CHAPTER 5
ALTERNATIVES

5.1 Introduction

Alternatives to the Master Plan Update have been considered in this EIR to explore potential means to mitigate or avoid the significant environmental impacts associated with implementation of the Master Plan Update while still achieving the primary objectives of the project. Pursuant to Section 15126.6(a) of the CEQA Guidelines, an EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project and evaluate the comparative merits of the alternatives. The CEQA Guidelines also state that an EIR need not consider every conceivable alternative or consider alternatives that are infeasible. Under CEQA, factors that can determine feasibility are site suitability, economic limitations, availability of infrastructure, consistency with applicable plans, regulatory limitations, and jurisdictional boundaries. An EIR should present a reasonable range of feasible alternatives that will support informed decision making and public participation regarding the potential environmental consequences of a project and possible means to address those consequences. An EIR need not consider alternatives whose effects cannot be reasonably ascertained and whose implementation is remote or speculative.

The alternatives analysis must also include a comparative evaluation of the No Project Alternative in accordance with Section 15126.6(e) of the CEQA Guidelines to determine the consequences of not implementing the project. Through the identification, evaluation, and comparison of alternatives, the relative advantages and disadvantages of each alternative compared with the proposed Master Plan Update can be determined.

No public or agency comments related to alternatives were received in response to the NOP. For a complete list of public comments received during the public scoping period, refer to Appendix A.

5.1.1 Project Objectives

The following objectives have been identified to support the underlying purpose of the Master Plan Update to support and advance the CSULB mission, vision, and values by guiding the physical development of the campus and to accommodate changes in enrollment through the horizon year 2035:

1. Support and advance the University's educational mission by guiding the physical development of the campus to accommodate gradual student enrollment growth to approximately 36,000 FTES in 2035, including approximately 33,000 FTES on campus and 3,000 FTES off-campus.

2. Optimize the existing campus space and minimize net new gross square footage.

3. Renovate or demolish buildings that are inefficient in terms of operation, maintenance, and user comfort due to age and that have critical deferred maintenance issues.

4. Replace demolished buildings with higher density, mixed-use buildings that consolidate and integrate colleges and student support spaces.

5. Support an expanded residential environment by constructing new or replacement

buildings or renovating existing student housing villages to:

- Increase student housing capacity by approximately 1,600 beds to enhance student experience, support, and wellness to support student success and retention;
- Include a more diverse mix of housing typologies for students (pod configurations, suites, and apartments);
- Provide high quality and affordable options with an equitable mix of offerings for students; and
- Include common spaces, active outdoor spaces, and space for student services.

6. Strengthen the physical connection between the two housing villages on the CSULB main campus.
7. Preserve space in the campus core for academic uses and student-focused facilities and programming to allow for greater integration of student residents.
8. Retain and recruit high-quality faculty and staff by providing on-campus affordable housing options.
9. Provide new faculty and staff housing at the perimeter of the campus to allow ease of access for faculty and staff who maintain social connections and conduct other daily activities off-campus, such as grocery shopping, dropping children off at school, and other family functions.
10. Provide mobility enhancements for safe and accessible circulation around the campus for pedestrians and bicyclists to help the campus become less reliant on vehicular mobility.
11. Provide defined campus gateways and edges with increased wayfinding and signage to highlight resources for the surrounding community by designating pathways to connect neighboring communities through the campus.
12. Provide high-quality athletic facilities and optimize existing recreational fields by better utilizing land area and improving connections to and through the sports precinct facilities.

5.2 Alternatives Development Process

In order to fulfill the project objectives, several alternatives to the proposed Master Plan Update have been considered, including alternate designs and reducing the amount of development proposed. Additionally, Section 15126.6(f)(2) of the CEQA Guidelines requires that an EIR consider alternative locations to the project site. Several alternative locations have been considered, including alternative site plans, off-campus development, an alternate location for the proposed Faculty and Staff Housing project, and alternate locations for proposed near- and mid-term development projects that would impact individually eligible historical resources and within archaeologically sensitive areas.

The range of alternatives has been refined through the Master Planning process to determine those alternatives that could be eliminated from further consideration and those alternatives that would be carried forward for detailed analysis in this EIR. A discussion of the alternatives that were considered but ultimately dismissed and the reasons for their elimination are provided in

Section 5.3 below. Section 5.4 summarizes the two alternatives that have been carried forward for detailed analysis in this EIR.

5.2.1 Summary of Master Plan Update Impacts

Based on the environmental analysis conducted for the proposed Master Plan Update contained in Chapter 3, Environmental Setting, Impacts, and Mitigation Measures of this EIR, potentially significant impacts that have been determined to require mitigation have been identified for:

- Aesthetics – construction lighting and proposed new permanent lighting at the Jack Rose Track/Commencement Facilities;
- Biological resources – construction impacts to nesting birds and roosting bats, regulatory review for improvements over and adjacent to Bouton Creek;
- Cultural resources – construction-related impacts to historic resources and archaeological resources;
- Geology, soils, and paleontological resources – construction-related impacts to paleontological resources;
- Noise – construction noise and crowd noise during events held at the proposed Jack Rose Track/Commencement Facilities; and
- Tribal cultural resources – construction-related impacts to potential tribal cultural resources.

The EIR identifies less than significant impacts for air quality, greenhouse gas emissions, hydrology and water quality, population and housing, public services and recreation, transportation, and utilities and energy.

No significant and unavoidable impacts have been identified for implementation of the Master Plan Update.

5.3 Alternatives Considered but Dismissed from Detailed Analysis

Section 15126.6(c) of the CEQA Guidelines requires that an EIR identify any alternatives that were considered by the lead agency but were rejected as infeasible during the scoping process and briefly explain the reasons underlying the lead agency's determination. Among factors that may be used to eliminate alternatives from detailed consideration in the EIR are: (1) failure to meet most of the basic project objectives, (2) infeasibility, and (3) inability to avoid significant environmental impacts. The following alternatives were eliminated from further consideration in the EIR.

5.3.1 Reduced Development Alternative

The Master Planning process included an assessment of the current and future needs of the university in terms of space planning, programming, on-campus housing availability, open space and landscaping, and mobility and circulation to determine the improvements that would be needed to accommodate the projected future student enrollment of approximately 36,000 FTES and a total campus population of 38,165, which also includes FTE employees, auxiliary employees, and faculty/staff household members through the horizon year. Iterations of the proposed Master Plan Update with a reduced overall amount of development were considered throughout the planning process. However, in the course of refining the Master Plan, the programming needs of the various divisions that comprise the university and the need to upgrade

outdated facilities were recognized and prioritized. Thus, targeted improvements were identified that would support the future projected campus population in a way that limits the net new gross square footage developed by using options such as renovation and replacement of existing facilities. As such, the proposed Master Plan Update reflects that balance, and reducing development would not allow for the improvements necessary to accommodate changes in enrollment and campus population through the horizon year. Therefore, this alternative has been eliminated from further consideration.

5.3.2 Alternative Site Plans

Throughout the Master Planning process, several site plan configurations were considered for the proposed facilities and improvements within the CSULB property boundaries that would accommodate the gradual student enrollment growth to approximately 36,000 FTES and total campus population growth to 38,165, which also includes FTE employees, auxiliary employees, and faculty/staff household members, by 2035. These various configurations would not reduce the overall amount of planned development at the CSULB main campus or Beachside Village property. Improvements have been identified based on a need to renovate, replace, or develop new facilities, and development would occur in generally the same locations as identified in the proposed Master Plan Update. Additionally, several proposed improvements under the Master Plan Update are specific to the type of programming at that particular site, and alternative site plans may not accommodate the programming needs of a project. Furthermore, the site planning presented in the Master Plan Update considers known and potentially sensitive resources within the CSULB property, and every effort has been made to identify facility and development locations at sites that would avoid sensitive resources, such as biological resources, historical resources, archaeological resources, and tribal cultural resources. As such, slight variations to individual site plans for proposed improvements would not avoid or substantially lessen any of the potentially significant impacts associated with implementation of the proposed Master Plan Update, and the same level of development and campus population growth would occur regardless of the site plan configuration. Therefore, alternative site plans are not evaluated further in this EIR.

5.3.3 Alternate Location – Off-Site Development Alternative

As discussed throughout this EIR, CSULB property comprises the CSULB main campus and the Beachside Village property. One of the primary objectives of the Master Plan Update is to optimize the existing campus space and minimize net new gross square footage. Thus, the proposed improvements under the Master Plan Update reflect the focus on renovation and replacement of existing facilities, rather than construction of new facilities. Additionally, due to their age, many of the facilities at the main campus have outdated infrastructure, which results in operational inefficiencies, such as plumbing, HVAC costs, and poor accessibility and circulation. Acquiring new property outside of the existing CSULB property boundaries would not eliminate the need to renovate and modernize the existing facilities.

CSULB does not own or lease any other property that could be used to develop the facility improvements proposed under the Master Plan Update. Additionally, CSULB is located in the fully developed urban area of the City of Long Beach and purchasing or otherwise acquiring off-site property may not be reasonably financially or logistically feasible. Any off-site property would require the development of a new satellite campus or off-campus center detached from the main campus. Large vacant parcels are not readily available in the surrounding area. As such, the Off-Site Development Alternative would likely require the purchase of several adjoining parcels. Any purchased or acquired parcels near the CSULB main campus would require the demolition of existing uses and construction of CSULB facilities. Additionally, operation of satellite campus or off-campus center facilities would require increases in faculty and staff, operating costs

associated with maintaining multiple properties, which may result in increases to other operational parameters, such as vehicular travel trips, air quality and GHG emissions, and utility usage. As discussed, the CSULB main campus and Beachside Village property are surrounded by residential neighborhoods and neighborhood-serving commercial uses. Construction and operation of a new satellite campus would potentially result in increased impacts on adjacent residential properties, as compared to the proposed Master Plan Update, the implementation of which would occur on existing CSULB property. Furthermore, the Off-Site Development Alternative would not support or achieve most of the project objectives. Therefore, this alternative has been eliminated from further consideration.

5.3.4 Alternate Location – 7th Street Faculty and Staff Housing

Under the proposed Master Plan Update, the Faculty and Staff Housing project would be located at the perimeter of the CSULB main campus near the northwest corner of State University Drive and Palo Verde Avenue. An alternate location was considered for this project near 7th Street and West Campus Drive at the proposed location of the New 7th Street Community Outreach Facility. 7th Street is a highly traveled six-lane roadway that constitutes the southern boundary of the CSULB main campus. At this location, 7th Street is connected to the western terminus of SR-22, which provides regional access to CSULB and the surrounding area. As such, in the course of identifying improvements and development projects to be implemented under the Master Plan, it was determined that the 7th Street site would be better suited for a community use, rather than campus housing. Therefore, this alternative has been eliminated from further consideration.

5.3.5 Alternate Locations – Theatre Arts Renovation Project and University Student Union Renovation/Addition & Cafeteria Replacement Project

As discussed in Section 3.4, Cultural Resources, the University Student Union (USU) and the Theatre Arts building have been identified as historical resources that are potentially eligible for listing on the National Register of Historic Places and the California Register of Historical Resources, as well as contributors to the potentially eligible 27-building Upper Campus historic district. As such, the proposed USU Renovation/Addition and Cafeteria Replacement project and the Theatre Arts Renovation project have the potential to result in impacts to these historical resources. However, alternate sites for these projects were eliminated from detailed evaluation because they involve site-specific renovations to existing purpose-built facilities that remain useful for and suited to their intended programmatic purposes, which would be infeasible to relocate because of their specialized nature (e.g., programming at the Theatre Arts building requires a stage and associated seating, which already exist in the building). Relocating this programming to other sites within the boundaries of the CSULB main campus would not eliminate the need to renovate and modernize the existing buildings to accommodate other programs and could also require the construction of new buildings and net new square footage, which could increase impacts on other environmental resources. Furthermore, the Theater Arts programming and USU and Cafeteria are centrally located within the upper campus in proximity to related programming, academic facilities, and student services. Thus, relocating these facilities elsewhere on the main campus would result in fragmented programming. As a result, it was determined that identifying alternate sites for Theater Arts programming and cafeteria uses would not avoid or substantially lessen any of the potentially significant impacts to historical resources associated with implementation of the proposed Master Plan Update.

Additionally, feasible mitigation measures HR-A through HR-F have been identified to reduce all potentially significant impacts to historical resources to less than significant. Mitigation Measures HR-A through HR-F comprehensively address initial project review by a qualified architectural historian for individually eligible historical resources; development of an Adaptive Mitigation

Management Program for the historic district; Historic American Building Survey Level II documentation; preparation and implementation of an interpretive program; salvage of character-defining features for educational and interpretive purposes or reuse; and project review by a qualified architectural historian during construction. Therefore, this alternative has been eliminated from further consideration.

5.3.6 Alternate Location – Known and Potentially Eligible Archaeological Resources

As discussed in Section 3.4, Cultural Resources, there is one known archaeological resource and several potentially eligible archaeological resources within the CSULB main campus. Proposed improvements and projects to be implemented under the Master Plan Update within the boundaries of the known archaeological resource include the Improved Campus Entrance at Bellflower Boulevard, which includes replacement of existing pavement, changing out the letters on the existing entrance sign, and landscaping updates such as planting and replacement of trees; Pedestrian and Bike Lane Improvements, which includes replacement of existing pavement; and the Hillside College Renovations/Addition project, which would include 10,000 square feet of additions/improvements and interior renovations. Construction activities in the areas containing archaeological resources could result in significant impacts. However, alternate sites for development of the Improved Campus Entrance at Bellflower Boulevard, Pedestrian and Bike Lane Improvements, and the Hillside College Renovations/Addition project were not considered because these are site-specific improvements that would occur at existing facilities and do not represent development of any new facilities that could be located elsewhere within the boundaries of the CSULB main campus. Both the Improved Entrance at Bellflower Boulevard and the Pedestrian and Bike Lane Improvements would require minor ground-disturbing activities associated with replacement paving that would not disturb materials below the existing right-of-way. The primary construction activities associated with the Hillside College Renovations/Addition would be interior renovations rather than ground-disturbing activities.

Additionally, projects that would be implemented under the Master Plan Update that would overlap with the potentially eligible archaeological resources include the Aquatics Center and Pool Renovation, Engineering Replacement Building, Faculty and Staff Housing, Jack Rose Track/Commencement Facilities, and Baseball Field Conversion to Multi-Use Field. The proposed Aquatics Center and Pool Renovation, Jack Rose Track/Commencement Facilities, and Baseball Field Conversion to Multi-Use include renovations at existing facilities that could not be located elsewhere within the main campus. While the Engineering Replacement Building and Faculty and Staff Housing projects represent new facilities, they would be constructed on sites containing existing facilities. The Engineering Replacement Building would demolish the existing EN2, EN3, and EN4 buildings and consolidate the programming and uses in those buildings into a new, larger building at the same site. Considering an alternate site for the Engineering Replacement Building would place the proposed programming farther from related College of Engineering buildings and programs on the main campus, which would interfere with the educational curriculum of the Engineering department, rendering an alternate site infeasible. An alternate site for the Faculty and Staff Housing project was considered but rejected from further consideration, as discussed in Section 5.3.4 above.

The required mitigation includes consultation with a qualified archaeologist to identify avoidance or minimization measures to ensure that development under the Master Plan Update would not impact cultural resources. The measures comprehensively address initial project review; approval of designated staging and stockpiling areas for individual development projects; Worker Environmental Awareness Programs; treatment of unanticipated finds of human remains; extended Phase I investigations; Construction Monitoring and Discovery Plans for projects within

or in close proximity to known and potentially eligible archaeological sites; conduct of archaeological monitoring; evaluation of unanticipated finds and Phase II testing; Treatment Plans; Phase III Data Recovery Plans; reporting; and curation and final disposition of archaeological materials. All potentially significant impacts to archaeological resources would be mitigated to less than significant levels with implementation of Mitigation Measures AR-A through AR-K.

Therefore, as many of the proposed improvements within archaeological resources-sensitive areas are proposed at existing facilities and/or would not require major ground-disturbing activities, and feasible mitigation has been identified to reduce all potentially significant impacts to less than significant, this alternative has been eliminated from further consideration.

5.4 Alternatives Carried Forward for Detailed Analysis

Two alternatives have been carried forward for detailed analysis in this EIR, including the "No Project Alternative," as required by CEQA. In accordance with CEQA Guidelines Section 15126.6(d), each alternative has been evaluated in sufficient detail to determine whether the overall environmental impacts of the alternatives would be less than, similar to, or greater than the corresponding impacts identified for the proposed Master Plan Update. The alternatives carried forward for detailed analysis in this chapter include:

- No Project Alternative: This alternative considers limited continued buildout of the campus in accordance with the approved 2008 Master Plan.
- Faculty and Staff Housing Design Alternative: This alternative was selected for its potential to reduce or avoid the significant but mitigable impacts identified for the Master Plan Update related to aesthetics; biological resources; cultural resources; geology, soils, and paleontological resources; noise; and tribal cultural resources.
- Reduced Development Footprint Alternative: This alternative would eliminate proposed near-term development projects that partially overlap significant or potentially significant archaeological resources. The alternative was chosen for its potential to avoid significant but mitigable impacts identified for the Master Plan Update related to archaeological resources.

5.4.1 No Project Alternative

Pursuant to CEQA Guidelines Section 15126.6(e)(3)(A), when the project is the revision of an existing land use plan, the No Project Alternative is defined as the continuation of the existing plan into the future. Under this alternative, the proposed Master Plan Update would not be adopted and the proposed improvements to CSULB facilities and individual development projects identified to accommodate the gradual student enrollment growth of approximately 36,000 FTES and overall campus population of 38,165, which includes FTE employees, auxiliary employees, and faculty/staff household members by 2035 would not be implemented. The renovation of existing facilities and the optimization of the physical assets on campus proposed under the Master Plan Update would not occur under this alternative. Instead, CSULB would continue to operate in accordance with the 2008 Master Plan, as amended most recently in July 2020, which includes proposed improvements to campus facilities to accommodate up to 31,000 FTES. Additionally, any new mitigation measures identified to avoid potentially significant impacts under the proposed Master Plan Update would not be implemented and mitigation applicable to development under the No Project Alternative would be limited to those measures already adopted in conjunction with the 2008 Campus Master Plan EIR and 2020 Supplemental EIR.

Under the No Project Alternative, the improvements and facilities under the 2008 Master Plan that have not yet been constructed could be implemented as proposed under the existing plan (refer to Figure 2-3, Existing Campus Master Plan, in Chapter 2, Project Description). Improvements proposed under the 2008 Master Plan that have not yet been developed include the following:

- a new soccer field complex at the George Allen Field in the North District which includes bleacher seating to accommodate approximately 1,000 spectators on the east side of the field, locker rooms, ticket booths, public restrooms, and food concessions;
- a new parking structure at the location of the existing surface Parking Lot G6 north of the Bouton Creek channel in the West District; and
- the addition of the remaining 925 beds of the originally proposed 2,000 student housing beds, which would be provided in existing student housing buildings at the CSULB main campus with no new housing buildings being constructed.

Therefore, the following impact analysis for the No Project Alternative considers the implementation of these improvements (new soccer field complex, new parking structure, and the addition of 925 beds).

Additionally, if the proposed Master Plan Update is not implemented, other new development projects proposed in future would require individual environmental review and would not be evaluated as part of a comprehensive plan.

Impact Analysis

Aesthetics

As discussed in Section 3.1, Aesthetics, nighttime construction activities associated with development under the Master Plan Update would potentially result in spillover lighting on adjacent residential uses, requiring implementation of mitigation measure AES-A to reduce impacts to less than significant. The 2008 Master Plan EIR did not identify any mitigation measures for nighttime construction lighting. The three projects that would be implemented under the No Project Alternative include a new soccer field complex, a new parking structure, and the addition of 925 beds provided in existing student housing buildings at the CSULB main campus. All three projects would be located on the interior of the main campus. As such, all construction under the No Project Alternative would occur within the interior of the CSULB main campus away from off-site sensitive residential properties. As such, this alternative would not have the potential to result in spillover light and glare impacts if nighttime construction activities are required. Therefore, light and glare impacts from construction under the No Project Alternative would be reduced as compared to the proposed Master Plan Update.

Under the Master Plan Update, the proposed Jack Rose Track/Commencement Facilities improvements would introduce new permanent flood lighting, requiring implementation of Mitigation Measure AES-B to reduce potential light and glare impacts during operation to less than significant. The No Project Alternative would not construct the Jack Rose Track/Commencement Facilities project and would not require the associated operational lighting mitigation. The 2008 Master Plan included the installation of new field lighting at the George Allen Soccer Field on the CSULB main campus, which has been installed and is currently operational. As such, no new field lighting would be installed under the No Project Alternative. All other operational lighting, including security lighting, parking lighting, and interior building lighting installed under the No Project Alternative would be located on the interior of the CSULB main campus and would not be visible from off-site residential properties.

Additionally, similar to the proposed Master Plan Update, all development on the campus under the No Project Alternative would be required to comply with the applicable development standards and regulations for exterior lighting under the California Building Standards Code, the CSU Outdoor Lighting Design Guide, and the CALGreen-mandated BUG ratings for exterior lighting related to light and glare. Therefore, light and glare impacts would be less than significant during operation under the No Project Alternative. Because the No Project Alternative would avoid the potentially significant impact associated with the new permanent lighting at the Jack Rose Track/Commencement Facilities, impacts would be reduced as compared to the proposed Master Plan Update.

Air Quality

As discussed in Section 3.2, Air Quality, implementation of the Master Plan Update would result in less than significant impacts related to air quality and would not require mitigation. The 2008 Master Plan EIR identified significant and unavoidable air quality impacts associated with peak construction activity and operational air quality emissions projected for the year 2020, the horizon year identified for the 2008 Master Plan. As shown in Table 3.2-9 in Section 3.2, Air Quality, air quality emissions were calculated for the proposed Master Plan Update for the baseline year of 2019 and for the buildout horizon year of 2035. The net change in operational air quality emissions indicates that none of the SCAQMD thresholds for criteria pollutants would be exceeded with implementation of the Master Plan Update.

Construction of new facilities under the No Project Alternative would be limited to a new soccer field complex and a new parking structure. New student beds added under the No Project Alternative would be provided in existing student housing buildings at the CSULB main campus and no new housing buildings would be constructed. Although the 2008 Master Plan EIR identified significant and unavoidable air quality impacts during construction, the intensity of construction analyzed was greater than the two construction projects (the new soccer field complex and new parking structure) that would be developed under the No Project Alternative. As such, construction emissions under this alternative would not reach the peak emissions identified in the 2008 Master Plan EIR. Additionally, the analysis of air quality emissions in the 2008 Master Plan EIR used the Ambient Air Quality Standards and emissions factors in effect at that time, neither of which are currently applicable. The two development projects under this alternative would be constructed during the planning horizon through 2035. As discussed in Section 3.2, Air Quality, of this EIR, USEPA Tier 4 emissions standards require the use of construction equipment with low emission factors and high energy efficiency. The use of such equipment and ongoing compliance with current regulatory requirements would be applicable to construction activities under this alternative and would minimize construction-related emissions. As less development would occur under this alternative, construction air quality emissions would be reduced as compared to the Master Plan Update. Therefore, construction air quality impacts would be reduced under the No Project Alternative as compared to the Master Plan Update.

The 2008 Master Plan EIR identified significant and unavoidable operational air quality impacts. Operational air quality emissions under the No Project Alternative would be associated with mobile sources (i.e., vehicle trips) and stationary sources, such as energy used during operation of the ancillary facilities developed for the soccer field complex and operation of the parking structure. The 925 new student beds added under this alternative would be provided in existing student housing buildings. As these buildings are already operating, no significant increase in air quality emissions would be associated with the addition of new student beds under this alternative. Operational vehicle trip generation is based on the total campus population. While development under the No Project Alternative would accommodate up to 31,000 FTES, it is

anticipated that the gradual student enrollment growth at CSULB would continue to grow at the 1% anticipated annual growth per the CSU Chancellor's Office beyond the 2020 horizon year identified in the 2008 Master Plan. Additionally, it is anticipated that faculty, staff, and employees would also gradually increase accordingly. Therefore, vehicle trip generation would be nominally different and would result in similar mobile source air quality emissions. Additionally, operation of the new ancillary facilities at the new soccer field complex and operation of the new parking structure under this alternative would require energy usage, which contributes to stationary source emissions. The 2008 Master Plan EIR identified mitigation requiring CSULB to exceed Title 24 energy saving requirements by 15 percent or more on all new or renovation projects. CSULB already exceeds Title 24 energy efficiency requirements, which would be incorporated into the projects developed under this alternative. However, with less new development at the CSULB main campus, aged or outdated utility infrastructure at existing facilities would remain in place and updates to enhance utility and energy efficiency, which would also result in decreased air quality emissions, would not be implemented. Therefore, stationary source emissions under the No Project Alternative would be increased as compared to the Master Plan Update. Therefore, operational air quality impacts under the No Project Alternative would be greater than under the Master Plan Update.

Biological Resources

As discussed in Section 3.3, Biological Resources, removal of vegetation and structures during construction activities associated with implementation of the proposed Master Plan Update would result in potentially significant impacts to special-status bird species and roosting bats, and thus, would require the implementation of Mitigation Measures BIO-A and BIO-B to reduce impacts to less than significant. The projects that would be implemented under the No Project Alternative (new soccer field complex, new parking structure, and the addition of 925 student beds) would not require the removal of substantial amounts of vegetation or buildings or structures. However, the 2008 Master Plan EIR did not identify any mitigation measures for biological resources. Projects that occur on campus would be required to adhere to the Migratory Bird Treaty Act and California Fish and Game Code (CFGC) Sections 3500-3516 that prohibit take of all birds and their active nests including raptors and other migratory nongame birds. However, no pre-construction nesting bird or roosting bat surveys (i.e., Mitigation Measures BIO-A and BIO-B under the Master Plan Update, respectively) would be implemented under the No Project Alternative. Thus, construction activities associated with development under this alternative could result in potentially significant impacts to special-status bird species and roosting bats. Therefore, impacts to special-status wildlife species would be greater under the No Project Alternative than under the proposed Master Plan Update.

The No Project Alternative would not involve construction activities over or adjacent to the Bouton Creek channel, an aquatic feature potentially falling under federal and/or state jurisdiction. As such, no regulatory review would be required, as outlined in Mitigation Measure BIO-C under the proposed Master Plan Update. Therefore, no impacts to aquatic features would occur under the No Project Alternative and impacts would be reduced as compared to the proposed Master Plan Update.

As discussed in Section 3.3, Biological Resources, there are no migratory wildlife movement corridors within the boundaries of the CSULB main campus. Therefore, no impact would occur under the No Project Alternative, similar to the proposed Master Plan Update.

Cultural Resources

As discussed in Section 3.4, Cultural Resources, there are several archaeological resources within the CSULB main campus and ground-disturbing activities during construction would result in potentially significant impacts to archaeological resources, requiring implementation of Mitigation Measures AR-A through AR-K to reduce impacts to less than significant. Construction of new facilities under the No Project Alternative would be limited to a new soccer field complex and a new parking structure. New student beds added under the No Project Alternative would be provided in existing student housing buildings at the CSULB main campus and no new housing buildings would be constructed. The 2008 Master Plan EIR also identified mitigation for ground-disturbing activities that would apply to construction activities under the No Project Alternative. Similar to the proposed Master Plan Update, impacts to archaeological resources under the No Project Alternative would be less than significant with implementation of mitigation measures. However, because the No Project Alternative would require less ground disturbance and construction activities for the approved projects that could be implemented would not occur within the boundaries of known or potentially eligible archaeological resources, impacts to archaeological resources under the No Project Alternative would be reduced as compared to the proposed Master Plan Update.

As discussed in Section 3.4, Cultural Resources, construction activities associated with implementation of the Master Plan Update would result in potentially significant impacts to historical resources, requiring implementation of Mitigation Measures HR-A through HR-F to reduce impacts to less than significant. The No Project Alternative would not involve development that could impact individually eligible historical resources or the Upper Campus Historic District. Therefore, impacts to historical resources under the No Project Alternative would be reduced as compared to the proposed Master Plan Update.

Geology and Soils

As discussed in Section 3.5, Geology, Soils, and Paleontological Resources, ground-disturbing activities extending to a depth of 4 feet or greater below ground surface during construction would result in potentially significant impacts to paleontological resources, requiring implementation of Mitigation Measures GEO-A through GEO-D to reduce impacts to less than significant. The three projects that would be implemented under the No Project Alternative include a new soccer field complex, a new parking structure, and the addition of 925 beds provided in existing student housing buildings at the CSULB main campus. The 2008 Master Plan EIR identified mitigation related to the discovery of paleontological resources. The only development under the No Project Alternative that may require excavations of 4 feet or more below ground surface is the new parking structure. Although development under the No Project Alternative would involve less overall ground disturbance than the proposed Master Plan Update, the 2008 Master Plan does not require project review by a qualified paleontologist or paleontological monitoring as outlined in Mitigation Measures GEO-A and GEO-B and, as such, there is a slightly increased risk of encountering previously unknown paleontological resources. Therefore, although impacts to paleontological resources would be less than significant with implementation of mitigation, impacts under the No Project Alternative would be slightly greater than the proposed Master Plan Update.

Greenhouse Gas Emissions

As discussed in Section 3.6, Greenhous Gas Emissions, implementation of the Master Plan Update would result in less than significant impacts related to GHG emissions and would not require mitigation. The 2008 Master Plan EIR did not include an analysis of GHG emissions, as it

was not required under CEQA at the time that document was prepared. GHG emissions were calculated for the proposed Master Plan Update for the baseline year of 2019 and for the buildout horizon year of 2035. The net change in operational GHG emissions was calculated for the proposed Master Plan Update, which indicates that the campus-specific mass emission threshold would not be exceeded with implementation of the Master Plan Update.

GHG emissions estimates are based on construction activity, mobile sources (i.e., vehicle trips), energy (electricity) use, solid waste disposal, and water demand. As previously discussed, while development under the No Project Alternative would accommodate up to 31,000 FTES, it is anticipated that the gradual student enrollment growth at CSULB would continue to grow at the 1% anticipated annual growth per the CSU Chancellor's Office beyond the 2020 horizon year identified in the 2008 Master Plan. Additionally, it is anticipated that faculty, staff, and employees would also gradually increase accordingly. Therefore, vehicle trip generation would be similar, resulting in similar mobile source GHG emissions.

Construction and operation of new facilities under this alternative would be limited to the new soccer field complex and the new parking structure. The 925 net new student beds added under this alternative would be provided in existing student housing buildings. Since these buildings are already operating, no significant increase in GHG emissions would be associated with the addition of new student beds under this alternative. Construction equipment and activities would be similar to those described under the Master Plan Update. As such, construction GHG emissions under this alternative would not exceed established thresholds. As less development would occur under this alternative, construction GHG emissions would be reduced as compared to the Master Plan Update. Therefore, construction GHG emissions impacts would be reduced under the No Project Alternative as compared to the Master Plan Update.

Operation of the new ancillary facilities at the new soccer field complex and operation of the new parking structure under this alternative would generate GHG emissions associated with energy use, solid waste disposal, and water demand. CSULB already exceeds Title 24 energy efficiency requirements, which would be incorporated into the projects developed under this alternative. Therefore, operation GHG emissions under the No Project Alternative would be similar to the Master Plan Update. As construction and operation of the new soccer field complex, new parking structure, and 925 additional student beds under the No Project Alternative would be required to comply with the same regulatory requirements as under the Master Plan Update, it can reasonably be assumed that GHG emissions associated with construction and operation under this alternative would be below the threshold. However, with less new development at the CSULB main campus, aged or outdated utility infrastructure at existing facilities would remain in place and updates to enhance utility and energy efficiency, which would also result in decreased GHG emissions, would not be implemented. Therefore, operational GHG impacts under the No Project Alternative would be greater than the Master Plan Update.

Hydrology and Water Quality

As discussed in Section 3.7, Hydrology and Water Quality, implementation of the Master Plan Update would result in less than significant impacts related to hydrology and water quality and would not require mitigation. Construction of new facilities under the No Project Alternative would be limited to a new soccer field complex and a new parking structure. New student beds added under the No Project Alternative would be provided in existing student housing buildings at the CSULB main campus and no new housing buildings would be constructed. Similar to the proposed Master Plan Update, development under the No Project Alternative would be required to comply with all applicable stormwater runoff regulations, including the NPDES permit and

project-specific SWPPPs during construction, and Small MS4 Permit requirements and LID standards, as applicable, during operation. The new soccer field complex would be located at the existing George Allen Soccer Field and the new parking structure would be developed on an existing paved surface parking lot, while the 925 net new student beds would be provided in existing student housing buildings. As such, similar to the proposed Master Plan Update, development under the No Project Alternative would not substantially increase the area of impervious surfaces present at the CSULB main campus such that increased volumes and/or rates of runoff would result in erosion or flooding. However, as the No Project Alternative would involve less development overall than that proposed under the Master Plan Update, impacts related to hydrology and water quality would be reduced as compared to the Master Plan Update.

Noise

As discussed in Section 3.8, Noise, construction activities associated with development under the Master Plan Update would result in potentially significant noise impacts at nearby sensitive uses, requiring implementation of Mitigation Measures NOI-A and NOI-B to reduce impacts to less than significant. Construction of new facilities under the No Project Alternative would be limited to a new soccer field complex and a new parking structure. New student beds added under the No Project Alternative would be provided in existing student housing buildings at the CSULB main campus and no new housing buildings would be constructed. The 2008 Master Plan EIR also identified mitigation to reduce construction-related noise, such as adhering to the construction hours identified in the City of Long Beach construction noise regulations and scheduling construction activities when classes are not in session, which would apply to construction activities under the No Project Alternative. Nonetheless, the 2008 Master Plan EIR concluded that impacts from construction noise would remain significant and unavoidable even with implementation of mitigation. Therefore, construction noise impacts under the No Project Alternative would be greater than under the proposed Master Plan Update.

Under the Master Plan Update, crowd noise associated with operation of the Jack Rose Track/Commencement Facilities project could exceed the threshold for increases over ambient noise levels at the nearest sensitive receptor during events due to the increased spectator capacity associated by the project. As such, implementation of Mitigation Measure NOI-C is required under the Master Plan Update to reduce noise levels during events such that they would not cause a significant increase over ambient noise levels. The 2008 Master Plan EIR identified mitigation to reduce event noise associated with operation of the proposed soccer field complex. As mitigation would reduce event noise levels to less than significant for both the Master Plan Update and No Project Alternative, operational noise impacts under the No Project Alternative would be similar to the proposed Master Plan Update.

Construction activities and equipment associated with development under the Master Plan Update would generate vibration; however, vibration levels would not exceed the threshold for human annoyance or building damage and no mitigation is required. As discussed in Section 3.8 for the Master Plan Update, the closest sensitive receptor is located approximately 145 feet from the CSULB main campus. For a conservative analysis, vibration levels for construction equipment, including pile drivers, were calculated at a distance of 130 feet. At this distance, the 0.2 inch per second PPV threshold for human annoyance and building damage would not be exceeded. The 2008 Master Plan EIR identified potentially significant construction vibration impacts associated with the use of pile drivers for the construction of the new parking structure. The parking structure that would be developed under the No Project Alternative would be located on the interior of the CSULB main campus more than 130 feet from the closest sensitive receptor. As such, pile drivers used in the construction of the parking structure under the No Project

Alternative would also not exceed the 0.2 inch per second PPV threshold. The 2008 Master Plan EIR also identified mitigation measures to reduce construction-related vibration, such as adhering to the construction hours identified in the City of Long Beach construction noise regulations and scheduling construction activities when classes are not in session, which would apply to construction activities under the No Project Alternative. Therefore, construction vibration impacts associated with development under the No Project Alternative would be similar to those of the proposed Master Plan Update.

Similar to the proposed Master Plan Update, development under the No Project Alternative would not introduce new land uses that could result in perceptible groundborne vibration during operation.

Population and Housing

As discussed in Section 3.9, Population and Housing, the Master Plan Update proposes new campus facilities, including student housing, to accommodate existing students and the projected campus population of 38,165, with a gradual increase in the on-campus population through the horizon year to with the provision of approximately 1,602 net new student beds and approximately 285 new faculty and staff housing units. Under the No Project Alternative, approximately 925 new student beds would be provided to accommodate up to 31,000 FTES. Similar to the proposed Master Plan Update, the projected campus population growth under the No Project Alternative is accounted for in the SCAG regional demographics and growth forecasts in the 2020-2045 RTP/SCS. As such, the No Project Alternative would not directly or indirectly induce substantial unplanned population growth in the area. However, the net new beds provided under this alternative would include student beds only; no faculty or staff housing units would be provided. As such, although the No Project Alternative would not induce unplanned population growth, the provision of fewer student beds and elimination of faculty and staff housing units under this alternative would not offset the housing need identified in the RHNA to the same extent as the Master Plan Update. As such, impacts under the No Project Alternative would be greater than the proposed Master Plan Update.

The new student beds added under the No Project Alternative would be provided in existing student housing buildings at the CSULB main campus and no new housing buildings would be constructed. The development of the new soccer field complex and new parking structure under this alternative would not include residential uses or displace existing people or housing. Under the proposed Master Plan Update, development of new campus housing would require demolition of some existing residence halls, which would temporarily require the shifting of those student beds to other student housing buildings until construction of the new buildings is completed. As the No Project Alternative would not displace existing people or housing, the impact would be reduced under this alternative as compared to the proposed Master Plan Update.

Public Services and Recreation

As discussed in Section 3.10, Public Services and Recreation, implementation of the Master Plan Update would result in less than significant impacts to public services and recreation and would not require mitigation. The three projects that would be implemented under the No Project Alternative include a new soccer field complex, a new parking structure, and the addition of 925 provided in existing student housing buildings at the CSULB main campus. The demand for public services is based on the service population. While development under the No Project Alternative would accommodate fewer FTES than the proposed Master Plan Update, the gradual increase in campus population projected through the horizon year 2035 would still occur. Per CSU charter, universities are obligated to allow all students accepted regardless of space planning and

programming on a campus. As such, while development under the No Project Alternative would accommodate up to 31,000 FTES, it is anticipated that student enrollment projected through the year 2035 would still be approximately 36,000 FTES. Under the No Project Alternative enhancements to public services proposed under the Master Plan Update, such as the expansion of the UPD facilities, provision of additional study space outside of the University Library, and upgrades to fire life safety systems, would not be implemented. As such, the No Project Alternative would not provide the public service facilities and improvements to accommodate the projected future campus population through the horizon year. Therefore, impacts to public services under the No Project Alternative would be greater than under the proposed Master Plan Update.

The need for new or expanded parks and recreational facilities is based on service population and access to existing open space and recreational facilities. The CSULB main campus currently contains open space such as open lawn areas, the Campus Quad, landscaped pedestrian pathways, and informal gathering spaces located within and near student housing buildings. Additionally, several public parks and recreational facilities are available in the surrounding area. Although the open space improvements proposed under the Master Plan Update would not be implemented under the No Project Alternative, many of these improvements would enhance existing open space uses at the CSULB main campus, rather than create additional new open space uses. The existing open space uses would still be available for use by the campus population under this alternative. Therefore, impacts to recreation under the No Project Alternative would be similar to the proposed Master Plan Update.

Transportation

As discussed in Section 3.11, Transportation, implementation of the Master Plan Update would result in less than significant impacts to transportation and would not require mitigation. The three projects that would be implemented under the No Project Alternative include a new soccer field complex, a new parking structure, and the addition of 925 provided in existing student housing buildings at the CSULB main campus. All three projects would be located on the interior of the main campus. The Master Plan Update proposes several mobility and circulation improvements that would not be implemented under the No Project Alternative. As such, none of the improvements that have the potential to affect external bicycle or pedestrian facilities, public transit facilities, or roadway facilities under City of Long Beach jurisdiction would occur. Therefore, the No Project Alternative would result in no impacts related to conflict with plans, ordinances, or policies addressing transit facilities, and impacts would be reduced as compared to the proposed Master Plan Update.

As previously discussed, while development under the No Project Alternative would accommodate up to 31,000 FTES, it is anticipated that student enrollment projected through the year 2035 would still be approximately 36,000 FTES. As the VMT model is based on total population, it can reasonably be assumed that travel patterns to and from the campus and associated VMT under the No Project Alternative would be similar to the proposed Master Plan Update.

Proposed pedestrian and bicycle mobility improvements under the Master Plan Update would reduce vehicle/pedestrian and vehicle/bicycle conflict locations and enhance safety. Additionally, proposed improvements to campus entry points under the Master Plan Update would reduce intersections with left turn conflicts, resulting in a beneficial impact of reducing the potential for crashes involving left turning vehicles. As the No Project Alternative would not implement these improvements to bicycle and pedestrian facilities and campus entry points, these beneficial

impacts would not be realized under this alternative. Therefore, although no impacts related to hazards due to a geometric design feature would occur under the No Project Alternative, impacts would be slightly greater under this alternative than under the proposed Master Plan Update.

Construction of new facilities under the No Project Alternative would be limited to a new soccer field complex and a new parking structure. New student beds added under the No Project Alternative would be provided in existing student housing buildings at the CSULB main campus and no new housing buildings would be constructed. Similar to the proposed Master Plan Update, development under the No Project Alternative would be required to implement construction traffic control plans per the CSU standard construction BMPs outlined in the CSU Owner Controlled Insurance Program Safety Manual and follow the CSU standards set forth in PolicyStat, which requires the State Fire Marshal to review all projects to confirm adequate emergency access and building safety features. Therefore, impacts related to emergency access under the No Project Alternative would be similar to the proposed Master Plan Update.

Tribal Cultural Resources

As discussed in Section 3.12, Tribal Cultural Resources, a restrictive covenant prohibiting development has been established on a large portion of the undeveloped land on the northwest border of the CSULB main campus that is part of the National Register-listed Puvunga Indian Village Sites Archaeological District and is listed in the Native American Heritage Commission's Sacred Lands Inventory. Due to the potential presence of tribal cultural resources on the CSULB main campus, ground-disturbing activities during construction would result in potentially significant impacts to such resources, requiring implementation of Mitigation Measures TCR-A through TCR-D and Mitigation Measures AR-A through AR-K to reduce impacts to less than significant. The 2008 Master Plan EIR did not include AB 52 consultation, as it was not required at the time that document was prepared and, as such, input from Native American tribal representatives on potential impacts to tribal cultural resources was not addressed in the 2008 Master Plan EIR. However, the 2008 Master Plan EIR identifies mitigation for ground-disturbing activities, including requiring Native American monitoring, which would apply to the construction activities under the No Project Alternative. The footprints of the new soccer field complex and new parking structure that would be constructed under this alternative would not overlap with the restrictive covenant or occur within the boundaries or buffer distance of a known tribal resource site. The new student beds added under the No Project Alternative would be provided in existing student housing buildings at the CSULB main campus and no new housing buildings would be constructed. Additionally, the No Project Alternative would require less overall ground disturbance, therefore, the potential to encounter previously unknown tribal cultural resources would be reduced as compared to the development under the proposed Master Plan Update.

Utilities and Energy

As discussed in Section 3.13, Utilities and Energy, implementation of the Master Plan Update would result in less than significant impacts to utilities and energy and would not require mitigation. Utilities and energy usage is based on the service population and the amount of new development implemented that would require new utility connections. While the total campus population under this alternative would remain similar to that of the proposed Master Plan Update, overall development of new facilities would be limited to the new soccer field complex and the new parking structure. New student beds added under the No Project Alternative would be provided in existing student housing buildings at the CSULB main campus and no new housing buildings would be constructed. Operation of the new ancillary facilities at the new soccer field complex and operation of the new parking garage under this alternative would require less energy usage when compared to the proposed new construction projects that would occur under the Master

Plan Update. However, with less new development at the CSULB main campus, aged or outdated utility infrastructure at existing facilities would remain in place and updates to enhance utility and energy efficiency would not be implemented. Therefore, impacts related to utilities and energy under the No Project Alternative would be greater than under the proposed Master Plan Update.

Relationship to Project Objectives

Development under the No Project Alternative would occur at the George Allen Soccer Field in the North District and at the site of the existing Parking Lot G6 in the West District, thereby preserving space in the campus core that could be used for academic uses and student-focused programming. Therefore, this alternative would achieve the following project objective:

7. Preserve space in the campus core for academic uses and student-focused facilities and programming to allow for greater integration of student residents.

As only limited development would occur under the No Project Alternative, net new gross square footage would be minimal. However, improvements implemented under the No Project Alternative would not include renovations to optimize existing facilities to accommodate the gradual increase in campus enrollment. Therefore, the No Project Alternative would partially achieve the following objective:

2. Optimize the existing campus space and minimize net new gross square footage.

This alternative would include development of a new soccer field complex at the George Allen Field. However, none of the other improvements to athletics facilities would be implemented under the No Project Alternative. Therefore, this alternative would partially achieve the following project objective:

12. Provide high-quality athletic facilities and optimize existing recreational fields by better utilizing land area and improving connections to and through the sports precinct facilities.

Under the No Project Alternative, CSULB would continue to operate under the current adopted 2008 Master Plan, which would include improvements to campus facilities to accommodate up to 31,000 FTES. As proposed development under the No Project Alternative would be limited to the accommodation of up to 31,000 FTES, this alternative would not achieve the following project objective:

1. Support and advance the University's educational mission by guiding the physical development of the campus to accommodate gradual student enrollment growth approximately 36,000 FTES in 2035, including approximately 33,000 FTES on campus and 3,000 FTES off-campus.

The No Project Alternative would only implement those proposed improvements that have not yet been developed, including a new soccer field complex at the George Allen Field in the North District; a new parking structure at the location of the existing surface Parking Lot G6 north of the Bouton Creek channel in the West District; and the addition of the remaining 925 beds of the originally proposed 2,000 student housing beds. As no other proposed improvements would be implemented under the No Project Alternative, upgrades and renovations to existing facilities would not occur. Therefore, this alternative would not achieve the following project objectives:

3. Renovate or demolish buildings that are inefficient in terms of operation, maintenance, and user comfort due to age and that have critical deferred maintenance issues.

4. Replace demolished buildings with higher density, mixed-use buildings that consolidate and integrate colleges and student support spaces.
5. Support an expanded residential environment by constructing new or replacement buildings or renovating existing student housing villages to:
    - Include a more diverse mix of housing typologies for students (pod configurations, suites, and apartments); and
    - Include common spaces, active outdoor spaces, and space for student services.
6. Strengthen the physical connection between the two housing villages on the CSULB main campus.
8. Retain and recruit high-quality faculty and staff by providing on-campus affordable housing options.
9. Provide new faculty and staff housing at the perimeter of the campus to allow ease of access for faculty and staff who maintain social connections and conduct other daily activities off-campus, such as grocery shopping, dropping children off at school, and other family functions.
10. Provide mobility enhancements for safe and accessible circulation around the campus for pedestrians and bicyclists to help the campus become less reliant on vehicular mobility.
11. Provide defined campus gateways and edges with increased wayfinding and signage to highlight resources for the surrounding community by designating pathways to connect neighboring communities through the campus.

Improvements to campus housing under the No Project Alternative would be limited to the provision of up to 925 beds, providing some contribution to the overall campus housing need. However, these would be implemented as student beds within existing residence halls, some of which are in need of renovations to restore common living spaces that have been converted to accommodate additional beds, which would not occur under the No Project Alternative. As a result, the quality of student housing options under the No Project Alternative would not include the social, programming, and support space offered under the proposed Master Plan Update. For these reasons, the No Project Alternative would not achieve the following objectives:

5. Support an expanded residential environment by constructing new or replacement buildings or renovating existing housing villages to:
    - Increase student housing capacity by approximately 1,600 beds to enhance student experience, support, and wellness to support student success and retention; and
    - Provide high quality and affordable options with an equitable mix of offerings for students.

Conclusion

As discussed above, the No Project Alternative would not implement any of the improvements proposed under the Master Plan Update. Due to the limited development associated with the No Project Alternative, it would result in reduced impacts as compared to the Master Plan Update in the following eight areas: aesthetics; air quality (construction); cultural resources (construction); GHG emissions (construction); hydrology and water quality; transportation (construction); utilities and energy (construction); and tribal cultural resources. However, because mitigation measures identified to avoid potentially significant impacts to nesting birds, roosting bats, and

paleontological resources would not be implemented, the No Project Alternative would result in greater construction impacts related to biological resources and geology, soils, and paleontological resources. Additionally, this alternative would not implement pedestrian, bicycle, or campus entry improvements that would enhance safety, and the No Project Alternative would result in greater transportation related impacts during operation. The No Project Alternative would also result in greater impacts related to air quality (operation); GHG emissions (operation); noise and vibration (construction); population and housing; public services and recreation, and utility and energy usage. Impacts in the following four areas would be similar to those identified for implementation of the Master Plan Update: biological resources (operation); cultural resources (operation); and geology, soils, and paleontological resources (operation).

The No Project Alternative would avoid the potentially significant impacts associated with the proposed new permanent lighting and crowd noise at the Jack Rose Track/Commencement Facilities. However, similar crowd noise impacts associated with the soccer field complex have been identified in the 2008 Master Plan, resulting in similar noise impacts for the alternative during operation. This alternative would also result in greater impacts in nine areas as compared to implementation of the Master Plan Update, including a significant and unavoidable impact associated with parking structure construction vibration.

The No Project Alternative would achieve one of the 12 project objectives; would partially achieve two of the project objectives to a lesser extent than the Master Plan Update; and would not achieve nine of the project objectives. Therefore, the No Project Alternative would not fully achieve or attain most of the project objectives.

5.4.2 Faculty and Staff Housing Project Design Alternative

The Faculty and Staff Housing Project Design Alternative would construct and operate the Faculty and Staff Housing project at the same location as proposed under the Master Plan Update. However, instead of demolishing the existing Design building and relocating its programming elsewhere on the CSULB main campus, that programming would be incorporated into the design of the project. Whereas the proposed Faculty and Staff Housing project would include four stories of housing above two levels of podium parking for a total of six stories, the building constructed under this alternative would include two levels of podium parking, one story for the relocated Department of Design programming, and four stories of housing, for a total of seven stories. Incorporating the Department of Design programming within the Faculty and Staff Housing project would result in the same number of faculty and staff housing units and an overall increase of approximately 50,000 square feet and one additional story over the project proposed under the Master Plan Update. All other improvements and individual development projects would be implemented as proposed under the Master Plan Update.

Development of this alternative would eliminate the need to renovate or construct a new space for the existing Department of Design programming elsewhere on the CSULB main campus. As such, this alternative was selected for its potential to reduce or avoid the significant but mitigable impacts identified for the Master Plan Update related to aesthetics; biological resources; cultural resources; geology, soils, and paleontological resources; noise; and tribal cultural resources.

Impact Analysis

Aesthetics

Similar to the proposed project, nighttime construction activities associated with development of this alternative would potentially result in spillover lighting on adjacent residential uses which would require implementation of Mitigation Measure AES-A to reduce impacts to less than

significant. Implementation of Mitigation Measure AES-A, requiring shielding of any construction lighting, would be required under this alternative to reduce impacts from light and glare to less than significant during construction. As such, construction impacts under the Faculty and Staff Housing Project Design Alternative would be similar to those of the project proposed under the Master Plan Update.

The building constructed under the Faculty and Staff Housing Project Design Alternative would be one story taller than the project proposed under the Master Plan Update. As such, the new building may be visible from more residential properties than the proposed project. The building materials and types of lighting used under this design alternative would be similar to the proposed project developed under the Master Plan Update. Additionally, development of this alternative would be required to comply with the applicable development standards and regulations for exterior lighting under the California Building Standards Code, the CSU Outdoor Lighting Design Guide, and the CALGreen-mandated BUG ratings for exterior lighting related to light and glare. However, the taller building that would be located at this site would be more visible from off-site properties than the six-story building under the Master Plan Update. Therefore, light and glare impacts during operation under the Faculty and Staff Housing Project Design Alternative would be greater than the proposed Master Plan Update.

Air Quality

Construction and operational air quality emissions are estimated for all development under the proposed Master Plan Update, including the Faculty and Staff Housing project. As discussed in Section 3.2, air quality emissions associated with construction and operation would not exceed significance thresholds. Construction of the Faculty and Staff Housing Project Design Alternative would include one additional story, or approximately 50,000 more square feet, than the building proposed under the Master Plan Update. As such, both construction and operation activities would be slightly increased. It is not anticipated that the additional square footage would result in substantially more air quality emissions that could exceed thresholds. Furthermore, although the increased construction and operation activities under this alternative would result in slightly increased air quality emissions as compared to those of the project proposed under the Master Plan Update, development of this alternative would eliminate the need to renovate or construct a new space for the existing Department of Design programming elsewhere on the CSULB main campus. Therefore, air quality impacts associated with construction and operation of the Faculty and Staff Housing Project Design Alternative would be similar to those of the project proposed under the Master Plan Update.

Biological Resources

As discussed in Section 3.3, Biological Resources, construction activities associated with development of new projects under the Master Plan Update, including the Faculty and Staff Housing project, may require the removal of vegetation and structures, which could result in potentially significant impacts to nesting birds and roosting bats, requiring implementation of Mitigation Measures BIO-A and BIO-B to reduce impacts to less than significant. Construction activities associated with the development of the Faculty and Staff Housing Project Design Alternative would be similar to those described under the proposed Master Plan Update. As such, Mitigation Measures BIO-A and BIO-B, requiring pre-construction nesting bird and roosting bat surveys, would be applicable under this alternative. Construction impacts to special-status wildlife species under the Faculty and Staff Housing Project Design Alternative would be less than significant with implementation of mitigation measures, similar to the project proposed under the Master Plan Update.

Similar to the project proposed under the Master Plan Update, the Faculty and Staff Housing Project Design Alternative would not result in any other potential impacts to biological resources during construction or operation, including special-status plant species, protected wetlands, or migratory wildlife corridors.

Cultural Resources

As discussed in Section 3.4, Cultural Resources, the footprint of the proposed Faculty and Staff Housing project is located within the boundary of a known archaeological resource. As such, construction activities occurring at that location could result in significant impacts to archaeological resources, requiring implementation of Mitigation Measures AR-A through AR-K to reduce impacts to less than significant. Construction activities associated with the development of the Faculty and Staff Housing Project Design Alternative would be similar to and would occur in the same location as those described under the proposed Master Plan Update. Thus, Mitigation Measures AR-A through AR-K would be implemented under this alternative, as applicable. With implementation of mitigation measures, construction impacts under the Faculty and Staff Housing Project Design Alternative would be less than significant, similar to the project proposed under the Master Plan Update.

Similar to the project proposed under the Master Plan Update, no impacts to archaeological resources would occur during operation of the Faculty and Staff Housing Project Design Alternative.

Similar to the project proposed under the Master Plan Update, the Faculty and Staff Housing Project Design Alternative would not involve development that could impact an individually eligible historical resource or the Upper Campus Historic District, and no impacts to such resources would occur under this alternative.

Geology and Soils

As discussed in Section 3.5, Geology, Soils, and Paleontological Resources, ground-disturbing activities associated with development of new projects under the Master Plan Update, including the Faculty and Staff Housing project, may require excavation for foundations that may reach undisturbed geologic contexts, which could result in potentially significant impacts to paleontological resources, requiring implementation of Mitigation Measures GEO-A through GEO-D to reduce impacts to less than significant. Construction activities associated with the development of the Faculty and Staff Housing Project Design Alternative would be similar to those described under the proposed Master Plan Update. As such, if it is determined that ground-disturbing activities at depths of 4 feet or greater would be required under this alternative, Mitigation Measures GEO-A through GEO-D would be implemented, as applicable. Construction impacts to paleontological resources under the Faculty and Staff Housing Project Design Alternative would be less than significant with implementation of mitigation measures, similar to the project proposed under the Master Plan Update.

Similar to the project proposed under the Master Plan Update, no impacts to paleontological resources would occur during operation of the Faculty and Staff Housing Project Design Alternative.

Greenhouse Gas Emissions

Construction and operational GHG emissions are estimated for all development under the proposed Master Plan Update, including the Faculty and Staff Housing Project. As discussed in Section 3.6, GHG emissions associated with construction and operation would not exceed

significance thresholds. Construction of the Faculty and Staff Housing Project Design Alternative would include one additional story, or approximately 50,000 more square feet, than the building proposed under the Master Plan Update. As such, both construction and operation activities would be slightly increased as compared to the Master Plan Update. It is not anticipated that the additional square footage would result in substantially more GHG emissions that could exceed thresholds. Furthermore, although the increased construction and operation activities under this alternative would result in slightly increased GHG emissions as compared to those of the project proposed under the Master Plan Update, development of this alternative would negate the need to renovate or construct a new space for the existing Department of Design programming elsewhere on the main campus. Therefore, GHG emissions impacts associated with construction and operation of the Faculty and Staff Housing Project Design Alternative would be similar to those of the project proposed under the Master Plan Update.

Hydrology and Water Quality

Construction activities associated with development of the Faculty and Staff Housing Project Design Alternative would include ground-disturbing activities that could increase the potential for erosion of exposed soils. Additionally, potential increases in impervious surfaces could increase rates of runoff from the site. Similar to the project proposed under the Master Plan Update, development of this alternative would be required to comply with all applicable stormwater runoff regulations, including obtaining an NPDES permit, implementing project-specific SWPPPs during construction, and adhering to Small MS4 Permit requirements and LID standards, as applicable, during operation. Additionally, although the building proposed under this alternative would be of greater square footage than the project proposed under the Master Plan Update, this additional square footage would occur vertically in the form of one additional floor, rather than increase the size of the building footprint. As such, similar to the Master Plan Update, development under this alternative would not substantially increase the area of impervious surfaces present at the site such that increased runoff would result in erosion or flooding. Therefore, with adherence to existing requirements, impacts to hydrology and water quality would be less than significant under the Faculty and Staff Housing Project Design Alternative, similar to the project proposed under the Master Plan Update.

Noise

As discussed in Section 3.8, Noise, construction activities associated with development of the Faculty and Staff Housing project would result in noise levels exceeding thresholds at the nearest sensitive receptor, which is the multi-family residential building located approximately 170 feet southeast of the project site, requiring implementation of Mitigation Measures NOI-A and NOI-B to reduce impacts to less than significant. Construction activities associated with the development of the Faculty and Staff Housing Project Design Alternative would be similar to and would occur in the same location as those described under the proposed Master Plan Update. As such, Mitigation Measures NOI-A and NOI-B would be applicable under this alternative. With implementation of the mitigation measures, daytime and nighttime construction noise levels would be less than significant under this alternative, similar to the project proposed under the Master Plan Update. However, because this alternative would develop a larger building at the project site than that proposed under the Master Plan Update, the construction activities would occur for a slightly longer duration at this location. Therefore, construction noise impacts under the Faculty and Staff Housing Project Design Alternative would be slightly greater than those of the project proposed under the Master Plan Update.

Operational noise sources under this alternative would be similar to those described for the Master Plan Update and would include stationary noise from HVAC units, crowd noise, and

parking activities, and mobile noise from vehicular traffic. Noise levels for HVAC units were calculated at a distance of 140 feet, which would not exceed the daytime or nighttime operational noise thresholds. HVAC units used during operation under this alternative would be located at the same distance from the nearest sensitive receptor as for the project proposed under the Master Plan Update, approximately 170 feet. As such, noise from HVAC units associated with operation under this alternative would be similar to that of the project proposed under the Master Plan Update and would not exceed noise thresholds. Additionally, similar to the project proposed under the Master Plan Update, crowd noise associated with this alternative would be well below the established thresholds for day and nighttime noise. However, the building developed under this alternative would accommodate more people by combining the Department of Design programming with the proposed housing uses. As such, crowd noise associated with outdoor gathering spaces, while not anticipated to exceed thresholds, would be slightly increased as compared to the project proposed under the Master Plan Update. No increase in parking facilities would occur under this alternative from that proposed for the Faculty and Staff Housing project under the Master Plan Update. Therefore, noise from parking activities under this alternative would be similar to that of the project proposed under the Master Plan Update. Noise levels from mobile sources were calculated to account for all development under the Master Plan Update through the horizon year, including the Faculty and Staff Housing project, and are based on the total campus population, rather than individual development projects. As such, mobile source noise levels associated with operation of the Faculty and Staff Housing Project Design Alternative would be similar to those of the project proposed under the Master Plan Update.

As discussed in Section 3.8, the closest sensitive receptor to the CSULB main campus is located approximately 145 feet away. For a conservative analysis, vibration levels for construction equipment were calculated at a distance of 130 feet. At this distance, the 0.2-inch-per-second PPV threshold for human annoyance and building damage would not be exceeded. The closet sensitive receptors from the Faculty and Staff Housing project site are approximately 170 feet away. As such, construction activities associated with this alternative would also not exceed the 0.2 inch per second PPV threshold. Therefore, construction vibration impacts associated with development under the Faculty and Staff Housing Project Design Alternative would be less than significant, similar to those of the project proposed under the Master Plan Update. However, because this alternative would develop a larger building at the project site than that proposed under the Master Plan Update, the construction activities would occur for a slightly longer duration at this location. Therefore, construction vibration impacts under the Faculty and Staff Housing Project Design Alternative would be slightly greater than those of the project proposed under the Master Plan Update.

Similar to the project proposed under the Master Plan Update, development under the Faculty and Staff Housing Project Design Alternative would not introduce new land uses that could result in perceptible groundborne vibration during operation.

Population and Housing

The number of faculty and staff housing units provided under this alternative and the location of development would be the same as under the Master Plan Update. As discussed in Section 3.9, Population and Housing, the net increase in faculty and staff housing units that would be provided in the Faculty and Staff Housing project is accounted for in the SCAG regional demographics and growth forecasts in the 2020-2045 RTP/SCS and would not directly or indirectly induce substantial unplanned population growth in the area. Additionally, the faculty and staff housing units would be developed at a site that does not currently contain housing units or beds and, as a result, would not displace existing housing or people. Therefore, impacts to population and housing under the

Faculty and Staff Housing Project Design Alternative would be similar to those of the project proposed under the Master Plan Update.

Public Services and Recreation

The demand for public services is based on the service population. This alternative would develop a larger building at the project site than that proposed under the Master Plan Update, and it would accommodate more people by combining the Department of Design programming with the faculty and staff housing units in the same building. A slight increase in the number of people accommodated at the project site would not increase the demand for fire or police protection services, as LBFD and UPD already service the campus and the total campus population would be the same under this alternative as for the Master Plan Update. The number of faculty and staff housing units provided under the Faculty and Staff Housing Project Design Alternative would be the same as described for the project proposed under the Master Plan Update. As such, the number of school-aged children generated by faculty and staff housing units would be the same under this alternative. Finally, similar to the project proposed under the Master Plan Update, the Faculty and Staff Housing Project Design Alternative would not increase the demand for library facilities, as adequate service is provided by the University Library at the CSULB main campus. Therefore, impacts to public services under the Faculty and Staff Housing Project Design Alternative would be similar to those of the project proposed under the Master Plan Update.

Development under this alternative would not be anticipated to result in a need for new or expanded parks or recreational facilities, as residents and students at the building would have access to the existing open space opportunities throughout the CSULB main campus. Additionally, the open space improvements proposed under the Master Plan Update would still be implemented under this alternative. Therefore, impacts to parks and recreational facilities under the Faculty and Staff Housing Project Design Alternative would be similar to those of the project proposed under the Master Plan Update.

Transportation

Development under the Faculty and Staff Housing Project Design Alternative would occur at the same location and within generally the same footprint as the project proposed under the Master Plan Update. As such, development of this alternative would not interfere with implementation of the mobility and circulation improvements proposed under the Master Plan. As such, this alternative would not conflict with plans, ordinances, or policies addressing the circulation system. Additionally, as previously discussed, the VMT model is based on total campus population, which would not be changed with the development of this alternative. Therefore, impacts related to VMT under the Faculty and Staff Housing Project Design Alternative would be similar to those of the project proposed under the Master Plan Update.

Similar to the project proposed under the Master Plan Update, implementation of the Faculty and Staff Housing Project Design Alternative would introduce a new driveway entrance onto Palo Verde Avenue, the construction of which would require a temporary pedestrian detour as a section of the sidewalk would be closed. It could also include the temporary closure of one lane of traffic on southbound Palo Verde Avenue. These proposed improvements that would affect roadway design under City of Long Beach jurisdiction would be subject to review and approval by the City of Long Beach and would be subject to the City's requirements for the preparation of temporary construction traffic control plans. Following completion of construction, implementation of this new driveway would permanently alter the geometry of access at this location. However, similar to the project proposed under the Master Plan Update, the location and design of the new driveway would be required to adhere to all applicable standards. With adherence to existing regulations,

impacts related to hazards due to a design feature under the Faculty and Staff Housing Project Design Alternative would be less than significant, similar to those of the project proposed under the Master Plan Update.

Similar to the project proposed under the Master Plan Update, development under this alternative would be required to implement construction traffic control plans per the CSU standard construction BMPs outlined in the CSU Owner Controlled Insurance Program Safety Manual and follow the CSU standards set forth in PolicyStat, which requires the State Fire Marshal to review all projects to confirm adequate emergency access and building safety features. Therefore, impacts related to emergency access under the Faculty and Staff Housing Project Design Alternative would be similar to those of the project proposed under the Master Plan Update.

Tribal Cultural Resources

As discussed in Section 3.12, Tribal Cultural Resources, due to the potential presence of tribal cultural resources at the CSULB main campus, ground-disturbing activities during construction would result in potentially significant impacts to such resources, requiring implementation of Mitigation Measures TCR-A through TCR-D to reduce impacts to less than significant. The footprint of the proposed Faculty and Staff Housing project is located within the boundary of a known archaeological resource. As such, construction activities occurring at that location have the potential to result in significant impacts to tribal cultural resources requiring mitigation. Construction activities associated with the development of the Faculty and Staff Housing Project Design Alternative would be similar to and would occur in the same location as those described under the proposed Master Plan Update. Thus, Mitigation Measures TCR-A through TCR-D would be implemented under this alternative, as applicable. With implementation of mitigation measures, construction impacts under the Faculty and Staff Housing Project Design Alternative would be less than significant, similar to the project proposed under the Master Plan Update.

Similar to the project proposed under the Master Plan Update, no impacts to tribal cultural resources would occur during operation of the Faculty and Staff Housing Project Design Alternative.

Utilities and Energy

As discussed in Section 3.13, Utilities and Energy, development of the Faculty and Staff Housing project would require the rerouting of, modifications to, or connections to some existing utilities at the site, including water, stormwater drainage, electric power, and telecommunications lines. Since development under this alternative would occur at the same location and within generally the same footprint as the project proposed under the Master Plan Update, this alternative would require the same activities associated with connections to utility infrastructure.

The building constructed under the Faculty and Staff Housing Project Design Alternative would be one story taller and accommodate more people than the project proposed under the Master Plan Update. As such, operation under this alternative would result in slightly increased consumption of water and energy, as well as slightly increased generation of wastewater and solid waste as compared to the project proposed under the Master Plan Update. However, similar to the project under the Master Plan Update, development under this alternative would implement water conservation measures, such as low water use fixtures and drought-tolerant landscaping, and would exceed the most current version of the Title 24 Building Energy Efficiency Standards by 10 percent. Furthermore, development of this alternative would negate the need to renovate or construct a new space for the existing Department of Design programming elsewhere on the CSULB main campus, thereby offsetting the slight increase in utility and energy usage at the site.

Therefore, impacts to utilities and energy under the Faculty and Staff Housing Project Design Alternative would be similar to those of the project proposed under the Master Plan Update.

Relationship to Project Objectives

The Faculty and Staff Housing Project Design Alternative would only include changes to the Faculty and Staff Housing project to accommodate the existing Department of Design programming within the new building by increasing the building height by one story. All other aspects of this alternative would remain similar to the project proposed under the Master Plan Update. Additionally, all other improvements and projects proposed under the Master Plan Update would be implemented under this alternative. As such, this alternative would achieve all of the project objectives:

1. Support and advance the University's educational mission by guiding the physical development of the campus to accommodate gradual student enrollment growth to approximately 36,000 FTES in 2035, including approximately 33,000 FTES on campus and 3,000 FTES off-campus.
2. Optimize the existing campus space and minimize net new gross square footage.
3. Renovate or demolish buildings that are inefficient in terms of operation, maintenance, and user comfort due to age and that have critical deferred maintenance issues.
4. Replace demolished buildings with higher density, mixed-use buildings that consolidate and integrate colleges and student support spaces.
5. Support an expanded residential environment by constructing new or replacement buildings or renovating housing villages to:
    - Increase student housing capacity by approximately 1,600 beds to enhance student experience, support, and wellness to support student success and retention;
    - Include a more diverse mix of housing typologies for students (undergraduate students, single graduate students, and graduate students with families);
    - Provide high quality and affordable options with an equitable mix of offerings for students; and
    - Include common spaces, active outdoor spaces, and space for student services.
6. Strengthen the physical connection between the two housing villages on the CSULB main campus.
7. Preserve space in the campus core for academic uses and student-focused facilities and programming to allow for greater integration of student residents.
8. Retain and recruit high-quality faculty and staff by providing on-campus affordable housing options.
9. Provide new graduate student and faculty housing at the perimeter of the campus to allow ease of access for faculty and staff who maintain social connections and conduct other daily activities off-campus, such as grocery shopping, dropping children off at school, and other family functions.
10. Provide mobility enhancements for safe and accessible circulation around the campus for pedestrians and bicyclists to help the campus become less reliant on vehicular mobility.
11. Provide defined campus gateways and edges with increased wayfinding and signage to

highlight resources for the surrounding community by designating pathways to connect neighboring communities through the campus.

12. Provide high-quality athletic facilities and optimize existing recreational fields by better utilizing land area and improving connections to and through the sports precinct facilities.

Conclusion

Construction and operation of the Faculty and Staff Housing Project Design Alternative would be largely the same as described for the project proposed under the Master Plan Update. Additionally, all applicable mitigation measures identified under the Master Plan Update would be implemented under this alternative. As such, construction and operation of this alternative would result in similar impacts to those identified under the Master Plan Update for all areas except noise. Construction of the Faculty and Staff Housing Project Design Alternative would include one additional story, or approximately 50,000 more square feet, than the building proposed under the Master Plan Update. As such, the construction duration would be slightly increased, resulting in greater construction noise impacts at the nearest residential sensitive receptors. Additionally, the Department of Design programming would be incorporated into the new building, resulting in more people at the site. As such, noise associated with outdoor gathering spaces under the Faculty and Staff Housing Project Design Alternative would be slightly increased as compared to the project proposed under the Master Plan Update. Furthermore, the additional height of the building under this alternative would make it more visible from off-site properties than the six-story building proposed under the Master Plan Update, resulting in comparatively greater light and glare impacts during operation.

The Faculty and Staff Housing Project Design Alternative would not avoid or substantially lessen any of the potentially significant impacts associated with the project proposed under the Master Plan Update. Additionally, this alternative would result in slightly increased noise impacts during construction and operation and increased light and glare impacts during operation. It should be noted that all potentially significant impacts identified under this alternative would be mitigated to levels less than significant. Additionally, the increased noise generated by occupancy and operation of the larger facility would not exceed the threshold. The Faculty and Staff Housing Project Design Alternative would achieve all 12 of the project objectives.

5.4.3 Reduced Development Footprint Alternative

This alternative would eliminate three near-term projects, including one new development project and two facility replacement projects, that partially overlap with two significant or potentially significant archaeological resources. These include the Faculty and Staff Housing project, the Aquatics Center and Pool Renovation replacement project, and the Engineering Replacement project. All other development under the Master Plan Update would be implemented as proposed under the project.

Under the Master Plan Update, the Faculty and Staff Housing project, which would demolish the existing Design Building and replace it with a six-story building with 285 apartment-style units, is proposed to occupy an approximately 2.5-acre site that overlaps a portion of a potentially eligible archaeological resource on the main campus. The Aquatics Center and Pool Renovation project, which would either repair and upgrade the existing pool or increase the facility size with additional bleachers, requiring the demolition of the existing pool, is proposed to occupy an approximately 1-acre site that is adjacent to the existing athletic fields and overlaps a portion of a potentially eligible archaeological resource on the main campus. Finally, the Engineering Replacement Building project would demolish the existing EN2, EN3, and EN4 buildings and construct a new six-story building. The Engineering Replacement Building project would provide right-sized

classrooms, teaching labs, faculty and staff workspaces, and flexible lab spaces into a higher-density building on an approximately 1.5-acre site that overlaps with a portion of a potentially eligible archaeological resource. The majority of the site would remain open space for a quad and to provide space for future buildings as the College of Engineering grows over time.

None of these facilities would be developed under this alternative, at these locations or any other locations on the main campus. The existing Aquatics facility would remain in use and would undergo minor maintenance upgrades in place. The Engineering Replacement Building project, including the accompanying open space for future growth and expansion of the College of Engineering, would not be constructed and its programs would not be realized; the College of Engineering would remain in its current facilities.

Impact Analysis

Aesthetics

The Reduced Development Footprint Alternative would eliminate development of the Faculty and Staff Housing project, Aquatics Center and Pool Renovation project, and Engineering Replacement Building project proposed under the Master Plan Update. Of these projects, only the Faculty and Staff Housing project is located at the perimeter of the main campus and visible from off-site locations. All other development proposed under the Master Plan Update would be implemented under this alternative.

Because the majority of development proposed under the Master Plan Update would continue to be implemented, nighttime construction activities associated with development under this alternative would still potentially result in spillover lighting on adjacent residential uses, which would require implementation of Mitigation Measure AES-A requiring shielding of any construction lighting, to reduce impacts to less than significant. Implementation of Mitigation Measure AES-A would also be required under the Reduced Development Footprint Alternative to reduce impacts from light and glare to less than significant during construction. However, eliminating development of the Faculty and Staff Housing project from the campus perimeter would eliminate potential light and glare impacts on the adjacent off-site residential uses during construction. As such, construction impacts under the Reduced Development Footprint Alternative would be slightly reduced as compared to the Master Plan Update.

Under the Master Plan Update, the proposed Jack Rose Track/Commencement Facilities improvements would still be implemented and would introduce new permanent flood lighting, requiring implementation of Mitigation Measure AES-B to reduce potential light and glare impacts during operation to less than significant. This project would result in the potential for additional skyglow that would be visible from off-site locations. As such, Mitigation Measure AES-B would still apply to this alternative. Additionally, the building materials and types of lighting used for development under this alternative would be similar to those proposed for development under the Master Plan Update, and therefore impacts related to glare and lighting would be the same. Furthermore, development of this alternative would be required to comply with the applicable development standards and regulations for exterior lighting under the California Building Standards Code, the CSU Outdoor Lighting Design Guide, and the CALGreen-mandated BUG ratings for exterior lighting related to light and glare.

Overall, with implementation of Mitigation Measure AES-B and compliance with existing standards and regulations, light and glare impacts would be minimized and would generally be similar to the proposed Master Plan Update. However, eliminating development of the Faculty and Staff Housing project would eliminate potential light and glare impacts on adjacent residential

properties associated with operation of a new, taller building at that site. Therefore, light and glare impacts under the Reduced Development Footprint Alternative would be reduced as compared to the Master Plan Update.

Air Quality

Construction and operational air quality emissions are estimated for all development under the proposed Master Plan Update. As discussed in Section 3.2, air quality emissions associated with construction and operation would not exceed significance thresholds. The Reduced Development Footprint Alternative would eliminate the construction and operation of the Faculty and Staff Housing Project, Aquatics Center and Pool Renovation project, and the Engineering Replacement Building project proposed under the Master Plan Update. The elimination of these three projects under the Reduced Development Footprint Alternative would result in fewer construction activities that would generate air emissions. However, aged or outdated utility infrastructure at existing facilities would not be demolished under this alternative (i.e., Design Building, EN2, EN3, EN4, and the pool) and instead would remain in use, and as a result, infrastructure improvements proposed under the Master Plan Update that would enhance utility and energy efficiency and reduce air emissions would not be realized. Therefore, stationary source emissions under the Reduced Development Footprint Alternative would be increased as compared to the Master Plan Update. Therefore, operational air quality impacts under the Reduced Development Footprint Alternative would be slightly greater than under the Master Plan Update.

Biological Resources

As discussed in Section 3.3, Biological Resources, construction activities associated with development of new projects under the Master Plan Update may require the removal of vegetation and structures, which could result in potentially significant impacts to nesting birds and roosting bats, requiring implementation of Mitigation Measures BIO-A and BIO-B to reduce impacts to less than significant.

Construction activities associated with the development of the Reduced Development Footprint Alternative would be substantially similar in nature to those described under the proposed Master Plan Update, albeit slightly reduced in magnitude because of the elimination of three projects. As such, Mitigation Measures BIO-A and BIO-B, requiring pre-construction nesting bird and roosting bat surveys, would still be applicable under this alternative. However, the elimination of the Staff and Faculty Housing project, Aquatics Center and Pool Renovation project, and the Engineering Replacement Building project would avoid the removal of vegetation and structures associated with construction of these projects. As such, the elimination of the three projects under the Reduced Development Footprint Alternative would result in fewer construction activities that could impact special-status bird species projected under the MBTA and CFGC, and/or roosting bats. Therefore, construction impacts to special-status wildlife species under the Reduced Development Footprint Alternative would be reduced as compared to the Master Plan Update.

Similar to the proposed Master Plan Update, the Reduced Development Footprint Alternative would not result in any other potential impacts to biological resources during construction or operation, including special-status plant species, protected wetlands, or migratory wildlife corridors.

Cultural Resources

As discussed in Section 3.4, Cultural Resources, the footprints for eight projects proposed under the Master Plan Update, including the Faculty and Staff Housing project, Aquatics Center and Pool Renovation project, and the Engineering Replacement Building project, overlap with the

boundaries of six potentially significant archaeological resources at the main campus. As such, ground-disturbing activities occurring during construction at these locations could result in significant impacts to archaeological resources, requiring implementation of Mitigation Measures AR-A through AR-K to reduce impacts to less than significant. Construction activities associated with development under the Reduced Development Footprint Alternative would be substantially similar in nature, although slightly reduced in magnitude, to those described under the proposed Master Plan Update. Thus, Mitigation Measures AR-A through AR-K would be required under this alternative, as applicable.

However, this alternative would eliminate development of the Faculty and Staff Housing project, Aquatics Center and Pool Renovation project, and the Engineering Replacement Building project, which collectively total approximately 5 acres. Elimination of these projects under the Reduced Development Footprint Alternative would entirely avoid ground-disturbing activities at two potentially significant archaeological resources at the main campus. Therefore, construction impacts to archaeological resources under the Reduced Development Footprint Alternative would be reduced as compared to the Master Plan Update.

Similar to the Master Plan Update, no impacts to archaeological resources would occur during operation of the Reduced Development Footprint Alternative, as operations do not require ground disturbance.

Construction activities associated with implementation of the Master Plan Update were also determined to result in potentially significant impacts to historical resources. Specifically, renovation, replacement, or new construction projects have the potential to impact individually eligible resources or the historic district, including its contributors, although no individually eligible resources are identified as sites for demolition in the Master Plan Update. Nonetheless, construction activities involving renovation, replacement, or new construction were determined to require implementation of Mitigation Measures HR-A through HR-F to reduce impacts to less than significant.

Construction activities associated with development under the Reduced Development Footprint Alternative would be substantially similar to those described under the proposed Master Plan Update. This alternative would eliminate the development of the Faculty and Staff Housing project, Aquatics Center and Pool Renovation project, and the Engineering Replacement Building project, none of which impact historical resources. As such, elimination of these three projects would not avoid or reduce impacts to any historical resources compared to the project. All other development proposed under the Master Plan Update would be implemented under this alternative. Thus, Mitigation Measures HR-A through HR-F would be implemented under this alternative, as applicable. As three identified projects were determined not to impact any historical resources, impacts to historical resources under the Reduced Development Footprint Alternative would be similar to the proposed Master Plan Update.

Geology and Soils

As discussed in Section 3.5, Geology, Soils, and Paleontological Resources, ground-disturbing activities associated with development of new projects, replacement projects, and renovation projects that include additions and/or renovations to the exterior of existing facilities under the Master Plan Update, may require excavation for foundations that may reach undisturbed geologic contexts, which could result in potentially significant impacts to paleontological resources. As such, implementation of Mitigation Measures GEO-A through GEO-D would be required to reduce impacts to less than significant.

Construction activities associated with the development under the Reduced Development Footprint Alternative would be substantially similar to those described under the proposed Master Plan Update, albeit slightly reduced in magnitude because of the elimination of three projects. As such, if it is determined that ground-disturbing activities at depths of 4 feet or greater would still be required under this alternative, Mitigation Measures GEO-A through GEO-D would be implemented, as applicable under this alternative. However, the elimination of the Faculty and Staff Housing project, Aquatics Center and Pool Renovation project, and the Engineering Replacement Building project, would avoid the ground-disturbing activities associated with construction of these projects. As such, the elimination of these three projects under the Reduced Development Footprint Alternative would result in fewer construction activities that could impact paleontological resources. Therefore, construction impacts under the Reduced Development Footprint Alternative would be reduced as compared to the Master Plan Update.

Similar to the Master Plan Update, no impacts to paleontological resources would occur during operation of the Reduced Development Footprint Alternative.

Greenhouse Gas Emissions

Construction and operational GHG emissions are estimated for all development under the proposed Master Plan Update. As discussed in Section 3.6, GHG emissions associated with construction and operation would not exceed significance thresholds. The Reduced Development Footprint Alternative would eliminate the construction and operation of the Faculty and Staff Housing Project, Aquatics Center and Pool Renovation project, and the Engineering Replacement Building project proposed under the Master Plan Update. The elimination of the three projects under the Reduced Development Footprint Alternative would result in fewer construction activities that would generate GHG emissions. As such, with less development occurring under this alternative, construction-related GHG impacts would be slightly reduced as compared to the Master Plan Update. However, aged or outdated utility infrastructure at existing facilities would not be demolished under this alternative (i.e., Design Building, EN2, EN3, EN4, and the pool) and instead would remain in use, and as a result, infrastructure improvements proposed under the Master Plan Update that would enhance utility and energy efficiency and reduce GHG emissions would not be implemented. Therefore, operational GHG emissions under the Reduced Development Footprint Alternative would be increased as compared to the Master Plan Update. Therefore, operational GHG impacts under the Reduced Development Footprint Alternative would be slightly greater than under the Master Plan Update.

Hydrology and Water Quality

Construction activities associated with development of the Reduced Development Footprint Alternative would include ground-disturbing activities that could increase the potential for erosion of exposed soils. Additionally, potential increases in impervious surfaces could increase rates of runoff from the site. Similar to the Master Plan Update, development of this alternative would be required to comply with all applicable stormwater runoff regulations, including obtaining an NPDES permit, implementing project-specific SWPPPs during construction, and adhering to Small MS4 Permit requirements and LID standards, as applicable, during operation. As such, similar to the proposed Master Plan Update, development in compliance with existing regulations under this alternative would not substantially increase the area of impervious surfaces present at the CSULB main campus such that increased volumes and/or rates of runoff would result in erosion or flooding. However, the Reduced Development Footprint Alternative would eliminate the construction and operation of the Faculty and Staff Housing Project, Aquatics Center and Pool Renovation project, and the Engineering Replacement Building project proposed under the Master Plan Update. The elimination of these three projects would result in fewer construction

and operation activities that would impact erosion, runoff, and other hydrology and water quality parameters. As such, with less development occurring under this alternative, both construction and operation activities would be slightly reduced. Therefore, impacts to hydrology and water quality associated with construction and operation of the Reduced Development Footprint Alternative would be reduced as compared to the Master Plan Update.

Noise

The Reduced Development Footprint Alternative would eliminate development of the Faculty and Staff Housing project, Aquatics Center and Pool Renovation project, and the Engineering Replacement Building project proposed under the Master Plan Update. As discussed in Section 3.8, Noise, construction activities associated with development under the Master Plan Update would result in noise levels exceeding thresholds at the nearest sensitive receptors, requiring implementation of Mitigation Measures NOI-A and NOI-B to reduce impacts to less than significant. Construction activities associated with the development under the Reduced Development Footprint Alternative would be substantially similar to the proposed Master Plan Update, albeit slightly reduced in magnitude because of the elimination of three projects. As such, Mitigation Measures NOI-A and NOI-B would still be applicable under this alternative. With implementation of the mitigation measures, daytime and nighttime construction noise levels would be less than significant under this alternative, similar to the proposed Master Plan Update. However, with less development occurring under this alternative, construction activities would be slightly reduced. Additionally, eliminating development of the Faculty and Staff Housing project would eliminate potential construction noise impacts at the adjacent residential uses at that location. Therefore, construction impacts under the Reduced Development Footprint Alternative would be reduced as compared to the Master Plan Update.

Operational noise sources under this alternative would be similar to those described for the Master Plan Update and would include stationary source noise from HVAC units, crowd noise from outdoor gathering spaces, and parking activities, and mobile source noise from vehicular traffic. Noise levels for HVAC units were calculated at a distance of 140 feet, which would not exceed the daytime or nighttime operational noise thresholds. As such, noise from HVAC units associated with operation under this alternative would be similar to the Master Plan Update.

Under the Master Plan Update, crowd noise associated with operation of the Jack Rose Track/Commencement Facilities project could exceed the threshold for increases over ambient noise levels at the nearest sensitive receptor during events due to the increased spectator capacity associated by the project. As such, implementation of Mitigation Measure NOI-C, requiring preparation of a noise assessment for the Jack Rose Track/Commencement Facilities, is required under the Master Plan Update to reduce noise levels during events such that they would not cause a significant increase over ambient noise levels. The Jack Rose Track/Commencement Facilities would be also implemented under the Reduced Development Footprint Alternative. As such, Mitigation Measure NOI-C would be applicable under this alternative. However, elimination of the Faculty and Staff Housing project under this alternative would eliminate the associated noise from outdoor gathering spaces that could be heard at the adjacent residential uses at that location. Therefore, crowd noise levels associated with operation under the Reduced Development Footprint Alternative would be slightly reduced as compared to the Master Plan Update.

As discussed in Section 3.8, Noise, the only project proposed under the Master Plan Update that includes parking is Faculty and Staff Housing. While implementation of this project would not significantly increase parking facility operational noise over the existing conditions, elimination of

the Faculty and Staff Housing project would result in reduced noise associated with parking activities as compared to the Master Plan Update.

Noise levels from mobile sources were calculated to account for all development under the Master Plan Update through the horizon year based on the total campus population, rather than for individual development projects. As such, mobile source noise levels associated with operation of the Reduced Development Footprint Alternative would be substantially similar to the Master Plan Update.

As discussed in Section 3.8, the closest sensitive receptor to the CSULB main campus is located approximately 145 feet away. For a conservative analysis, vibration levels for construction equipment were calculated at a distance of 130 feet. At this distance, the 0.2-inch-per-second PPV threshold for human annoyance and building damage would not be exceeded. Development of three projects would be eliminated under the Reduced Development Footprint Alternative. All other development proposed under the Master Plan Update would be implemented under this alternative. Of the projects eliminated under this alternative, the Faculty and Staff Housing project site is located nearest to an off-site sensitive receptor, at 170 feet away. Although construction activities associated with development of this project would not exceed the applicable vibration threshold, elimination of the Faculty and Staff Housing project would entirely construction vibration impacts at this and other nearby sensitive receptors. Additionally, with less development occurring under this alternative, construction activities overall would be slightly reduced. Therefore, construction vibration impacts under the Reduced Development Footprint Alternative would be reduced as compared to the Master Plan Update.

Similar to the Master Plan Update, development under the Reduced Development Footprint Alternative would not introduce new land uses that could result in perceptible groundborne vibration during operation.

Population and Housing

As discussed in Section 3.9, Population and Housing, the net increase in student beds and faculty and staff housing units that would be provided under the Master Plan Update is accounted for in the SCAG regional demographics and growth forecasts in the 2020-2045 RTP/SCS and would not directly or indirectly induce substantial unplanned population growth in the area. Additionally, development of new campus housing under the Master Plan Update would require demolition of some existing residence halls, which would temporarily require the shifting of those student beds to other student housing buildings until construction of the new buildings is completed. While the student beds provided under this alternative would remain unchanged from the proposed Master Plan Update, the Faculty and Staff Housing project would be eliminated. Elimination of faculty and staff housing units under this alternative would not offset the housing need identified in the RHNA to the same extent as the Master Plan Update. As such, impacts to population and housing under the Reduced Development Footprint Alternative would be greater than the proposed Master Plan Update.

Public Services and Recreation

The demand for public services is based on the service population. The total campus population under this alternative would be similar to the Master Plan Update. As such development under this alternative would not increase the demand for fire or police protection services, as LBFD and UPD already service the campus. Additionally, as adequate service is provided by the University Library at the CSULB main campus, development under this alternative would not increase the demand for library facilities. However, the elimination of the Faculty and Staff Housing project

under this alternative would eliminate the generation of school-aged children that would occur with the provision of faculty and staff housing units under the Master Plan Update. Therefore, impacts to public services under the Reduced Development Footprint Alternative would be slightly reduced as compared to the Master Plan Update

The need for new or expanded parks and recreational facilities is based on service population and access to existing open space and recreational facilities. As previously discussed, the total campus population under this alternative would be similar to the Master Plan Update, and the open space improvements proposed under the Master Plan Update would still be implemented under this alternative. Development of the Aquatics Center and Pool Renovation project and the Engineering Replacement Building project, which would include the creation of a new quad, would be eliminated under this alternative. Nonetheless, the CSULB main campus currently contains open space such as open lawn areas, the Campus Quad, landscaped pedestrian pathways, and informal gathering spaces, and the existing aquatics center and pool would remain in place under this alternative. Therefore, impacts to recreation under the Reduced Development Footprint Alternative would be similar to the proposed Master Plan Update.

Transportation

The Reduced Development Footprint Alternative would eliminate the development of the Faculty and Staff Housing project, Aquatics Center and Pool Renovation project, and the Engineering Replacement Building project proposed under the Master Plan Update. All other development proposed under the Master Plan Update would be implemented under this alternative, including the proposed mobility and circulation improvements. As such, this alternative would not conflict with plans, ordinances, or policies addressing the circulation system and impacts would be similar to the Master Plan Update. Additionally, the VMT model is based on total campus population. As previously discussed, the total campus population under this alternative would be similar to the Master Plan Update. Therefore, impacts related to VMT under the Reduced Development Footprint Alternative would be similar to the Master Plan Update.

Under the Master Plan Update, implementation of the Faculty and Staff Housing project would introduce a new driveway entrance onto Palo Verde Avenue, the construction of which would require a temporary pedestrian detour as a section of the sidewalk would be closed. It could also include the temporary closure of one lane of traffic on southbound Palo Verde Avenue. These proposed improvements that would affect roadway design under City of Long Beach jurisdiction would be subject to review and approval by the City of Long Beach and would be subject to the City's requirements for the preparation of temporary construction traffic control plans. Following completion of construction, implementation of this new driveway would permanently alter the geometry of access at this location. The location and design of the new driveway would be required to adhere to all applicable standards to ensure impacts related to hazards due to a design feature would remain less than significant. The elimination of the Faculty and Staff Housing project under this alternative would eliminate the need to alter vehicular access at that location, which would avoid related impacts associated with development of that project. Therefore, impacts related to design features under the Reduced Development Footprint Alternative would be reduced as compared to the Master Plan Update.

Similar to the Master Plan Update, development under this alternative would be required to implement construction traffic control plans per the CSU standard construction BMPs outlined in the CSU Owner Controlled Insurance Program Safety Manual and follow the standards set forth in PolicyStat, which requires the State Fire Marshal to review all projects to confirm adequate emergency access and building safety features. Therefore, impacts related to emergency access

under the Reduced Development Footprint Alternative would be similar to those of the project proposed under the Master Plan Update.

Tribal Cultural Resources

As discussed in Section 3.12, Tribal Cultural Resources, the footprints for eight projects identified under the Master Plan Update, including the proposed Faculty and Staff Housing project, Aquatics Center and Pool Renovation project, and the Engineering Replacement Building project, overlap with the boundaries of potentially eligible archaeological resources on the CSULB main campus that could be considered tribal cultural resources. As such, ground-disturbing activities occurring during construction at these locations could result in significant impacts to tribal cultural resources, requiring implementation of Mitigation Measures TCR-A through TCR-D to reduce impacts to less than significant. Construction activities associated with development under the Reduced Development Footprint Alternative would be similar to those described under the proposed Master Plan Update. Thus, Mitigation Measures TCR-A through TCR-D would be implemented under this alternative, as applicable. However, this alternative would eliminate development of the Faculty and Staff Housing project, the Aquatics Center and Pool Renovation project, and the Engineering Replacement Building project, thereby avoiding ground-disturbing activities at two potentially eligible archaeological resources on the CSULB main campus that could be considered tribal cultural resources. Therefore, construction impacts to tribal cultural resources under the Reduced Development Footprint Alternative would be reduced as compared to the Master Plan Update.

Similar to the Master Plan Update, no impacts to tribal cultural resources would occur during operation of the Reduced Development Footprint Alternative.

Utilities and Energy

As discussed in Section 3.13, Utilities and Energy, development under the Master Plan Update would require the rerouting of, modifications to, or connections to some existing utilities at individual development sites, including water, stormwater drainage, electric power, and telecommunications lines. Development under this alternative would require similar activities associated with connections to utility infrastructure. Additionally, similar to the Master Plan Update, updates to enhance utility and energy efficiency would be implemented under this alternative. However, the Reduced Development Footprint Alternative would eliminate the construction of the Faculty and Staff Housing project, Aquatics Center and Pool Renovation project, and the Engineering Replacement Building project proposed under the Master Plan Update. The elimination of these three projects under the Reduced Development Footprint Alternative would result in fewer construction activities that would require utility and energy consumption. As such, construction-related impacts would be slightly reduced. However, aged or outdated utility infrastructure at existing facilities that would not be demolished under this alternative (i.e., Design Building, EN2, EN3, EN4, and the pool) would remain in place and updates to enhance utility and energy efficiency would not be implemented. Therefore, operational impacts related to utilities and energy under the Reduced Development Footprint Alternative would be greater than under the proposed Master Plan Update.

Relationship to Project Objectives

Under the Reduced Development Footprint Alternative, all proposed improvements related to student housing facilities would be implemented as described under the Master Plan Update, including the New Parkside Housing Village, Hillside College Renovations/Addition, Beachside Housing, and landscape, open space, and mobility improvements between and around the student housing facilities. Therefore, this alternative would achieve the following project objectives:

5. Support an expanded residential environment by constructing new or replacement buildings, or renovating existing student housing villages to:
    - Increase student housing capacity by approximately 1,600 beds to enhance student experience, support, and wellness to support student success and retention.
    - Include a more diverse mix of housing typologies for students (undergraduate students, single graduate students, and graduate students with families)
    - Provide high quality and affordable options with an equitable mix of offerings for students.
    - Include common spaces, active outdoor spaces, and space for services.
6. Strengthen the physical connection between the two housing villages on the CSULB main campus.

The Reduced Development Footprint Alternative would eliminate development of the proposed Faculty and Staff Housing project, Aquatics Center and Pool Renovation project, and Engineering Replacement Building project. All other development proposed under the Master Plan Update would be implemented under this alternative. Additionally, this alternative would not introduce any other development projects not already included in the Master Plan Update. As this alternative would result in less development occurring at the main campus, the Reduced Development Footprint Alternative would achieve the following project objective:

7. Preserve space in the campus core for academic uses and student-focused facilities and programming to allow for greater integration of student residents.

All proposed mobility and circulation improvements would be implemented under the Reduced Development Footprint Alternative. Therefore, this alternative would achieve the following project objectives:

10. Provide mobility enhancements for safe and accessible circulation around the campus for pedestrians and bicyclists to help the campus become less reliant on vehicular mobility.
11. Provide defined campus gateways and edges with increased wayfinding and signage to highlight resources for the surrounding community by designating pathways to connect neighboring communities through the campus.

Similar to the Master Plan Update, the Reduced Development Footprint Alternative would include improvements to campus facilities proposed to accommodate anticipated student enrollment and campus population growth up to 36,000 FTES in the horizon year 2035. However, the elimination of the Faculty and Staff Housing project, Aquatics Center and Pool Renovation project, and Engineering Replacement Building project would limit the physical development and improvements implemented to accommodate the anticipated student enrollment growth. Therefore, this alternative would partially achieve the following project objective:

1. Support and advance the University's educational mission by guiding the physical development of the campus to accommodate gradual student enrollment growth approximately 36,000 FTES in 2035, including approximately 33,000 FTES on campus and 3,000 FTES off-campus.

The proposed Engineering Replacement Building project would demolish the existing EN2, EN3, and EN4 buildings and consolidate the programming and uses at those buildings into a new larger building at the same site. The elimination of this project under the Reduced Development Footprint Alternative would limit the ability of the University to consolidate academic programming and reduce inefficiencies associated with the existing configuration of the College of Engineering buildings on the main campus and would also constrain and possibly preclude future growth and expansion of the College. As other proposed renovation, replacement, and new construction projects and other improvements would be implemented under this alternative, this alternative would partially achieve the following project objectives:

2. Optimize the existing campus space and minimize net new gross square footage.
3. Renovate or demolish buildings that are inefficient in terms of operation, maintenance, and user comfort due to age and have critical deferred maintenance issues.
4. Replace demolished buildings with higher density, mixed use buildings that consolidate and integrate colleges and student support spaces.

The proposed Aquatics Center and Pool Renovation project would repair and upgrade the existing pool and may increase the size of the facility and include additional bleacher seating. This project would be eliminated under the Reduced Development Footprint Alternative; however, other proposed improvements to athletic facilities would be implemented. Therefore, this alternative would partially achieve the following project objective:

12. Provide high-quality athletic facilities and optimize existing recreational fields by better utilizing land area and improving connections to and through the sports precinct facilities.

The proposed Faculty and Staff Housing project would provide 285 new faculty and staff housing units in a new six-story building near the northwest corner of State University Drive and Palo Verde Avenue. This project would be eliminated under the Reduced Development Footprint Alternative. Therefore, this alternative would not achieve the following project objectives:

8. Retain and recruit high-quality faculty and staff by providing on-campus affordable housing options.
9. Provide new faculty and staff housing at the perimeter of the campus to allow ease of access for faculty and staff who maintain social connections and conduct other daily activities off-campus, such as grocery shopping, dropping children off at school, and other family functions.

Conclusion

As discussed above, the Reduced Development Footprint Alternative would eliminate development of the Faculty and Staff Housing project, Aquatics Center and Pool Renovation project, and the Engineering Replacement Building project. All other development proposed under the Master Plan Update would be implemented under this alternative. The reduction in the amount of development that would occur under this alternative would result in reduced construction activities. As such, impacts under this alternative would be reduced as compared to the Master Plan Update in eight areas: aesthetics; air quality (construction); GHG emissions (construction); hydrology and water quality; noise; public services and recreation; transportation; and utilities and energy (construction).

Additionally, development under this alternative would require implementation of the same mitigation measures to reduce construction impacts to special-status wildlife species and paleontological resources. However, the elimination of the three identified projects under this alternative would avoid the ground-disturbing activities associated with construction of these projects. As such, the elimination of these three projects under the Reduced Development Footprint Alternative would result in fewer construction activities that could impact special-status bird and bat species, archaeological resources, paleontological resources, and tribal cultural resources. Therefore, this alternative would result in reduced construction impacts in the following areas: biological resources; cultural resources; geology, soils, and paleontological resources; and tribal cultural resources. Elimination of faculty and staff housing units under this alternative would not offset the housing need identified in the RHNA to the same extent as the Master Plan Update. As such, Reduced Development Footprint Alternative would result in greater population and housing impacts than the proposed Master Plan Update.

The Reduced Development Footprint Alternative would also result in greater impacts in six areas: air quality (operation); GHG emissions (operation); and utility and energy usage. Impacts in the following areas would be similar to those identified for implementation of the Master Plan Update: biological resources (operation); cultural resources (operation); geology, soils, and paleontological resources (operation); and tribal cultural resources (operation).

As the Reduced Development Footprint Alternative would eliminate development of three projects that partially overlap significant or potentially significant archaeological resources, this alternative would avoid the potentially significant impacts to archaeological resources and tribal cultural resources associated with development at those sites. Additionally, the reduced development that would occur under this alternative would reduce construction and operation impacts in several areas as compared to implementation of the Master Plan Update. However, the elimination of the Faculty and Staff Housing project would result in increased impacts to population and housing.

The Reduced Density Development Footprint Alternative would achieve five of the 12 project objectives; would partially achieve five of the project objectives to a lesser extent than the Master Plan Update; and would not achieve two of the project objectives. Therefore, the Reduced Development Footprint Alternative would not fully achieve or attain a majority of the project objectives.

5.5 Environmentally Superior Alternative

In accordance with CEQA Guidelines Section 15126.6, an EIR shall identify an environmentally superior alternative among the feasible alternatives. The analysis in this chapter is summarized in Table 5-1, which provides a comparison of the impacts of the alternatives to the Master Plan Update. The No Project Alternative would avoid the potentially significant aesthetics impacts associated with new permanent lighting at the Jack Rose Track/Commencement Facilities proposed under the Master Plan Update. However, the No Project Alternative would not implement the mitigation measures identified to reduce impacts under the Master Plan Update. As such, the No Project Alternative would result in greater potential impacts to nesting birds, roosting bats, and paleontological resources, which would not be mitigated. Additionally, improvements to the operation of facilities at the CSULB main campus would not be implemented, resulting in greater impacts related to vehicle/pedestrian, vehicle/bicycle, and left turn conflicts, and utility and energy usage. Thus, while the No Project Alternative would avoid one potentially significant impact associated with the Master Plan Update, it would also result in nine increased impacts, including a significant unavoidable impact associated with construction vibration. Additionally, the No Project Alternative would not achieve most of the project objectives.

The Faculty and Staff Housing Project Design Alternative would not avoid or substantially lessen any of the potentially significant impacts associated with the project proposed under the Master Plan Update. However, similar to the Master Plan Update, all potentially significant impacts identified under this alternative would be mitigated to levels less than significant. Although this alternative would result in slightly increased noise impacts during construction and operation due to the increased size of the building, construction noise impacts would be less than significant with mitigation and crowd noise levels from outdoor gathering spaces during operation would not exceed the threshold. Additionally, the Faculty and Staff Housing Project Design Alternative would achieve all of the project objectives.

The Reduced Development Footprint Alternative would avoid the potentially significant impacts to archaeological resources and tribal cultural resources associated with development of the Faculty and Staff Housing project, Aquatics Center and Pool Renovation project, and the Engineering Replacement Building project. However, with the elimination of the Faculty and Staff Housing project, this alternative would not offset the housing need identified in the RHNA to the same extent as the Master Plan Update, thereby resulting in increased population and housing impacts. The Reduced Development Footprint Alternative would also result in greater impacts related to air quality, GHG, and utility and energy usage as updates to enhance utility and energy efficiency would not be implemented. Nonetheless, the reduction in development under this alternative would result in reduced construction impacts as compared to the Master Plan Update and would avoid impacts in two areas. As such, this alternative would result in the least impacts of the three alternatives. Additionally, the Reduced Development Footprint Alternative would achieve most of the project objectives, although not to the same extent as under the Master Plan Update. Therefore, the Reduced Development Footprint Alternative is considered the environmentally superior alternative.

Table 5-1: Comparison of Impacts of the Alternatives to the Proposed Master Plan Update

Impact Area	Proposed Master Plan Update	No Project Alternative	Faculty and Staff Housing Project Design Alternative	Reduced Development Footprint Alternative
Aesthetics				
Construction	I	Less	Similar	Less
Operation	I	Less	Greater	Less
Air Quality				
Construction	II	Less	Similar	Less
Operation	II	Greater	Similar	Greater
Biological Resources				
Construction	I	Greater	Similar	Less
Operation	III	Similar	Similar	Similar
Cultural Resources				
Construction	I	Less	Similar	Less
Operation	II	Similar	Similar	Similar
Geology, Soils, and Paleontological Resources				
Construction	I	Greater	Similar	Less
Operation	III	Similar	Similar	Similar
Greenhouse Gas Emissions				
Construction	II	Less	Similar	Less
Operation	II	Greater	Similar	Greater
Hydrology and Water Quality				
Construction	II	Less	Similar	Less
Operation	II	Less	Similar	Less
Noise				
Construction	I	Greater	Greater	Less
Operation	I	Similar	Greater	Less
Population and Housing	II	Greater	Similar	Greater
Public Services and Recreation				
Construction	II	Similar	Similar	Less
Operation	II	Greater	Similar	Less

Table 5-1: Comparison of Impacts of the Alternatives to the Proposed Master Plan Update

Impact Area	Proposed Master Plan Update	No Project Alternative	Faculty and Staff Housing Project Design Alternative	Reduced Development Footprint Alternative
Transportation				
Construction	II	Less	Similar	Less
Operation	II	Greater	Similar	Less
Tribal Cultural Resources				
Construction	I	Less	Similar	Less
Operation	II	Similar	Similar	Similar
Utilities and Energy				
Construction	II	Less	Similar	Less
Operation	II	Greater	Similar	Greater

Notes:

I. Potentially Significant Impact Unless Mitigated
II. Less than Significant Impact
III. No Impact

Less: Impact is lower in magnitude than impacts of the proposed Master Plan Update.
Similar: Impact is similar in magnitude to impacts of the proposed Master Plan Update.
Greater: Impact is greater in magnitude than impacts of the proposed Master Plan Update.