CHAPTER 6.0
ALTERNATIVES

The California Environmental Quality Act requires an EIR to describe and evaluate a range of alternatives to the proposed project, or alternatives to the location of the proposed project. The purpose of the alternatives analysis is to explore ways that the objectives of the proposed project could be attained while reducing or avoiding significant environmental impacts of the project as proposed. This process is intended to foster informed decision-making and public participation in the environmental process.

This chapter evaluates alternatives to the Area 9/2 Housing Project and examines the potential environmental impacts associated with each alternative. Section 15126.6(a) of the CEQA Guidelines indicates that EIRs are required to evaluate a "range of reasonable alternatives to the project, or to the location of the project, which could feasibly attain the basic objectives of the project." Not every conceivable alternative must be addressed, nor do infeasible alternatives need to be considered. When addressing the feasibility of alternatives, Section 15126.6 of the CEQA Guidelines also states that the factors that may be taken into account are site suitability, economic viability, availability of infrastructure, other plans or regulatory limitations, and jurisdictional boundaries. The Guidelines require discussion of the No Project alternative and also state that the discussion of alternatives should focus on "alternatives capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives could impede to some degree the attainment of the project objectives or would be more costly" (Section 15166.6(b)). CEQA further directs that "the significant effects of the alternatives shall be discussed, but in less detail than the significant effects of the project as proposed" (Section 15126.6(d)).

The following sections discuss the project alternatives that were considered pursuant to CEQA. Based on the State CEQA Guidelines, the following project alternatives were identified to avoid or reduce significant project impacts and are discussed in Section 6.1. The environmentally superior alternative is presented in Section 6.2.

Table 6-1. Summary of Analysis for Alternatives to the 2007 LRDP

Issue Areas with Potential for Significant Impacts under the University Hills Area 9/2 Housing Project or its Alternatives	University Hills Area 9/2 Housing Project		Alternatives to the University Hills Area 9/2 Housing Project		
	Without Mitigation	With Mitigation	No Project	Reduced Development	Location on Campus Drive
4.1 Aesthetics					
Visual Character and Quality	S	LS	—	—	▼
Lighting and Glare	S	LS	—	—	▼
4.2 Air Quality					
Air Quality Standards					
Construction related impacts	S	SU	▼	▼	—
Cumulative impacts from CO, NO_x, VOCs, PM_{10}, and $PM_{2.5}$ emissions	S	SU	▼	▼	—
Cumulative impacts to sensitive receptors	S	SU	▼	▼	—
4.3 Biological Resources					
Sensitive and Special Status Animal Species	S	LS	▼	▼	▼
Riparian Habitat and Other Sensitive Natural Communities	S	LS	▼	▼	▼
Wetlands	S	LS	▼	▼	▼
4.4 Cultural Resources					
Archeological Resources	S	LS	▼	▼	▼
Paleontological Resources	S	LS	▼	▼	▼
4.6 Hazardous Materials					
Construction-related Road Closure Affecting Emergency Response	S	LS	▼	—	—
4.7 Hydrology and Water Quality					
Site Drainage and Hydrology	S	LS	▼	▼	—
Water Quality	S	LS	▼	▼	—
4.9 Noise					
Temporary Increases in Ambient Noise	S	LS	▼	▼	—
Excessive Ground borne Vibration or Noise	S	LS	▼	▼	—
4.14 Utilities, Service Systems, and Energy					
Impacts from New Storm Water Facilities	S	LS	▼	—	▼

▲ Alternative is likely to result in greater impacts to issue when compared to proposed project
— Alternative is likely to result in a similar impacts to issue when compared to proposed project
▼ Alternative is likely to result in less impacts to issue when compared to proposed project, however, impacts would still be significant before mitigation.
S Significant impact
LS Less than significant impact
SU Significant and unavoidable impact

6.1 ALTERNATIVES ANALYZED

This section considers the No Project alternative, a reduced project alternative and an alternate project location. For each alternative, a brief description is first presented, followed by a comparison of likely significant impacts compared to the proposed project, an identification of likely significant effects of the alternative different from those identified for the proposed project, and an assessment of the degree to which the alternative would meet the project objectives stated in Section 3.3 of this analysis.

6.1.1 NO PROJECT ALTERNATIVE

Under the No Project alternative, the Area 9/2 Housing Project would not be constructed, either on the proposed site or elsewhere. The project site would not be developed by ICHA for faculty/staff housing would remain in its present undeveloped condition

6.1.1.1 IMPACT ANALYSIS

The No Project alternative would have no impacts on the physical environment, direct, indirect, or cumulative. The No Project alternative, however, would have a new significant adverse impact on population and housing, since it would not be consistent the LRDP goal of providing adequate housing for future campus growth. Without the housing that would be created by the proposed project, UCI may not be able accommodate future growth, which would increase population and housing demand in the communities surrounding the campus.

6.1.1.2 ABILITY TO ACCOMPLISH PROJECT OBJECTIVES

Under the No Project alternative, none of the project objectives stated in Section 3.3 of this EIR would be accomplished. No additional faculty/staff housing would be constructed. Therefore the amount of housing available would not be expanded (#1), adverse impacts to local traffic and housing supply would not be decreased (#2), housing would not be maximized (#3), Area 9/2 would not be developed according to Faculty/Staff Housing land use designations (#4), and housing would not be created to accommodate future projected growth (#5). Therefore, none of the project objectives would be achieved under the No Project Alternative.

6.1.2 REDUCED DEVELOPMENT ALTERNATIVE

This alternative would reduce the number of homes constructed by 33 percent. All residential units would be constructed in the northern portion of the site. This reduces the project footprint and leaves an open space area between the proposed housing development and the southern project boundary. This open space area would connect with the open space system to west of the project site location.

6.1.2.1 IMPACT ANALYSIS

Aesthetics

The site is next to the proposed Community Center site (Area 9/1) and additional housing sites. The Area 9/2 Housing Project site would be visible to a large number of viewers that would occupy the adjacent housing or visitors to the community center. The development would also be visible from Bonita Canyon Drive; although, it would be less prominent than the proposed project due to the increased setback of this alternative from Bonita Canyon Drive.

Significant impacts related to aesthetics for this alternative could be reduced to below a level of significance by appropriate design measures and the implementation of similar mitigation measures as those that are proposed for the Area 9/2 Housing Project. Therefore, this alternative would have a similar impact on aesthetics as the proposed project.

Air Quality

This alternative requires less construction and would have fewer occupants, which would reduce emissions of air pollutants associated with construction and operation as compared to those emissions of the proposed Area 9/2 Housing Project. Therefore, this alternative would have less impact on air quality than the proposed project.

Biology

This alternative would set aside more open space than proposed project, and the open space would be connected to the open space system to the west of the project location. Compared to the proposed project, less vegetation and habitat would be removed with this alternative. Therefore, this alternative would have less of an impact on biology than the proposed project.

Cultural Resources

Construction of this alternative, similar to the proposed project, has the potential to disturb cultural resources. However, since construction required for this alternative is less that what is required for the proposed project, this alternative would be expected to have less of an impact on cultural resources.

Hazards and Hazardous Materials

Similar to the proposed project, construction of this alternative may result in temporary road closures or detours that could require alternate emergency response or evacuation routes. However, notification of emergency response providers (Mitigation Measure Haz-1) would reduce impact to below a significant level, as it does for the proposed project. Therefore, this alternative would have the same impact on hazards and hazardous materials as the proposed project.

Hydrology and Water Quality

This alternative would alter drainage patterns, although, similar to the proposed project, Mitigation Measure Hyd-1A would be expected to reduce alternative impacts to below a significant level. Additionally construction of this alternative could generate pollutants that would violate waste discharge requirements. However, since the scope of construction is less than the proposed project, the area impacted and the amount of new impervious surface would be less, pollutants generated by the alternative would be expected to be less that those generated by the proposed project. Therefore, this alternative would have less impact on hydrology and water quality than the proposed project.

Noise

Construction of this alternative could increase ambient noise levels temporarily, similar to the proposed project. However, because the scope of construction for this alternative is less than that for the proposed project, it can be assumed that noise impacts would be less. Similarly, because fewer homes will be constructed, it can be assumed that noise associated with operation, primarily traffic in and out of the site, would be less under this alternative than with implementation of the proposed project.

Transportation, Traffic, and Parking

Because this alternative constructs fewer housing units, fewer trips in and out of the project site would be generated under this alternative. Therefore, this alternative would have less impact on traffic than the proposed project.

Utilities, Service Systems, and Energy

Like the proposed project, implementation of this alternative would potentially require the construction or expansion of stormwater drainage facilities because it increases impervious surfaces. However, Mitigation Measure Hyd-1A would be expected to reduce impacts to below a significant level for this alternative as well. Therefore, this alternative would have the same impact on utilities, service systems, and energy as the proposed project.

6.1.2.2 Ability to Accomplish Project Objectives

This alternative would fulfill project objectives #1, #2, and #4, but not objectives #3, and #5, regarding the number of homes constructed to meet future demand. The project would expand the supply of affordable, on-campus housing (#1), would reduce impacts on local traffic and housing supply (#2), and would be consistent with the Faculty/Staff Housing land use designation (#4). However, by constructing fewer homes, this alternative does not maximize the amount of housing UCI could offer (#3), and as a result, would may not provide adequate housing to serve projected future growth (#5). Therefore, only three of the five project objectives would be achieved under the Reduced Development Alternative.

6.1.3 Alternative Location On Campus Drive

This alternative would develop the entire proposed project at an alternative location, located on existing Parking Lot 1A adjacent to Campus Drive between East Peltason, Adobe Circle North, and California Avenue. The location of the alternative site is depicted on Figure 6-1.

The alternative site is 10 acres in size, so it could accommodate the structures proposed for the original site, on which residential lots and associated roadways would have totaled 10 acres. However, this site is currently designated as Student Housing in the LRDP. Developing this site as faculty/staff housing would entail redesignating the site for faculty housing resulting in less land area available for student housing. To fully implement the LRDP student housing program future student housing projects would require higher densities.

6.1.3.1 Impact Analysis

Aesthetics

Because the alternative site is currently developed as a surface parking lot, construction of the project here would result in a significant change to the visual character in the area and may contribute a substantial new source of lighting or glare. As the area is adjacent to on and off-site housing that would have a similar visual character, this alternative would have less aesthetic impact than the proposed project which would be constructed on an undeveloped hillside.

Air Quality

This alternative would require a similar scope of construction, and would therefore have similar impacts associated with construction emissions. Since this alternative would construct the same number of housing units as the proposed project, operational impacts would be the same as well. Therefore, this alternative would have the same impact on air quality as the proposed project.

Biology

Since this alternative site has already been developed, this alternative would not result in any loss of habitat. Therefore, this alternative would have less impact on biology than the proposed project.

Cultural Resources

Since this alternative site has already been developed, redevelopment of the site would not be expected to result in new impacts to potential cultural resources on the site. Therefore, this alternative would have less impact on cultural resources than the proposed project.

Hazards and Hazardous Materials

Similar to the proposed project, construction of this alternative may result in temporary road closures or detours that could require alternate emergency response or evacuation routes. However, notification of emergency response providers (Mitigation Measure Haz-1) would reduce impact to below a significant level, as it does for the proposed project. Therefore, this alternative would have the same impact on hazards and hazardous material as the proposed project.

Hydrology and Water Quality

Construction of the project on the alternative site would not significantly alter drainage patterns because the alternative site has already been developed as a surface parking lot. Therefore, impacts to hydrology and drainage patterns would be less than the proposed project. Construction of this alternative could generate pollutants that would violate waste discharge requirements. However, since construction required would be the same as the proposed project, impacts on water quality would be the same.

Noise

Construction of this alternative could increase ambient noise levels temporarily, similar to the proposed project. Operational noise would also be similar because the same number of housing units would be constructed. Therefore, potentially significant noise impacts would be the same with this alternative as the proposed project.

Population and Housing

The construction of the project on this alternative site would displace an existing parking lot and would utilize land planned for student housing, while the proposed project does not. Therefore, this alternative has similar impacts to population and housing as the proposed project

Transportation, Traffic, and Parking

Because this alternative provides the same number of housing units, the same amount of additional traffic would be generated. The existing parking spaces on site would be replaced with existing or new parking spaces in other surface parking lots in the vicinity resulting in no net change in campus trip generation and minor changes to campus trip distribution. Therefore, this alternative would have the same impact on traffic as the proposed project.

Utilities, Service Systems, and Energy

This alternative would not increase impervious surfaces because the site has already been developed, therefore it would not increase the amount of stormwater discharged from the project area. Therefore, this alternative would have less impact on storm water facilities than the proposed project.

6.1.3.2 ABILITY TO ACCOMPLISH PROJECT OBJECTIVES

This alternative would fulfill project objectives #1, #2, but not objectives #3, #4, or #5. This alternative would provide additional housing (#1) and reduce UCI's impact on local traffic and housing supply (#2). However, this alternative would not result in a cohesive faculty/staff community in residence on the campus (#4) as this site is remote from existing University Hills neighborhoods. In addition as this project displaces future student housing it may impact UCI's ability to maximize on campus housing to serve future campus growth as described in objectives #3 and #4. Therefore, the Alternate Location Alternative would achieve two of the five project objectives.

6.2 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

Based on an evaluation of conditions as they are currently known, the Reduced Development Alternative is environmentally superior to the proposed project. Because less construction would be required and a smaller footprint would be developed, this alternative has less impact on air quality, biology, cultural resources, hydrology, noise, and traffic. However, impacts for each of these topic areas would still be expected to occur if the alternative were be implemented, only to a lesser degree. Additionally, this alternative does not meet all project objectives regarding maximizing housing availability and providing adequate housing for UCI's projected growth. With no other feasible environmental alternative available which provides substantially less environmental impact while still meeting project objectives, the proposed project is best suited to provide Faculty/Staff Housing for ICHA.

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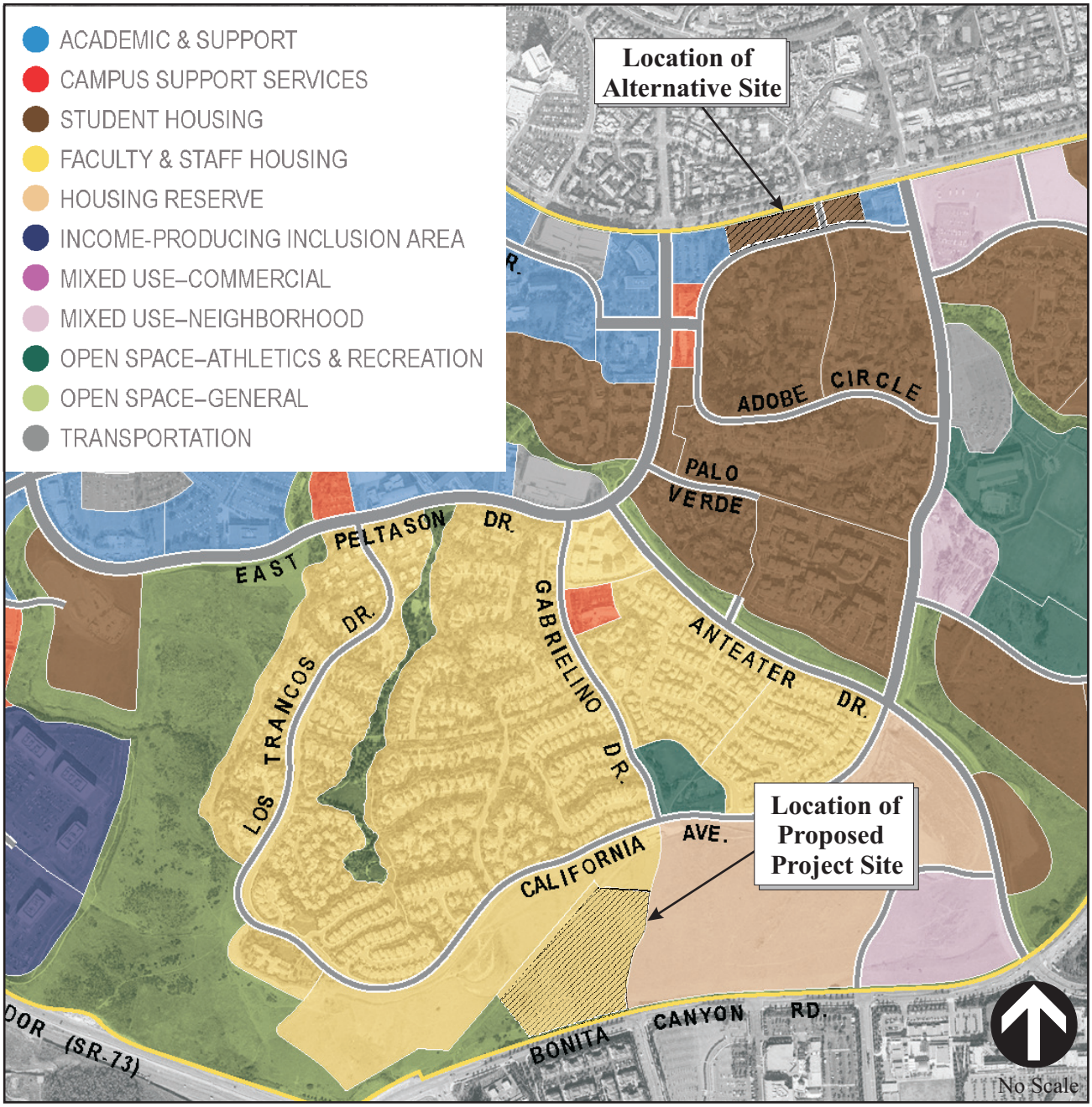

SOURCE: University of California, Irvine, 2007

ALTERNATIVE LOCATION ON CAMPUS DRIVE **FIGURE 6-1**