP Planning Strategies *Land Use 3, Open Space 1 through 4, Conservation 1 through 3, Campus and Community 1, Development Strategy 1*, PP 4.1-1, PP 4.1-2(a), and PP 4.1-2(b) as part of the 2005 LRDP would minimize the impact from light and glare. The 2005 EIR concluded that build-out of the 2005 LRDP would result in a potentially significant impact associated with creating new sources of light and glare as a result of developing new buildings with surfaces and windows that may reflect and cause glare. Implementation of LRDP Mitigation Measures 4.1-3(a) would prohibit mirrored and reflective glass on the campus, 4.1-4(b) would require fixtures on exterior lighting to be shielded to reduce light spillover, and 4.1-3(c) would require the design of proposed parking areas to minimize the impact of vehicle headlights. Therefore, the impact from campus development under the 2005 LRDP would be reduced to less than significant with mitigation (UCR 2005).

Existing sources of light on the project site consists of standard street lamp fixtures throughout Parking Lot 22 and headlights of cars entering or exiting the lot. Existing sources of glare on the project site include vehicles parked on the lot. Development of the Dundee-Glasgow project would increase the number of light and glare sources on the project site, although the re-purposing of A-I dining hall would not increase light and glare and is not further discussed below. The replacement of the parking lot with two seven-story residence hall buildings and a dining facility would increase the amount of light emitted from the site. New sources of lighting would include, but are not limited to, interior building lights (visible through windows), exterior building lights, and security lighting along pedestrian walkways and outdoor common areas. With respect to glare, although the Glasgow Dining facility would be only two stories high, and trees would be planted along the perimeter of the dining hall to provide shade and decrease glare from the glass panes, the two residence hall buildings would be seven stories high and would include window glazing. Therefore, the development of the residence hall would have the potential to substantially increase the amount of daytime glare in the vicinity, although glare from cars parked on Parking Lot 22 would be eliminated. However, the proposed project would implement LRDP Mitigation Measures 4.1-3(a) through 4-1.3(c), which would reduce potential impacts from light and glare to a less than significant level. Furthermore, all buildings would be designed to be consistent with the Campus Landscape Master Plan and the Campus Design Guidelines, which includes provisions to reduce light and glare impacts, including limiting the use of reflective building materials. The impact from light



and glare due to project implementation would be reduced to a less than significant level. No new mitigation is required.

### ***6.1.3 Analysis of Cumulative Impacts***

Cumulative visual impacts of campus development under the 2005 LRDP, including the project site, are addressed in the 2005 LRDP EIR and the LRDP Amendment 2 EIR. Both EIRs concluded that there are no scenic resources near the campus so the implementation of the 2005 LRDP, in conjunction with cumulative development, would have no cumulative effect. The EIRs found that implementation of the 2005 LRDP, in conjunction with cumulative development, would minimally alter the visual character and scenic vistas, and would result in minimal additional light and glare. Therefore, with appropriate mitigation and implementation of PPs, the contribution of the 2005 LRDP to cumulative impacts on visual character, scenic vistas, light and glare, and scenic resources was determined not to be cumulatively considerable (UCR 2005; UCR 2011). The proposed Dundee-Glasgow project would not result in new or more severe impacts on visual resources and would not change the conclusions of the EIRs with respect to cumulative impacts. As with the 2005 LRDP, the cumulative impacts of the Dundee-Glasgow project related to visual character, scenic vistas, scenic resources, and light and glare would be less than significant.

### ***6.1.4 Changes in Circumstances or New Information that could affect the Earlier Environmental Analysis***

There are no changes in circumstances in which the proposed project would be undertaken. No new information has become available and no new regulations related to visual resources have come into effect since the certification of the 2005 LRDP EIR or the LRDP Amendment 2 EIR that would alter the previous analysis and change its conclusions.

### ***6.1.5 Conclusion***

The Dundee-Glasgow project would not adversely affect any scenic vistas, scenic resources, visual quality and character, and light and glare. The construction and operation of the Dundee-Glasgow project would not change the nature or increase the magnitude of potential impacts to aesthetic resources or the conclusions in the 2005 LRDP EIR or the LRDP Amendment 2 EIR.

## 6.2 AGRICULTURE AND FORESTRY RESOURCES

### 6.2.1 *Relevant Elements of the Dundee-Glasgow Project*

The Dundee-Glasgow project would occupy approximately 6.58 acres of land on the UC Riverside campus and is located in an area currently identified by the Department of Conservation's 2016 Farmland Mapping and Monitoring Program (FMMP) as Urban and Built-Up Land. There are no agricultural uses currently on the project site. There is no land designated under a Williamson Act contract on the campus. In addition, no portion of the campus is zoned for forest or timber land.

### 6.2.2 *Analysis of Project*

**Implementation of the Dundee-Glasgow project would not result in a new significant impact or increase the severity of the LRDP impact on Important Farmland, including Prime Farmland, Unique Farmland, and Farmland of Statewide Importance.**

Impacts of campus development on Important Farmland were evaluated in the 2005 LRDP EIR and were updated in the LRDP Amendment 2 EIR (2011). A small portion of the East Campus is identified as Farmland of State Importance, and all of the Prime Farmland is located on the West Campus. As discussed in the 2005 LRDP EIR and the 2005 LRDP Amendment 2 EIR, campus development under the 2005 LRDP would convert existing Important Farmland to nonagricultural uses, resulting in a significant impact. Although the continued implementation of LRDP Planning Strategies *Land Use 2 and 3* as part of the 2005 LRDP would minimize the impact from conversion of Important Farmland, there is no feasible mitigation and therefore the impact on Important Farmland from development of the campus under the 2005 LRDP, as analyzed in both EIRs, was determined to be significant and unavoidable (UCR 2005; UCR 2011).

The proposed project is located in the East Campus and would not convert Prime Farmland to non-agricultural uses. Therefore, no impact would occur from implementation of the proposed project.

**Implementation of the Dundee-Glasgow project would not conflict with existing zoning for agricultural use or land under Williamson Act contract.**

As discussed in the 2005 LRDP EIR, no portion of the campus area proposed for development under the 2005 LRDP is under Williamson Act contract and there are no nearby agricultural lands under Williamson Act contracts. LRDP Planning Strategies *Land Use 2* and *Land Use 3* would continue to be implemented as part of the 2005 LRDP. Therefore, there would be no conflict with land under Williamson Act contract. In addition, the 2005 LRDP would consolidate the agricultural land on the West Campus

which would reduce the impact from urban land uses on agricultural uses. The development under the 2005 LRDP on farmland zoned for agricultural use or under Williamson Act contract would have a less than significant impact (UCR 2005).

The Dundee-Glasgow project would not conflict with any land under Williamson Act contract. Therefore, the proposed project would not change the conclusions of the previous analysis and would result in no impact.

**Implementation of the Dundee-Glasgow project would not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production, or result in the loss of forest land or conversion of forest land to non-forest use.**

The proposed project site is currently a surface parking lot and there are no forest lands (as defined in Public Resources Code (PRC) Section 12220[g]) on the site. There is no timberland (as defined by PRC Section 4526) or timberland zoned Timberland Production (as defined by Government Code Section 51104[g]) on any portion of the project site.

The project site does not contain trees managed for public benefit. Therefore, implementation of the Dundee-Glasgow project would not result in conflicts with existing zoning for, or cause rezoning of, forest land or timberland.

**Implementation of the Dundee-Glasgow project would not result in a new significant impact related to the conversion of farmland to non-agricultural use.**

The lands surrounding the Dundee-Glasgow project site are campus lands and not zoned for agricultural use. In addition, the Dundee-Glasgow project would neither construct any uses sensitive to agricultural noise or activities nor construct any uses that would conflict with agricultural practices. Therefore, the Dundee-Glasgow project would not create land use conflicts with adjacent agricultural lands that could result in the abandonment of agricultural uses or cause the lands to convert to non-agricultural uses. No impact would occur. The development of the Dundee-Glasgow project would not change the conclusions of the previous analysis.

### ***6.2.3 Analysis of Cumulative Impacts***

Cumulative agricultural impacts of the 2005 LRDP, including the project site, are addressed in the 2005 EIR and the LRDP Amendment 2 EIR. Both EIRs concluded that implementation of the 2005 LRDP in conjunction with cumulative development, would result in the loss of Important Farmland. The UC Riverside campus site contains Prime Farmland and Farmland of Statewide Importance. Therefore, the

contribution of campus development under the 2005 LRDP to the significant cumulative impact on Important Farmland would be cumulatively considerable (UCR 2005; UCR 2011). However, as noted above, the Dundee-Glasgow project would not convert Prime Farmland to non-agricultural uses. Additionally, similar to other campus development under the 2005 LRDP, the Dundee-Glasgow project would not result in a cumulative impact to forest land, timberland, lands under Williamson Act contract, and would not result in conversion of farmland to non-agricultural uses.

#### ***6.2.4 Changes in Circumstances or New Information that could affect the Earlier Environmental Analysis***

There are no changes in circumstances in which the proposed project would be undertaken and no new information has become available since the certification of the 2005 LRDP EIR and LRDP Amendment 2 EIR that would alter the previous analyses or change its conclusions relative to campus development under the 2005 LRDP, including the project site.

#### ***6.2.5 Conclusion***

The Dundee-Glasgow project would not result in the conversion of Important Farmland, nor would the project conflict with land under Williamson Act contract, conflict with land zoned forest or timberland, convert forest or timberland, or convert agricultural land. The Dundee-Glasgow project would not change the nature or increase the magnitude of potential impacts to agricultural or forestry resources or the conclusions in the 2005 LRDP EIR and the 2011 LRDP Amendment 2 EIR.

### **6.3 AIR QUALITY**

#### ***6.3.1 Relevant Elements of the Dundee-Glasgow Project***

The proposed project includes construction of the Dundee Residence Hall, Glasgow Dining, and repurposing of the existing A-I Residence Hall dining hall. As shown in **Figure 3.0-3**, the area of disturbance would be approximately 6.58 acres. Construction is expected to occur from Fall 2018 with building construction scheduled for completion in the Summer of 2020, for a construction period of about 22 months.

Some groups of people are considered more sensitive to adverse effects from air pollution than the general population. The California Air Resources Board, or CARB, has identified the following persons as most likely to be affected by air pollution: children under 14, the elderly over 65, athletes, and people with cardiovascular and chronic respiratory diseases. These groups are classified as sensitive receptors. Locations that may contain a high concentration of these sensitive population groups include residential

areas, hospitals, daycare facilities, elder care facilities, elementary schools, and parks. Sensitive receptors near the Dundee-Glasgow project include single-family residences located approximately 800 feet to the northeast across Watkins Drive and the railroad tracks.

### ***6.3.2 Analysis of Project***

**Construction of the Dundee-Glasgow project, which includes relevant LRDP Programs and Practices and Mitigation Measures, would not result in a new significant impact or increase the severity of the significant impact of LRDP construction emissions on air quality.**

The potential impacts on air quality from construction emissions associated with the campus development under the 2005 LRDP were evaluated in detail in the 2005 LRDP EIR, and updated in the LRDP Amendment 2 EIR (2011). The LRDP Amendment 2 EIR noted that the continued implementation of LRDP PP 4.3-2(a) and PP 4.3-2(b) was expected to minimize the impact from construction emissions. The URBEMIS model was used to estimate the construction emissions. It was assumed that two to four buildings would be under construction on the campus at one time. Based on the estimated emissions of criteria pollutants, the LRDP Amendment 2 EIR found that NO<sub>x</sub> emissions would exceed significance thresholds. The EIR noted that LRDP Mitigation Measures 4.3-1(a) through 4.3-1(c) would be implemented which require the Campus to implement the recommended SCAQMD air quality measures. However, the analysis concluded that the mitigation measures would not reduce the impact from construction of campus facilities under the 2005 LRDP Amendment 2 to less than significant (UCR 2011).

The Dundee-Glasgow project would develop approximately 227,000 square feet of building space. This is within the building space analyzed to be constructed under the 2005 LRDP in the 2005 LRDP EIR as well as in the LRDP Amendment 2 EIR. Therefore, the proposed project is within the scope of the 2005 LRDP and was analyzed in both prior EIRs. Furthermore, the proposed project would implement LRDP PP 4.3-2(a) and PP 4.3-2(b) and LRDP Mitigation Measures 4.3-1a through 4.3-1c to mitigate its impact related to construction emissions, including emissions of TACs during construction. However, the emissions would still exceed the thresholds, and the impact would remain significant and unavoidable. The Dundee-Glasgow project would not change the nature or increase the magnitude of the impact resulting from construction emissions or the conclusions in the 2005 LRDP EIR and the LRDP Amendment 2 EIR. This impact is adequately analyzed in the 2005 LRDP EIR as well as in the LRDP Amendment 2 EIR and was fully addressed in the Findings and Statement of Overriding Considerations adopted by The Regents in connection with its approval of the 2005 LRDP and Amendment 2.

**Operation of the Dundee-Glasgow project would not result in a new significant impact or increase the severity of the significant impact of LRDP operational emissions on air quality.**

The potential impacts on air quality from operational emissions associated with campus development were evaluated in detail in the 2005 LRDP EIR, and updated in the LRDP Amendment 2 EIR (2011). The continued implementation of LRDP PP 4.3-1 as part of the amended 2005 LRDP would minimize the impact from operational emissions. Based on the estimated emissions of criteria pollutants, VOC, NO<sub>x</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub> emissions would exceed significance thresholds. In addition, LRDP Mitigation Measures 4.3-2(a) and 4.3-2(b) would be implemented which require the Campus to implement certain emissions reduction measures and participate in a greenhouse gas emissions reduction program that would also reduce criteria pollutant emissions. However, the analysis concluded that mitigation measures would not reduce the impact from operation of the campus at full buildout of the 2005 LRDP Amendment 2 to less than significant (UCR 2011).

As noted above, the Dundee-Glasgow project would develop approximately 227,000 square feet of building space. This is within the approximately 14.9 million square feet of building space analyzed to be constructed under the amended 2005 LRDP. However, implementation of the Dundee-Glasgow project would not result in an increase in the campus population or vehicle trips (the project would, in fact, reduce vehicle trips). Therefore, although the proposed project is within the scope of the amended 2005 LRDP and was analyzed in the LRDP Amendment 2 EIR, the proposed project would not result in substantial operational emissions. Furthermore, PP 4.3-1, and LRDP Mitigation Measures 4.3-2(a) and 4.3-2(b) would be implemented as part of the project. Therefore, the project's operational emissions impact would be less than significant. The project would not increase the severity of the LRDP impact related to operational emissions.

**Implementation of the Dundee-Glasgow project would not result in a new significant impact or increase the severity of the LRDP impact related to emissions of a criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard.**

The analysis in the LRDP Amendment 2 EIR (2011) concluded that implementation of the amended 2005 LRDP would result in a cumulatively considerable net increase of a criteria pollutant for which the project region is nonattainment under SCAQMD air quality standards. The implementation of LRDP Mitigation Measure 4.3-7 would ensure that the number of motor vehicle trips and area source emissions are reduced to the maximum extent feasible. Therefore, with mitigation, campus development under the amended 2005 LRDP was concluded to have a less than significant cumulative impact related to an increase in criteria pollutants emissions for which the region is in nonattainment (UCR 2011).

As explained above, the Dundee-Glasgow project is within the scope of the amended 2005 LRDP and thus, within the envelope of operational emissions analyzed in the LRDP Amendment 2 EIR. Furthermore, the project would result in operational emissions that would not be substantial. The Dundee-Glasgow project would not change the nature or significantly increase the magnitude of the cumulative impacts resulting from criteria air pollutants for which the region is in nonattainment or the conclusions in the LRDP Amendment 2 EIR as analyzed for the amended 2005 LRDP.

**Implementation of the Dundee-Glasgow project would not result in a new significant impact or increase the severity of the LRDP impact on sensitive receptors from exposure to substantial carbon monoxide concentrations or toxic air contaminant emissions.**

The potential impacts on sensitive receptors from carbon monoxide concentrations (CO) and toxic air contaminants (TAC) associated with campus development, under the 2005 LRDP, were evaluated in detail in the 2005 LRDP EIR, and updated in the LRDP Amendment 2 EIR (2011). Sensitive receptors, considered to be places where children, the elderly, and other sensitive people are located, are more susceptible to the effects of air pollution than the general population. Nearby TAC and CO pollution can impact sensitive receptors. As determined by the analysis in the LRDP Amendment 2 EIR, campus development would not result in TAC emissions that would result in a significant human health risk on- or off-site. The LRDP Amendment 2 EIR also evaluated campus development for its potential to cause high levels of CO due to congestion resulting from project-related traffic. The results indicated that under worst-case conditions, future CO concentrations would not exceed the state 1-hour and 8-hour standards. Based on this analysis, the LRDP Amendment 2 EIR concluded that the amended 2005 LRDP would not cause CO levels that exceed applicable standards (UCR 2011).

The Dundee Residence Hall would provide on-campus housing for first-year students, which would reduce the total number of vehicle trips to and from the campus. The proposed project would also change a parking lot use with cars going in, out, and idling to residential and dining uses. Additionally, first-year student residents of the project would not have cars as they are not given parking permits. Therefore, the Dundee-Glasgow project would reduce traffic to and from the campus. The Dundee-Glasgow project would not change the nature or increase the magnitude of the impacts resulting from exposure of sensitive receptors to substantial TAC emissions or pollutant concentrations or the conclusions in the LRDP Amendment 2 EIR.

**Construction and operation of the Dundee-Glasgow project would not create objectionable odors affecting a substantial number of people.**

The potential odor impacts associated with campus development, under the 2005 LRDP, were evaluated in the 2005 LRDP EIR, and updated in the LRDP Amendment 2 EIR (2011). According to that analysis, construction of campus facilities under the amended 2005 LRDP would require the use of diesel-fueled equipment, architectural coatings, and asphalt, all of which produce associated odors. During operation of campus facilities developed under the amended 2005 LRDP, there could be airborne odors resulting from cooking activities associated with the new residential buildings, and odors from new trash receptacles. However these odors would not be pervasive enough to cause objectionable odors affecting a substantial number of people. The analysis also concluded that the facilities planned to be constructed under the 2005 LRDP Amendment 2 would not be significant sources of odors (UCR 2011).

The proposed project would have the potential to result in localized diesel exhaust emissions from the operation of construction equipment and truck activity during the construction period. As diesel exhaust has an associated odor, these emissions may be noticeable from time to time to adjacent receptors. However, they would be temporary, short-term, and localized and are not likely to result in confirmed odor complaints. Furthermore, LRDP PP 4.3-2(a) and LRDP Mitigation Measure 4.3-1(b) would be implemented to minimize diesel exhaust emissions emitted on the project site during construction. The odor impact from construction-phase emissions would be less than significant. The proposed project does not include any land uses that could subject existing receptors in the project vicinity to substantial odors.

There are no sources of substantial odors near the project site that could subject the new residents of the site to substantial odors. There would be no impact on the new residents related to exposure to odors. There would be no change to the less-than-significant impact conclusions of the previous analysis.

**Implementation of the Dundee-Glasgow project would not result in a new significant impact or increase the severity of the significant impact of the LRDP related to conflict with or obstruction of the implementation of the applicable air quality plan.**

The potential impacts from air emissions associated with campus development, under the amended 2005 LRDP, on the 2007 Air Quality Management Plan (AQMP) for the South Coast Air Basin were evaluated in detail in the LRDP Amendment 2 EIR (2011). The development of campus land uses included in the LRDP Amendment 2 was not foreseen at the time that the AQMP was prepared. Therefore, the land uses and associated growth projections were not included in the 2007 AQMP projections for employment and population growth or in the SCAG growth projections. The EIR noted that the LRDP Planning Strategies *Land Use 4, Land Use 5, Transportation 1 through 6, Conservation 5*, and PP 4.3-1 would continue



implemented as part of the amended 2005 LRDP. Implementation of LRDP Mitigation Measure 4.3-6 would minimize the impact from potential inconsistencies with the AQMP. However, campus development under the amended 2005 LRDP would still potentially conflict with the region's air quality plan, and the impact from development under the amended 2005 LRDP would be significant and unavoidable (UCR 2011). This impact is adequately analyzed in the LRDP Amendment 2 EIR and was fully addressed in the Findings and Statement of Overriding Considerations adopted by The Regents in connection with its approval of the LRDP Amendment 2 EIR.

The Dundee-Glasgow project does not include facilities that support enrollment and employment growth beyond what was analyzed in the LRDP Amendment 2 EIR. Therefore, the Dundee-Glasgow project, in itself, would not conflict with the AQMP and would have a less than significant impact. Furthermore, the development of the Dundee-Glasgow project would not substantially change the nature or magnitude of the impacts to the AQMP or the conclusions in the LRDP Amendment 2 EIR.

### ***6.3.3 Analysis of Cumulative Impacts***

In addition to the analysis above, cumulative air quality impacts of campus development under the amended 2005 LRDP are addressed in the LRDP Amendment 2 EIR. The EIR concluded that implementation of the amended 2005 LRDP, in conjunction with cumulative development, would result in substantial emissions from construction activities and from vehicle trips and stationary sources during operation which would be cumulatively considerable. However, individual construction projects on the campus that do not exceed the SCAQMD recommended daily thresholds for project-specific impacts would not be considered to cause a cumulatively considerable increase in emissions. The cumulative impact from campus development under the 2005 LRDP and LRDP Amendment 2 on odors, the AQMP, and CO hotspots, and TAC emissions on sensitive receptors would be less than significant (UCR 2011). The Dundee-Glasgow project is within the planned campus development under the amended 2005 LRDP and there would be no change in the less than significant or less than significant with mitigation cumulative impacts.

### ***6.3.4 Changes in Circumstances or New Information that could affect the Earlier Environmental Analysis***

There are no additional changes in circumstances in which the proposed project would be undertaken since the certification of the 2005 LRDP EIR and LRDP Amendment 2 EIR that would alter the previous analysis or change its conclusions. Although additional guidance has been put forth by the Air District for the evaluation of human health risk impacts from exposure to TACs based on 2015 OEHHA guidance, the proposed project would not result in a new significant impact related to human health risk from

exposure to TACs during construction because there are no sensitive receptors in close proximity of the project site. The SCAQMD Risk Assessment Procedures, Rule 1401.1, indicates that construction of any new facility located within 1,000 feet from school age children must demonstrate that the cancer risks would be less than one in a million. The UCR Child Development Center would be located over 1,000 feet from the proposed dining facility, which may use burners that produce low levels of TACs. Additionally, the project will implement LRDP Mitigation Measures 4.3-2(a) through 4.3-2(c) which would control emissions of TACs substantially to result in a less than significant impact.

### **6.3.5 Conclusion**

The Dundee-Glasgow project would produce construction and operational emissions that would be within what was analyzed in the LRDP Amendment 2 EIR. The project would not expose sensitive receptors to CO hotspots or TAC emissions, or produce objectionable odors. The Dundee-Glasgow project would not change the nature or increase the magnitude of potential impacts to air quality or the conclusions in the 2005 LRDP EIR and LRDP Amendment 2 EIR.

## **6.4 BIOLOGICAL RESOURCES**

### **6.4.1 Relevant Elements of the Dundee-Glasgow Project**

The proposed project would demolish the existing parking lot and construct the Dundee Residence Hall and the stand-alone Glasgow Dining facility. The proposed project would also repurpose the existing Aberdeen-Inverness Residence Hall dining hall. The project site is entirely developed with a parking lot and is in a developed area of the campus. There are no sensitive habitats present on the project site (UCR 2005).

### **6.4.2 Analysis of Project**

**Implementation of the Dundee-Glasgow project would not result in a new significant effect or increase the severity of the LRDP impact, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species.**

Potential impacts to special-status plant and wildlife species from campus development under the 2005 LRDP were analyzed in the 2005 LRDP EIR. The analysis in the 2005 LRDP EIR concluded that development of the campus would result in both direct and indirect impacts on special-status plants. LRDP Planning Strategies *Open Space 1 through 4*, *Conservation 1 through 3*, and continued implementation of LRDP PP 4.4-1(a) and PP 4.4-1(b) would minimize the impact to special-status species. In addition, LRDP Mitigation Measures 4.4-1(a) and 4.4-1(b) would be implemented which would require the

Campus to conduct surveys for special-status species prior to disturbance of areas or habitat that are known to support the species and implement specific measures if special-status species are identified. With mitigation, the impact from the campus development under the 2005 LRDP to special-status species would be reduced to less than significant (UCR 2005).

The proposed project site is not identified as within an area containing sensitive biological resources. The proposed construction of the Dundee-Glasgow project would have no impact to special-status species. The development of the Dundee-Glasgow project would not change the conclusions of the previous analysis.

**Implementation of the Dundee-Glasgow project would not result in a new significant impact or increase the severity of the LRDP impact 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 Wildlife or U.S. Fish and Wildlife Service.**

As analyzed in the 2005 LRDP EIR, the riparian area, which provides critical habitat for the California gnatcatcher, located in the area south of South Campus Drive, would be affected by the campus development under the 2005 LRDP. Therefore, implementation of the 2005 LRDP would result in an adverse effect to riparian habitat or designated California gnatcatcher critical habitat. The LRDP Planning Strategies *Open Space 1 through 3, Conservation 1 through 2*, and continued implementation of LRDP PP 4.4-2(a) and PP 4.4-2(b) would minimize the impact to riparian areas. In addition, implementation of LRDP Mitigation Measures 4.4-1(a) and 4.4-1(b) would reduce any potential impact. With incorporation of the mitigation measures the impact from campus development under the 2005 LRDP to a sensitive natural community would be less than significant (UCR 2005).

The proposed project site is not located within a riparian zone or within gnatcatcher critical habitat. The Dundee-Glasgow project would have a less than significant impact on a sensitive natural community. The development of the Dundee-Glasgow project would not change the conclusions of the previous analysis.

**Implementation of the Dundee-Glasgow project would not result in a new significant effect or increase the severity of the impact 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.**

As analyzed in the 2005 LRDP EIR, campus development under the 2005 LRDP could include minor development projects, such as extension of utility lines or pedestrian or bicycle paths, which may disturb

federally protected seasonal wetlands or jurisdictional waters of the United States. Therefore, implementation of the 2005 LRDP could result in an adverse effect to jurisdictional waters. The continued implementation of LRDP Planning Strategies *Open Space 3*, *Conservation 1*, *Conservation 2*, and LRDP PP 4.4-1(a), PP 4.4-1(b), PP 4.4-2(a), and PP 4.4-2(b) as part of the 2005 LRDP would minimize the impact to jurisdictional waters. In addition, implementation of LRDP Mitigation Measures 4.4-3(a), 4.4-3(b), and 4.4-3(c) would require the Campus to conduct a wetland delineation of any impact area, restore or enhance any affected wetland or riparian habitat, and include United States Army Corps of Engineers (USACE) approved measures. The analysis concluded that with incorporation of the mitigation measures the impact from campus development under the 2005 LRDP on jurisdictional waters would be less than significant (UCR 2005).

The Dundee-Glasgow project would not affect any jurisdictional wetlands. The development of the Dundee-Glasgow project would not change the less than significant conclusions of the previous analysis.

**Implementation of the Dundee-Glasgow project, which includes relevant LRDP Mitigation Measures, would not result in a new significant impact or increase the severity of the LRDP impact on the movement of any native resident or migratory fish or wildlife species or migratory wildlife corridors or affect nesting birds.**

As analyzed in the 2005 LRDP EIR, campus development under the 2005 LRDP could result in fragmentation of open space areas which could interfere with movement of native resident or migratory wildlife species. Therefore, implementation of the 2005 LRDP would result in a significant effect on wildlife corridors such as on-campus arroyos, and migratory birds and raptors. The LRDP Planning Strategies *Open Space 1 through 3*, *Conservation 1 through 2*, and continued implementation of LRDP PP 4.4-1(a), and PP 4.4-1(b) as part of the 2005 LRDP would minimize the impact to wildlife corridors and migratory birds. In addition, implementation of LRDP Mitigation Measures 4.4-4(a) and 4.4-4(b) would require surveys for nesting special status avian species if any trees are to be removed or construction is proposed to occur during the nesting months. If an active nest is discovered, a buffer zone would be established. With incorporation of the mitigation measures, the impact from campus development under the 2005 LRDP to wildlife corridors and migratory birds would be less than significant (UCR 2005).

The proposed project site is previously disturbed land and is surrounded by urban land uses on all sides. Therefore, the site is unlikely to be used as a wildlife corridor. The existing parking lot has landscaping trees throughout and mature trees are located along the perimeter of the project site which could provide nesting habitat for migratory birds. However, the mature trees would not be removed by the project. Additionally, LRDP Mitigation Measures 4.4-4(a) and 4.4-4(b) described above would be implemented to reduce any potential impact to nesting bird species to a less than significant level. The re-purposing of the

existing A-I dining hall would occur within the existing building and would not affect nesting birds. The development of the Dundee-Glasgow project would not change the conclusions of the previous analysis.

**The Dundee-Glasgow project would not conflict with any applicable policies protecting biological resources.**

As with campus development under the 2005 LRDP, the Dundee-Glasgow project would be consistent with local policies or ordinances protecting biological resources. LRDP Planning Strategies *Open Space 1 through 3* and *Conservation 1* would minimize any conflict with local policies or ordinances protecting biological resources. The Dundee-Glasgow project would not change the nature or increase the magnitude of the potential impacts to biological resources or the less than significant conclusions in the 2005 EIR as analyzed for campus development under the 2005 LRDP.

**The Dundee-Glasgow project would not result in a new significant impact or increase the severity of the LRDP impact related to conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.**

A Multiple Species Habitat Conservation Plan (MSHCP) was approved and adopted by Riverside County in 2003 as a comprehensive, multi-jurisdictional Habitat Conservation Plan (HCP) and Natural Communities Conservation Plan (NCCP) focusing on conservation of both species and habitats to address biological ecological diversity conservation needs in Western Riverside County. A portion of the campus is included in the MSHCP but is not identified for conservation. Therefore, the 2005 LRDP EIR concluded that campus development under the 2005 LRDP would not conflict with the MSHCP and would have no impact on the any HCP, NCCP, or approved local, regional, or State habitat conservation plan (UCR 2005).

The proposed project site is not within the portion of the campus that is included in the MSHCP. The development of the Dundee-Glasgow project would not change the nature or increase the magnitude of the potential impacts to HCPs or the conclusions in the 2005 LRDP EIR.

### **6.4.3 Analysis of Cumulative Impacts**

Cumulative biological impacts of campus development under the 2005 LRDP are addressed in the 2005 LRDP EIR. The analysis concluded that with the implementation of the mitigation program put forth by the Campus, the cumulative impacts of campus development on wildlife corridors would not be cumulatively considerable. However, the cumulative impact from the 2005 LRDP to special-status species would be significant and unavoidable after mitigation (UCR 2005). As noted above, sensitive special-

status species and critical habitat are not present on the site of the Dundee-Glasgow project, and to the extent that there could be any direct or indirect impacts from the development on the project site, they would be mitigated by the mitigation measures in the 2005 LRDP EIR. The Dundee-Glasgow project's contribution to cumulative impacts would not be considerable.

#### ***6.4.4 Changes in Circumstances or New Information that could affect the Earlier Environmental Analysis***

There are no changes in circumstances in which the proposed project would be undertaken. No new information has become available and no new biological resources regulations relevant to the project site have come into effect since the certification of the 2005 LRDP EIR that would alter the previous analysis and change its conclusions.

#### ***6.4.5 Conclusion***

The Dundee-Glasgow project would not have a substantial adverse effect on biological resources. The proposed project would not change the nature or increase the magnitude of potential impacts to biological resources or the conclusions in the 2005 LRDP EIR.

### **6.5 CULTURAL RESOURCES**

#### ***6.5.1 Relevant Elements of the Dundee-Glasgow Project***

The UC Riverside Campus was inhabited by aboriginal inhabitants of the area but was not claimed by any residents during the time of Spanish colonization until California became a part of the U.S. in 1846. There are no structures, including historic structures, identified on the project site. There are no known paleontological resources or fossil-bearing sediments known to occur within the project site or its vicinity (UCR 2005).

#### ***6.5.2 Analysis of Project***

**Implementation of the Dundee-Glasgow project would not result in a new significant impact or increase the severity of the LRDP impact on structures designated as eligible to the NRHP or CRHR.**

Potential impacts to cultural resources from campus development under the 2005 LRDP were analyzed in the 2005 LRDP EIR. The EIR analysis found that campus development could result in modification of structures that have been determined as eligible to the NRHP or CRHR. The LRDP Planning Strategy *Conservation 4* would continue to be implemented as part of the 2005 LRDP and would minimize the impact. The analysis concluded that implementation of LRDP Mitigation Measures 4.5-1(a) and 4.5-1(b),

which requires a qualified architectural historian to evaluate the potential significance of structures 50 years or older than may be affected, would reduce the impact to less than significant (UCR 2005).

The Dundee-Glasgow project would not modify or remove any facilities eligible for the NRHP or CRHR as no structures are present on the site. Therefore, there would be no impact on listed historic resources. The development of the Dundee-Glasgow project would not change the less than significant impact conclusions of the previous analysis.

**Implementation of the Dundee-Glasgow project would not result in a new significant impact or increase the severity of the LRDP's significant impact on historic structures.**

Impacts to potential historic structures from campus development were analyzed in the 2005 LRDP EIR. The EIR analysis found that campus development would result in the demolition of potentially historic structures that currently are not eligible for listing on the NRHP or CRHR. The LRDP Planning Strategy *Conservation 4*, *Land Use 3*, and *Open Space 5* and PP 4.5-2 would continue to be implemented as part of the 2005 LRDP and would minimize the impact to historic structures. In addition, LRDP Mitigation Measure 4.5-2 would be implemented, which requires documentation and treatment of historic facilities. However, the impact would not be reduced to less than significant. The analysis concluded that the impact of campus development under the 2005 LRDP on historic resources would be significant and unavoidable (UCR 2005).

The Dundee-Glasgow project would not disturb any historic structures or facilities on the project site as no structures are present on the site and would therefore have no impact. The development of the Dundee-Glasgow project would not increase the severity of the significant and unavoidable impact on historic resources or the conclusions of the previous analysis.

**Implementation of the Dundee-Glasgow project, which includes relevant LRDP Planning Strategies and Programs and Practices, would not result in a new significant impact or increase the severity of the LRDP impact on archaeological, human remains, and paleontological resources.**

As analyzed in the 2005 LRDP EIR, ground-disturbing construction activities associated with campus development under the 2005 LRDP have the potential to inadvertently unearth and damage previously unknown archaeological, human remains, or paleontological resources that were not identified by the 2002 survey of the campus. Implementation of LRDP Planning Strategies *Land Use 2*, *Land Use 3*, *Open Space 1 through 3*, and *5*, and *Conservation 1 through 3* and PP 4.5-3, PP 4.5-4, and PP 4.5-5 as part of the 2005 LRDP would reduce these impacts to archaeological, human remains, and paleontological resources to less than significant (UCR 2005).



The development of the Dundee-Glasgow project would be subject to LRDP Planning Strategies *Conservation 2*, PP 4.5-3, PP 4.5-4, and PP 4.5-5 and would result in less than significant impact on previously unknown archaeological, human remains, and paleontological resources. The proposed project would not change the nature or increase the magnitude of the potential impacts to cultural and paleontological resources or the conclusions in the 2005 LRDP EIR.

### ***6.5.3 Analysis of Cumulative Impacts***

Cumulative cultural resources impacts of campus development under the 2005 LRDP are addressed in the 2005 EIR. The 2005 EIR concluded that implementation of the 2005 LRDP, in conjunction with cumulative development, could potentially disturb previously unknown cultural and paleontological resources (UCR 2005). As with the other campus development under the 2005 LRDP, the cumulative impacts of the Dundee-Glasgow project to previously unknown cultural and paleontological resources would be reduced to less than significant with the mitigation measures listed above. The Dundee-Glasgow project's contribution to cumulative impacts would not be considerable.

### ***6.5.4 Changes in Circumstances or New Information that could affect the Earlier Environmental Analysis***

There are no changes in circumstances in which the proposed project would be undertaken. No new information has become available and no new regulations related to cultural and paleontological resources have come into effect since the certification of the 2005 LRDP EIR that would alter the previous analysis and change its conclusions.

### ***6.5.5 Conclusion***

The Dundee-Glasgow project would not have a substantial adverse effect on structures eligible for NRHP or CRHR, or other cultural and paleontological resources. It would not contribute to the significant impact to potential historic structures. The Dundee-Glasgow project would not change the nature or magnitude of potential impacts to cultural and paleontological resources or the conclusions in the 2005 LRDP EIR.

## **6.6 GEOLOGY AND SOILS**

### ***6.6.1 Relevant Elements of the Dundee-Glasgow Project***

The topography of the project site is flat. The site is underlain by alluvium deposited by streams in the Holocene era.

The closest known active fault to the campus is the San Jacinto fault, located approximately 6 miles to the northeast. The Banning Fault zone, which interacts with the San Andreas Fault zone, is located approximately 10 miles to the northeast of the campus. The San Andreas Fault zone is located approximately 14 miles northeast of the campus. In the event of a seismic event the area could experience severe earthshaking, although surface rupture is unlikely. In addition, the risk of liquefaction on the campus is very low (UCR 2005).

### **6.6.2 Analysis of Project**

**Implementation of the Dundee-Glasgow project would not result in a new significant impact or increase the severity of the LRDP impacts associated with exposure of people or structures to increased risk related to rupture of a known earthquake fault or seismic ground shaking.**

Potential impacts related to risk from fault rupture or ground shaking from campus development under the 2005 LRDP was analyzed in the 2005 LRDP EIR. The continued implementation of LRDP PP 4.6-1(a) through PP 4.6-1(c) would minimize any impact to people or structures from ground shaking or ground failure. The analysis concluded that campus development would not expose people or structures to risk of injury or structural damage from fault rupture as there are no active faults that cross the campus site and the site is not subject to significant seismic hazards. Therefore, implementation of the 2005 LRDP would result in less than significant impacts from fault rupture, strong seismic ground shaking, or seismic-related ground failure (UCR 2005).

As described above, there are no fault lines that cross the project site. As a result there would be no risk of fault rupture. Construction of the residence hall buildings and a dining facility would expose people and structures to potentially substantial adverse effects resulting from seismic ground shaking. Similar to the conclusions of the 2005 EIR, continued implementation of PP 4.6-1(a), PP 4.6-1(b), and PP 4.6-1(c) would ensure that the new buildings would be designed to be consistent with current seismic and geotechnical engineering practice to provide adequate safety levels, as defined in the California Code of Regulations and the University Policy on Seismic Safety. With implementation of PP 4.6-1(a), PP 4.6-1(b), and PP 4.6-1(c), this impact would be less than significant. The development of the Dundee-Glasgow project would not change the nature or increase the magnitude of the potential impacts from fault rupture, strong seismic ground shaking, or seismic-related ground failure or the conclusions in the 2005 LRDP EIR.

**Implementation of the Dundee-Glasgow project, which includes relevant LRDP Planning Strategies, would not result in a new significant impact or increase the severity of the LRDP impact associated with substantial soil erosion or the loss of topsoil, expansive soil, or soil incapable of adequately supporting the use of septic tanks or alternative wastewater disposal units.**

Potential impacts related to soil erosion from campus development under the 2005 LRDP were analyzed in the 2005 LRDP EIR. Campus development under the 2005 LRDP would involve site clearance, grading, and other earthmoving activities, which could subject exposed soils to erosion by water or wind. Depending on the location on the campus, the erosion hazard ranges from slight to high. All construction activities would comply with Chapter 29 of the CBC, which regulates excavation activities and the construction of foundations and retaining walls, and Chapter 70 of the CBC, which regulates grading activities, including drainage and erosion control. The continued implementation of LRDP Planning Strategies *Land Use 2*, *Land Use 3*, *Open Space 1 through 5*, *Conservation 1 through 3*, LRDP PP 4.6-2(a), and PP 4.6-2(b) as part of the 2005 LRDP would also minimize soil erosion and loss of topsoil impacts. Therefore, implementation of the 2005 LRDP would not result in substantial soil erosion or the loss of topsoil, and the impact would be less than significant. The UC Riverside campus uses the City of Riverside sanitary sewer to treat and dispose wastewater. The Campus has no plans to develop septic tanks or alternative wastewater systems on the campus. Therefore, the development of the 2005 LRDP EIR concluded that there would be no impact associated with soils incapable of adequately supporting alternative wastewater systems (UCR 2005).

The Dundee-Glasgow project would be constructed on the East Campus where erosion hazard from soils mostly range from slight to moderate. Similar to the conclusions of the 2005 EIR, implementation of LRDP Planning Strategy *Open Space 4*, Planning Strategy *Conservation 2*, Planning Strategy *Conservation 3*, LRDP PP 4.6-2(a), and PP 4.6-2(b) would reduce the impact from substantial soil erosion or the loss of topsoil to a less than significant level. No septic tanks or alternative wastewater systems would be installed as part of the Dundee-Glasgow project. The development of the Dundee-Glasgow project would not change the nature or increase the magnitude of any of the impacts described above, or the conclusions in the 2005 LRDP EIR.

**Implementation of the Dundee-Glasgow project, which includes relevant LRDP Planning Strategies, would not result in a new significant impact or increase the severity of the LRDP impact associated with exposure of people or structure to increased risk associated with landsliding, lateral spreading, subsidence, liquefaction, collapse, or differential settlement.**

Potential impacts related to risk from landsliding, lateral spreading, subsidence, liquefaction, collapse, or differential settlement from campus development under the 2005 LRDP were analyzed in the 2005 LRDP

EIR. The continued implementation of LRDP Planning Strategies *Conservation 2, Open Space 1 and 2*, and PP 4.6-1(a) as part of the 2005 LRDP development would minimize impacts from landslides, lateral spreading, subsidence, liquefaction or collapse. The 2005 LRDP EIR noted that the risk of liquefaction at the campus is low. In addition, the risk of deep-seated landsliding is considered to be very low, even on natural slopes. In certain areas on the campus less dense strata and lenses of old alluvium are susceptible to collapse as well as the younger alluvium located near the University Arroyo. Fill material in many areas on the campus was deposited prior to the development of modern building codes. Therefore, the fill materials may exhibit great variability in their density and compressibility and may not be appropriate for the support of structures. In these instances the fill material would need to be recompacted or removed. The campus development under the 2005 LRDP would not result in impacts to people or structures from landslides, lateral spreading, subsidence, liquefaction or collapse, and the impact would be less than significant (UCR 2005).

The Riverside County Open Data geotechnical database maps the project site within a zone of low liquefaction hazard susceptibility (Haley & Aldrich 2018). Furthermore, potential for liquefaction and liquefaction-related secondary effects to develop at the project site following a seismic event is negligible, due to deep groundwater conditions (Haley & Aldrich 2018). No impacts from project implementation would occur. Therefore, the development of the Dundee-Glasgow project would not increase the magnitude of the potential LRDP development impacts from landsliding, lateral spreading, subsidence, liquefaction, collapse, or differential settlement or the conclusions in the 2005 LRDP EIR.

### **6.6.3 Analysis of Cumulative Impacts**

Cumulative impacts related to geology and soils from the implementation of the 2005 LRDP are addressed in the 2005 LRDP EIR. The 2005 LRDP EIR concluded that implementation of the 2005 LRDP in conjunction with cumulative development, would not result in differential settlement, liquefaction, unstable soils, or soil erosion. However, the cumulative impact from seismic ground shaking would be considered significant (UCR 2005). As with other development under the 2005 LRDP, the cumulative impacts of the Dundee-Glasgow project related to differential settlement, unstable soils, or soil erosion would be less than significant. The significant impact from seismic ground shaking would still occur. Unlike other campus development under the 2005 LRDP, impacts from liquefaction to the Dundee-Glasgow project would not occur. The Dundee-Glasgow project's contribution to cumulative impacts would not be considerable.

#### ***6.6.4 Changes in Circumstances or New Information that could affect the Earlier Environmental Analysis***

There are no changes in circumstances in which the Dundee-Glasgow project would be undertaken. No new information has become available and no new regulations related to seismic activity, local geology, or soils resources have come into effect since the certification of the 2005 LRDP EIR that would alter the previous analysis and change its conclusions.

#### ***6.6.5 Conclusion***

The Dundee-Glasgow project would not have a substantial adverse effect from seismic activity, local geology, or soils. The proposed project would not change the nature or magnitude of potential impacts from seismic activity, local geology, or soils or the conclusions in the 2005 LRDP EIR.

### **6.7 GREENHOUSE GAS EMISSIONS**

#### ***6.7.1 Relevant Elements of the Dundee-Glasgow Project***

As described in **Section 6.3 Air Quality**, the Dundee-Glasgow project includes the construction of residence hall buildings, dining facility, and repurposing of an existing dining hall. The area of disturbance would be approximately 6.58 acres. Construction is expected to occur from Fall 2018 with building construction scheduled for completion in the Summer of 2020, for a construction period of about 22 months.

#### ***6.7.2 Analysis of Project***

**Construction and operation of the Dundee-Glasgow project would not result in a new significant impact or increase the severity of the LRDP impact related to greenhouse gas emissions.**

Potential impacts related to greenhouse gas emissions from campus development were not analyzed in the 2005 LRDP EIR as that EIR predated AB 32. The impacts related to greenhouse gas emissions from campus development under the amended 2005 LRDP were analyzed in the LRDP Amendment 2 EIR (2011). Development of the campus under the amended 2005 LRDP would produce significant amounts of greenhouse gas emissions from construction and operation of the existing and planned facilities. The Campus committed to meeting an emissions rate equal to its rate in 1990 for full buildout in 2020. This requirement would result in a reduction of over 70 percent from current “business as usual” (BAU) 2020 projections. Appropriate reduction measures from the University Policy on Sustainable Practices and UC Riverside Climate Action Plan (CAP) would be implemented to meet this goal. LRDP Mitigation Measure

4.16-1 would be implemented which would require the Campus to implement appropriate greenhouse gas reduction measures from the UC Riverside CAP and University Policy on Sustainable Practices. Therefore, with mitigation, implementation of the amended 2005 LRDP would result in a less than significant impact related to greenhouse gas emissions (UCR 2011).

The proposed project includes the construction of the Dundee Residence Hall, Glasgow Dining, and repurposing of the existing A-I Residence Hall dining hall. Construction of the buildings would require limited heavy machinery, resulting in GHG emissions. However, GHG emissions associated with project construction would be short-term, occurring only during construction and therefore would have a very limited impact on overall state emission rates. The SCAQMD have not put forth quantitative thresholds for evaluation of the significance of a project's construction emissions. The proposed project would implement PP 4.3-2(b) and LRDP Mitigation Measures 4.3-1(a) and 4.3-1(b) to reduce exhaust emissions from construction vehicles and equipment which would also reduce GHG emissions. For all of the reasons provided above, the impact of the proposed project's construction-phase GHG emissions would be less than significant and no mitigation is required.

By providing housing on the campus, the proposed project would reduce daily trips to and from the campus, and thus result in a reduction in the GHG emissions estimated for the campus in 2020 and previously reported in the LRDP Amendment 2 EIR. (Refer to Section 6.16, Transportation/Traffic, for a discussion of traffic impacts.) The Dundee-Glasgow project would not change the nature or increase the magnitude of the potential impacts from greenhouse gas emissions or the conclusions in the LRDP Amendment 2 EIR.

**The Dundee-Glasgow project would not result in a new significant conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.**

Potential impacts related to conflict with an applicable greenhouse gas emissions reduction plan and the 2005 LRDP as amended by Amendment 2 were analyzed in the LRDP Amendment 2 EIR. Development of the campus under the 2005 LRDP Amendment 2 was accounted for by the Campus in developing the UC Riverside CAP. The mitigation measures described in the LRDP Amendment 2 EIR would ensure that each project on the campus would be evaluated for its consistency with the applicable emissions reduction measures in the CAP. Therefore, implementation of the 2005 LRDP Amendment 2 would not conflict with the UC Riverside CAP or the University Policy on Sustainable Practices. The amended 2005 LRDP would have a less than significant impact (UCR 2011).

Construction and operation of the Dundee-Glasgow project would be consistent with what is allowed and was previously analyzed in the LRDP Amendment 2 EIR. Therefore, the proposed project is

accounted for in the UC Riverside CAP and is consistent with the emission reduction measures in the CAP. The development of the Dundee-Glasgow project would not change the nature or increase the magnitude of the potential impacts from conflict with applicable greenhouse gas reduction plans or the conclusions in the LRDP Amendment 2 EIR.

### ***6.7.3 Analysis of Cumulative Impacts***

The cumulative greenhouse gas impacts of campus development under the 2005 LRDP, including the proposed project, are adequately analyzed in the LRDP Amendment 2 EIR. Further cumulative impact analysis and additional mitigation measures are not required.

### ***6.7.4 Changes in Circumstances or New Information that could affect the Earlier Environmental Analysis***

The LRDP Amendment 2 EIR analyzed the impact of campus related greenhouse gas emissions. There are no changes in circumstances in which the Dundee-Glasgow project would be undertaken. No new information related to greenhouse gas emissions has become available since the certification of the LRDP Amendment 2 EIR that would alter the previous analysis and change its conclusions. Although new laws and regulations related to greenhouse gas emissions (such as SB 375 and SB 32) have been passed since the LRDP Amendment 2 EIR was certified, they have no effect on the conclusions of the LRDP Amendment 2 EIR.

### ***6.7.5 Conclusion***

The Dundee-Glasgow project would have a less than significant effect related to greenhouse gas emissions. The project would not change the nature or magnitude of potential impacts from greenhouse gas emissions or the conclusions in the LRDP Amendment 2 EIR.

## **6.8 HAZARDS AND HAZARDOUS MATERIALS**

### ***6.8.1 Relevant Elements of the Dundee-Glasgow Project***

The Dundee-Glasgow project site consists of about 6.58 acres of previously developed land. The 2005 LRDP EIR noted that certain locations on the campus may have been contaminated by various hazardous substances as a result of the former uses of the site, leaks from unidentified underground storage tanks, or unidentified buried debris that could contain hazardous substances or hazardous byproducts. If not managed safely, contaminated soil, groundwater, or building materials have the potential to pose hazards to construction workers and existing and future campus occupants and nearby land uses. All



identified contamination on the campus has either been remediated, or is in the process of undergoing remediation (UCR 2005).

The project site is not located in a FEMA flood zone and would not be subject to on-site flooding. The project site is not located within two miles of a public airport or in the vicinity of a private airstrip (UCR 2011).

### **6.8.2 Analysis of Project**

**Implementation of the Dundee-Glasgow project would not create a new significant hazard or increase the severity of a hazard to the public or the environment through the routine transport, use, disposal of hazardous materials, or from the accidental release of hazardous materials.**

Potential impacts related to routine transport, use, and disposal of hazardous materials from campus development under the amended 2005 LRDP, were analyzed in the LRDP Amendment 2 EIR (2011). The continued implementation of LRDP PP 4.7-1 and PP 4.7-3 as part of the amended 2005 LRDP would minimize impacts related to the transport, use, storage, or disposal of hazardous materials and potential health risks in the event of an accident or accidental release. Certain future facilities that would be developed on the campus under the 2005 LRDP Amendment 2 have the potential to involve the use of hazardous materials. Hazardous materials may include inorganic and organic chemicals, chemical reagents and reaction products, solvents, mercury, radioisotopes, biohazards, fuels, oils, paints, cleansers, and pesticides. However, compliance with federal, state, and local laws and regulations pertaining to health and safety would reduce the impact. The development of the campus under the amended 2005 LRDP would have a less than significant impact related to hazardous materials (UC Riverside 2011).

The Dundee-Glasgow project would construct two residence hall buildings and a new dining hall, and repurpose an existing dining hall, all of which would not produce, use, or transport hazardous waste that could affect nearby populations. Maintenance vehicles on-site may result in minor leakage of petroleum products. However, only a few vehicles would travel to and from the site periodically and the project's impact would be less than significant. Furthermore the number of trips made by the project-related vehicles would be far fewer than the trips to the parking lot currently on the site. Therefore, the development of the Dundee-Glasgow project would not change the nature or increase the magnitude of the potential impacts from use, transport, disposal, or storage of hazardous materials or the conclusions in the LRDP Amendment 2 EIR.

**Implementation of the Dundee-Glasgow project would not result in a new significant impact or increase the severity of the LRDP impact related to hazardous emissions or the handling of hazardous materials within one-quarter mile of an existing or proposed school.**

Potential impacts related to hazardous materials or emissions from campus development under the amended 2005 LRDP within one-quarter mile of an existing school were analyzed in the LRDP Amendment 2 EIR. The continued implementation of LRDP PP 4.7-1 as part of the 2005 LRDP would minimize impacts to schools. Campus development could result in the development of academic buildings, laboratories, and other research facilities that could involve hazardous emissions or the handling of hazardous materials within one-quarter mile of an existing or proposed school. Compliance with federal, State, and local regulations pertaining to hazardous wastes would ensure that risks to nearby schools would be eliminated or reduced. The campus development under the amended 2005 LRDP would have a less than significant impact from use of hazardous materials within one-quarter mile of an existing or proposed school (UC Riverside 2011).

There are no existing or proposed schools within one-quarter mile of the project site. Furthermore, the project would not produce any emissions of hazardous materials. As a result, there would be no impact. The development of the Dundee-Glasgow project would not change the nature or increase the magnitude of the potential impacts to schools from hazardous materials or the conclusions in the LRDP Amendment 2 EIR.

**Implementation of the Dundee-Glasgow project, which includes relevant LRDP Programs and Practices and Mitigation Measures, would not result a new significant impact or increase the severity of the LRDP impact on the public or the environment from being located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 or from renovation or demolition of buildings which may contain hazardous materials.**

Potential impacts related to hazards and hazardous materials from campus development under the amended 2005 LRDP were analyzed in the Initial Study that was prepared for the LRDP Amendment 2 EIR. The Initial Study found that the elements of the 2005 LRDP Amendment 2 would be situated on lands north of MLK. These sites are located north of known or suspected contamination sites identified south of MLK. There are no other areas on the campus that are on the Cortese list. Thus, implementation of the amended 2005 LRDP was found to not create a significant hazard to the public or the environment, and this impact was determined to be less than significant (UCR 2011).

The continued implementation of LRDP PP 4.7-4 as part of the 2005 LRDP would reduce the impact from contaminated soil and/or groundwater if encountered during construction. The campus is listed on a list

of hazardous materials sites, due to the former pesticide disposal pits located south of Martin Luther King Boulevard. In addition, there have been localized areas of soil contamination in connection with leaking underground storage tanks (UST). The identified sites have been remediated. There is a remaining UST site on the campus but it conforms to appropriate regulations. Therefore, the site is not identified as having soil and groundwater contamination. Pesticides, fertilizers, and other agricultural chemicals were used on the agricultural teaching and research fields which may result in exposure of construction workers or campus occupants to these residues. However, agricultural chemical residues may not be easily detectable and could result in exposure of construction workers and campus occupants to contaminants. LRDP Mitigation Measure 4.7-4 would be implemented which would require the Campus to perform appropriate soil testing prior to development of former agricultural lands. With mitigation, campus development under the 2005 LRDP would not result in soil and groundwater contaminant exposure and the impact would be less than significant (UCR 2005).

The Dundee-Glasgow project is not located on properties associated with a hazardous site listed under Government Code Section 65962.5, also known as the Cortese List. Furthermore, according to a Phase I environmental site assessment, the project site does not contain any residual agricultural chemicals that could pose a risk for the environment or public health. As a result, the proposed project would not create a significant hazard to the public or the environment and no impact would occur. The development of the Dundee-Glasgow project would not substantially change the nature or increase the magnitude of the potential impacts due to hazardous materials creating a hazard to the public or the environment or the conclusions in the 2005 LRDP EIR.

**The Dundee-Glasgow project would not result in a new significant impact or increase the severity of the LRDP impact related to an adopted emergency response or emergency evacuation plan.**

Potential impacts to an adopted emergency response or emergency evacuation plan from campus development under the amended 2005 LRDP were analyzed in the Initial Study prepared for the LRDP Amendment 2 EIR. The construction of facilities associated with the 2005 LRDP Amendment 2 could result in lane or roadway closures. In addition, future development could affect areas that are currently identified as emergency assembly areas. Continued implementation of LRDP planning strategies *Transportation 4*, LRDP PP 4.7-7(a) and (b) would reduce impacts. In addition, LRDP Mitigation Measures MM 4.7- 7(a) and (b) would be implemented, which require the siting of construction staging areas to avoid designated evacuation zones and require that the Campus Emergency Operations Plan be updated as appropriate to account for new on-campus development, which may require that the locations for Campus Evacuation Zones be revised. Thus, implementation of the amended 2005 LRDP would not

impair the implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan (UCR 2011).

The 2011 Emergency Operations Plan indicates that the northern portion of the project site where the proposed Dundee Residence Hall would be constructed is identified as a location for evacuation assembly area. However, except for the duration of project construction when the site would not be available for assembly and an alternative site would be designated, the proposed project is not expected to preclude this use on-site.

Therefore, the proposed project would not interfere with the Campus Emergency Operations Plan, and the project would have no effect. The development of the Dundee-Glasgow project would not substantially change the nature or increase the magnitude of the potential impacts due to interference with an emergency response or emergency evacuation plan or the conclusions in the 2005 LRDP EIR.

**The Dundee-Glasgow project would not result in a new significant impact or increase the severity of the LRDP impact resulting from exposure of people or structures to risk of loss, injury, or death from wildland fires.**

Potential impacts related to exposure of people or structures to risks from wildland fires, resulting from campus development, including the development of the project site under the 2005 LRDP, were analyzed in the 2005 LRDP EIR. The continued implementation of LRDP Planning Strategy *Open Space 1* as part of the 2005 LRDP would minimize impacts from wildland fire. The southeast hills may be subject to wildland fire. Campus facilities would not be developed within the wildland fire hazard area but adjacent development could expose people or structures to loss, injury, or death. Implementation of LRDP Mitigation Measures 4.7-8(a) and 4.7-8(b) would require landscaping with appropriate plant materials and implementation of annual fuel management procedures. The analysis concluded that with mitigation, increased risk of loss, injury, or death as a result of wildland fires from development of the campus under the 2005 LRDP would be reduced to less than significant (UCR 2005).

The Dundee-Glasgow project site is not located adjacent to the southeast hills that pose a high risk for wildland fires. Therefore, the proposed project would not place people or structures at risk from wildland fires and there would be no impact. The development of the Dundee-Glasgow project would not substantially change the nature or increase the magnitude of the potential impacts due to loss, injury, or death involving wildland fires or the conclusions in the 2005 LRDP EIR.

### ***6.8.3 Analysis of Cumulative Impacts***

Cumulative impacts related to hazards and hazardous materials from the implementation of the 2005 LRDP are addressed in the 2005 LRDP EIR and LRDP Amendment 2 EIR. The 2005 LRDP EIR concluded that with the mitigation described above, campus development would not result in a cumulative impact from hazardous materials, contaminated soil or groundwater, wildland fire, or interference with the emergency operations plan (UCR 2005). The LRDP Amendment 2 EIR concluded that campus development would not result in a substantial cumulative impact from transport, use, disposal, or storage of hazardous materials (UC Riverside 2011). The Dundee-Glasgow project is within the facilities planned for the project area in the amended 2005 LRDP. Therefore, the Dundee-Glasgow project's cumulative impacts related to hazards and hazardous materials are adequately addressed in the 2005 LRDP EIR and the LRDP Amendment 2 EIR.

### ***6.8.4 Changes in Circumstances or New Information that could affect the Earlier Environmental Analysis***

Since the certification of the 2005 LRDP EIR and LRDP Amendment 2 EIR, the 2011 Emergency Operations Plan and the 2012 Emergency Action Plan (revised 2016) for the UC Riverside Campus were prepared. Both plans identify a portion of the Dundee-Glasgow project site as an emergency assembly area; however except for the duration of project construction when the site would not be available for assembly and an alternative site would be designated, the proposed project is not expected to preclude this use on-site. There are no other changes in circumstances in which the proposed project would be undertaken and no new information has become available since the certification of the 2005 LRDP EIR or the LRDP Amendment 2 EIR that would alter the previous analysis or change its conclusions.

### ***6.8.5 Conclusion***

The Dundee-Glasgow project would not have a substantial adverse effect related to hazards and hazardous materials. The proposed project would not change the nature or increase the magnitude of potential impacts from hazards and hazardous materials or the conclusions in the 2005 LRDP EIR and LRDP Amendment 2 EIR.

## **6.9 HYDROLOGY AND WATER QUALITY**

### ***6.9.1 Relevant Elements of the Dundee-Glasgow Project***

The Dundee-Glasgow project site is located within the University Arroyo Watershed. The proposed project site is north of an unnamed arroyo, which enters the campus west of Valencia Hill Drive and runs

between the Pentland Hills and Lothian Residence Halls. The project site is not within the 100-year floodplain of any drainage as defined by the Federal Emergency Management Agency (FEMA). The campus is located near the southeastern edge of the Riverside-Arlington groundwater subbasin within the Santa Ana River watershed. The groundwater within this subbasin has high total dissolved solids (TDS) and levels of trichloroethylene (TCE), a degreaser/cleaner used in industry; perchlorate, which is a primary ingredient of solid rocket propellants and other industrial applications; and dibromochloropropane (DBCP), which is a banned pesticide previously used on citrus groves. The City of Riverside supplies the campus with water which is obtained from some groundwater sources (UCR 2005).

### 6.9.2 *Analysis of Project*

**The Dundee-Glasgow project, which includes relevant LRDP Planning Strategies and Programs and Practices, would not result in a new significant impact or increase the severity of the LRDP impact from runoff that would violate water quality standards or waste discharge requirements.**

Potential impacts on water quality from the campus development, including the development of the project site under the 2005 LRDP, were analyzed in the 2005 LRDP EIR. The continued implementation of LRDP Planning Strategy *Conservation 2* and PP 4.8-1 as part of the 2005 LRDP would reduce impacts to water quality. Development of the campus under the 2005 LRDP could result in the increase of impermeable surfaces associated with new facilities and additional runoff. However, the campus facilities that would be developed under the 2005 LRDP would be substantially similar to existing campus uses which would not contribute different types of storm water pollutants than those generated currently. The Campus would comply with the NPDES Phase I and Phase II requirements which would ensure that campus stormwater quality is not substantially degraded. Therefore, campus development under the 2005 LRDP would have a less than significant impact on water quality (UCR 2005).

The Dundee-Glasgow project site is currently a surface parking lot. Construction of the new residential hall buildings and a dining facility would modestly decrease impervious areas on site. Re-purposing of the existing dining hall would occur within the building and would not change the amount of impervious surfaces. LRDP Planning Strategy *Conservation 2* and PP 4.8-1 would be implemented as part of the project. Runoff from the site would not increase compared to existing conditions. No excess runoff would be generated that would leave the project site to enter receiving waters. Therefore, the proposed project would have a less than significant impact on water quality. The development of the Dundee-Glasgow project would not substantially change the nature or increase the magnitude of the potential impacts to water quality or the conclusions in the 2005 LRDP EIR.

**The Dundee-Glasgow project would not result in a new significant impact or increase the severity of the LRDP impact related to depletion of groundwater supplies or interference with groundwater recharge.**

Potential impacts to groundwater supplies from the campus development under the amended 2005 LRDP were analyzed in the LRDP Amendment 2 EIR. The continued implementation of LRDP Planning Strategy *Conservation 5* and PP 4.8-2(a) through PP 4.8-2(c), as part of the amended 2005 LRDP, would reduce impacts to groundwater supplies or recharge. Development of the campus under the amended 2005 LRDP could result in the increase of impervious surfaces associated with new facilities. However, the Campus is not designated as a groundwater recharge area. Therefore, the increase in impervious surfaces would not result in a decrease in groundwater recharge. The development of the campus under the amended 2005 LRDP would have a less than significant impact on groundwater (UCR 2011).

Re-purposing of the existing dining hall would occur within the building as would not change the amount of impervious surfaces. The Dundee-Glasgow project site is currently a surface parking lot. Implementation of the new residential hall building and a dining facility would decrease the amount of impervious areas and would therefore not interfere with groundwater recharge. The increase in occupied building space would increase demand for potable water that could indirectly increase demand for groundwater, as the campus is supplied domestic water by the City of Riverside, which utilizes groundwater wells for potable water. However, as the analysis in the LRDP Amendment 2 EIR shows that implementation of the amended 2005 LRDP would not substantially deplete groundwater supplies (UCR 2011). Furthermore, the proposed project would similarly implement LRDP PP 4.8-2(a) through PP 4.8-2(c) to promote conservation measures that would reduce demand for potable water. In addition, LRDP Planning Strategy *Conservation 5* would be implemented which requires compliance with Title 24 requirements, which includes the California Plumbing Code and its water conservation measures. Consequently, implementation of the proposed project would not substantially deplete groundwater supplies, and the proposed project would have a less than significant impact to groundwater supplies and groundwater recharge. Therefore, the development of the Dundee-Glasgow project would not substantially change the nature or increase the magnitude of the potential impacts to groundwater supplies, groundwater recharge, or the conclusions in the 2005 LRDP EIR.



**The Dundee-Glasgow project, which includes relevant LRDP Planning Strategies and Programs and Practices, would not result in a new significant impact or increase the severity of the LRDP impact related to substantially altering drainage patterns on the campus and/or resulting in substantial erosion or siltation on- or off-site.**

Potential impacts on drainage patterns, erosion, or siltation from campus development, under the 2005 LRDP, were analyzed in the 2005 LRDP EIR. The continued implementation of LRDP Planning Strategies *Land Use 2 and 3*, *Open Space 1 through 5*, *Conservation 1 through 3* and LRDP PP 4.8-3(a) through PP 4.8-3(e) as part of the 2005 LRDP would reduce impacts to drainage patterns, erosion, and siltation. Depending on the locations of the new facilities and impervious surfaces proposed under the 2005 LRDP, surface drainage patterns on the campus would change. Alterations to the existing drainage channels within the arroyos would alter drainage patterns.

Within the majority of the East Campus, soil erosion hazards range from slight to moderate. Construction activities could result in erosion but the impact would be temporary. The National Pollution Discharge Elimination System (NPDES) permits require that the proposed project develop and implement a SWPPP, including control measures (or Best Management Practices) to control erosion and release of sediment and other pollutants from the site. Therefore, campus development under the 2005 LRDP would have a less than significant impact related to soil erosion (UCR 2005).

Surface flow at the Dundee-Glasgow project site, located on the East Campus, is currently diverted to a 39-inch culvert, and then flows westward beneath the Lower Intramural Fields. West of Canyon Crest Drive, the 39-inch culvert discharges into an open channel reach referred to as the Gage Basin. At the western end of the Gage Basin, stormwater enters two parallel 60-inch-by-54-inch box culverts that flow underneath the freeway toward Linden Avenue. Implementation of the proposed project would modestly decrease impervious areas on site. Furthermore, LRDP Planning Strategy *Conservation 2*, LRDP Planning Strategy *Conservation 3*, LRDP PP 4.8-3(c), PP 4.8-3(d), and PP 4.8-3(e) would be implemented as part of the proposed project. Therefore, the proposed project would have a less than significant impact on drainage patterns, erosion, and siltation. The development of the Dundee-Glasgow project would not substantially change the nature or increase the magnitude of the potential impacts to on drainage patterns, erosion, and siltation or the conclusions in the 2005 LRDP EIR.

**The Dundee-Glasgow project would not result in a new significant impact or increase the severity of the LRDP impact related to substantially altering existing site drainage patterns that could result in flooding either on- or off-site, exceed the capacity of existing storm drainage systems, or provide substantial sources of polluted runoff.**

Potential impacts to surface runoff and flooding from campus development, under the 2005 LRDP were analyzed in the 2005 LRDP EIR. The East Campus is generally underlain with Class C and Class D soils, with intermediate to low permeability. Development of the campus under the 2005 LRDP could result in the increase of impermeable surfaces associated with new facilities and additional runoff. However, a substantial increase in runoff is not anticipated, as existing soil conditions currently result in runoff from undeveloped sites. The continued implementation of LRDP PP 4.8-3(c) through PP 4.8-3(e) would reduce impacts to surface runoff and flooding. Therefore, the analysis concluded that campus development under the 2005 LRDP would have a less than significant impact related to surface runoff (UCR 2005).

As described above, the project would decrease the amount of impervious areas and runoff from the site would not increase compared to existing conditions. Therefore, the proposed project would have a less than significant impact to surface runoff and flooding. The development of the Dundee-Glasgow project would not substantially change the nature or increase the magnitude of the potential impacts to surface runoff and flooding or the conclusions in the 2005 LRDP EIR.

**The Dundee-Glasgow project would not result in a new significant impact or increase the severity of the LRDP impact related to placing housing or structures within a 100-year flood hazard area, or exposing people or structures to flooding from levee or dam failure, or inundation by seiche, tsunami, or mudflow.**

Potential impacts of flooding or inundation on campus development under the 2005 LRDP were analyzed in the 2005 LRDP EIR. The continued implementation of LRDP PP 4.8-3(e) and PP 4.8-10 as part of the 2005 LRDP would minimize impacts from flooding and inundation. The Prado Dam, the nearest dam to the campus, is located on the Santa Ana River downstream of the campus. The nearest upstream dam is Seven Oaks Dam. The 2005 LRDP EIR indicates that the potential for catastrophic failure of the Seven Oaks Dam is considered remote. There are portions of the campus that are within a 100-year flood hazard area. However, the University Arroyo Flood Control and Enhancement Project resulted in a reduction in the extent of the 100-year floodplain on the campus. None of the planned development of new housing or redevelopment of existing housing sites is located within the 100-year flood hazard zone. LRDP Mitigation Measures 4.8-9(a) and 4.8-9(b) would reduce impacts to structures in the 100-year floodplain if the improvements were not carried out. With mitigation, campus development under the 2005 LRDP would have a less than significant impact from flooding or inundation (UCR 2005).

The Dundee-Glasgow project site is not located within a 100-year floodplain and the site is unlikely to experience inundation from dam failure, mudflow, seiche, or tsunami. Therefore, the proposed project would have no impact related to flooding and inundation. The development of the Dundee-Glasgow project would not substantially change the nature or increase the magnitude of the potential impacts from flooding, inundation, or the conclusions in the 2005 LRDP EIR.

### ***6.9.3 Analysis of Cumulative Impacts***

Cumulative hydrology and water quality impacts of campus development under the 2005 LRDP are addressed in the 2005 LRDP EIR and in the LRDP Amendment 2 EIR. The 2005 LRDP EIR concluded that campus development in conjunction with other cumulative development would not have a significant cumulative impact on hydrology and water quality (UC Riverside 2005). The LRDP Amendment 2 EIR concluded that campus development under the amended 2005 LRDP in association with cumulative development would not have a substantial cumulative impact on groundwater supplies or groundwater recharge (UCR 2011). The Dundee-Glasgow project is within the envelope of development envisioned under the amended 2005 LRDP. Therefore, Dundee-Glasgow project's cumulative impacts related to hazards and hazardous materials are adequately addressed in the 2005 LRDP EIR and LRDP Amendment 2 EIR.

### ***6.9.4 Changes in Circumstances or New Information that could affect the Earlier Environmental Analysis***

There are no changes in circumstances in which the Dundee-Glasgow project would be undertaken. No new information has become available and no new regulations related to hydrology and water quality have come into effect since the certification of the 2005 LRDP EIR and LRDP Amendment 2 EIR that would alter the previous analysis and change its conclusions.

### ***6.9.5 Conclusion***

The Dundee-Glasgow project would not have a substantial adverse effect on hydrology and water quality. The proposed project would not change the nature or increase the magnitude of potential impacts related to hydrology and water quality or the conclusions in the 2005 LRDP EIR and LRDP Amendment 2 EIR.

## 6.10 LAND USE AND PLANNING

### 6.10.1 *Relevant Elements of the Dundee-Glasgow Project*

The UC Riverside Campus is located in the City of Riverside. I-215/SR-60 bisects the campus in a northwest-southeast alignment separating West Campus and East Campus areas. The proposed Dundee-Glasgow project is located on the East Campus.

### 6.10.2 *Analysis of Project*

**The Dundee-Glasgow project would not result in a new significant impact or increase the severity of the LRDP impact related to incompatibility of on-campus development with existing adjacent land uses.**

Potential impacts from incompatibilities due to the land use changes identified in the 2005 LRDP were analyzed in the 2005 LRDP EIR. The LRDP Amendment 2 EIR (2011) analyzed land use changes only in the West Campus and thus the analysis of the 2005 LRDP EIR is relevant to this Addendum. The continued implementation of LRDP Planning Strategies *Land Use 1 through 7, Open Space 1 through 7, Campus and Community 1 through 3, Transportation 1 through 6, Conservation 1 through 4, Development Strategy 1 through 3*, and PP 4.9-1(a) through PP 4.9-1(c) as part of the 2005 LRDP would reduce impacts to existing adjacent land uses. Therefore, the on-campus land uses planned in the 2005 LRDP were determined to have a less than significant impact on adjacent land uses (UCR 2005).

The Dundee-Glasgow project site is currently designated as *Residence Hall and Related Support* under the 2005 LRDP, which remained unchanged under the LRDP Amendment 2 EIR. Accordingly, the proposed Dundee-Glasgow project would not conflict with the land use designations of the 2005 LRDP and would not conflict with the existing adjacent campus land uses, which include residence halls, campus support, and open space. Therefore, the Dundee-Glasgow project would not change the nature or increase the magnitude of the potential impacts to conflict with adjacent land uses or the conclusions in the 2005 LRDP EIR.

**The Dundee-Glasgow project would not result in a new significant impact or increase the severity of the LRDP impact from conflict with an applicable land use plan, policy, or regulation of an agency with jurisdiction over the project.**

Potential impacts of campus development under the 2005 LRDP related to conflicts with applicable regional plans were analyzed in the 2005 LRDP EIR. The LRDP Planning Strategies *Land Use 1 through 7, Open Space 1 through 7, Campus and Community 1 through 3, Transportation 1 through 6, Conservation 1*

through 4, Development Strategy 1 through 3, and PP 4.9-1(a) through PP 4.9-1(c) would be implemented as part of the 2005 LRDP. The regional plans relevant to the campus include the Regional Comprehensive Plan and Guide (SCAG 1995), the Regional Transportation Plan (SCAG 2001), the Water Quality Control Plan for the Santa Ana River Basin (California Regional Water Quality Control Board, Santa Ana Region, 1995), and the Air Quality Management Plan (South Coast Air Quality Management District [SCAQMD] 1997 and 1999). No inconsistencies of the LRDP development with these regional plans were identified in the 2005 LRDP EIR. Therefore, the analysis concluded that campus development under the 2005 LRDP would have a less than significant impact related to applicable regional plans (UCR 2005).

Development of the Dundee Residence Hall and Glasgow Dining facility, and repurposing the existing Aberdeen-Inverness dining hall would be consistent with the existing land use designation of the project site, and would therefore result in development that is consistent with the 2005 LRDP. Therefore, the Dundee-Glasgow project would not change the nature or increase the magnitude of the LRDP impact related to regional plans or the conclusions in the 2005 LRDP EIR.

**The Dundee-Glasgow project would not result in a new significant impact or increase the severity of the LRDP impact related to physically dividing an established community or conflicting with any applicable habitat conservation plan or natural community conservation plan.**

Potential impacts of campus development under the 2005 LRDP, including the development of the project site, on established communities and habitat conservation plans were analyzed in the 2005 LRDP EIR. The analysis concluded that campus development under the 2005 LRDP would not impact an established community, a habitat conservation plan, or a natural community conservation plan (UCR 2005).

The Dundee-Glasgow project would be located on the East Campus in an area surrounded by existing student housing, dining facilities, and parking lots. The proposed project would not physically divide an established community. The Dundee-Glasgow project would not conflict with any habitat conservation plans or natural community conservation plans applicable to the campus site, as described in **Section 6.4 Biological Resources**, above. The development of the Dundee-Glasgow project would not substantially change the nature or increase the magnitude of the impact to established communities or applicable conservation plans or the conclusions in the 2005 LRDP EIR.

### **6.10.3 Analysis of Cumulative Impacts**

Cumulative land use impacts of campus development under the 2005 LRDP are addressed in the 2005 LRDP EIR. The EIR concluded that campus development in conjunction with other cumulative

development would not have a significant land use impact (UCR 2005). The Dundee-Glasgow project would be consistent with the land use designation of the project site and is within the scope of development envisioned under the 2005 LRDP. Therefore, Dundee-Glasgow project's cumulative impacts related to land use are adequately addressed in the 2005 LRDP EIR.

#### ***6.10.4 Changes in Circumstances or New Information that could affect the Earlier Environmental Analysis***

Since certification of the 2005 LRDP EIR, the 2016 RTP and 2016 AQMP were prepared. Although these new plans have been prepared since the 2005 LRDP EIR was certified, their adoption and implementation have no effect on the conclusions of the 2005 LRDP EIR. There are no additional changes in circumstances in which the proposed project would be undertaken and no new information has become available since the certification of the 2005 LRDP EIR that would alter the previous analysis or change its conclusions relative to the Dundee-Glasgow project.

#### ***6.10.5 Conclusion***

The Dundee-Glasgow project would not have a substantial adverse effect on land use and planning. The proposed project would not change the nature or increase the magnitude of potential impacts from land use and planning or the conclusions in the 2005 LRDP EIR.

### **6.11 MINERAL RESOURCES**

#### ***6.11.1 Relevant Elements of the Dundee-Glasgow Project***

The UC Riverside Campus, which includes the Dundee-Glasgow project site, does not contain any mineral resource zones (MRZ) or MRZs that require managed production (MRZ-2 area). There are no mineral resources of regional or statewide importance known to exist on the campus. No mineral resource recovery activities have been associated with development of the campus (UCR 2005).

#### ***6.11.2 Analysis of Project***

**Implementation of the Dundee-Glasgow project would not result in a new significant impact or increase the severity of the LRDP impact related to a substantial loss of availability of mineral resources.**

As analyzed in the 2005 LRDP EIR and stated above, development of the campus under the 2005 LRDP including development of the project site, would not result in the loss of availability of known mineral resources that would be of value to the region or residents of the state. Redevelopment of existing

Parking Lot 22 would not result in the loss of potential availability of known mineral resources. Repurposing the existing dining facility would occur within the building and would not result in the loss of potential availability of known mineral resources. Therefore, no impact on mineral resources would occur.

### ***6.11.3 Analysis of Cumulative Impacts***

There would be no cumulative effects to mineral resources as analyzed in the 2005 LRDP EIR.

### ***6.11.4 Changes in Circumstances or New Information that could affect the Earlier Environmental Analysis***

There are no changes in circumstances in which the Dundee-Glasgow project would be undertaken. No new information has become available and no new regulations related to mineral resources have come into effect since the certification of the 2005 LRDP EIR that would alter the previous analysis and change its conclusions.

### ***6.11.5 Conclusion***

The Dundee-Glasgow project would not have a substantial adverse effect on mineral resources. The project would not change the nature or increase the magnitude of potential impacts to mineral resources or the conclusions in the 2005 LRDP EIR.

## **6.12 NOISE**

### ***6.12.1 Relevant Elements of the Dundee-Glasgow Project***

The Dundee-Glasgow project would construct two residence hall buildings and a dining facility, and repurpose an existing dining hall. Noise sources in the area include traffic on the campus and local roadways. Noise-sensitive receptors in the vicinity of the project site include the surrounding student residence halls located to the west of Valencia Hill Drive, the UCR Child Development Center on Watkins Drive near Blaine Street, and the single-family residences to the northeast across Watkins Drive and the railroad tracks. The Campus is not located within an airport land use plan study area, nor is it within 2 miles of a public airport or the vicinity of a private airstrip (UCR 2011).

### 6.12.2 Analysis of Project

**The Dundee-Glasgow project, which includes relevant LRDP Programs and Practices and Mitigation Measures, would not result in a significant new impact or increase the LRDP impact related to exposure of on-site campus student residential uses to noise levels in excess of the State's 45 dB(a) CNEL interior noise standard.**

Potential noise impacts from campus development, under the amended 2005 LRDP on on-campus student residential uses were analyzed in the LRDP Amendment 2 EIR (2011). The EIR noted that continued implementation of LRDP Planning Strategy *Open Space 4* and PP 4.10-1(a) and PP 4.10-1 (b) as part of the amended 2005 LRDP would reduce potential noise impacts on on-campus student residents. Additional residential housing would be developed on the campus under the amended 2005 LRDP. The LRDP Amendment 2 EIR indicates that exterior noise levels around the student housing buildings would not approach the threshold of 75 dBA CNEL. As stated on page 4.10-15 of the LRDP Amendment 2 EIR, exterior-to-interior noise reduction of newer residential units constructed in California is generally 30 dBA or more (UCR 2011). Therefore interior noise levels would not exceed the state's interior noise standard, and campus development under the amended 2005 LRDP would have a less than significant noise impact (UCR 2011).

The Dundee Residence Hall is proposed in an area located beyond the 70 dB(A) CNEL noise contour distances identified in Table 4.10-5 of the LRDP Amendment 2 EIR, and therefore the residents would not be exposed to interior noise levels exceeding the state noise standard. Concerning railroad noise, the proposed project would not site student housing along Watkins Drive adjacent to the railroad tracks. The proposed project would be located south of existing development located along Watkins Drive and therefore, noise from train pass-bys would not affect the sensitive receptors on the proposed project. Furthermore, the proposed project would implement LRDP PP 4.10-1(a) to ensure that potential impacts associated with construction and building siting and design would be less than significant. Therefore, the development of the Dundee-Glasgow project would not substantially change the nature or increase the magnitude of the potential noise impacts on on-campus residential housing or the conclusions in the LRDP Amendment 2 EIR.

**Construction of the Dundee-Glasgow project, which includes relevant LRDP Programs and Practices and Mitigation Measures, would not result in a new significant vibration impact or increase the severity of the significant LRDP impact on on-campus receptors from groundborne vibration.**

Potential groundborne vibration impacts from construction of campus development under the amended 2005 LRDP on on-campus receptors were analyzed in the LRDP Amendment 2 EIR. The continued



implementation of LRDP PP 4.10-2 would minimize potential construction impacts from groundborne vibration on on-campus receptors. Development of the campus under the amended 2005 LRDP would nonetheless result in groundborne vibration levels that could exceed thresholds for each nearby building type. The impact would be less than significant if construction occurs more than 50 feet from campus facilities and 300 feet from sensitive research buildings. However, if construction activities occur less than 300 feet from research buildings with vibration sensitive equipment, the impact would be significant. LRDP Mitigation Measure 4.10-2 requires the Campus to notify all academic and residential facilities within 300 feet of construction sites about planned construction activities. However, construction activities under the amended 2005 LRDP would have a significant and unavoidable impact related to groundborne vibration (UCR 2011).

The Dundee-Glasgow project would construct two residence hall buildings and a dining facility, and repurpose an existing dining hall. On-campus sensitive receptors in the vicinity of the project site include the adjacent A-I Residence Hall (within 50 feet) and the UCR Child Development Center on Watkins Drive near Blaine Street (more than 300 feet). There are no existing on-campus research buildings with vibration-sensitive equipment in the vicinity of the project site. Similar to the conclusions of the 2005 EIR, with implementation of LRDP PP 4.10-2 and LRDP Mitigation Measure 4.10-2 described above, the Dundee-Glasgow project would minimize the impact to students in the A-I Residence Hall from groundborne vibration during construction but groundborne vibration would still exceed the identified thresholds of significance. Similar to the conclusion of the 2005 LRDP Amendment 2 EIR, the impact would be significant and unavoidable. This impact is adequately analyzed in the 2011 LRDP Amendment 2 EIR and was fully addressed in the Findings and Statement of Overriding Considerations adopted by The Regents in connection with its approval of LRDP Amendment 2.

<b>Construction of the Dundee-Glasgow project would not result in a significant new impact or increase the severity of the LRDP impact on off-campus receptors from groundborne vibration.</b>
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Potential groundborne vibration impacts from construction of campus development under the amended 2005 LRDP on off-campus receptors were analyzed in the LRDP Amendment 2 EIR. Construction on the campus under the amended 2005 LRDP would result in groundborne vibration levels that would not exceed Federal Railway Administration's 80 VdB vibration impact threshold for residences located off campus. Therefore, campus construction under the amended 2005 LRDP would have a less than significant groundborne vibration impact on off-campus receptors (UCR 2011).

The Dundee-Glasgow project is not located adjacent to any off-campus sensitive receptors; the nearest off-campus residences are approximately 800 feet from the project site. At this distance, any construction vibrations generated at the project site would not be perceptible at the receptor. There would be no

impact. The development of the Dundee-Glasgow project would not substantially change the nature or increase the magnitude of the potential groundborne noise impacts to off-campus receptors or the conclusions in the LRDP Amendment 2 EIR.

**Operation of the Dundee-Glasgow project would not result in a significant new impact or increase the severity of the LRDP impact on on- or off-campus receptors from groundborne vibration.**

Potential operational vibration impacts from campus development under the amended 2005 LRDP on on- and off-campus receptors were analyzed in the LRDP Amendment 2 EIR. Campus operations would not involve activities that would generate substantial vibrations which could exceed Federal Railway Administration's impact thresholds for sensitive on-campus research buildings, residences, student housing buildings, or other institutional buildings. Therefore, campus development under the 2005 LRDP Amendment 2 would have a less than significant impact (UCR 2011).

The Dundee-Glasgow project does not propose to install any equipment that would result in groundborne vibration during operation. There would be no impact related to operational vibrations. The development of the Dundee-Glasgow project would not substantially change the nature or increase the magnitude of the potential groundborne vibration impacts to on- and off-campus receptors or the conclusions in the LRDP Amendment 2 EIR.

**Implementation of the Dundee-Glasgow would not result in a significant new impact or increase the severity of the LRDP impact related to an increase in noise levels from vehicular traffic on the regional road network that could affect on- or off-campus receptors.**

Potential traffic noise impacts from campus development under the amended 2005 LRDP on on- and off-campus receptors were analyzed in the LRDP Amendment 2 EIR. Campus development under the amended 2005 LRDP would result in an increase in traffic volume which would increase noise along nearby roadways. The continued implementation of LRDP PP 4.10-5(a) and PP 4.10-5(b) as part of the amended 2005 LRDP would minimize potential traffic noise impacts to on- and off-campus receptors. The roadway levels at all on- and off-campus locations would not exceed the significance thresholds and would increase by less than 5 dBA CNEL and by less than 3 dBA CNEL where the noise level is 70 dBA CNEL or more. Therefore, campus development under the amended 2005 LRDP would have a less than significant impact (UCR 2011).

Construction truck trips to the project site would be temporary and would be within the total traffic volumes that were analyzed for traffic noise impacts in the LRDP Amendment 2 EIR. Additionally, operation of the Dundee-Glasgow project would reduce rather than increase daily trips to the campus.

The Dundee-Glasgow project would result in a less than significant traffic noise impact to on- and off-campus receptors. The development of the Dundee-Glasgow project would not substantially change the nature or increase the magnitude of the potential traffic noise impacts to on- and off-campus receptors or the conclusions in the LRDP Amendment 2 EIR.

**The Dundee-Glasgow project would not result in a significant new noise impact or increase the severity of the LRDP impact on on- or off-campus ambient noise levels from new stationary noise sources.**

Potential noise impacts from stationary sources proposed as part of the campus development under the amended 2005 LRDP on on- and off-campus receptors were analyzed in the LRDP Amendment 2 EIR. Campus development would include new stationary sources of noise, such as rooftop heating, ventilation, and air conditioning equipment. The new stationary sources would increase ambient noise levels in the vicinity. The continued implementation of LRDP Planning Strategies *Open Space 4, Campus and Community 1* and PP 4.10-6 as part of the amended 2005 LRDP would reduce potential stationary source noise impacts to on- and off-campus receptors. With appropriate shielding and location, stationary sources would not produce noise levels in excess of significance thresholds. Therefore, campus development under the amended 2005 LRDP would have a less than significant impact related to noise from stationary sources (UCR 2011).

Similar to other campus development, the Dundee-Glasgow project would include new stationary sources of noise, such as rooftop heating, ventilation, and air conditioning equipment. The new stationary sources would increase ambient noise levels in the vicinity. With appropriate shielding and siting of the equipment, stationary sources would not produce noise levels in excess of significance thresholds. Therefore, the Dundee-Glasgow project would not substantially change the nature or increase the magnitude of the potential stationary source noise impacts to on- and off-campus receptors or the conclusions in the LRDP Amendment 2 EIR.

**Construction of the Dundee-Glasgow project, which includes relevant LRDP Programs and Practices, would not result in a new significant impact or increase the severity of the significant LRDP impact from temporary or periodic increases in ambient noise levels at locations on- and off-campus.**

Potential ambient noise impacts from construction of campus facilities under the amended 2005 LRDP on on- and off-campus receptors were analyzed in the LRDP Amendment 2 EIR. Campus development would result in the construction of facilities throughout the campus which would increase ambient noise levels in the vicinity. The continued implementation of LRDP PP 4.10-7(a) through PP 4.10-7(d) and PP 4.10-8 would minimize the ambient noise impacts from construction to on- and off-campus receptors. No

mitigation is feasible to adequately reduce the noise from construction. Therefore, campus development under the amended 2005 LRDP would have a significant and unavoidable impact related to construction noise (UCR 2011).

The Dundee-Glasgow project would construct two residence hall buildings and a dining facility, and would repurpose an existing dining hall. Construction could temporarily increase the ambient noise levels near the surrounding student residence halls, the nearby UCR Child Development Center on Watkins Drive near Blaine Street, and the off-campus single family homes located 800 feet to the northeast. However, even with the limited duration and scope of construction activities, and with the continued implementation of LRDP PP 4.10-8, and LRDP PP 4.10-7(a) through PP 4.10-7(d), similar to the conclusions of the 2005 EIR, the Dundee-Glasgow project would have a significant and unavoidable impact from construction noise on on-campus and off-campus receptors. The development of the Dundee-Glasgow project would not substantially change the nature or increase the magnitude of the potential construction noise impact to on- and off-campus receptors or the conclusions in the LRDP Amendment 2 EIR. This impact is adequately analyzed in the 2011 LRDP Amendment 2 EIR and was fully addressed in the Findings and Statement of Overriding Considerations adopted by The Regents in connection with its approval of the LRDP Amendment 2.

**The Dundee-Glasgow project would not result in a new significant impact or increase the severity of the LRDP noise impact associated with special events.**

Potential noise impacts from special events were analyzed in the LRDP Amendment 2 EIR. Special events would result in temporary or periodic increases in ambient noise levels. However, the ambient noise levels from special events would not be substantial. Therefore, campus development under the amended 2005 LRDP would have a less than significant impact related to special event noise (UCR 2011).

The Dundee-Glasgow project would not result in any additional large-scale special events such as athletic meets or outdoor concerts. There would be no impact related to special event noise. The development of the Dundee-Glasgow project would not substantially change the nature or increase the magnitude of the potential special event noise impacts or the conclusions in the 2005 LRDP EIR.

### ***6.12.3 Analysis of Cumulative Impacts***

Cumulative noise impacts of campus development under the amended 2005 LRDP are addressed in the LRDP Amendment 2 EIR. The EIR concluded that campus development in conjunction with other cumulative development would not have a significant cumulative noise impact (UCR 2011). The Dundee-Glasgow project would construct student housing and dining facilities, which is within the scope

development envisioned under the 2005 LRDP Amendment 2 and analyzed in the LRDP Amendment 2 EIR for its cumulative impacts. The project's cumulative noise impacts are adequately addressed in the LRDP Amendment 2 EIR.

#### ***6.12.4 Changes in Circumstances or New Information that could affect the Earlier Environmental Analysis***

There are no changes in circumstances in which the Dundee-Glasgow project would be undertaken. No new information has become available and no new regulations related to noise have come into effect since the certification of the LRDP Amendment 2 EIR that would alter the previous analysis and change its conclusions.

#### ***6.12.5 Conclusion***

The Dundee-Glasgow project would not have a substantial adverse effect on off-campus receptors from stationary noise sources, vehicle noise, and groundborne vibration. The Dundee-Glasgow project would not substantially change the nature or increase the magnitude of the significant impacts related to groundborne vibration impacts on on-campus receptors and ambient noise impacts to on- or off-campus receptors from construction. The project would not change the nature or increase the magnitude of potential impacts from noise or the conclusions in the LRDP Amendment 2 EIR.

### **6.13 POPULATION AND HOUSING**

#### ***6.13.1 Relevant Elements of the Dundee-Glasgow Project***

The proposed project would add 820 new student beds to the campus housing inventory.

#### ***6.13.2 Analysis of Project***

**The Dundee-Glasgow project would not result in a new significant impact or increase the severity of the LRDP impact related to the inducement of substantial population growth in the area.**

Potential growth impacts on the area from campus development were analyzed in the LRDP Amendment 2 EIR (2011). The continued implementation of LRDP Planning Strategy *Land Use 4* as part of the amended 2005 LRDP would reduce the impact from the increase in campus population. Campus development under the amended 2005 LRDP would result the growth of the campus population which could induce growth in the surrounding area such as City of Riverside. The City of Riverside and other local and regional planning agencies are aware of the projected population growth on the campus and the growth is accounted for in planning documents. In addition, housing for at least 50 percent of the student

population is planned to be provided on the campus, reducing the impact on the City of Riverside and other areas. The analysis in the LRDP Amendment 2 EIR determined that there is adequate vacant housing in the City of Riverside to accommodate the off-campus demand for housing under the amended 2005 LRDP. Therefore, campus development under the amended 2005 LRDP would have a less than significant impact related to population growth (UCR 2011).

The Dundee-Glasgow project would construct two residence hall buildings for first year students and a new dining facility, and would repurpose an existing dining hall. As a project that would provide an additional 820 student beds on the campus, the Dundee-Glasgow project would support planned enrollment growth on the campus under the amended 2005 LRDP but would not in itself cause enrollment increase or an increase in population in the City of Riverside. Implementation of the proposed project would help further the LRDP goal of housing 50 percent of the enrolled students on-campus. Therefore, the Dundee-Glasgow project would result in a less than significant growth impact. The development of the Dundee-Glasgow project would not substantially change the nature or increase the magnitude of the potential growth impacts on the surrounding region or the conclusions in the LRDP Amendment 2 EIR.

**The Dundee-Glasgow project would not result in a new significant impact or an increase in the severity of the LRDP impact related to an increased demand for housing or displacement of substantial numbers of existing housing or people, necessitating the construction of replacement housing elsewhere.**

Potential impacts to housing and people within the area from campus development were analyzed in the 2005 LRDP EIR. Campus development under the 2005 LRDP would result in the growth of campus population, including students, staff, and faculty. The continued implementation of LRDP Planning Strategy *Land Use 5* as part of the 2005 LRDP would minimize the impact from the demolition of existing housing on campus. The City of Riverside and other local and regional planning agencies have factored in the projected population growth on campus into their planning documents. The staff and faculty housing demand would be met within the City of Riverside because the housing demand does not exceed the projected supply. The 2005 LRDP proposes to replace any demolished on-campus housing with additional housing and provide housing for any displaced residents. Therefore, campus development under the 2005 LRDP would have a less than significant impact on existing housing stock and displacement of existing housing (UCR 2005).

The Dundee-Glasgow project would be constructed on a site currently used as a surface parking lot. The repurposing of the existing dining hall would not demolish any buildings. No housing or people would be displaced due to the proposed project. The proposed project would provide housing and associated

facilities for the existing and projected campus population but would not induce growth beyond what was previously analyzed. Therefore, the Dundee-Glasgow project would result in a less than significant impact on housing. The development of the Dundee-Glasgow project would not substantially change the nature or increase the magnitude of the potential impacts on housing in the area or the conclusions in the 2005 LRDP EIR.

### ***6.13.3 Analysis of Cumulative Impacts***

Cumulative population and housing impacts of campus development under the 2005 LRDP and amended 2005 LRDP are addressed in the 2005 LRDP EIR and LRDP Amendment 2 EIR. The 2005 LRDP EIR concluded that campus development, in conjunction with cumulative development, would not have significant population and housing impacts (UCR 2005). The LRDP Amendment 2 EIR concluded that the cumulative impact from the substantial population growth in the City of Riverside would be less than significant because adequate housing would be available (UCR 2011). As the Dundee-Glasgow project would not change the campus's growth projections, the Dundee-Glasgow project's cumulative population and housing impacts are adequately addressed in the 2005 LRDP EIR and LRDP Amendment 2 EIR.

### ***6.13.4 Changes in Circumstances or New Information that could affect the Earlier Environmental Analysis***

Since certification of the 2005 LRDP EIR, the City of Riverside 2025 General Plan and 2016 RTP were prepared. Although these new plans have been prepared since the 2005 LRDP EIR was certified, they have no effect on the conclusions of the 2005 LRDP EIR. In addition, the campus population projections were included in the revised plans and the LRDP Amendment 2 EIR addressed the updated City of Riverside 2025 General Plan. Therefore, there are no additional changes in circumstances in which the proposed project would be undertaken and no new information has become available since the certification of the 2005 LRDP EIR and LRDP Amendment 2 EIR that would alter the previous analysis or change its conclusions relative to the Dundee-Glasgow project.

### ***6.13.5 Conclusion***

The Dundee-Glasgow project would not have a substantial adverse effect on population and housing. The project would not change the nature or increase the magnitude of potential impacts to population and housing or the conclusions in the 2005 LRDP EIR or LRDP Amendment 2 EIR.

## 6.14 PUBLIC SERVICES

### 6.14.1 *Relevant Elements of the Dundee-Glasgow Project*

The Dundee-Glasgow project would be served by the UC Riverside Police Department for law enforcement. The City of Riverside Fire Department (RFD) in conjunction with UC Riverside EH&S would provide fire services for the project site. The nearest City fire station is Station 6, located at 3510 Cranford Avenue (UCR 2011). The Riverside Unified School District (RUSD) would provide public elementary, middle, and high school education (UCR 2005).

### 6.14.2 *Analysis of Project*

**The Dundee-Glasgow project would not result in a new significant impact or increase the severity of the LRDP impact associated with an increased demand for fire protection or law enforcement services and the construction of new facilities.**

Potential impacts related to law enforcement and fire protection facilities from campus development under the amended 2005 LRDP were analyzed in the LRDP Amendment 2 EIR (2011). Development of the campus under the amended 2005 LRDP would result in an increased demand for services that could reduce response times. However, response times currently remain within acceptable limits. The continued implementation of LRDP PP 4.12-2(a) and PP 4.12-2(b) would reduce the LRDP development's impact on law enforcement and LRDP Planning Strategy *Transportation 4* and PP 4.12-1(a) and PP 4.12-1(b) as part of the amended 2005 LRDP would reduce the impact to fire protection services. The UC Riverside Police Department would hire additional officers as needed to maintain adequate service levels. Any additional facilities required to house the new police officers would be small and not result in a significant impact. Fire flow for each project would be assessed to determine any potential inadequacies which would be upgraded as needed. LRDP Mitigation Measure 4.12-1, which requires the University to pay its proportional share of the cost of the environmental mitigation, would be implemented to further reduce the impact. Therefore, campus development under the amended 2005 LRDP would have a less than significant impact on law enforcement and fire protection facilities (UCR 2011).

The building space added by the Dundee-Glasgow project is within the planned development detailed and analyzed in the LRDP Amendment 2 EIR. Furthermore, the proposed project would support the projected enrollment growth analyzed in the Amendment 2 EIR but would not induce population growth. As a result, implementation of the project would not result in a demand for fire protection and law enforcement services in excess of the demand analyzed in the LRDP Amendment 2 EIR. The development of the Dundee-Glasgow project would not substantially change the nature or increase the



magnitude of the potential impacts on law enforcement and fire protection services or the conclusions in the LRDP Amendment 2 EIR.

**The Dundee-Glasgow project would not result in a new significant impact or increase the severity of the LRDP impact associated with increased enrollment in local public schools resulting in the need for new or physically altered public schools.**

Potential impacts to local public schools from campus development under the 2005 LRDP were analyzed in the 2005 LRDP EIR. The analysis in the 2005 LRDP EIR concluded that campus development would result in demand for public schools from employees and some student families that may move into the Riverside area. The demand for schools would require the construction of new schools or expanded facilities at existing schools in the City if a new school is not built. However, the RUSD has plans to expand capacity independently of the 2005 LRDP population growth. Although the campus is exempt from payment of school impact fees, new development of private residential and commercial projects in the City would be subject to school impact fees. In addition, the RUSD may increase capacity by using a variety of planning options such as providing new or temporary classrooms to existing schools. Therefore, campus development under the 2005 LRDP would have a less than significant impact on public schools (UCR 2005).

As noted above, the proposed project would support the projected enrollment growth analyzed in 2005 LRDP EIR and the LRDP Amendment 2 EIR but would not induce population growth. Furthermore, the project would house freshmen students who would not be accompanied by families. Therefore the project would not generate school-age children and would not result in a demand on local schools. The development of the Dundee-Glasgow project would not substantially change the nature or increase the magnitude of the potential impacts on public schools or the conclusions in the 2005 LRDP EIR.

**The Dundee-Glasgow project would not result in a new significant impact or increase the severity of the LRDP impact associated with the provision of new or physically altered public libraries.**

Potential impacts related to public libraries from campus development under the 2005 LRDP were analyzed in the 2005 LRDP EIR. Development of the campus under the 2005 LRDP would result in expansion beyond the existing four libraries. The Campus would provide and meet the need for library services for the on-campus population. However, staff and faculty who would not live on the campus would rely on other nearby libraries in the City of Riverside, the County of Riverside, and surrounding three-county area of Los Angeles, Orange, and San Bernardino counties. However, the staff and faculty would be distributed throughout the area and would not result in a substantial increase in demand for library services within any one jurisdiction or at any local library facility. Therefore, as analyzed in the

2005 LRDP EIR the impacts on the libraries in the City of Riverside and other nearby areas from campus development under the 2005 LRDP would be less than significant (UCR 2005).

The Dundee-Glasgow project would not add any population to the City or other communities and would result in no impact on libraries. The development of the Dundee-Glasgow project would not change the nature or increase the magnitude of the potential impacts to public libraries, or the conclusions in the 2005 LRDP EIR.

### ***6.14.3 Analysis of Cumulative Impacts***

Cumulative public service impacts of campus development under the 2005 LRDP on schools and libraries are addressed in the 2005 LRDP EIR. The cumulative impacts on fire and police facilities from the amended 2005 LRDP are addressed in the LRDP Amendment 2 EIR. Both EIRs concluded that campus development, in conjunction with cumulative development, would not have a significant public services impact (UCR 2005, UCR 2011). As the Dundee-Glasgow project would not induce population growth but would provide facilities for the enrollment growth projected in the amended 2005 LRDP, the Dundee-Glasgow project's cumulative public services impacts are adequately addressed in the 2005 LRDP EIR and LRDP Amendment 2 EIR.

### ***6.14.4 Changes in Circumstances or New Information that could affect the Earlier Environmental Analysis***

There are no changes in circumstances in which the Dundee-Glasgow project would be undertaken. No new information has become available and no new regulations related to public services have come into effect since the certification of the 2005 LRDP EIR and LRDP Amendment 2 EIR that would alter the previous analysis and change its conclusions.

### ***6.14.5 Conclusion***

The Dundee-Glasgow project would not have a substantial adverse effect on public services. The project would not change the nature or increase the magnitude of potential impacts to public services or the conclusions in the 2005 LRDP EIR or LRDP Amendment 2 EIR.

## **6.15 RECREATION**

### ***6.15.1 Relevant Elements of the Dundee-Glasgow Project***

The City of Riverside Parks and Recreation Department has neighborhood, community, and citywide parks. There is a total of about 1,002 acres of City parks located in the vicinity of the campus and 18 City-

operated parks and recreational facilities within 2 miles of the campus. There are additional park and recreational facilities maintained by the County of Riverside Open Space and Recreation Department such as Box Springs Mountain Park located to the east of the campus (UCR 2005).

### ***6.15.2 Analysis of Project***

**The Dundee-Glasgow project would not result in a new significant impact or increase the severity of the LRDP impact associated with an increased demand for parks and recreational facilities, and would not require the construction of new recreational facilities off-site.**

Potential recreational impacts from campus growth under the 2005 LRDP were analyzed in the 2005 LRDP EIR. The continued implementation of LRDP Planning Strategy *Open Space 7* as part of the 2005 LRDP would minimize the impact from demand for recreational facilities. Development of the 2005 LRDP would result in the growth of campus population, including students, staff, and faculty which would increase demand for recreational facilities. The 2005 LRDP would provide recreational space and parks on the campus. The staff and faculty who would not live on the campus could increase demand for recreational facilities. However, the staff and faculty would be distributed throughout the area and would not result in a substantial increase in demand for park and recreation facilities within any one jurisdiction. Therefore, campus growth under the 2005 LRDP would have a less than significant impact on recreational facilities (UCR 2005).

The Dundee-Glasgow project would construct on-campus student housing and a dining facility, and repurpose an existing dining hall. The proposed project would provide facilities for previously analyzed 2005 LRDP growth and would not add any new population to the nearby communities. Therefore, the proposed project would not contribute to any increase in demand for recreational facilities. The development of the Dundee-Glasgow project would not substantially change the nature or increase the magnitude of the potential impacts on recreational facilities in the area or the conclusions in the 2005 LRDP EIR.

**The Dundee-Glasgow project would not result in a new significant impact or increase the severity of the LRDP impact associated with the construction of recreational facilities or the conversion of existing recreational facilities to non-recreational uses.**

Potential impacts from construction of recreational facilities or conversion of existing recreational facilities under the 2005 LRDP were analyzed in the 2005 LRDP EIR. Development of the campus under the 2005 LRDP would result in the construction of additional recreational facilities. The physical impacts of construction would be reduced with continued implementation of LRDP Planning Strategies,

Programs and Practices and mitigation measures in the EIR. In addition, construction activities would comply with all SCAQMD rules and regulations as indicated in **Section 6.3 Air Quality** above. There would not be any impacts beyond those identified in the 2005 LRDP EIR. The 2005 LRDP would displace some recreational facilities on-campus but the loss would be offset by the increased recreational opportunities elsewhere on the campus. Therefore, campus development under the 2005 LRDP would have a less than significant impact related to construction of recreational facilities and conversion of existing recreational facilities (UCR 2005).

The Dundee-Glasgow project would construct a residence hall for first year students and a dining facility, and would repurpose an existing dining hall. The proposed site is currently used as a surface parking lot. Recreational facilities were not planned for the project site in the 2005 LRDP or the amended 2005 LRDP. Therefore, the proposed project would not displace any planned recreational facilities and would not construct new recreational facilities. There would be no impact on recreational facilities. The development of the Dundee-Glasgow project would not substantially change the nature or increase the magnitude of the potential impacts from conversion or construction of recreational facilities, or the conclusions in the 2005 LRDP EIR.

### ***6.15.3 Analysis of Cumulative Impacts***

Cumulative impacts to parks and recreational facilities from the development of the campus are addressed in the 2005 LRDP EIR. The 2005 LRDP EIR concluded that the impact from an increase in demand for neighborhood and community park facilities and construction of recreational facilities would not be cumulatively considerable (UCR 2005). As the Dundee-Glasgow project would not add any population to the City, the Dundee-Glasgow project's cumulative impacts on parks and recreational facilities are adequately addressed in the 2005 LRDP EIR.

### ***6.15.4 Changes in Circumstances or New Information that could affect the Earlier Environmental Analysis***

There are no changes in circumstances in which the Dundee-Glasgow project would be undertaken. No new information has become available and no new regulations related to recreation and parks have come into effect since the certification of the 2005 LRDP EIR that would alter the previous analysis and change its conclusions.

### 6.15.5 Conclusion

The Dundee-Glasgow project would not have a substantial adverse effect on recreation and parks. The project would not change the nature or increase the magnitude of potential impacts to recreation and parks or the conclusions in the 2005 LRDP EIR.

## 6.16 TRANSPORTATION/TRAFFIC

### 6.16.1 Relevant Elements of the Dundee-Glasgow Project

Vehicular access to the project site would be provided by a driveway connecting to Linden Street and extending to the south along the eastern border of the project site. This driveway would provide emergency access, as well as service access.

Campus policy does not allow parking permits to be sold to first-year resident students; therefore, no parking would be provided on the project site. Other upper class residents currently utilizing Parking Lot 22 can be accommodated in the adjacent parking lot, Lot 21. No traffic changes are expected as the parking lot entrances are only forty feet apart along Linden Street.

### 6.16.2 Analysis of Project

**Implementation of the Dundee-Glasgow project would not result in a new significant impact or increase the severity of the previously identified significant LRDP impacts on intersection levels of service under existing conditions and 2020 conditions.**

As analyzed in the LRDP Amendment 2 EIR (2011), campus development under the amended 2005 LRDP would increase the number of daily and peak hour trips to and from the campus under 2020 conditions, which would increase traffic volumes on the local street network. The level of service (LOS) would degrade at some intersections due to the increase in campus traffic. The continued implementation of LRDP Planning Strategies *Land Use 4*, *Land Use 7*, *Transportation 1 through 6*, and *PP 4.14-1* as part of the amended 2005 LRDP would minimize the impact on intersection LOS from campus traffic. LRDP Mitigation Measures 4.14-1(a) through 4.14-1(f) would further minimize intersection impacts by identifying improvements to the significantly affected study intersections. The improvements would improve intersection operations to acceptable operating conditions. However, all off-campus intersection improvements are within the jurisdiction of the City of Riverside. Therefore, implementation of all the mitigation measures is not feasible, due to both funding and jurisdictional issues. The analysis concluded that the traffic impact from campus development under the amended 2005 LRDP would be significant and unavoidable (UCR 2011).

The Dundee-Glasgow project would not increase student enrollment. Rather, the new residence hall buildings would provide 820 new beds on campus to accommodate students that would otherwise be commuting to campus. Re-purposing of the existing dining hall to a multi-functional student support and service space would serve students already on-campus and would not add any vehicle trips. Therefore, the project is expected to reduce the number of vehicle-trips during peak travel hours and throughout the day. To estimate the reduction in vehicle trips due to the project, the following approach was used.

The 2005 LRDP EIR traffic study provides trip generation rates for resident and commuter students. Since the trip generation rates were developed for the 2005 LRDP, first-year residents are no longer allowed to purchase permits for on-campus parking. Therefore, the trip generation rates from the LRDP traffic impact study for residence hall housing do not accurately reflect current travel characteristics for first-year residents. Applying the 2005 LRDP trip generation rates to the Dundee-Glasgow project would result in an overly conservative estimate of the project's trip generation. Therefore, the analysis below uses trip generation rates for commuter students documented in the 2005 LRDP EIR to estimate the number of trips that would be reduced by the project.

**Table 6.16-1** presents the trip generation rates and vehicle trip estimates for commuter students. Using the trip generation rates for commuter students documented in the 2005 LRDP EIR, the daily and peak hour trips to the campus were estimated under a Business as Usual scenario.<sup>3</sup>

**Table 6.16-1**  
**UC Riverside Commuter Student Trip Generation Rates**

Land Use	Size	Trip Generation Rates			Estimated Trip Generation		
		Daily Rate	AM Peak Hour	PM Peak Hour	Daily Trips	AM Peak Hour	PM Peak Hour
Business as Usual							
Commuter Students	820 students	1.11	0.08	0.06	909	66	52
Source: Fehr & Peers Traffic Memo, April 2018 (Appendix B), UCR Trip Generation Rates & Refined UCR Trip Generation Rates, UC Riverside LRDP EIR Traffic Impact Study, March 2004.							

<sup>3</sup> The Business as Usual scenario assumes that without the Dundee-Glasgow project, the 820 students that the facility will provide housing for would remain commuter students. Since these 820 students will now be residing on campus and will not be able to purchase a campus parking permit, the number of vehicle trips traveling to/from the UCR campus will decrease with the Dundee-Glasgow project.

As no parking would be provided on-site and first-year students are not eligible to purchase parking permits, the residents of the Dundee Residence Hall would not generate any new vehicle trips. With the Dundee-Glasgow project in place, commuter student trips would decrease by approximately 909 daily trips, including 66 AM peak hour trips and 52 PM peak hour trips. While a minimal number of trips associated with the site could occur from delivery or maintenance vehicles, those trips would be negligible compared to the reduction in trips from converting commuter students to on-campus residents. As the project's new dining facility would serve existing and new student residents who would already be on-campus, it is also not expected to generate any new vehicle-trips. As the Dundee-Glasgow project would reduce daily and peak hour trips, it would not result in a new significant traffic impact nor would it result in an increase in the severity of the previously identified LRDP impact on study area intersections from increases in campus traffic.

Cumulative traffic forecasts from the LRDP Amendment 2 EIR (2011) were also compared to traffic counts collected in 2017 to verify that Cumulative Year (2020) forecasts developed in the LRDP Amendment 2 EIR are still an accurate reflection of the traffic in the study area under 2020 conditions.

Traffic count data collected at two intersections near the proposed project site in November 2017 was used to compare the Cumulative Year LRDP forecasts to existing traffic patterns. The two intersections where traffic data was collected are:

1. W. Linden Street & Canyon Crest Drive
2. W. Linden Street & Aberdeen Drive

The comparison of AM and PM peak hour volumes is summarized in **Table 6.16-2**. The table shows the difference between the Cumulative Year forecasts from the 2011 LRDP EIR traffic analysis and traffic data collected in 2017.

Based on the comparison documented in **Table 6.16-2**, growth at UC Riverside has not exceeded the traffic volumes analyzed as part of the LRDP Amendment 2. The comparison of traffic data collected in 2017 to Cumulative Forecasts from the LRDP Amendment 2 EIR shows that the LRDP 2020 forecasts are generally higher than 2017 traffic volumes, verifying that Dundee-Glasgow project is covered within the LRDP EIR transportation impact analysis. Although the outbound traffic at Linden and Aberdeen Drive in 2017 is slightly higher than the 2020 forecast, this increase is not significant because the intersection of Linden Street & Aberdeen Drive was projected to operate at LOS B in 2020 in the LRDP Amendment 2 EIR, and to the extent the traffic leaving campus is greater than previously projected, it would still not be substantial enough to reduce the intersection operations to an unacceptable level of service.

**Table 6.16-2  
Traffic Volumes Comparison Summary**

Study Intersection	AM Peak Hour			PM Peak Hour		
	Total Volume	Inbound (to Campus)	Outbound (from Campus)	Total Volume	Inbound (to Campus)	Outbound (from Campus)
<b>Existing (2017)</b>						
W. Linden Street & Canyon Crest Drive	1,019	358	358	1,434	573	399
W. Linden Street & Aberdeen Drive	447	197	133	724	253	290
<b>LRDP (2020)</b>						
W. Linden Street & Canyon Crest Drive	1,553	563	599	2,366	929	843
W. Linden Street & Aberdeen Drive	573	275	116	795	294	295
<b>2020 LRDP Forecast – Existing 2017 Count</b>						
W. Linden Street & Canyon Crest Drive	534	205	241	932	356	444
W. Linden Street & Aberdeen Drive	126	78	-17	71	41	5
<b>% Difference</b>						
W. Linden Street & Canyon Crest Drive	52%	57%	67%	65%	62%	111%
W. Linden Street & Aberdeen Drive	28%	40%	-13%	10%	16%	2%
Source: Fehr & Peers Traffic Memo, April 2018 ( <i>Appendix B</i> ), UCR LRDP Amendment 2, 2011.						

Based on the above, the impact of the proposed project would be less than significant because it would reduce rather than increase trips to the campus. The development of the Dundee-Glasgow project would not change the nature or increase the magnitude of the potential impacts on study intersections under 2020 conditions or the conclusions in the LRDP Amendment 2 EIR.

**Implementation of the Dundee-Glasgow project would not result in a new significant impact to local roadway segment levels of service under existing conditions or 2020 conditions.**

As analyzed in the LRDP Amendment 2 EIR, campus development under the amended 2005 LRDP would increase campus trip generation beyond what was analyzed in the 2005 LRDP EIR. The continued implementation of LRDP PP 4.14-1 as part of the amended 2005 LRDP would reduce the impact of campus traffic on local roadway segments and the roadways segments would operate at a level of service (LOS) D or better. The impact from campus development under the amended 2005 LRDP on roadway segments would be less than significant (UCR 2011).



As the analysis above shows, the proposed project would decrease rather than increase vehicle trips to the campus. As a result, it would not result in a new significant impact on roadway segments or increase the severity of the previously analyzed roadway segment impacts of campus development under the amended 2005 LRDP.

**Construction-related vehicle trips associated with the Dundee-Glasgow project would not result in a new significant impact nor increase the severity of the previously identified significant LRDP impact to traffic conditions along roadway segments and intersections.**

As analyzed in the LRDP Amendment 2 EIR, campus development under the amended 2005 LRDP would increase vehicle traffic during construction and renovation of facilities on the campus. The continued implementation of LRDP PP 4.14-2 as part of the amended 2005 LRDP would minimize the impact to intersection LOS from construction traffic. Coordination of construction activities would limit the potential impacts to traffic. However, construction vehicle traffic may still result in localized impacts. The impact to traffic conditions from the construction and renovation on the campus under the amended 2005 LRDP would be significant and unavoidable (UCR 2011).

The Dundee-Glasgow project would authorize the temporary construction of facilities and associated construction vehicle trips. However, the proposed project would continue to implement LRDP PP 4.14-2 to minimize construction traffic. The development of the Dundee-Glasgow project would not change the nature or increase the magnitude of the potential impacts from construction traffic on roadway segments or intersections or the conclusions in the LRDP Amendment 2 EIR.

**Implementation of the Dundee-Glasgow project would not increase the severity of the previously identified LRDP-level significant LOS impact to roadways designated by the Riverside County Congestion Management Plan under 2020 conditions or existing conditions.**

As analyzed in the LRDP Amendment 2 EIR, campus development under the amended 2005 LRDP would increase vehicle trips to the campus which would increase traffic volumes on the highway network. The LOS of some highway segments would be significantly affected by the additional vehicle trips generated by campus development under the amended 2005 LRDP. To address the impact, certain improvements would be required that would involve additional right of way acquisitions and were determined to be feasible. The LOS of some freeway segments would remain adversely affected. The impact from campus development under the amended 2005 LRDP would be significant and unavoidable (UCR 2011).

As discussed above, the Dundee-Glasgow project would result in a reduction in daily and peak hour trips and therefore would reduce and not increase the previously analyzed significant impact of campus growth on the highway network. The development of the Dundee-Glasgow project would not result in an increase in the severity of the previously identified impact.

**Implementation of the Dundee-Glasgow project, which includes relevant Program and Practices, would not result in hazards due to design features or land use incompatibilities or during construction, to vehicle traffic or pedestrians.**

As analyzed in the LRDP Amendment 2 EIR, campus development under the amended 2005 LRDP would not result in hazardous design features or incompatible use and construction would not result in hazards to vehicles or pedestrians. As part of the amended 2005 LRDP the continued implementation of LRDP PP 4.14-4 would reduce the impact from parking and roadway design, LRDP PP 4.14-5 would reduce the vehicle hazard impact from temporary roadway closures, and LRDP PP 4.14-6 would reduce the hazard to pedestrians from sidewalk and path closures. Therefore, campus development under the amended 2005 LRDP would have a less than significant impact related to hazardous design features, incompatible uses, or construction conditions (UCR 2011).

The Dundee-Glasgow project would be consistent with the previously planned land uses for the project site and would be compatible with the existing land uses adjacent to the site. The proposed project also does not include any design feature that could result in hazards to vehicle traffic and pedestrians. During construction, the site would be fenced off and would exclude pedestrians from entering the site, and hazardous conditions would be avoided. Therefore, the development of the Dundee-Glasgow project would not change the nature or increase the magnitude of the potential impacts related to hazardous design features, incompatible uses, or construction conditions, and it would not change the conclusions in the LRDP Amendment 2 EIR.

**The Dundee-Glasgow project, which includes relevant LRDP Program and Practices, is not near a public airport, and would not substantially increase hazards due to a design feature or result in inadequate emergency access.**

As with the campus development under the 2005 LRDP, the Dundee-Glasgow project site is not within the land use planning area of a public airport. Therefore, there would be no change in air traffic patterns from construction or operation of the project. The continued implementation of LRDP PP 4.14-5 and PP 4.14-8 as part of the proposed project would reduce the potential impact related to impairment of emergency access. The proposed project is not expected to result in any substantial delays for emergency vehicles. The impact would be less than significant.

**Implementation of the Dundee-Glasgow project would not conflict with adopted policies, plans, or programs supporting alternative transportation, or substantially increase demand for public transit facilities.**

The LRDP Amendment 2 EIR analyzed the effect of the projected increase in enrollment and employment at UC Riverside on demand for public transit. As analyzed in the EIR, campus development under the amended 2005 LRDP would not substantially increase demand for regional and local transit services. The continued implementation of LRDP PP 4.14-1 (which requires the implementation of a Transportation Demand Management program) as part of the amended 2005 LRDP would reduce the impact to public transit. LRDP Mitigation Measure 4.14-13 would be implemented to ensure that the Campus works with service providers to provide adequate public transit service to the campus. Therefore, the amended 2005 LRDP would result in a less than significant impact related to public transit or public transit plans (UCR 2011).

As the Dundee-Glasgow project would not in itself cause the campus enrollment to increase and the project would be required to comply with the campus Alternative Transportation programs, the Dundee-Glasgow project would not change the nature or increase the magnitude of the potential impacts to public transit, public transit plans, bicycle plans, pedestrian systems, or the conclusions in the LRDP Amendment 2 EIR.

### ***6.16.3 Analysis of Cumulative Impacts***

The cumulative impacts of traffic that would result from future growth in regional traffic, including the growth in campus traffic under the amended 2005 LRDP, are analyzed in the LRDP Amendment 2 EIR. As the proposed project is within the scope of the development envisioned under the amended 2005 LRDP, the project is accounted for in the cumulative analysis. Furthermore, as the project's trip generation analysis above shows, as a student housing project, the project would reduce rather than increase vehicle trips to the campus. Therefore, the project is adequately analyzed for its cumulative impacts in the LRDP Amendment 2 EIR.

### ***6.16.4 Changes in Circumstances or New Information that could affect the Earlier Environmental Analysis***

There are no additional changes in circumstances in which the project would be undertaken and no new information has become available since the certification of the LRDP Amendment 2 EIR that would alter the previous analysis or change its conclusions.

### **6.16.5 Conclusion**

The development of the Dundee-Glasgow project would not adversely affect public transit plans, bicycle plans, or pedestrian systems. In addition, the Dundee-Glasgow project is not near a public airport, and would not substantially increase hazards due to a design feature or result in adequate emergency access. The Dundee-Glasgow project would not contribute to the significant and unavoidable impact on signalized intersections under 2020 conditions and a significant and unavoidable impact related to exceedance of the level of service threshold along local and freeway roadway segments under 2020 conditions. The project would not change the nature or increase the magnitude of potential impacts to transportation and traffic or the conclusions in the LRDP Amendment 2 EIR.

## **6.17 TRIBAL CULTURAL RESOURCES**

### **6.17.1 Relevant Elements of the Dundee-Glasgow Project**

The proposed project would be located on a 6.58 acre site on the East Campus that is developed with a parking lot. Land on all sides of the project site is also developed with campus facilities.

### **6.17.2 Analysis of Project**

**The Dundee-Glasgow project, which includes relevant LRDP Program and Practices, would be unlikely to cause a substantial adverse change in the significance of a Tribal Cultural Resource.**

At the time the 2005 LRDP EIR and the 2011 LRDP Amendment 2 EIR were prepared, CEQA did not require an analysis of impacts to tribal cultural resources due to project implementation.

AB 52 applies only to projects where the NOP for the EIR was issued after July 1, 2015. The NOPs for both the 2005 LRDP EIR and the 2011 LRDP Amendment EIR were issued well before July 2015. As the proposed project is an element of the previously approved planned development under the 2005 LRDP, the proposed project is not subject to AB 52.

### **6.17.3 Analysis of Cumulative Impacts**

Not applicable.

### **6.17.4 Conclusion**

AB 52 is not applicable to the proposed project.

## 6.18 UTILITIES AND SERVICE SYSTEMS

### 6.18.1 *Relevant Elements of the Dundee-Glasgow Project*

The City of Riverside supplies domestic water to the UC Riverside campus. The water is supplied by pumping groundwater from 48 wells operated by Riverside Public Utilities (RPU). In line with the State of California's law and the Federal Government's Executive Order, the UC Sustainable Practices Policy sets goals to reduce potable water consumption adjusted for population growth by 20 percent by the year 2020, when compared to baseline conditions. In 2015, UC Riverside reached and surpassed its potable water reduction goals four years early (UCR 2016). In 2008, UC Riverside used a total of 583 million gallons of water. In 2015 UC Riverside decreased its water use to approximately 333 million gallons of water per year (UCR 2016).

The City of Riverside owns and operates the Riverside's Regional Water Quality Control Plant (RRWQCP) which serves the campus.

Nonhazardous municipal waste from the campus is handled by Burrtec Waste Industries. The waste is sent to the Badlands Landfill. RPU provides electricity and the Southern California Gas Company would provide natural gas to the campus (UCR 2011).

### 6.18.2 *Analysis of Project*

**The Dundee-Glasgow project would not require new or expanded water supply entitlements. The Dundee-Glasgow project would also not require construction of new water treatment facilities or expansion of existing facilities.**

As analyzed in the LRDP Amendment 2 EIR (2011), campus development under the amended 2005 LRDP would require expanded water supply entitlements or construction of new or expanded water treatment facilities. The LRDP Amendment 2 EIR found that the total water demand of the campus at full implementation of the amended 2005 LRDP would increase to a total of approximately 5.3 mgd by 2020, an increase of approximately 2.8 mgd over demand of 2009. The continued implementation of LRDP PP 4.15-1(a) through PP 4.15-1(d) as part of the amended 2005 LRDP would reduce the impact to water supply by implementing water conservation measures. Additionally, LRDP Mitigation Measure 4.15-2 was set forth which requires the University to pay its proportional share of the cost of the environmental mitigation should the City determine that construction of new water treatment facilities or expansion of existing water treatment facilities is required in order to accommodate campus demand. The impact on potable water supply and facilities from campus development under the amended 2005 LRDP was determined to be less than significant (UCR 2011).

The Dundee-Glasgow project would add approximately 820 new beds with the construction of the Dundee Residence Hall. As a result, 820 students would live on the campus as opposed to off campus. For students living on-campus, the water demand factor in the 2005 LRDP EIR is 70 gallons per day.<sup>4</sup> Therefore, upon occupancy, the Dundee Residence Hall would generate a demand of 57,400 gallons of potable water per day. The Dundee-Glasgow project would also construct an approximately 830-seat standalone dining facility. With the construction of this new dining facility, the existing A-I dining hall would not be used as a dining hall and would be re-purposed to other uses. The existing 500-seat A-I dining hall was built in 1959. Although the 830-seat Glasgow Dining facility would be larger than the existing 500-seat A-I dining hall, the facility would be substantially more efficient in regards to water use as it would meet LEED Silver certification and target LEED Gold certification. Water demand associated with the new dining facility would be less than or comparable to that of the existing dining hall. In addition, the proposed project would also be required to follow water conservation policies listed in the UC Policy on Sustainable Practices.

The proposed project is within the scope of the amended 2005 LRDP development and its water demand is accounted for in the estimated 5.3 mgd water demand for the campus analyzed in the LRDP Amendment 2 EIR. Furthermore, the Campus currently uses on average about 1.6 mgd. If the proposed project's water demand is added to the Campus's existing demand, the total would still be substantially less than the 5.3 mgd of water demand analyzed for the year 2020 in the LRDP Amendment 2 EIR. The analysis in the LRDP Amendment 2 EIR shows that based on the 2015 Urban Water Management Plan (UWMP) prepared by Riverside Public Utilities (RPU) there would be an adequate supply of potable water to meet future demands (through 2040) under a normal weather conditions scenario as well as under dry weather conditions within its water supply service area. However, under multiple dry year conditions, the RPU identifies a shortage in water supply in the year 2040. For years of water shortages, the Water Conservation Ordinance establishes a Water Conservation Program which addresses different levels of water supply conditions and needs. During a mandated reduction, RPU would intensify its water conservation programs, especially public education. Furthermore, the primary source of RPU's recycled water supply is groundwater from the Bunker Hill, Riverside North, and Riverside South groundwater basins. RPU's groundwater water supply from the Bunker Hill Basin is considered 100 percent reliable during single and multi-year dry periods (Riverside 2011).

The proposed project is within the scope of development under the amended 2005 LRDP and as it would not increase the Campus's water demand above the previously analyzed campus water demand in the

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<sup>4</sup> Based on 2001 UCR water consumption rate and sustainability factors that promote water conservation in future buildings.

LRDP Amendment 2 EIR, the Dundee-Glasgow project would not change the nature or increase the magnitude of the potential impacts to water supply or the conclusions in the LRDP Amendment 2 EIR.

**The Dundee-Glasgow project would require construction of new or expanded wastewater treatment and conveyance facilities, but the construction of which would not cause significant environmental effects.**

As analyzed in the LRDP Amendment 2 EIR, campus development under the amended 2005 LRDP would require expanded new or expanded wastewater treatment and conveyance facilities. The continued implementation of LRDP PP 4.15-5 as part of the amended 2005 LRDP would reduce or avoid potential impacts associated with water quality standards or waste discharge requirements. Additionally, LRDP Mitigation Measure 4.15-3 would be implemented which requires the University to pay its proportional share of the cost of the environmental mitigation should the City determine that construction of new or expanded wastewater treatment facilities is required in order to accommodate campus demand. The impact from construction of wastewater conveyance facilities or expansion of existing conveyance facilities on and off campus under the amended 2005 LRDP was determined to be less than significant (UCR 2011).

The Dundee Residence Hall element of the project would generate approximately 22,960 mgd of wastewater.<sup>5</sup> The Glasgow 830-seat dining facility would replace the existing A-I dining hall. The A-I dining hall would be repurposed into a multi-functional student support and service space. As mentioned above, the Glasgow Dining facility would meet LEED Silver certification and target LEED Gold certification and would be more efficient in regard to water use. Therefore, the increase in wastewater would not be substantial. The proposed project would be required to follow water conservation policies listed in the UC Policy on Sustainable Practices. Compliance with these requirements would reduce water use, which, in turn, would reduce wastewater flows.

The proposed project is within the scope of the amended 2005 LRDP development and its wastewater generation is accounted for in the estimated 1.2 mgd for the campus as analyzed in the LRDP Amendment 2 EIR. The Campus currently generates on average about 0.64 mgd of wastewater.<sup>6</sup> If the proposed project's wastewater is added to the current volume discharged from the campus, the total volume would still be substantially below the 1.2 mgd analyzed in the LRDP Amendment 2 EIR. The

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<sup>5</sup> Based on LRDP Amendment 2 EIR factors that states wastewater generation would be 40 percent of domestic water demand.

<sup>6</sup> Ibid.

analysis in the LRDP Amendment 2 EIR shows that the RRWQCP would have adequate capacity to treat this volume of wastewater from the campus. Given the above, campus growth under the amended 2005 LRDP, including the proposed project, would not result in significant environmental impacts associated with the provision of wastewater treatment capacity, and the impact would be less than significant. Therefore, the Dundee-Glasgow project would not change the nature or increase the magnitude of the potential impacts to wastewater treatment or conveyance facilities or the conclusions in the LRDP Amendment 2 EIR.

**The Dundee-Glasgow project would require construction of new storm water drainage facilities or expansion of existing facilities but their construction would not cause significant environmental effects.**

As analyzed in the LRDP Amendment 2 EIR, campus development, under the amended 2005 LRDP, would increase impervious surfaces which would result in the need for new or expanded stormwater drainage facilities. The continued implementation of LRDP Mitigation Measure 4.15-5 as part of the amended 2005 LRDP would reduce the impact to storm water facilities. The impact from construction of new storm water drainage facilities or expansion of existing facilities under the amended 2005 LRDP was determined to be less than significant (UCR 2011).

The Dundee-Glasgow project would slightly decrease the amount of impervious surfaces on the project site as the existing project site is a surface parking lot. Therefore the runoff from the project site would not increase and would in fact likely decrease. The runoff would discharge into the existing storm drain system near the project site and construction of new or expanded storm drains would not be required. Similar to the conclusions of the LRDP Amendment 2 EIR, the proposed project would result in a less than significant impact. The Dundee-Glasgow project would not change the nature or increase the magnitude of the potential impacts to stormwater drainage facilities or the conclusions in the LRDP Amendment 2 EIR.

**The Dundee-Glasgow project would be served by a landfill with sufficient permitted capacity.**

As analyzed in the LRDP Amendment 2 EIR, campus development under the amended 2005 LRDP would not require the expansion of the permitted capacity of a regional landfill. The impact from solid waste generation under the amended 2005 LRDP was determined to be less than significant (UCR 2011).

At an annual solid waste generation rate of 0.675 ton per 1,000 square feet, the Dundee-Glasgow project would generate approximately 153 tons of municipal solid waste per year. Approximately 55 percent of solid waste stream on the campus is diverted, recycled, or reused, which is consistent with the goals of



the Integrated Waste Management Act. The proposed project is within the scope of the amended 2005 LRDP development and its solid wastes generation is accounted for in the estimated additional 5,610 tons of solid waste from the Campus as analyzed in the LRDP Amendment 2 EIR. The LRDP Amendment 2 EIR concluded that the increase in solid waste generation from development under the amended 2005 LRDP could be accommodated within the remaining permitted capacity of the Badlands landfill. Similar to the conclusions of the 2005 EIR, solid wastes generation under the amended 2005 LRDP, including the proposed project, can be accommodated within the remaining permitted capacity of the Badlands landfill. Development of the Dundee-Glasgow project would not change the nature or increase the magnitude of the potential impacts to the local landfill or the conclusions in the LRDP Amendment 2 EIR.

**The Dundee-Glasgow project would increase the demand for electricity and natural gas, but would not require construction or expansion of electrical and natural gas facilities.**

As analyzed in the LRDP Amendment 2 EIR, campus development under the amended 2005 LRDP would increase the demand for electricity and natural gas. With adherence to energy conservation policies included in the UC Policy on Sustainable Practices and efforts to reach GHG reduction goals in the Campus Climate Action Plan (CAP), development that would occur under the amended 2005 LRDP would not require the construction or expansion of electrical facilities, which could cause significant environmental effects. The impact from increased demand for electricity and natural gas under the amended 2005 LRDP was determined to be less than significant (UCR 2011).

The Dundee-Glasgow project would similarly increase the demand for electricity and natural gas, but not over what was previously planned for growth under the amended 2005 LRDP. Therefore, similar to the conclusions of the 2005 EIR, implementation of the proposed project would have a less than significant impact. Development of the Dundee-Glasgow project would not change the nature or increase the magnitude of the potential impacts from construction of electrical or natural gas distribution facilities or the conclusions in the LRDP Amendment 2 EIR.

**The Dundee-Glasgow project would not encourage the wasteful or inefficient use of energy.**

As analyzed in the LRDP Amendment 2 EIR, campus development, including the development of the project site under the amended 2005 LRDP, would not encourage the wasteful or inefficient use of energy. Future development of the campus under the amended 2005 LRDP would comply with the UC Policy on Sustainable Practices, as well as any future conservation goals or programs enacted by the University of California. The LRDP Amendment 2 EIR also concluded that new development would be required to minimize energy use in order for the campus to attain the GHG reduction goals listed in the

Campus CAP. The LRDP Amendment 2 EIR determined that implementation of the 2005 LRDP as amended would not encourage the wasteful or inefficient use of energy, and this impact would be less than significant (UCR 2011).

The Dundee-Glasgow project would similarly comply with the UC Policy on Sustainable Practices and would incorporate features to minimize energy to achieve the GHG reduction goals listed in the Campus CAP. The proposed project also would meet LEED Silver certification and target LEED Gold certification, which requires the project to minimize energy use. Therefore, similar to the conclusions of the LRDP Amendment 2 EIR, implementation of the proposed project would not encourage the wasteful or inefficient use of energy and the impact would be less than significant. Development of the Dundee-Glasgow project would not change the nature or increase the magnitude of the potential impacts from wasteful or inefficient use of energy or the conclusions in the LRDP Amendment 2 EIR.

### ***6.17.3 Analysis of Cumulative Impacts***

Cumulative impacts of campus development under the amended 2005 LRDP on utilities and service systems are addressed in the LRDP Amendment 2 EIR. The EIR concluded that campus development, in conjunction with other cumulative development, would result in demand for water, electrical, and natural gas; and expansion or construction of new wastewater facilities and regional landfill. The cumulative impacts from demand for water,<sup>7</sup> the demand placed on the RRWQCP, Badlands Landfill, and the demand for electricity and natural gas would be less than significant (UCR 2011).

As discussed above, the proposed project would increase utility demand compared to existing conditions but the project's demand is within the campus demand for utilities analyzed in the LRDP Amendment 2 EIR. Therefore the Dundee-Glasgow project's cumulative impacts on utilities and service systems are adequately addressed in the LRDP Amendment 2 EIR.

### ***6.17.4 Changes in Circumstances or New Information that could affect the Earlier Environmental Analysis***

There are no changes in circumstances in which the Dundee-Glasgow project would be undertaken. No new information has become available and no new regulations related to utilities and service systems have come into effect since the certification of the LRDP Amendment 2 EIR that would alter the previous analysis and change its conclusions.

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<sup>7</sup> Campus water consumption remains within levels covered the RPU 2015 UWMP.

### **6.17.5 Conclusion**

The Dundee-Glasgow project would not have a substantial adverse effect on utilities and service systems. The project would not change the nature or increase the magnitude of potential impacts to utilities and service systems or the conclusions in the LRDP Amendment 2 EIR.

## **7.0 SUPPORTING INFORMATION SOURCES**

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UCR. 2016. UCR Sustainability – Water Initiatives. Available at:  
<http://sustainability.ucr.edu/programs/water.html>, accessed on April 18, 2018.

UCR. 2017. Barn Expansion Final Initial Study/ Mitigated Negative Declaration. August.

## **8.0 ADDENDUM PREPARERS**

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## 2005 LRDP PLANNING STRATEGIES, PROGRAMS, AND PRACTICES

### Planning Strategies

#### *Land Use*

1. Achieve academic core densities of 1.0 FAR or higher on the East Campus and 1.6 to 1.9 FAR on the West Campus in order to achieve a balance of academic land area versus other required uses.
2. In order to achieve these development densities, infill sites in the partially developed East Campus academic core and expand to the West Campus academic zone immediately adjacent to the I-215/SR-60 freeway, maintaining a compact and contiguous academic core.
3. Maintain the teaching and research fields on the West Campus south of Martin Luther King Jr. Boulevard.
4. Pursue a goal of housing 50 percent of student enrollment in on campus or campus controlled housing.
5. Remove existing family housing units on the East Campus, and provide replacement and additional units of family housing on the West Campus.
6. Provide expanded athletics and recreational facilities and fields on the East and West Campuses, adjacent to concentrations of student housing.
7. Over time, relocate parking from central campus locations to the periphery of the academic core and replace surface parking with structures, where appropriate.

#### *Open Space*

1. Protect the steep and natural southeast hillsides designated as a Natural Open Space Reserve, to protect wildlife habitat, to provide a visual backdrop to the campus, and protect against erosion.
2. Within the Natural Open Space Reserve, no major facilities will be allowed (except for sensitively sited utility projects), vehicular and pedestrian access will be limited, and native plant materials will be used, where needed, for erosion, screening, and restoration.
3. In Naturalistic Open Space areas, where arroyos and other natural features exist, preserve wherever possible, existing landforms, native plant materials, and trees. Where appropriate, restore habitat value.
4. Provide landscaped buffers and setbacks along campus edges, such as Valencia Hill Drive and its extension south of Big Springs Road, Martin Luther King Jr. Boulevard, and the I-215/SR-60 freeway.
5. Retain the Carillon Mall as a major Campus Landmark Open Space, respecting its existing dominant width of approximately 200 feet throughout its length. Other "named" malls and walks will be 100 feet wide.

6. Provide a new Campus Landmark Open Space on the West Campus, the Gage Canal Mall, to reflect the natural dry arroyos that are part of the Riverside landscape, and provide gathering/activity space within and adjacent to the Mall.
7. Provide neighborhood parks and tot lots in the family housing areas as neighborhood open space.

### ***Campus and Community***

1. Provide sensitive land use transitions and landscaped buffers where residential neighborhoods might experience noise or light from UCR activities.
2. Encourage a “permeable” edge with the community where interaction is desirable, especially along University Avenue and in areas where a high proportion of students live in close proximity to the campus.
3. Discourage vehicular traffic originating off campus from moving through campus as a short cut.
4. Provide strong connections within the campus and its edges to promote walking, bicycling and transit use, rather than vehicular traffic.
5. Continue to improve campus signage and wayfinding to provide easy access for visitors and to discourage impacts in neighboring residential areas.
6. Locate public-oriented uses, such as performance facilities, galleries and major sports venues, where they can be easily accessed and where they can contribute to the vitality and economic health of businesses along University Avenue.
7. Work cooperatively with the City of Riverside to effect the redevelopment of University Avenue between the campus and Chicago Avenue as a high intensity mixed use district, with an abundance of campus/community serving businesses and uses.
8. Encourage the City to explore the opportunity for student housing in a mixed use configuration along University Avenue.
9. Strongly encourage private developers to provide a variety of housing types that target both current and future needs of the overall community and the campus.
10. Use City/UCR/RCC enhancement of Downtown cultural, arts and entertainment resources and the campus need for off-campus housing as the foundation of a revitalization program.
11. Support the City in their coordination of Block Grant, Redevelopment set-aside, and other funds for the upgrading of Neighborhood Reinvestment Areas adjacent to University Avenue.
12. Support the City in creating design guidelines for community, student, faculty, staff and visitor housing along University Avenue that has a friendly street presence.
13. Support the City in amending the Eastside Community Plan to update housing strategies and action plans for rehabilitation of existing housing stock and new construction. This should be done in conjunction with modifications to the University Avenue Specific Plan.

14. Support the City in creating a “town/gown square” at the southwest corner of the intersection of University and Chicago Avenues to provide retail and services for the community and campus.
15. Support the City in developing design guidelines for mixed use housing and retail along University Avenue.
16. Partner with the City to create a Riverside/UCR Entrepreneurial Program at the “town/gown square” related to minority business Opportunities in the University Avenue and Hunter Business Park areas.
17. Work with the City to link the open spaces of UCR, University Avenue, the Marketplace and the Downtown with enhanced streetscape treatments for University to Market and from Market to Santa Fe Street along Mission Inn Avenue/7th Street.
18. Work with the City to link the open spaces of UCR with the Citywide Trail Network.
19. Work with the City to develop streetscape concepts with banners, lighting, street furniture and public art that celebrate the linkages between the University and Downtown. Banners should highlight cultural and artistic events in Downtown and at UCR when appropriate.
20. Work with the City to evaluate the conversion of University Avenue from Iowa Avenue to the I-215/SR 60 freeway from an auto emphasis street to a biking, pedestrian, transit street with localized auto access. Consider Martin Luther King Jr. Boulevard/14th Street and Blaine/3rd Street as primary freeway connecting streets.
21. Work with the City to emphasize University Avenue as the link between the UCR campus and Downtown rather than as the link to the freeways.
22. Work with the City to encourage bicycle and pedestrian use and safety, including minimizing the number of curb cuts for residential and retail development along University Avenue to Chicago Avenue and then to the Downtown.

### ***Transportation***

1. Develop an integrated multi-modal transportation plan to encourage walking, biking, and transit use.
2. Expand shuttle or tram service connecting major parking lots and campus destinations, and linking the East and West Campuses. Coordinate this system with RTA routes and schedules.
3. Provide a continuous network of bicycle lanes and paths throughout the campus, connecting to off-campus bicycle routes.
4. Over time, limit general vehicular circulation in the central campus, but allow transit, service, and emergency vehicle access, and provide access for persons with mobility impairments.
5. Provide bicycle parking at convenient locations.
6. Implement parking management measures that may include
  - Restricted permit availability

- Restricted permit mobility
- Differential permit parking (price determined by proximity to facilities/buildings).

### ***Development Strategies***

1. Establish a design review process to provide regular review of building and landscape development on campus.
2. Review and update, as needed, the Campus Design Guidelines and the Campus Landscape Guidelines (now the 2007 Campus Design Guidelines) to ensure conformity with LRDP planning strategies.
3. Review other plans that may be prepared, such as district, sub-area or transportation plans, for conformity with the goals and design intent of the 2005 LRDP.

### **Programs and Practices**

PP 4.1-1                      The Campus shall provide design professionals with the 2007 Campus Design Guidelines and instructions to implement the guidelines, including those sections related to use of consistent scale and massing, compatible architectural style, complementary color palette, preservation of existing site features, and appropriate site and exterior lighting design.

(This is identical to Land Use PP 4.9-1(a))

PP 4.1-2(a)                The Campus shall continue to provide design professionals with the 2007 Campus Design Guidelines and instructions to develop project-specific landscape plans that are consistent with the Guidelines with respect to the selection of plants, retention of existing trees, and use of water conserving plants, where feasible.

(This is identical to Land Use PP 4.9-1(b))

PP 4.1-2(b)                The Campus shall continue to relocate, where feasible, mature “specimen” trees that would be removed as a result of construction activities on the campus.

(This is identical to Land Use PP 4.9-1(c).)

PP 4.1-2(c)                To reduce impacts to the Natural Open Space Reserve area:

(i) If any construction is proposed within the Open Space Reserve, conduct surveys for threatened and endangered species at an appropriate time of year. If these species are located in this area, the site or sites shall be protected from damage by either protective fencing or some other means of restricting access.

(ii) Landscaping around development areas adjacent to the Open Space Reserve shall emphasize native or historically significant plant material that provide



wildlife value and a sensitive transition from developed areas to natural open spaces. A qualified native landscape specialist shall be retained to develop an appropriate native landscape plan for the development areas.

(This is identical to Biological Resources PP 4.4-1(a) and Hydrology PP 4.8-3(a).)

PP 4.1-2(d)

To reduce disturbance of Natural and Naturalistic Open Space areas:

- (i) Unnecessary driving in sensitive or otherwise undisturbed areas shall be avoided. New roads or construction access roads would not be created where adequate access already exists.
- (ii) Removal of native shrub or brush shall be avoided, except where necessary.
- (iii) Drainages shall be avoided, except where required for construction. Limit activity to crossing drainages rather than using the lengths of drainage courses for access.
- (iv) Excess fill or construction waste shall not be dumped in washes.
- (v) Vehicles or other equipment shall not be parked in washes or other drainages.
- (vi) Overwatering shall be avoided in washes and other drainages.
- (vii) Wildlife including species such as fox, coyote, snakes, etc. shall not be harassed. Harassment includes shooting, throwing rocks, etc.

(This is identical to Biological Resources PP 4.4-1(b) and Hydrology PP 4.8-3(b).)

PP 4.3-1

The Campus shall continue to implement a Transportation Demand Management program that meets or exceeds all trip reduction and AVR requirements of the SCAQMD. The TDM program may be subject to modification as new technologies are developed or alternate program elements are found to be more effective.

(This is identical to Transportation and Traffic PP 4.14-1)

PP 4.3-2(a)

Construction contract specifications shall include the following:

- (i) Compliance with all SCAQMD rules and regulations
- (ii) Maintenance programs to assure vehicles remain in good operating condition
- (iii) Avoid unnecessary idling of construction vehicles and equipment
- (iv) Use of alternative fuel construction vehicles
- (v) Provision of electrical power to the site, to eliminate the need for on-site generators

PP 4.3-2(b)

The Campus shall continue to implement dust control measures consistent with SCAQMD Rule 403—Fugitive Dust during the construction phases of new project development. The following actions are currently recommended to implement Rule 403 and have been quantified by the SCAQMD as being able to reduce dust generation between 30 and 85 percent depending on the source of the dust generation. The Campus shall implement these measures as necessary to reduce fugitive dust. Individual measures shall be specified in construction documents and require implementation by construction contractor:

- (i) Apply water and/or approved non-toxic chemical soil stabilizers according to manufacturer's specification to all inactive construction areas (previously graded areas that have been inactive for 10 or more days)
- (ii) Replace ground cover in disturbed areas as quickly as possible
- (iii) Enclose, cover, water twice daily, or apply approved chemical soil binders to exposed piles with 5 percent or greater silt content
- (iv) Water active grading sites at least twice daily
- (v) Suspend all excavating and grading operations when wind speeds (as instantaneous gusts) exceed 25 miles per hour over a 30-minute period
- (vi) All trucks hauling dirt, sand, soil, or other loose materials shall be covered or maintain at least two feet of freeboard (i.e., minimum vertical distance between top of the load and the top of the trailer), in accordance with Section 23114 of the California Vehicle Code
- (vii) Sweep streets at the end of the day if visible soil material is carried over to adjacent roads
- (viii) Install wheel washers where vehicles enter and exit unpaved roads onto paved roads, or wash off trucks and any equipment leaving the site each trip
- (ix) Apply water three times daily or chemical soil stabilizers according to manufacturers' specifications to all unpaved parking or staging areas or unpaved road surfaces
- (x) Post and enforce traffic speed limits of 15 miles per hour or less on all unpaved roads

(This is identical to Geology PP 4.6-2(a) and Hydrology PP 4.8-3(c).)

PP 4.3-2(c)

The Campus shall continue to implement SCAQMD Rule 1403—Asbestos when demolishing existing buildings on the campus.

PP 4.4-1(a)

To reduce impacts to the Natural Open Space Reserve area:

- (i) If any construction is proposed within the Open Space Reserve, conduct surveys for threatened and endangered species at an appropriate time of year. If these species are located in this area, the site or sites shall be protected from damage by either protective fencing or some other means of restricting access.
- (ii) Landscaping around development areas adjacent to the Open Space Reserve shall emphasize native or historically significant plant material that provides wildlife value and a sensitive transition from developed areas to natural open spaces. A qualified native landscape specialist shall be retained to develop an appropriate native landscape plan for the development areas.

(This is identical to Aesthetics PP 4.1-2(c) and Hydrology PP 4.8-3(a).)

PP 4.4-1(b)

To reduce disturbance of Natural and Naturalistic Open Space areas:

- (i) Unnecessary driving in sensitive or otherwise undisturbed areas shall be avoided. New roads or construction access roads would not be created where adequate access already exists.
- (ii) Removal of native shrub or brush shall be avoided, except where necessary.
- (iii) Drainages shall be avoided, except where required for construction. Limit activity to crossing drainages rather than using the lengths of drainage courses for access.
- (iv) Excess fill or construction waste shall not be dumped in washes.
- (v) Vehicles or other equipment shall not be parked in washes or other drainages.
- (vi) Overwatering shall be avoided in washes and other drainages.
- (vii) Wildlife including species such as fox, coyote, snakes, etc. shall not be harassed. Harassment includes shooting, throwing rocks, etc.

(This is identical to Aesthetics PP 4.1-2(d) and Hydrology 4.8-3(b).)

PP 4.4-2(a)

Impacts to riparian and wetland habitats shall be avoided, wherever feasible. If avoidance is not feasible, then the impacts will be evaluated as part of the Clean Water Act section 404 and California Fish and Game Code section 1602 permit application process. If mitigation is required, the University of California will develop and implement a resource mitigation program to be reviewed and approved by the USACE and CDFG through the state and federal permit process. The permit shall mitigate the habitats such that they are consistent with the Clean Water Act and CDFG policy of "no net loss" of wetland. Furthermore, impacted wetlands and/or riparian vegetation that cannot be avoided would be replaced at a ratio approved by the USACE and CDFG. If replacement within the area is not feasible, then an approved mitigation bank or other off-site area will be used. The revegetation of impacted areas or mitigation parcels will be

performed by a qualified restoration specialist and shall be conducted only on sites where soils, hydrology, and microclimate conditions are suitable for riparian habitat. First priority will be given to areas that are adjacent to existing patches of native habitat.

PP 4.4-2(b)

In compliance with NPDES, the Campus would continue to implement Best Management Practices, as identified in the UCR Stormwater Management Plan (UCR 2003):

- (i) Public education and outreach on stormwater impacts
- (ii) Public involvement/participation
- (iii) Illicit discharge detection and elimination
- (iv) Pollution prevention/good housekeeping for facilities
- (v) Construction site stormwater runoff control
- (vi) Post-construction stormwater management in new development and redevelopment

(This is identical to Geology and Soils PP 4.6-2(b) and Hydrology PP 4.8-3(d).)

PP 4.5-2

If any project is proposed that would require or result in the relocation or demolition of a historic structure, the Campus shall prepare a project-specific CEQA analysis, pursuant to Section 15064.5 et seq. of the CEQA Guidelines.

PP 4.5-3

If construction would occur within the southeast hills or within the portion of the West Campus north of Martin Luther King Boulevard, a surface field survey shall be conducted in conjunction with a project specific environmental analysis in accordance with CEQA. Depending on the results of the survey, the following measures shall be implemented:

- (i) If no evidence of surface archaeological resources is discovered, or if development would occur in areas not designated as sensitive for archaeological resources:
  - Prior to site preparation or grading activities, construction personnel shall be informed of the potential for encountering unique archaeological resources and taught how to identify these resources if encountered. This shall include the provision of written materials to familiarize personnel with the range of resources that might be expected, the type of activities that may result in impacts, and the legal framework of cultural resources protection. Construction specifications shall require that all construction personnel shall be instructed to stop work in the vicinity of a potential discovery until a qualified, non-University archaeologist assesses the significance of the find and implements appropriate measures to protect or scientifically remove the find. Construction personnel shall also be

informed that unauthorized collection of archaeological resources is prohibited.

- The Campus shall require the site project contractor to report any evidence of archaeological resources unearthed during development excavation to the campus.
  - The archaeologist shall then be present during the grading and shall have the authority to halt disturbance of any archaeological resources long enough to assess the situation, conduct testing, and implement mitigation measures that would reduce impacts in accordance with Section 21083.2 of CEQA.
- (ii) If any evidence of archaeological materials is discovered on the surface during field survey, then:
- A qualified archaeologist shall prepare a recovery plan for the resources.
  - An archaeologist shall also be present during grading and shall have the authority to halt disturbance of any archaeological resources long enough to assess the situation, conduct testing, and implement mitigation measures that would reduce impacts in accordance with Section 21083.2 of CEQA.

PP 4.5-4

Construction specifications shall require that if a paleontological resource is uncovered during construction activities:

- (i) A qualified paleontologist shall determine the significance of the find.
- (ii) The Campus shall make an effort to preserve the find intact through feasible project design measures.
- (iii) If it cannot be preserved intact, then the University shall retain a qualified non-University paleontologist to design and implement a treatment plan to document and evaluate the data and/or preserve appropriate scientific samples.
- (iv) The paleontologist shall prepare a report of the results of the study, following accepted professional practice.
- (v) Copies of the report shall be submitted to the University and the Riverside County Museum.

PP 4.5-5

In the event of the discovery of a burial, human bone, or suspected human bone, all excavation or grading in the vicinity of the find shall halt immediately and the area of the find shall be protected and the University immediately shall notify the Riverside County Coroner of the find and comply with the provisions of P.R.C. Section 5097 with respect to Native American involvement, burial treatment, and re-burial, if necessary.

- PP 4.6-1(a) During project-specific building design, a site-specific geotechnical study shall be conducted under the direct supervision of a California Registered Engineering Geologist or licensed geotechnical engineer to assess seismic, geological, soil, and groundwater conditions at each construction site and develop recommendations to prevent or abate any identified hazards. The study shall follow applicable recommendations of CDMG Special Publication 117 and shall include, but not necessarily be limited to
- Determination of the locations of any suspected fault traces and anticipated ground acceleration at the building site
  - Potential for displacement caused by seismically induced shaking, fault/ground surface rupture, liquefaction, differential soil settlement, expansive and compressible soils, landsliding, or other earth movements or soil constraints
  - Evaluation of depth to groundwater
- The structural engineer shall incorporate the recommendations made by the geotechnical report when designing building foundations.
- PP 4.6-1(b) The Campus shall continue to implement its current seismic upgrade program.
- PP 4.6-1(c) The Campus will continue to fully comply with the University of California's Policy for Seismic Safety, as amended. The intent of this policy is to ensure that the design and construction of new buildings and other facilities shall, as a minimum, comply with seismic provisions of California Code of Regulations, Title 24, California Administrative Code, the California State Building Code, or local seismic requirements, whichever requirements are most stringent.
- PP 4.6-2(a) The Campus shall continue to implement dust control measures consistent with SCAQMD Rule 403—Fugitive Dust during the construction phases of new project development. The following actions are currently recommended to implement Rule 403 and have been quantified by the SCAQMD as being able to reduce dust generation between 30 and 85 percent depending on the source of the dust generation. The Campus shall implement these measures as necessary to reduce fugitive dust. Individual measures shall be specified in construction documents and require implementation by construction contractor:
- (i) Apply water and/or approved nontoxic chemical soil stabilizers according to manufacturer's specification to all inactive construction areas (previously graded areas that have been inactive for 10 or more days)
  - (ii) Replace ground cover in disturbed areas as quickly as possible
  - (iii) Enclose, cover, water twice daily, or apply approved chemical soil binders to exposed piles with 5 percent or greater silt content
  - (iv) Water active grading sites at least twice daily

- (v) Suspend all excavating and grading operations when wind speeds (as instantaneous gusts) exceed 25 miles per hour over a 30-minute period
- (vi) All trucks hauling dirt, sand, soil, or other loose materials are to be covered or should maintain at least two feet of freeboard (i.e., minimum vertical distance between top of the load and the top of the trailer), in accordance with Section 23114 of the California Vehicle Code
- (vii) Sweep streets at the end of the day if visible soil material is carried over to adjacent roads
- (viii) Install wheel washers where vehicles enter and exit unpaved roads onto paved roads, or wash off trucks and any equipment leaving the site each trip
- (ix) Apply water three times daily or chemical soil stabilizers according to manufacturers' specifications to all unpaved parking or staging areas or unpaved road surfaces
- (x) Post and enforce traffic speed limits of 15 miles per hour or less on all unpaved roads

(This is identical to Air Quality PP 4.3-2(b) and Hydrology PP 4.8-3(c).)

PP 4.6-2(b)

In compliance with National Pollution Discharge Elimination System (NPDES), the Campus would continue to implement Best Management Practices, as identified in the UCR Stormwater Management Plan (UCR 2003):

- (i) Public education and outreach on stormwater impacts
- (ii) Public involvement/participation
- (iii) Illicit discharge detection and elimination
- (iv) Pollution prevention/good housekeeping for facilities
- (v) Construction site stormwater runoff control
- (vi) Post-construction stormwater management in new development and redevelopment

(This is identical to Biological Resources PP 4.4-2(b) and Hydrology PP 4.8-3(d).)

PP 4.7-1

The Campus shall continue to implement the current (or equivalent) health and safety plans, programs, and practices related to the use, storage, disposal, or transportation of hazardous materials, including, but not necessarily limited to, the Business Plan, the Broadscope Radioactive Materials License, and the following programs: Biosafety, Emergency Management, Environmental Health, Hazardous Materials, Industrial Hygiene and Safety, Laboratory/Research Safety, Radiation Safety, and Integrated Waste Management. These programs may be subject to modification as more stringent standards are developed or if

the programs are replaced by other programs that incorporate similar health and safety protection measures.

PP 4.7-2                   The Campus shall perform hazardous materials surveys on buildings and soils, if applicable, prior to demolition. When remediation is deemed necessary, surveys shall identify all potential hazardous materials within the structure to be demolished, and identify handling and disposal practices. The Campus shall follow the practices during building demolition to ensure construction worker and public safety.

PP 4.7-3                   The Campus will inform employees and students of hazardous materials minimization strategies applicable to research, maintenance, and instructional activities, and require the implementation of these strategies where feasible. Strategies include but are not limited to the following:

- (i) Maintenance of online database by EH&S of available surplus chemicals retrieved from laboratories to minimize ordering or new chemicals.
- (ii) Shifting from chemical usage to micro techniques as standard practice for instruction and research, as better technology becomes available.

PP 4.7-4                   Prior to demolition of structures on the campus or new construction on former agricultural teaching and research fields, the Campus shall complete a Phase I environmental site assessment to determine the potential for soil or groundwater contamination on a project site. If the assessment determines that a substantial potential exists on the site, the Campus shall develop and implement an appropriate testing and, if needed, develop a remediation strategy prior to demolition or construction activities.

If contaminated soil and/or groundwater is encountered during the removal of onsite debris or during excavation and/or grading activities

- (i) The construction contractor(s) shall stop work and immediately inform EH&S.
- (ii) An on-site assessment shall be conducted to determine if the discovered materials pose a significant risk to the public or construction workers.
- (iii) If the materials are determined to pose such a risk, a remediation plan shall be prepared and submitted to EH&S to comply with all federal and State regulations necessary to clean and/or remove the contaminated soil and/or groundwater.
- (iv) Soil remediation methods could include, but are not necessarily limited to, excavation and on-site treatment, excavation and off-site treatment or disposal, and/or treatment without excavation.
- (v) Remediation alternatives for cleanup of contaminated groundwater could include, but are not necessarily limited to, on-site treatment, extraction and off-site treatment, and/or disposal.



- (vi) The construction schedule shall be modified or delayed to ensure that construction will not inhibit remediation activities and will not expose the public or construction workers to significant risks associated with hazardous conditions.

PP 4.7-7(a) 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, 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 segment, the Campus shall provide appropriate signage indicating alternative routes.

(This is identical to Transportation and Traffic PP 4.14-5.)

PP 4.7-7(b) To maintain adequate access for emergency vehicles when construction projects would result in roadway closures, the Office of Design and Construction shall consult with the UCPD, EH&S, and the RFD to disclose roadway closures and identify alternative travel routes.

(This is identical to Transportation and Traffic PP 4.14-8.)

PP 4.8-1 The Campus will continue to comply with all applicable water quality requirements established by the SARWQCB.

(This is identical to Utilities PP 4.15-5.)

PP 4.8-2(a) To further reduce the campus' impact on domestic water resources, to the extent feasible, UCR will

- (i) Install hot water recirculation devices (to reduce water waste)
- (ii) Continue to require all new construction to comply with applicable State laws requiring water-efficient plumbing fixtures, including but not limited to the Health and Safety Code and Title 24, California Code of Regulations, Part 5 (California Plumbing Code)
- (iii) Retrofit existing plumbing fixtures that do not meet current standards on a phased basis over time
- (iv) Install recovery systems for losses attributable to existing and proposed steam and chilled-water systems
- (v) Prohibit using water as a means of cleaning impervious surfaces
- (vi) Install water-efficient irrigation equipment to maximize water savings for landscaping and retrofit existing systems over time

(This is identical to Utilities PP 4.15-1(b))

PP 4.8-2(b) The Campus shall promptly detect and repair leaks in water and irrigation pipes.

(This is identical to Utilities PP 4.15-1(c))

PP 4.8-2(c) The Campus shall avoid serving water at food service facilities except upon request.

(This is identical to Utilities PP 4.15-1(d))

PP 4.8-3(a) To reduce impacts to the Natural Open Space Reserve area:

(i) If any construction is proposed within the Open Space Reserve, conduct surveys for threatened and endangered species at an appropriate time of year. If these species are located in this area, the site or sites shall be protected from damage by either protective fencing or some other means of restricting access.

(ii) Landscaping around development areas adjacent to the Open Space Reserve shall emphasize native or historically significant plant material that provides wildlife value and a sensitive transition from developed areas to Natural open spaces. A qualified native landscape specialist shall be retained to develop an appropriate native landscape plan for the development areas.

(This is identical to Biological Resources PP 4.4-1(a) and Aesthetics 4.1-2(c).)

PP 4.8-3(b) To reduce disturbance of Natural and Naturalistic Open Space areas:

(i) Unnecessary driving in sensitive or otherwise undisturbed areas shall be avoided. New roads or construction access roads would not be created where adequate access already exists.

(ii) Removal of native shrub or brush shall be avoided, except where necessary.

(iii) Drainages shall be avoided, except where required for construction. Limit activity to crossing drainages rather than using the lengths of drainage courses for access.

(iv) Excess fill or construction waste shall not be dumped in washes.

(v) Vehicles or other equipment shall not be parked in washes or other drainages.

(vi) Overwatering shall be avoided in washes and other drainages.

(vii) Wildlife including species such as fox, coyote, snakes, etc. shall not be harassed. Harassment includes shooting, throwing rocks, etc.

(This is identical to Aesthetics PP 4.1-2(d) and Biological Resources PP 4.4-1(b).)

PP 4.8-3(c)

The Campus shall continue to implement dust control measures consistent with SCAQMD Rule 403—Fugitive Dust during the construction phases of new project development. The following actions are currently recommended to implement Rule 403 and have been quantified by the SCAQMD as being able to reduce dust generation between 30 and 85 percent depending on the source of the dust generation. The Campus shall implement these measures as necessary to reduce fugitive dust. Individual measures shall be specified in construction documents and require implementation by construction contractor:

- (i) Apply water and/or approved nontoxic chemical soil stabilizers according to manufacturer's specification to all inactive construction areas (previously graded areas that have been inactive for 10 or more days)
- (ii) Replace ground cover in disturbed areas as quickly as possible
- (iii) Enclose, cover, water twice daily, or apply approved chemical soil binders to exposed piles with 5 percent or greater silt content
- (iv) Water active grading sites at least twice daily
- (v) Suspend all excavating and grading operations when wind speeds (as instantaneous gusts) exceed 25 miles per hour over a 30-minute period
- (vi) All trucks hauling dirt, sand, soil, or other loose materials are to be covered or should maintain at least two feet of freeboard (i.e., minimum vertical distance between top of the load and the top of the trailer), in accordance with Section 23114 of the California Vehicle Code
- (vii) Sweep streets at the end of the day if visible soil material is carried over to adjacent roads
- (viii) Install wheel washers where vehicles enter and exit unpaved roads onto paved roads, or wash off trucks and any equipment leaving the site each trip
- (ix) Apply water three times daily or chemical soil stabilizers according to manufacturers' specifications to all unpaved parking or staging areas or unpaved road surfaces
- (x) Post and enforce traffic speed limits of 15 miles per hour or less on all unpaved roads

(This is identical to Air Quality PP 4.3-2(b) and Geology PP 4.6-2(a).)

PP 4.8-3(d):

In compliance with NPDES, the Campus would continue to implement Best Management Practices, as identified in the UCR Stormwater Management Plan (UCR 2003):

- (i) Public education and outreach on stormwater impacts
- (ii) Public involvement/participation

- (iii) Illicit discharge detection and elimination
- (iv) Pollution prevention/good housekeeping for facilities
- (v) Construction site stormwater runoff control
- (vi) Post-construction stormwater management in new development and redevelopment

(This is identical to Biological Resources PP 4.4-2(b) and Geology and Soils PP 4.6-2(b).)

PP 4.8-3(e) Prior to the time of design approval, the Campus will evaluate each specific project to determine if the project runoff would exceed the capacity of the existing storm drain system. If it is found that the capacity would be exceeded, one or more of the following components of the storm drain system would be implemented to minimize the occurrence of local flooding:

- (i) Multi-project stormwater detention basins
- (ii) Single-project detention basins
- (iii) Surface detention design
- (iv) Expansion or modification of the existing storm drain system
- (v) Installation of necessary outlet control facilities

PP 4.8-10 In the event of an emergency, including catastrophic failure of the California State Water Project pipeline, the Campus would implement the Emergency Operations Plan.

PP 4.9-1(a) The Campus shall provide design professionals with the 2007 Campus Design Guidelines and instructions to implement the guidelines, including those sections related to use of consistent scale and massing, compatible architectural style, complementary color palette, preservation of existing site features, and appropriate site and exterior lighting design.

(This is identical to Aesthetics PP 4.1-1.)

PP 4.9-1(b) The Campus shall continue to provide design professionals with the 2007 Campus Design Guidelines and instructions to develop project-specific landscape plans that are consistent with the Guidelines with respect to the selection of plants, retention of existing trees, and use of water conserving plants, where feasible.

(This is identical to Aesthetics PP 4.1-2(a).)

PP 4.9-1(c)	<p>The Campus shall continue to relocate, where feasible, mature “specimen” trees that would be removed as a result of construction activities on the campus.</p> <p>(This is identical to Aesthetics PP 4.1-2(b).)</p>
PP 4.10-1(a)	<p>UCR will incorporate the following siting design measures to reduce long-term noise impacts:</p> <ul style="list-style-type: none"> <li>(i) Truck access, parking area design, and air conditioning/refrigeration units will be designed and evaluated when planning specific individual new facilities to minimize the potential for noise impacts to adjacent developments.</li> <li>(ii) Building setbacks, building design and orientation will be used to reduce intrusive noise at sensitive student residential and educational building locations near main campus access routes, such as Blaine Street, Canyon Crest Drive, University Avenue, and Martin Luther King Jr. Boulevard. Noise walls may be advisable to screen existing and proposed facilities located near the I-215/SR-60 freeway.</li> <li>(iii) Adequate acoustic insulation would be added to residence halls to ensure that the interior Ldn would not exceed 45 dBA during the daytime and 40 dBA during the nighttime (10 P.M. to 7 A.M.) in rooms facing major streets.</li> <li>(iv) Potential noise impacts would be evaluated as part of the design review for all projects. If determined to be significant, mitigation measures would be identified and alternatives suggested. At a minimum, campus residence halls and student housing design would comply with Title 24, Part 2 of the California Administrative Code.</li> </ul>
PP 4.10-2	<p>The UCR campus shall limit the hours of exterior construction activities from 7:00 A.M. to 9:00 P.M. Monday through Friday and 8:00 A.M. to 6:00 P.M. on Saturday when necessary. Construction traffic shall follow transportation routes prescribed for all construction traffic to minimize the impact of this traffic (including noise impacts) on the surrounding community.</p>
PP 4.10-5(a)	<p>The Campus shall continue to provide on-campus housing to continue the evolution of UCR from a commuter to a residential campus.</p>
PP 4.10-5(b)	<p>The Campus shall continue to implement an Alternative Transportation program that facilitates and promotes the use of transit, carpools, vanpools, and bicycling.</p>
PP 4.10-6	<p>The Campus shall continue to shield all new stationary sources of noise that would be located in close proximity to noise-sensitive buildings and uses.</p>
PP 4.10-7(a)	<p>To the extent feasible, construction activities shall be limited to 7:00 A.M. to 9:00 P.M. Monday through Friday, 8:00 A.M. to 6:00 P.M. on Saturday, and no construction on Sunday and national holidays, as appropriate, in order to minimize disruption to area residences surrounding the campus and to on-campus uses that are sensitive to noise.</p>

- PP 4.10-7(b) The Campus shall continue to require by contract specifications that construction equipment be required to be muffled or otherwise shielded. Contracts shall specify that engine-driven equipment be fitted with appropriate noise mufflers.
- PP 4.10-7(c) The Campus shall continue to require that stationary construction equipment material and vehicle staging be placed to direct noise away from sensitive receptors.
- PP 4.10-7(d) The Campus shall continue to conduct regular meetings, as needed, with on campus constituents to provide advance notice of construction activities in order to coordinate these activities with the academic calendar, scheduled events, and other situations, as needed.
- PP 4.10-8 The Campus shall continue to conduct meetings, as needed, with off-campus constituents that are affected by campus construction to provide advance notice of construction activities and ensure that the mutual needs of the particular construction project and of those impacted by construction noise are met, to the extent feasible.
- PP 4.12-1(a) As development occurs, the following measures will be incorporated:
- (i) New structures would be designed with adequate fire protection features in compliance with State law and the requirements of the State Fire Marshal. Building designs would be reviewed by appropriate campus staff and government agencies.
  - (ii) Prior to implementation of individual projects, the adequacy of water supply and water pressure will be determined in order to ensure sufficient fire protection services.
  - (iii) Adequate access will be provided to within 50 feet of the main entrance of occupied buildings to accommodate emergency ambulance service.
  - (iv) Adequate access for fire apparatus will be provided within 50 feet of stand pipes and sprinkler outlets.
  - (v) Service roads, plazas, and pedestrian walks that may be used for fire or emergency vehicles will be constructed to withstand loads of up to 45,000 pounds.
  - (vi) As implementation of the LRDP occurs, campus fire prevention staffing needs would be assessed; increases in staffing would be determined through such needs assessments.
- PP 4.12-1(b) (i) Accident prevention features shall be reviewed and incorporated into new structures to minimize the need for emergency response from the City of Riverside.

(ii) Increased staffing levels for local fire agencies shall be encouraged to meet needs generated by LRDP project related on-campus population increases.

PP 4.12-2(a) As development under the LRDP occurs, the Campus will hire additional police officers and support staff as necessary to maintain an adequate level of service, staff, and equipment, and will expand the existing police facility when additional space is required.

PP 4.12-2(b) The Campus will continue to participate in the "UNET" program (for coordinated police response and staffing of a community service center), which provides law enforcement services in the vicinity of the campus, with equal participation of UCR and City police staffs.

PP 4.14-1 The Campus shall continue to implement a Transportation Demand Management program that meets or exceeds all trip reduction and AVR requirements of the SCAQMD. The TDM program may be subject to modification as new technologies are developed or alternate program elements are found to be more effective.

(This is identical to Air Quality PP 4.3-1.)

PP 4.14-2 The Campus will periodically assess construction schedules of major projects to determine the potential for overlapping construction activities to result in periods of heavy construction vehicle traffic on individual roadway segments, and adjust construction schedules, work hours, or access routes to the extent feasible to reduce construction-related traffic congestion.

PP 4.14-4 The Campus shall provide design professionals for roadway and parking improvements with the Campus Design Guidelines and instructions to implement those elements of the guidelines relevant to parking and roadway design.

PP 4.14-5 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, 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 segment, the Campus shall provide alternate routes and appropriate signage.

(This is identical to Hazards and Hazardous Materials PP 4.7-7(a).)

PP 4.14-6 For any construction-related closure of pedestrian routes, the Campus shall provide alternate routes and appropriate signage and provide curb cuts and street crossings to assure alternate routes are accessible.

PP 4.14-8 To maintain adequate access for emergency vehicles when construction projects would result in roadway closures, the Office of Design and Construction shall consult with the UCPD, EH&S, and the RFD to disclose roadway closures and identify alternative travel routes.

(This is identical to Hazards and Hazardous Materials PP 4.7-7(b).)

PP 4.15-1(a) Improvements to the campus water distribution system, including necessary pump capacity, will be made as required to serve new projects. Project-specific CEQA analysis of environmental effects that would occur prior to project-specific approval will consider the continued adequacy of the domestic/fire water systems, and no new development would occur without a demonstration that appropriate domestic/fire water supplies continue to be available.

PP 4.15-1(b) To further reduce the campus' impact on domestic water resources, to the extent feasible, UCR will

(i) Install hot water recirculation devices (to reduce water waste)

(ii) Continue to require all new construction to comply with applicable State laws requiring water-efficient plumbing fixtures, including but not limited to the

Health and Safety Code and Title 24, California Code of Regulations, Part 5 (California Plumbing Code)

(iii) Retrofit existing plumbing fixtures that do not meet current standards on a phased basis over time

(iv) Install recovery systems for losses attributable to existing and proposed steam and chilled-water systems

(v) Prohibit using water as a means of cleaning impervious surfaces

(vi) Install water-efficient irrigation equipment to local evaporation rates to maximize water savings for landscaping and retrofit existing systems over time

(This is identical to Hydrology PP 4.8-2(a).)

PP 4.15-1(c) The Campus shall promptly detect and repair leaks in water and irrigation pipes.

PP 4.15-1(d) The Campus shall avoid serving water at food service facilities except upon request.

PP 4.15-5 The Campus will continue to comply with all applicable water quality requirements established by the SARWQCB.

(This is identical to Hydrology PP 4.8-1.)





## MEMORANDUM

Date: May 1, 2018  
To: Lynn Kaufman & Shabnam Barati, Impact Sciences, Inc.  
From: Kara Hall and Sarah Brandenburg, Fehr & Peers  
Subject: **Dundee-Glasgow Project Trip Generation Assessment & Traffic Volume Comparison**

OC18-0569

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This memorandum documents a trip generation assessment and traffic volume comparison conducted by Fehr & Peers for the proposed Dundee Residence Hall-Glasgow Dining Hall project (Dundee-Glasgow project) located in the northern portion of East Campus on the University of California, Riverside (UCR) in Riverside County, California. The trip generation was estimated and reviewed to assess the project's potential to create transportation impacts. Traffic volumes collected in 2017 were then compared to the Cumulative Year (2020) traffic forecasts from UCR's Long Range Development Plan (LRDP) to verify that the Dundee-Glasgow project is within the scope of development covered in the LRDP's traffic impact analysis. A brief summary of the project is provided below followed by an overview of the project's travel characteristics and a comparison of the proposed project to the 2005 LRDP EIR as updated and augmented by the LRDP Amendment 2 EIR.

### Project Description

The Dundee-Glasgow project would replace a surface parking lot, referred to as Lot 22, and consist of the following uses:

- Two new residence hall buildings with approximately 820 new beds including ancillary support space;
- Approximately 12,000 square feet of living, learning, and community spaces, including academic/classroom space;



- A standalone dining facility with approximately 830 seats, including kitchen, storage, and support space; and
- A 17,750 square feet multifunctional student support service space that will replace an existing 500-seat dining facility.

Vehicular access would be provided by a driveway connecting to Linden Street and extending to the south along the eastern border of the project site. This driveway would provide emergency access, as well as service access. Campus policy does not allow parking permits to be sold to first-year residents; therefore, no parking would be provided on the project site.

## **Project Trip Generation**

On-campus student housing generates different trip patterns than general-purpose apartments due to students' unique schedules and their proximity to campus and other nearby destinations. Thus, trip generation rates for general-purpose apartments from the Institute of Transportation Engineers manual, which is the standard source for trip generation rates, are not appropriate for the Dundee-Glasgow project.

UCR's Long Range Development Plan (LRDP) EIR calculated trip generation rates for specific campus population groups based on an extensive traffic count data collection effort. Trip generation rates were developed for students that commute to campus as well as various on-campus housing uses including residence hall housing. The LRDP traffic impact study analyzed the effects of campus growth as well as the addition and reconfiguration of student housing and parking areas on the campus's internal roadway network as well as the external transportation system.

Since the trip generation rates were developed for the 2005 LRDP, first-year residents are no longer allowed to purchase permits for on-campus parking. Therefore, the trip generation rates from the LRDP traffic impact study for residence hall housing do not accurately reflect current travel characteristics for first-year residents. Applying the 2005 LRDP rates to the Dundee-Glasgow project would result in an overly conservative estimate of the project's trip generation. In addition, the 2005 LRDP EIR represented a worst-case scenario when it estimated future travel demand on campus because it applied these higher trip rates for on-campus residence halls when developing the Cumulative Year traffic forecasts for the traffic impact analysis.

The Dundee-Glasgow project will not increase student enrollment. Rather, the new residence hall buildings will provide 820 new beds on campus to accommodate students that would otherwise be



commuting to campus. Therefore, the project is expected to reduce the number of vehicle-trips during peak travel hours and throughout the day.

**Table 1** presents the trip generation rates and vehicle trip estimates for commuter students. Using the trip generation rates for commuter students documented in the LRDP, a Business as Usual scenario for estimated trips to campus was established. The Business as Usual scenario assumes that without the Dundee-Glasgow project, the 820 students that the facility will provide housing for would remain commuter students. Since these 820 students will now be residing on campus and will not be able to purchase a campus parking permit, the number of vehicle trips traveling to/from the UCR campus will decrease with the Dundee-Glasgow project.

**TABLE 1**  
**UC RIVERSIDE COMMUTER STUDENT**  
**TRIP GENERATION ESTIMATES**

Land Use	Size	Trip Generation Rates			Estimated Trip Generation		
		Daily Rate	AM Peak Hour	PM Peak Hour	Daily Trips	AM Peak Hour	PM Peak Hour
Business as Usual							
Commuter Students	820 students	1.11	0.08	0.06	909	66	52

*Source: UCR Trip Generation Rates & Refined UCR Trip Generation Rates, UC Riverside LRDP EIR Traffic Impact Study. March 2004.*

As no parking will be provided on-site and first-year students are not eligible to purchase parking permits, the residents of the Dundee-Glasgow facility will not generate any new vehicle trips. With the Dundee-Glasgow project in place, commuter student trips would decrease by approximately 900 daily trips, including by 65 AM peak hour trips and 50 PM peak hour trips. While a minimal number of trips associated with the site could occur from delivery or maintenance vehicles, those trips would be significantly smaller than the number of trips generated by the Business as Usual scenario. As the project's new dining facility will serve existing and new student residents who will already be on-campus, it is also not expected to generate any new vehicle-trips.



## Traffic Volumes Comparison

Cumulative traffic forecasts from the LRDP were also compared to traffic counts collected in 2017 to verify that Cumulative Year forecasts developed as part of the LRDP are still an accurate reflection of the growth approved through the adopted 2005 LRDP EIR as updated and augmented by the LRDP Amendment 2 EIR and that no further analysis is needed to determine potential traffic impacts from the project. The traffic forecasts from the LRDP Amendment 2 reflecting Year 2020 conditions were used in this comparison.

Traffic count data collected at two intersections near the proposed project site in November 2017 was used to compare the Cumulative Year LRDP forecasts to existing traffic patterns. The two intersections where traffic data was collected are:

1. W Linden Street & Canyon Crest Drive
2. W Linden Street & Aberdeen Drive

The comparison of AM and PM peak hour volume is summarized in **Table 2**. The table shows the difference in Cumulative Year forecasts from UCR's LRDP and traffic data collected in 2017.



**TABLE 2**  
**UC RIVERSIDE DUNDEE-GLASGOW PROJECT**  
**TRAFFIC VOLUMES COMPARISON SUMMARY**

Study Intersection	AM Peak Hour			PM Peak Hour		
	Total Volume	Inbound (to Campus)	Outbound (from Campus)	Total Volume	Inbound (to Campus)	Outbound (from Campus)
<b>Existing (2017)</b>						
1. W Linden Street & Canyon Crest Drive	1,019	358	358	1,434	573	399
2. W Linden Street & Aberdeen Drive	447	197	133	724	253	290
<b>LRDP (2020)</b>						
1. W Linden Street & Canyon Crest Drive	1,553	563	599	2,366	929	843
2. W Linden Street & Aberdeen Drive	573	275	116	795	294	295
<b>2020 LRDP Forecast – Existing 2017 Count</b>						
1. W Linden Street & Canyon Crest Drive	534	205	241	932	356	444
2. W Linden Street & Aberdeen Drive	126	78	<b>-17</b>	71	41	5
<b>% Difference</b>						
1. W Linden Street & Canyon Crest Drive	52%	57%	67%	65%	62%	111%
2. W Linden Street & Aberdeen Drive	28%	40%	<b>-13%</b>	10%	16%	2%

Note: **Bold** text indicates that data collected in 2017 exceeds forecasted volumes for 2020.

Source: UCR LRDP Amendment 2, 2011.

Based on the comparison documented in **Table 2**, growth at UCR has not exceed the traffic volumes analyzed as part of the LRDP Amendment 2. For the AM peak hour volumes, existing traffic data was found to be lower than projected 2020 traffic volumes with the exception of a minor increase in traffic leaving campus at the intersection of W. Linden Street & Aberdeen Drive. Traffic volumes during the PM peak hour were found to be lower in 2017 than the forecasted 2020 traffic volumes for both inbound and outbound trips and total volume.



## Conclusion

Fehr & Peers has found that the Dundee-Glasgow project is within the scope of development covered in the LRDP's traffic assessment and no further traffic analysis is required to determine potential traffic impacts associated with the proposed project. This finding is supported by the trip generation estimates, which indicate that without the proposed project an additional 820 commuter students would generate approximately 900 daily trips, 65 AM peak hour trips, and 50 PM peak hour trips to/from campus. With the Dundee-Glasgow project in place the commuter students will become resident students and will not be allowed to purchase campus parking permits. Therefore, any trips generated from the site from staff or deliveries will be negligible compared to the reduction in trips from converting commuter students to on-campus residents. The comparison of traffic data collected in 2017 to Cumulative Forecasts from the LRDP found that the LRDP 2020 forecasts are generally higher than 2017 traffic volumes, verifying that Dundee-Glasgow project is covered within the LRDP EIR transportation impact analysis.