

5.0 ALTERNATIVES

A. INTRODUCTION

Under CEQA, and as indicated in California Public Resources Code Section 21002.1(a), the identification and analysis of alternatives to a project is a fundamental aspect of the environmental review process intended to consider ways to mitigate or avoid the significant environmental effects of a project.

Guidance regarding the definition of project alternatives is provided in State *CEQA Guidelines* Section 15126.6(a) as follows:

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 State *CEQA Guidelines* emphasize that the selection of project alternatives be based primarily on the ability to reduce significant impacts relative to the proposed project, “even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly.”¹ The State *CEQA Guidelines* further direct that the range of alternatives be guided by a “rule of reason,” such that only those alternatives necessary to permit a reasoned choice are analyzed.²

In selecting project alternatives for analysis, potential alternatives should be feasible. The State *CEQA Guidelines* Section 15126.(f)(1) explains that:

Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries (projects with a regionally significant impact should consider the regional context), and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site.

The State *CEQA Guidelines* require the analysis of a “no project” alternative and, depending on the circumstances, evaluation of alternative location(s) for the project, if feasible. Based on the alternatives analysis, an environmentally superior alternative is to be designated. In general, the environmentally superior alternative is the alternative with the least adverse impacts on the environment. If the environmentally superior alternative is the “no project” alternative, the EIR shall also identify another environmentally superior alternative among the other alternatives.³

¹ *CEQA Guidelines* Section 15126.6(b).

² *Ibid.*, Section 15126.6(f).

³ *Ibid.*, Section 15126.6(e) (2).

Section 15126.6(d) of the State *CEQA Guidelines* states that alternatives analysis need not be presented in the same level of detail as the assessment of the proposed project. Rather, the EIR is required to provide sufficient information to allow meaningful evaluation, analysis and comparison with the proposed project.

B. OBJECTIVES OF THE PROPOSED PROJECT

The underlying purpose and primary objective of the Master Plan Project is to redevelop the County-owned Harbor-UCLA Medical Center Campus to support a modern, integrated healthcare delivery system which provides a New Hospital Tower to replace the acute care functions of the Existing Hospital before the state law deadline to meet seismic standards for critical trauma/ tertiary acute care services so that the South Bay service region and the County seamlessly retain this key link in the County-wide trauma hospital safety net which features biomedical research and development facilities and integrates inpatient and outpatient services in a renovated and expanded setting. As discussed in Chapter 2.0, Project Description, of this Draft EIR, this goal is supported by the following objectives:

1. Secure timely compliance with the Alquist Hospital Facilities Seismic Safety Act (also known as Senate Bill [SB] 1953) to maintain critical trauma services in the South Bay service region of the County of Los Angeles, which requires replacement of the current tertiary acute care Existing Hospital tower and other essential supporting facilities with upgrades/replacement before January 1, 2030.
2. Support the renovation of existing healthcare facilities to implement the County's strategy to respond to the Affordable Care Act of 2010 and modernize and integrate healthcare delivery and update facilities to modern standards by constructing new buildings and repurposing/remodeling existing buildings on the campus to improve operational efficiencies, resolve existing deferred maintenance issues, and consolidate inpatient and outpatient services in dedicated buildings, to optimize the quality of care and operational effectiveness while reducing administrative, operational and maintenance costs.
3. Provide for a fundamental reorganization, expansion, and integration of outpatient services with the specific goals of being a) more community-based and patient-centered, b) more efficient, and c) configured to include clear wayfinding and pedestrian walkways;
4. Plan renovation and appropriate new medical campus construction for a mix of inpatient, outpatient, and supporting facilities to respond to healthcare needs in the South Bay service region, based on the Harbor-UCLA Medical Center Master Plan Project's current services and market projections for the planning horizon.
5. Provide opportunities for development up to 250,000 square feet of new Bioscience Tech Park uses and support facilities, as well as 225,000 square feet of expanded LA BioMed facilities.
6. Encourage a vibrant, mixed-use setting that supports the continuing Harbor-UCLA mission of clinical care, education, and research as well as the provision of modernized facilities for existing and future tenants of the Medical Center Campus.
7. Achieve optimum public utilization of land and buildings under the ownership and control of the County and maintain flexibility to respond to future shifts in medical care and technology.

8. Develop the campus in ways that do not compromise environmental quality, social equity, or economic opportunity for future generations by: a) creating durable, adaptable green infrastructure and buildings, promoting resource-efficient transportation solutions, and seeking climate-positive outcomes, b) establishing goals to reduce net greenhouse gas emissions, including: energy, buildings and land use, transportation, water and waste, and c) accommodating changing sustainable design practices, from current standards to a future vision for a “Regenerative Campus.”

C. SUMMARY OF THE ALTERNATIVES

This chapter considered a total of seven (7) alternatives to the Project, three of which were considered but were not selected for further analysis, and the remaining four of which, including the “no project” alternative noted previously and three other “build” alternatives, are comprehensively evaluated below. The three alternatives that were considered but rejected after initial analysis included Alternative Off-Site Locations, Alternative On-Site Uses, and a No Bioscience Tech Park Alternative. The No Project Alternative for this analysis is referred to as the No Project/No Build Alternative. Under the No Project/No Build Alternative, the Project would not be developed and the use of the entire Harbor-UCLA Medical Center Campus would continue as under current conditions.

Three additional alternatives were selected, as noted above, with the goal of identifying ways to reduce or avoid significant unavoidable impacts that would result from implementation of the Project, including temporary construction-related traffic impacts; long-term operational traffic impacts; cumulative construction noise impacts; and temporary operational helicopter noise impacts. Based on these significant unavoidable environmental impacts and the objectives established for the Project (set forth above), the following alternatives are evaluated:

1. No Project/No Build Alternative
2. Reduced Intensity Alternative A: Acute Bed and Other Plan Reductions
3. Reduced Intensity Alternative B: Further Acute Bed and Other Plan Reductions
4. Reduced Intensity Alternative C: New Acute Bed Hospital Tower Only

D. ALTERNATIVES CONSIDERED AND REJECTED

The State *CEQA Guidelines* Section 15126.6(c) provides that an EIR should identify alternatives that were considered for analysis but rejected and briefly explain the reasons for their rejection. According to the State *CEQA Guidelines*, the following factors may be used to eliminate alternatives from detailed consideration: the alternative’s failure to meet most of the basic Project objectives, the alternative’s infeasibility, or the alternative’s inability to avoid significant environmental impacts. Alternatives that have been considered and rejected as infeasible are discussed below.

1. Alternative Off-Site Locations

CEQA does not require that analysis of alternative sites always be included in an EIR. However, if all the surrounding circumstances make it reasonable to consider an alternative site, then this Alternative should be

considered and analyzed in the EIR. In making the decision to include or exclude analysis of an alternative site, the “key question and first step in analysis is whether any of the significant effects of the project would be avoided or substantially lessened by putting the project in another location. Only locations that would avoid or substantially lessen any of the significant effects of the project need to be considered for inclusion in the EIR”. If no feasible alternative locations exist, the EIR must disclose the reasons for this conclusion.⁴

Among the factors that may be considered when addressing the feasibility of alternatives is site suitability, economic viability, availability of infrastructure, general plan consistency, jurisdictional boundaries, and whether the proponent can reasonably acquire, control, or otherwise have access to the alternative site.⁵

The Medical Center Campus is unique in the Project area (West Carson and vicinity) because of its size, current uses, availability for development, and central location with respect to the sizeable daytime employee population and 24-hour residential populations within the surrounding communities. The Medical Center Campus is also highly visible and easily accessible from major roadways (Vermont Avenue, Normandie Avenue, Carson Street and 220th Street) and the Harbor Freeway.

Within unincorporated Los Angeles County, and in the Project area (West Carson) there is a scarcity of vacant properties, or developed properties suitable for redevelopment, that are similarly sized to the Medical Center Campus, are proximate to existing public services with easy access from an existing public road and freeway visibility, and are near compatible uses. Furthermore, to replace the entire existing Medical Center Campus, which has been located here since 1943 and serves many thousands of people, to a completely new and undeveloped location would likely result in impacts greater than the Project, while redevelopment of an already urbanized site elsewhere in the region would not serve the population that currently relies on the services provided at the Medical Center Campus. Furthermore, acquisition of a similarly sized property, whether public or private, would involve substantial capital costs that would not otherwise be necessary at the existing Medical Center Campus, as the Project Site is currently under the sole ownership of the County of Los Angeles.

Implementation of the Project at an off-site location, therefore, would not meet the Project objectives of modernizing and renovating the current Medical Center Campus or optimizing use of County property and resources. In addition, the County did not consider implementation of other alternatives discussed in this chapter at any off-site locations, based on the discussion above regarding the Project. For these reasons, this development scenario, was not considered for further analysis in this Draft EIR.

2. Alternative On-Site Uses

As discussed in Chapter 2.0, Project Description, of this Draft EIR, the existing Medical Center Campus has been utilized for hospital, outpatient, research, and other related activities for many decades, with substantial investment by the County and other on-site tenants in support of these functions. As further stated in Chapter 2.0, Harbor-UCLA Medical Center expects increasing demand in its service area, which currently encompasses 10 million people and is expected to grow by an estimated 600,000, through 2030. It is projected that the service area will include an additional 190,000 Medicare-eligible patients by the

⁴ *State CEQA Guidelines, Section 15126.6(f) (2)*

⁵ *Ibid., Section 15126.6(f) (1)*

buildout horizon, an assumption based on an anticipated increase in the service area population and aging, and is expected to affect demand for certain services as well as the overall volume of patient visits, which is in turn expected to increase by an estimated 20 percent by 2030, even assuming some percentage of future patients transfer back to Martin Luther King Hospital or other hospitals. Further, it is expected that there will be an increasing need for Harbor-UCLA to enhance its outpatient programs and other patient support services. In light of the expected increase in its service area population and increased demand for its services, a physician workforce shortage in Los Angeles, and the lack of plans for the new construction of other acute care hospital facilities in the region by the Master Plan Project buildout horizon, Harbor-UCLA sees a clear need to invest in its facilities and programs at the existing Medical Center Campus in order to continue to fulfill its role as a strategic piece of the healthcare “safety net” of Los Angeles County in general and for South Bay communities in particular. Given the County’s ownership of the 72-acre Medical Center Campus property, substantial long-term investment in hospital and related health care and research facilities at the site, and location within the geography such facilities serve, redevelopment of the Medical Center Campus with land uses other than hospital, outpatient, biomedical research and related supporting uses was not considered for further analysis in this Draft EIR.

In addition, this development scenario would not achieve many of the key objectives of the Project including achieving compliance with seismic safety requirements for acute care facilities; supporting the renovation of existing healthcare facilities; providing for a fundamental reorganization, expansion, and integration of outpatient services; renovation and appropriate new medical campus construction for a mix of inpatient, outpatient, and supporting facilities to respond to healthcare needs in the South Bay service region; providing opportunities for development up to 250,000 square feet of new Bioscience Tech Park uses and support facilities, as well as 225,000 square feet of expanded LA BioMed facilities; encouraging a vibrant, mixed-use setting that supports the continuing Harbor-UCLA mission of clinical care, education, and research; and achieving optimum public utilization of land and buildings under the ownership and control of the County. As such, the County did not consider pursuing development of other uses on the Medical Center Campus that are not proposed by the Board of Supervisors or the Harbor-UCLA Master Plan.

3. No Bioscience Tech Park Alternative

As part of its exploration of potential alternatives to the Master Plan Project, the County considered a Project alternative that would implement the Master Plan Project as proposed but without a Bioscience Tech Park component. All other aspects of the Project would be implemented on the Medical Center Campus under this Alternative, including (1) a New Hospital Tower; (2) new and renovated outpatient care facilities (to be provided in new outpatient buildings and in portions of the renovated Existing Hospital Tower); (3) other services and facilities, including administrative office, warehouse/storage areas, day care, limited commercial services (e.g., coffee stand, sundry shop); (4) long-term buildout of the LA BioMed Campus; and (5) Medical Center Campus support facilities, including new and renovated infrastructure, utilities, parking, roadways, and pedestrian and bicycle circulation improvements.

However, while this alternative would achieve many of the Project objectives, including objectives 1, 2, 3, 4, 6, 7, and 8 discussed above, and would partially achieve objective 5 relative to expansion of existing LA BioMed uses on the Medical Center Campus, this Alternative would not achieve one of the County’s key objectives for the Project, which is to provide opportunities for development up to 250,000 square feet of new Bioscience Tech Park uses and support facilities.

As stated in Chapter 2.0, Project Description, of this Draft EIR, the proposed Bioscience Tech Park represents an important opportunity to grow the bioscience industry in the County, and unique to the Harbor UCLA Campus location, to take advantage of existing and potential future relationships and research opportunities between a collocated Bioscience Tech Park, the on-site hospital and outpatient facilities, and the existing LA BioMed facility, a privately-operated program that itself has plans for growth on the Medical Center Campus during the course of Master Plan Project buildout. This is consistent with Harbor UCLA's long-standing status as a teaching hospital with an existing affiliation with the David Geffen School of Medicine at UCLA.

Moreover, the availability of a sizeable and currently undeveloped buildable area on the western side of the Medical Center Campus would support a facility of the necessary size, and would allow achievement of this objective without the need for costly acquisition of additional real estate or displacement of existing uses on the Medical Center Camps or at an off-site location. Finally, a facility in this location would also provide needed employment opportunities and, as noted in the Project Description in this Draft EIR, would further strengthen Harbor UCLA's role as a strategic part of the healthcare "safety net" in the South Bay portion of the County.

For these reasons, this development scenario, which would eliminate the Bioscience Tech Park, was not considered for further analysis in this Draft EIR.

E. ANALYSIS FORMAT

In accordance with State *CEQA Guidelines* Section 15126.6(d), each alternative is evaluated in sufficient detail to determine whether the overall environmental impacts would be less than, similar to, or greater than the corresponding impacts of the project. Furthermore, each alternative is evaluated to determine whether most of the Project objectives, identified in Chapter 2.0, Project Description, would be feasibly attained by the alternative.⁶ The evaluation of each of the alternatives follows the format described below:

- A description of the alternative.
- The environmental impacts of the alternative before and after implementation of reasonable mitigation measures for each environmental issue area analyzed in the EIR are described. Where applicable, the evaluation is divided between temporary impacts that would occur during the Project's construction phase, and impacts that would occur during the Project's operational phase.
- Environmental impacts of the alternative and the Project are compared for each environmental issue area evaluated in Chapter 4.0 the Draft EIR. Where the impact of the alternative would be clearly less adverse than the impact of the Project, the comparative impact is said to be "less." Where the alternative's net impact would clearly be more adverse than the Project, the comparative impact is said to be "greater." Where the impacts of the alternative and Project would be roughly equivalent, the comparative impact is said to be "similar." The evaluation also documents whether compared to the Project an impact would be entirely avoided, whether a significant impact could be reduced to a less than significant level, or whether a significant unavoidable impact would be feasible to mitigate to a less than significant level.
- The comparative analysis of the impacts is followed by a general discussion of the extent to which the underlying purpose and Project objectives are attained by the alternative.

⁶ *Ibid.*, Section 15126.6(c).

5.0 ALTERNATIVES

A. ALTERNATIVE 1: NO PROJECT/NO BUILD ALTERNATIVE

A. DESCRIPTION OF THE ALTERNATIVE

Under the No Project/No Build Alternative, the proposed Medical Center Campus Master Plan Project would not be implemented, and the site would remain in its current state. New Hospital Tower would not be constructed on the site, nor would the proposed outpatient care facilities, parking lots and other services facilities be developed. Because it would not meet new seismic requirements scheduled to be effective January 1, 2030 for acute care facilities, the Existing Hospital would not be licensed to operate as an acute care facility after December 31, 2029. The hospital could continue to operate providing non-acute care services. The buildout of the LA BioMed Campus would not occur, and the new Bioscience Tech Park, campus support and required infrastructure would not be constructed. Proposed new amenities on the Medical Center Campus, including the Medical Center Campus reorganization with its new network of pedestrian walkways and landscaped areas, would not be implemented.

B. ENVIRONMENTAL IMPACTS

1. Aesthetics

Under the No Project/No Build Alternative, no construction activities would take place, and the Medical Center Campus Master Plan Project would not be implemented. The existing configuration of the current Medical Center Campus would remain the same. The LA BioMed Campus would not be reconfigured, nor would the new Bioscience Tech Park be constructed. The New Hospital Tower, which is intended as the tallest, most-visible building on the Medical Center Campus, and therefore, its primary focal point, would not be constructed. The proposed Landscape Master Plan would not be implemented, thereby resulting in no new landscaping being planted, no garden installations, plazas, walkways, trails or public art. As such, current visual character, views and light and glare impacts associated with the Medical Center Campus would remain unchanged, and there would be no impact to aesthetics resulting from the No Project/No Build Alternative, including impacts related to visual character, views, and light and glare. In Section 4.A., Aesthetics, of this Draft EIR, it was determined that the Project would result in a less than significant impact with respect to aesthetics. All impacts would be avoided under the No Project/No Build Alternative, as no impacts would occur. As a result, potential impacts to Aesthetics under the No Project/No Build Alternative would be less than under the Project.

2. Air Quality

Under the No Project/No Build Alternative, no construction would occur, and no development would result. Therefore, the Project's less than significant construction emissions would not occur, as no impact would result from this Alternative. Under this Alternative, there would not be an increase in the number of employees, patients, visitors or other patrons on the Medical Center Campus, and there would be no additional vehicle trips resulting. As such, operational emissions under this Alternative would be equivalent to existing conditions. Operational emissions would also be less than those generated by the Project, which would have increased emissions from mobile, area, and stationary sources. Although Project-generated

construction and operational emissions would be less than significant, there would be no increase in emissions under this Alternative. Therefore, there would be no resulting impact under the No Project/No Build Alternative. As a result, construction and operational air quality impacts would be less under the No Project/No Build Alternative than under the Project.

3. Energy

Under the No Project/No Build Alternative, there would be no new additional development on the Medical Center Campus which would consume energy and natural resources, as compared to the current condition. Although energy consumption would be less under this Alternative than under the Project, older, inefficient facilities, practices and machinery would continue to use energy resources in this manner. The Project's sustainable development plan would introduce LEED Silver-level certification for new development, which would incorporate a number of requirements for more efficient facilities and practices throughout the Medical Center Campus. Implementation of the Project's Landscape Master Plan would help reduce dependency on natural resources by capturing and cleaning stormwater runoff and shading buildings to reduce cooling demands. Although this Alternative would not replace existing facilities with newer, more efficient ones, the continued use of such facilities would not represent an adverse impact with regard to energy consumption as no changes to energy demands or applications would occur relative to baseline conditions. Although the Project's energy impacts would be less than significant, the No Project/No Build Alternative would generate no new demand or associated impacts. As a result, energy impacts would be less under the No Project/No Build Alternative than under the Project.

4. Geology and Soils

The No Project/No Build Alternative would not increase the number of people at the Medical Center Campus that could potentially be exposed to seismic hazards compared to the Project. Furthermore this Alternative would not involve any construction that would occur under the Project, including grading and excavation to construct the Project components. Therefore, no impacts relative to seismic or other groundwater and soils geologic hazards would occur under this Alternative. As a result, geology and soils impacts under the No Project/No Build Alternative would be less than those that would occur under the Project.

5. Greenhouse Gas Emissions

The No Project/No Build Alternative would generate no increase in GHG emissions and thus would result in no impacts. Under the Project, GHG emissions would increase during construction and operation but would be less than significant. Therefore, impacts under the No Project/No Build Alternative would not occur, which would be less compared to the Project.

6. Hazards and Hazardous Materials

Under the No Project/No Build Alternative, existing Campus operations would continue unchanged except the existing hospital will no longer be licensed to provide acute care services beyond 2030 and will not provide those services. It is assumed for this analysis that the Existing Hospital will continue to provide non acute medical care. No new uses or activities would be introduced. Hazardous substances used on the Medical Center Campus would be limited to those currently used for medical treatment and research, cleaning and property and equipment maintenance, and landscaping, and would include cleaning agents, paints, pesticides, and other such materials. All hazardous substances would continue to be contained,

stored, and used in accordance with manufacturers' instructions and applicable standards and regulations. The existing buildings on the Site would remain intact, and the potential for release of asbestos-containing materials (ACMs), lead-based paints (LBPs), or polychlorinated biphenyls PCBs in fluorescent light ballasts as the result of building rehabilitation or demolition activities would not occur. In addition, there is no potential for encountering contaminated soil or underground features beneath the Medical Center Campus.

Therefore, no impacts related to hazardous materials would occur under the No Project/No Build Alternative, and impacts would be less than those of the Project. Although buildings on the Medical Center Campus would likely deteriorate and at some point could lead to the release of ACBM, LBPs, and PCBs if preventative maintenance, rehabilitation, or demolition is not undertaken. However, demolition activities for specific buildings or uses are not contemplated as part of this Alternative, and only maintenance is assumed.

7. Hydrology and Water Quality

Under the No Project/No Build Alternative, existing development would remain and no new development or activities would be introduced to the Medical Center Campus. There would be no modifications to the existing drainage patterns, directions, or type, quality and quantity of runoff generated from the Medical Center Campus. Accordingly, no new pollutants would be introduced into the stormwater system via stormwater runoff. Improvements that would be implemented under the Project, such as the Landscape Master Plan, SUSMP and LID BMP's that would result in improved water quality for on-site stormwater runoff, would not occur under the No Project/No Build Alternative. Nonetheless, since no new construction activities or development would occur under this Alternative, this No Project/No Build Alternative would have no construction-related or operational impacts on surface water quality and impacts would be less than those of the Project.

8. Land Use

Under the No Project/No Build Alternative, there would be no changes to land uses on the Medical Center Campus. No new uses or development would be introduced to the Medical Center Campus under this Alternative, and no General Plan amendment, zone change, or other entitlements would be requested. The No Project/No Build Alternative would therefore have no land use impacts related to land use policy consistency or physical compatibility. Therefore, overall impacts related to land use under the No Project/No Build Alternative would be less than those of the Project.

9. Noise

The No Project/No Build Alternative would not introduce new construction, operational noise sources, vibration or new traffic-related noise to the Medical Center Campus. Therefore, this Alternative would result on no construction or operational noise impacts. This Alternative would, therefore, avoid the Project's significant and unavoidable, short-term, construction noise and vibration impacts. Under this Alternative, existing Campus operations would continue as under current conditions, including helicopter operations. Therefore, this Alternative would have no operational noise and vibration impacts, and impacts would be less than those of the Project.

10. Population, Housing and Employment

Under the No Project/No Build Alternative, there would be no expansion of the Medical Center Campus as proposed under the Master Plan, and no new employment opportunities and resulting new employees. The Project involves future development of medical buildings and uses on-site as part of the proposed expansion, removal, replacement, and modification within the existing Campus, which would increase the visitor, patient, and employment population on the Medical Center Campus. The Project would cause a less than significant impact with regard to population, housing and employment. By comparison, the No Project/No Build Alternative would have no impact on population, housing and employment, and therefore impacts would be less than those of the Project.

11. Public Services

a. Fire Protection and Emergency Services

Fire protection and emergency medical services impacts under the Project would be less than significant with implementation of applicable mitigation measures. Under the No Project/No Build Alternative, no increased demand for fire protection and emergency medical services would occur and it would have no effect on emergency response times or emergency access, as could occur under the Project from construction activities, operational traffic, and Medical Center Campus design. Therefore, impacts related to fire protection and emergency services under the No Project/No Build Alternative would be less than those of the Project.

b. Sheriff Protection

Sheriff services impacts under the Project would be less than significant with implementation of applicable mitigation measures. The No Project/No Build Alternative would not change existing conditions or cause a net increase in the level of activity at the Medical Center Campus. Therefore, it would not alter demand for sheriff protection services or affect emergency response times. Impacts related to sheriff protection and emergency response times under the No Project/No Build Alternative would be less than those of the Project.

c. Parks and Recreation

Impacts to parks and recreational facilities under the Project would be less than significant without the need for mitigation measures. The No Project/No Build Alternative would not increase the on-site residential population or generate related demand for off-site parks and recreational facilities or services. This Alternative would have no impacts on recreational facilities and services or parks, and impacts would be less than those of the Project.

d. Schools

Impacts to schools under the Project would be less than significant without the need for mitigation measures. The No Project/No Build Alternative would not introduce new development to the Medical Center Campus that would directly or indirectly generate students, and thus no impact would occur. This Alternative would have no impact on schools, and impacts would, therefore, be less than those of the Project.

e. Libraries

Impacts to library facilities under the Project would be less than significant without the need for mitigation measures. The No Project/No Build Alternative would not increase the residential population on the Medical Center Campus or increase demand for library services, and thus no impact would occur in this regard. There would be no impacts on library services, and impacts would, therefore, be less than those of the Project.

12. Transportation and Parking**a. Construction**

Construction activities under the Project would result in significant unavoidable traffic impacts, though such impacts would be temporary in nature. The No Project/No Build Alternative would not generate temporary increases in vehicle trips associated with hauling or workers. No construction traffic impacts would occur and, therefore, traffic impacts would be less than under the Project.

b. Operation

Long-term operation of the Project would result in significant unavoidable traffic impacts even with prescribed mitigation measures. The No Project/No Build Alternative would not generate any new trips or increase demand for parking, no transportation and parking impacts would occur, and all operational traffic and parking impacts would be less than the Project.

13. Utilities and Service Systems**a. Water Supply**

Impacts to water supply and related infrastructure under the Project would be less than significant without the need for mitigation measures. The No Project/No Build Alternative would not change the existing facility or generate a net increase in employees and visitors, nor would it increase or alter landscaped areas. Although the Project would have a less than significant impact with respect to water supply, because the No Project/No Build Alternative would not cause any increase in water demand and thus would not result in any impacts, impacts with respect to water supply would be less than under the Project.

b. Wastewater

Impacts to wastewater conveyance and treatment facilities under the Project would be less than significant without the need for mitigation measures. The No Project/No Build Alternative would not generate wastewater or require the potential upgrade of any on- or off-site wastewater conveyance systems. Although the Project would have a less than significant impact with respect to wastewater, because the No Project/No Build Alternative would not cause any increase in wastewater generation, impacts with respect to wastewater treatment and conveyance would be less than under the Project.

c. Solid Waste

Impacts to solid waste facilities under the Project would be less than significant without the need for mitigation measures. The No Project/No Build Alternative would not would not change the existing facility,

create a net increase in employees or visitors, or affect solid waste generation compared to existing conditions. Therefore, impacts on solid waste facilities would be less than under the Project.

C. RELATIONSHIP OF THE ALTERNATIVE TO PROJECT OBJECTIVES

The No Project/No Build Alternative would avoid the Project's significant and unavoidable construction-related traffic impacts, as well as long-term operational traffic impacts at three Caltrans freeway facilities and the following twelve (12) intersections: Normandie Avenue & Torrance Boulevard, Vermont Avenue & Torrance Boulevard, Normandie Avenue & Carson Street, Berendo Avenue & Carson Street, Medical Center Drive & Carson Street, Vermont Avenue & Carson Street, I-110 Southbound Ramps & Carson Street, Vermont Avenue & 220th Street, Figueroa Street and 220th Street/I-110 Northbound Ramps, Normandie Avenue & 223rd Street, Vermont Avenue & 223rd Street, and I-110 Southbound Ramps & 223rd Street. It would avoid the Project's significant and unavoidable construction noise at sensitive receptor sites along 220th Street during Phase C, Phase 5, and Phase 6, and would also avoid temporary operational helicopter noise impacts. The No Project/No Build Alternative would also avoid potentially significant impacts (mitigated to less than significant levels under the Project) associated with seismic safety, geologic stability, expansive soils, hazardous materials management, fire protection and emergency medical services, and sheriff protection.

While the No Project/No Build Alternative would avoid the Project's significant impacts and would not result in any new environmental impacts, it would not achieve the primary underlying purpose of the Project, which is secure timely compliance with SB 1953 (Alquist Hospital Facilities Seismic Safety Act) to maintain critical trauma services in the South Bay market area of the County of Los Angeles. SB 1953 requires the replacement of the current tertiary acute care hospital and other essential supporting facilities with upgrades/replacement before January 1, 2030.

The No Project/No Build Alternative would also not achieve the Project's basic objectives to support the renovation of existing health facilities to meet the Affordable Care Act of 2010 and to modernize and integrate healthcare delivery. It would not update facilities to modern standards by constructing new buildings and repurposing/remodeling existing buildings. The No Project/No Build Alternative also would not provide opportunities for development up to 250,000 square feet of additional Bioscience Tech Park and support facilities and 225,000 square feet of expanded LA BioMed facilities. It would not meet the objective to resolve existing deferred maintenance issues and optimize the quality of care and operational effectiveness, while reducing administrative, operational and maintenance costs. It would not allow for the fundamental reorganization, expansion and integration of outpatient services; renovate and appropriate new medical Campus construction; encourage a vibrant, mixed-use setting that supports the continuing Harbor-UCLA mission of clinical care, education, and research, as well as the provision of modernized facilities for existing and future tenants of the Medical Center Campus. It would not achieve optimum public utilization of land and buildings under the ownership and control of the County. Lastly, the No Project/No Build Alternative would not create durable, adaptable green infrastructure and buildings, promoting resource-efficient transportation solutions, or accommodate changing sustainable design practices.

5.0 ALTERNATIVES

B. ALTERNATIVE 2: REDUCED INTENSITY ALTERNATIVE A – ACUTE BED AND OTHER PLAN REDUCTIONS

A. DESCRIPTION OF THE ALTERNATIVE

Alternative 2, Reduced Intensity Alternative A – Acute Bed and Other Plan Reductions, would implement the Master Plan Project but at a lower overall intensity than proposed under the Project. Specifically, this Alternative would result in the construction of the New Hospital Tower, but with a reduction in the maximum number of licensed acute care beds from 446 to approximately 375, as well as construction of two outpatient buildings (compared to three under the Project), a reduced Central Plant, up to three parking structures with a maximum of 2,300 parking spaces, and partial renovation of the Existing Hospital tower (compared to complete renovation under the Project). This Alternative would also eliminate all retail uses from the development plan. In addition, Alternative 2 would be phased so that the New Hospital Tower would be constructed by 2025, which is prior to new outpatient buildings, with completion of construction activities anticipated in 2027. All development associated with LA BioMed build out and the proposed Bioscience Tech Park, as well as necessary infrastructure, landscaping, circulation, and other Medical Center Campus improvements, would be implemented as under the proposed Master Plan Project.

B. ENVIRONMENTAL IMPACTS

1. Aesthetics

a. Visual Character

(1) Construction

Construction activities typically result in site disturbance, movement of construction equipment, import and export of materials, views of incomplete structures and other activities that generally contrast with the aesthetic character of an area. Under the Reduced Intensity Alternative A, construction activities would be visible at various times from Vermont Avenue, Carson Street, Normandie Avenue, and 220th Street. As with the Project, construction activities would occur over the course of several years and within specific areas of the half-mile-long Medical Center Campus, as well as in limited off-site areas related to infrastructure and utility improvements necessary to serve Reduced Intensity Alternative A. As such, visual character impacts experienced at any single viewing location, for both on-site and off-site construction activities, would be intermittent and temporary. Because adverse visual effects would be temporary and would be confined to portions of the Medical Center Campus or distinct off-site areas at any one time, such effects would not be experienced by nearby viewers continually during the buildout of Reduced Intensity Alternative A. As with the Project, construction impacts would be less than significant. However, because overall construction would be incrementally less and be completed in fewer years than under the Project (completed in approximately 2027 instead of approximately 2030), the impact of construction on visual character under Reduced Intensity Alternative A would be incrementally less under Reduced Intensity Alternative A.

(2) Operation

Reduced Intensity Alternative A would allow for a reduced intensity with respect to the New Hospital Tower and would not completely renovate the existing Hospital Tower. The reduction in beds in the New Hospital Tower could allow for an incrementally smaller building, either in height or profile. Because a complete renovation of the old Hospital Tower would not be implemented, the Reduced Intensity Alternative A may not result in the same aesthetic character of the old Hospital Tower as under the Project. New sidewalks and street scape, internal landscaping, public art and other aesthetic amenities would be the same as under the Project. As with the Project, the transition of the Medical Center Campus to greater density would be consistent with growth trends and buildout in the surrounding area and Reduced Intensity Alternative A would be contained within the existing Medical Center Campus, aside from temporary off-site improvements and would not directly adjoin any other existing neighborhood or community uses. New buildings under the Reduced Intensity Alternative A would be required to implement the Design Guidelines, in which individual buildings must complement each other and the character of surrounding spaces, streets, and walks; maintain view corridors, both to and from buildings; and align axes, corner lines and features of neighboring buildings and spaces. Under the Design Guidelines, overall heights, massing, styles, and materials of neighboring buildings within the Medical Center Campus must be compatible. Views of service areas and mechanical equipment located both on grade and on building roofs must be screened. With the implementation of the Design Guidelines, the massing of buildings within the site would create a visually pleasant skyline effect (cluster) that would contribute to the visual character of the community.

Reduced Intensity Alternative A, as with the Project, would enhance the existing pedestrian experience along Carson Street, Vermont Avenue, Normandie Avenue, and 220th Street with landscaping and streetscape, including the installation of canopy trees, provision of a landscaped parkway between the sidewalk and Carson Street, the removal of chain link fencing and walls along Vermont and Normandie Avenues and 220th Street, and other improvements in visual character and safety along 220th Street. As with the Project, Reduced Intensity Alternative A would create a more aesthetic public environment than under existing conditions. Because it would introduce elements that would enhance the public interface along all adjacent streets, as well as public access to gardens, public art, and other benefits, and maintain a high architectural standard, the Master Plan Project is not considered to substantially degrade the visual character of the Site or its surroundings because of height, bulk, pattern, scale, character, and other features. Impacts with respect to visual character under Reduced Intensity Alternative A would be similar to the Project and less than significant.

b. Views

Other than original and newer buildings and existing landscaping associated with the Medical Center Campus, the local area is not distinguished by historical or architecturally notable buildings or natural areas, focal views of which would be considered visual resources. The reduction in scale of the New Hospital Tower under Reduced Intensity Alternative A has the potential to, but may not necessarily reduce the New Hospital Tower's height or width as represented in the Project's stacking profile. Overall, however, stacking and building heights would be quite similar to that of the Project.

As with the Project, the new buildings of the Reduced Intensity Alternative A would be minimally visible in panoramic views of the Los Angeles Basin and, as such, would not cause any adverse view effects. However, development of the Project has the potential to affect existing views of the Medical Center Campus from adjacent public streets. The views of the Medical Center Campus from Carson Street, Vermont Avenue,

Normandie Avenue, and 220th Street would be improved by new, high quality construction, removal of hedging and fencing materials and surface parking lots, and installation of evergreen/semi-evergreen trees along the Medical Center Campus periphery that allow views into the Project's gardens, paths, buildings and public art. Views from Carson Street would also be upgraded by the streetscape program. Because no existing recognized valued publicly available views or scenic vistas are currently evident across the Medical Center Campus, as with the Project, the Reduced Intensity Alternative A would not block views of existing scenic resources. In addition, the Reduced Intensity Alternative A would upgrade overall views of the Medical Center Campus, while providing for deeper views into the proposed garden areas. The impact of Reduced Intensity Alternative A with respect to views would, thus, be less than significant and similar to that of the Project.

c. Light and Glare

(1) Construction

Lighting during construction would potentially cause minor light spillover in the vicinity of the Medical Center Campus, including the residential neighborhoods to the south, east, and west. However, construction activities would occur primarily during daylight hours and any construction-related illumination would be used for safety and security purposes only. As with the Project, construction lighting under Reduced Intensity Alternative A would only be located in specific locations within the approximately 72-acre site and would not be experienced by any sensitive, off-site receptors for a long duration. Any construction lighting would be limited and directed onto specific locations within construction sites to avoid impacts on-site medical patients. As with the Project, artificial light associated with construction activities would be limited to security lighting and specific construction tasks and would not adversely impact off-site sensitive receptors. Reduced Intensity Alternative A would also have a less than significant impact with respect to construction lighting. However, because overall construction would occur over a shorter timeframe (completed in approximately 2027 instead of approximately 2030 under the Project), construction lighting impacts under Reduced Intensity Alternative A would be incrementally less than those generated by the Project.

(2) Operation

(a) Artificial Light

As with the Project, the security and landscape lighting for Reduced Intensity Alternative A would be located near ground level, generally shielded from adjacent uses by landscaping, and low-intensity in character. Lighting would be directed downward to avoid glare at on-site occupied hospital rooms and to maintain a calm ambience for on-site visitors and employees. Landscaping and rooftop garden lighting would be low-level consistent with the proposed hospital use. Light spillage from the Project's multi-story components would be similar to existing conditions and would not be disruptive of off-site residential uses, the nearest of which would be more than 200 feet to the south of the New Hospital Tower. The removal of surface parking lots, including Parking Lot A, which is visible from residential uses to the east and the surface parking lot in the southwest corner of the Medical Center Campus, which is visible to uses at the south side of 220th Street, would reduce vehicle light sources and security lights currently visible from these residential areas. As with the Project, new lighting sources from Reduced Intensity Alternative A are not expected to substantially increase ambient light or cause light spill onto adjacent light-sensitive receptors. As such, artificial light impacts under Reduced Intensity Alternative A would be similar to those of the Project and less than significant.

(b) Glare

Building surfaces associated with window glass and polished surfaces, such as metallic or glass curtain walls and trim can reflect light. Glare can also occur between neighboring buildings when expanses of glass and metals are used for building sheathing. As with the Project, the Design Guidelines for Reduced Intensity Alternative A would require that building materials, massing, and styles are consistent with neighboring buildings, including the Existing Hospital tower, and to complement the character of the surrounding Medical Center Campus buildings. Buildings using expanses of metals and reflective glass would not meet these criteria, nor would such materials be consistent with the overall use of the Medical Center Campus as a medical facility. As such, Reduced Intensity Alternative A, as with the Project, would not generate glare from reflected sunlight that would alter the character of the off-site areas surrounding the Medical Center Campus. Therefore, glare impacts under Reduced Intensity Alternative A would be similar to the Project and less than significant.

2. Air Quality**a. Consistency with Air Quality Management Plan****(1) Construction**

Reduced Intensity Alternative A would result in an increase in short-term employment compared to existing conditions. Being relatively small in number and temporary in nature, construction jobs under both Reduced Intensity Alternative A and the Project would not conflict with the long-term employment projections upon which the AQMP is based. Reduced Intensity Alternative would comply with CARB requirements to minimize short-term emissions from on-road and off-road diesel equipment and, as such, would not conflict with implementation of AQMP strategies intended to reduce emissions from construction equipment and activities. Reduced Intensity Alternative A would also comply with SCAQMD regulations for controlling fugitive dust pursuant to SCAQMD Rule 403. Compliance with these requirements is consistent with and meets or exceeds the AQMP requirements for control strategies. Although both the Project and Reduced Intensity Alternative A would result in less than significant impacts, since this Alternative would be smaller in terms of total development, it would have incrementally less impact than the Project.

(2) Operation

As with the Project, Reduced Intensity Alternative A would be consistent with growth projections set forth in the AQMP, and would be supportive of relevant Transportation Control Measures aimed at reducing vehicle trips. Both the Project and Reduced Intensity Alternative A would have a less than significant impact relative to the AQMP; however, because Reduced Intensity Alternative A is smaller in total development, it would have incrementally less impact.

b. Violation of Air Quality Standards**(1) Construction**

Construction of Reduced Intensity Alternative A has the potential to create air quality impacts through the use of heavy-duty construction equipment and through vehicle trips generated from construction workers traveling to and from the Medical Center Campus. However, as with the Project, construction-related daily emissions for the criteria and precursor pollutants would not exceed the SCAQMD regional thresholds for VOC, NO_x, CO, SO_x, PM₁₀, and PM_{2.5}. Although emissions would be less than significant under both the Project

and Reduced Intensity Alternative A, because Reduced Intensity Alternative A would involve less construction, it would have incrementally less impact than the Project with respect to the SCAQMD regional thresholds.

(2) Operation

Operation of Reduced Intensity Alternative A has the potential to create air quality impacts based on daily trip generation and energy demand. As discussed in Section 4.B., Air Quality, of the Draft EIR, the Project's net operational-related daily emissions for the criteria and precursor pollutants (VOC, NO_x, CO, SO_x, PM₁₀, and PM_{2.5}) would not exceed SCAQMD regional thresholds for during interim operations when combined with on-going construction emissions. Additionally at full build-out, operation of the Project would not exceed the SCAQMD numeric indicators. As such both the Project and Reduced Intensity Alternative A would have a less than significant impact with respect to SCAQMD standards. However, because daily trips and the scope of development would be incrementally less under Reduced Intensity Alternative A, impacts relative to SCAQMD thresholds would be less than the Project.

c. Non-Attainment Pollutants

(1) Construction

As with the Project, construction of Reduced Intensity Alternative A would result in the emission of criteria pollutants for which the region is in nonattainment; however, the maximum daily emissions from construction of Reduced Intensity Alternative A would not exceed the numeric indicator of significance for criteria pollutants nor their precursors. As with the Project, compliance with CARB and SCAQMD control measures and the same design features implemented by the Project would minimize and reduce construction emissions. Neither Reduced Intensity Alternative A nor the Project would result in a cumulatively considerable net increase of a criteria pollutant for which the region is non-attainment. Although both the Project and Reduced Intensity Alternative A would result in a less than significant impact, because Reduced Intensity Alternative A would involve less construction, it would lower total emissions than the Project.

(2) Operation

Operation of Reduced Intensity Alternative A would result in the emission of criteria pollutants for which the region is in nonattainment; however, as with the Project, maximum daily emissions from operation would not exceed the threshold of significance for any of pollutants in nonattainment nor their precursors. During interim operations that overlap with construction emissions and at full build-out, operation of Reduced Intensity Alternative A would not exceed the applicable thresholds of significance. Although both the Project and Reduced Intensity Alternative A would result in a less than significant impact, because Reduced Intensity Alternative A would be incrementally smaller in development scope, it would generate fewer total emissions than the Project.

d. Substantial Pollutant Concentrations

As with the Project, Reduced Intensity Alternative A would not exceed SCAQMD localized significance thresholds for NO_x, CO, PM₁₀, or PM_{2.5} at nearby sensitive receptors. Interim operation of the either Reduced Intensity Alternative A or the Project, when combined with on-going construction emissions, would not exceed the localized significance thresholds for NO_x, CO, PM₁₀, or PM_{2.5}. Operation of the Reduced Intensity

Alternative A at full build-out would not exceed SCAQMD localized significance thresholds at nearby sensitive receptors for NO_x, CO, PM₁₀, or PM_{2.5}. Construction and operation of either the Project or Reduced Intensity Alternative A would not result in substantial emissions of TACs at nearby sensitive receptors. Construction activities would not result in health risks which exceed SCAQMD numeric indicators of an allowable incremental increase in cancer risk of 10 in one million and non-cancer health index of 1.0. Construction and operation of either the Project or Reduced Intensity Alternative A would not result in traffic congestion that would cause or contribute to formation of localized CO hotspots that exceed the CAAQS or NAAQS. Although both the Project and Reduced Intensity Alternative A would result in a less than significant impact, because Reduced Intensity Alternative A would be incrementally smaller in scale, it would generate fewer total emissions than the Project.

e. Odors

(1) Construction

As with the Project, Reduced Intensity Alternative A may emit odors during construction associated with the use of architectural coatings and solvents. However, SCAQMD Rule 1113 limits the allowable amount of VOCs from architectural coatings and solvents. Since compliance with SCAQMD Rules governing these compounds is mandatory, no construction activities or materials are proposed that would create objectionable odors. Both the Project and Reduced Intensity Alternative A would result in a less than significant impact. Also, because SCAQMD Rule 1113 would be equally enforceable under both the Project and Reduced Intensity Alternative A, impact levels would be similar.

(2) Operation

As with the Project, Reduced Intensity Alternative A does not include any uses identified by the SCAQMD as being typically associated with objectionable or nuisance odors. Waste collection areas and disposal for the Reduced Intensity Alternative A would be covered and situated away from the property line and sensitive off-site uses. Under both the Project and Reduced Intensity Alternative A, medical waste would be properly sealed and stored in accordance with applicable rules to ensure that no objectionable medical waste-related odors would be created. Best management and good housekeeping practices would be sufficient to prevent nuisance odors. Therefore, potential odor impacts would be less than significant under both the Project and Reduced Intensity Alternative A and impact levels would be similar.

3. Energy

a. Construction

Construction would entail consumption of diesel for hauling and construction equipment, gasoline for some hauling and workers' transportation, and electricity to provide temporary power for lighting and electronic equipment and to power certain construction equipment. Some heavy-duty construction could be electric or alternatively fueled, such as tower cranes, based on commercial availability. As with the Project, Reduced Intensity Alternative A would utilize electric or alternatively fueled equipment as available and as feasible. It is estimated that the construction of the Project would require approximately 0.002 percent of the statewide annual gasoline consumption and 0.003 percent of the statewide annual diesel consumption. Compliance with anti-idling and emissions regulations would result in a more efficient use of construction-related energy. As with the Project, Reduced Intensity Alternative A would also meet or exceed the County's waste diversion targets. Neither the Project nor Reduced Intensity Alternative A would result in the wasteful,

inefficient, and unnecessary consumption of energy during construction, or preempt future energy conservation during construction. Although both the Project and Reduced Intensity Alternative A would result in a less than significant impact, because Reduced Intensity Alternative A would be incrementally smaller in development scope, it would generate less energy demand than the Project.

b. Operation

Operation of both Reduced Intensity Alternative A and the Project would utilize energy for necessary on-site activities and off-site transportation associated with Campus employees, patients, and visitors traveling to and from the site. The amount of energy used would not represent a substantial fraction of the available energy supply in terms of equipment and transportation fuels. Furthermore, the Project and Reduced Intensity Alternative A would meet or exceed energy standards by incorporating green building measures consistent with County policy that requires LEED Silver-level certification and the County's CCAP. The Project would also provide opportunities for future energy efficiency by promoting solar power and electric or alternatively-fueled vehicles. Neither the Project nor Reduced Intensity Alternative A would result in the wasteful, inefficient, and unnecessary consumption of energy during operation, or preempt future energy conservation during operation. Although both the Project and Reduced Intensity Alternative A would result in a less than significant impact, because Reduced Intensity Alternative A would be incrementally smaller in development scope, it would generate less overall energy demand than the Project.

4. Geology and Soils

a. Seismic Hazards

The Harbor-UCLA Campus is located within a seismically active region, with the potential for seismic ground shaking. The horizontal peak ground acceleration (PGA) for the site corresponds to the Targeted Maximum Considered Earthquake (MCE_R) of 0.65g. This would be the same under Reduced Intensity Alternative A and the Project. Based on these PGA estimates, ground shaking at the Harbor-UCLA Campus could have a potentially significant impact on people and proposed buildings on the Harbor-UCLA Campus. Although seismic risk exists, Reduced Intensity Alternative A would implement MM-GEO-1, discussed in Section 4.D., Geology and Soils, of this Draft EIR. MM-GEO-1, which requires adherence to the recommendations of an approved Geotechnical Evaluation, would reduce seismic impacts for Reduced Intensity Alternative A and the Project to a less than significant level. With the implementation of MM-GEO-1, the Project and Reduced Intensity Alternative A would have a less than significant and similar impact with respect to seismic hazards.

b. Soil Erosion and Topsoil

Reduced Intensity Alternative A would require the same or potentially less grading, including clearing, excavation, stockpiling, than the Project. As with the Project, all work would be performed in accordance with a National Pollutant Discharge Elimination System (NPDES) Permit, which incorporates a Storm Water Pollution Prevention Program (SWPPP) and Best Management Practices (BMPs) for erosion control. Implementation of BMPs would ensure that water- and wind-related erosion would be confined to the construction area and not transported off-site. Also, the relatively gentle topographic gradients at the Medical Center Campus would reduce the potential for soil erosion during construction. As with the Project, Reduced Intensity Alternative A would have a less than significant impact with respect to soil erosion and topsoil. However, because the potential exists that less area would be graded under Reduced Intensity Alternative A, Reduced Intensity Alternative A would have incrementally less impact with respect to soil erosion than the Project.

c. Geologic Stability

As with the Project, Reduced Intensity Alternative A could be exposed to differential soil settlement and liquefaction beneath proposed buildings because of the presence of alluvium, possible undocumented fill, and relatively shallow depths to groundwater. If wet or saturated soil conditions are encountered during excavation, instability could present a constraint to the construction of foundations. Because the risk of compressible/collapsible soils and shallow groundwater exists, as with the Project, Reduced Intensity Alternative A would implement MM-GEO-2, discussed in Section 4.D., Geology and Soils, of this Draft EIR. MM-GEO-2, which provides several approaches to address settlement and shallow groundwater, would reduce the potential for these geologic hazards. With the implementation of MM-GEO-2, the Project and Reduced Intensity Alternative A would have a less than significant and similar impact with respect to geologic stability.

d. Expansive and Corrosive Soils

The near-surface soils at the Medical Center Campus are generally sandy silt and clayey and typically expansive when wetted. In addition, on-site soils are potentially corrosive to concrete and metal, which could cause premature deterioration of underground structures or foundations. The risk of expansive and corrosive soils would occur under both Reduced Intensity Alternative A and the Project. As with the Project, Reduced Intensity Alternative A would implement MM-GEO-3, discussed in Section 4.D., Geology and Soils, of this Draft EIR. MM-GEO-3, which provides performance standards and required assessments to address expansive and corrosive soils would reduce the effects of these soils conditions. With the implementation of MM-GEO-3, the Project and Reduced Intensity Alternative A would have a less than significant and similar impact with respect to expansive and corrosive soils.

5. Greenhouse Gas Emissions

a. Consistency with CCAP

As with the Project, Reduced Intensity Alternative A would be consistent with the County's CCAP, which provides goals and strategies that would achieve a reduction target of at least 11 percent below 2010 levels for unincorporated areas of the County. Based on the conservatively estimated GHG emissions, the Project would result in a net increase in GHG emissions from 2010 levels. However, the potential increase is extremely small compared to the County's total inventory. One of the Project objectives to maintain critical trauma services in the South Bay service region of the County of Los Angeles by redeveloping the existing hospital site, would result in more GHG efficiency than developing a new hospital campus on a greenfield site. Therefore, while the Project and Reduced Intensity Alternative A results in a conservatively estimated minimal net increase in GHG emissions, both the Project and Reduced Intensity Alternative A would be consistent with applicable CCAP measure to minimize its GHG emissions. As such, both the Project and Reduced Intensity Alternative A would not be expected to conflict with the County's ability to achieve the CCAP target reduction. Both the Project and Reduced Intensity Alternative A would have a less than significant impact relative to the CCAP and because both the Project and Reduced Intensity Alternative A would be consistent, impact levels would be similar.

b. Greenhouse Gas Reduction Plans

Construction and operation of the Reduced Intensity Alternative A, as with the Project, would be consistent with applicable GHG emissions reductions plans, policies, or regulations. Design features, such as green

building measures would reduce GHG emissions by increasing energy-efficiency beyond regulatory requirements, reducing indoor and outdoor water demand, and incorporating waste reduction measures. The Project would also incorporate components to reduce transportation-related GHG emissions by providing bicycle and end-of-trip facilities, and by being located within one-quarter mile of transit, thereby encouraging alternative forms of transportation. As with the Project, Reduced Intensity Alternative A would be constructed and operated in a manner consistent with a Silver Certification from the USGBC's LEED program. The LEED features that would be incorporated in the Project would include building efficiency measures to reduce energy consumption, water-saving measures, and waste reduction measures. Both the Project and Reduced Intensity Alternative A would be designed to optimize energy performance. Trees planted on the Medical Center Campus as part of the planned landscaping would sequester CO₂ as they age (not included in the quantitative analysis). The Project would reduce indoor water use by a minimum of 20 percent with water fixtures that exceed applicable standards. As a result, construction and operation of the both the Project and Reduced Intensity Alternative A would not have a significant impact with respect to consistency with GHG reduction plans. Because both the Project and Reduced Intensity Alternative A would be consistent with applicable plans, impact levels would be similar.

6. Hazards and Hazardous Materials

a. Hazardous Materials Management

As with the Project, Reduced Intensity Alternative A would require the demolition of some buildings and equipment identified as having ACMs, LPB, and PCBs; the removal and/or relocation of USTs and ASTs that presently contain, or have contained in the past, fuels and other potentially hazardous materials; and the disturbance of soil potentially contaminated with hazardous materials as the result of on-site or off-site LUSTs. Remediation of these materials would be conducted by qualified professionals in accordance with regulations governing these activities, including SCAQMD's Rule 1403 (ACBMs); Cal-OSHA rules (LBP); the federal Toxics Substances Control Act (PCBs); and, for USTs, RCRA Subtitle I, the State Health and Safety Code, and LACFD's enforcement of the State's applicable CCR regulations, with oversight by the RWQCB where groundwater may be affected. Reduced Intensity Alternative A, as with the Project, has the potential to result in accidental upset and release of hazardous materials into the environment, which is a potentially significant impact. In addition, the potential extent of possible contamination of underlying groundwater with petroleum hydrocarbons originating with nearby off-site LUSTs is not known, and construction activities have the potential to result in a significant hazard related to potential contaminated soil and groundwater. As with the Project, Mitigation Measures HAZ-1 through HAZ-4, which require abatement in accordance with the recommendation of the Hazardous Building Materials Survey, removal of USTs pursuant to the LACFD review and closure letter, preparation and adherence to a Soils Management Plan, and investigation of the purpose and potential abandonment of existing on-site groundwater monitoring wells, would be implemented. With the implementation of Mitigation Measures HAZ-1 through HAZ-4, hazardous materials impacts associated with Reduced Intensity Alternative A and the Project would be reduced to less than significant levels. Because Reduced Intensity Alternative A involves demolition and excavation and development in an area with potential groundwater contamination, as under the Project, with mitigation, impacts with respect to hazardous materials management would be similar and less than significant.

b. Airport Safety Provisions

Reduced Intensity Alternative A is located on the same property as the Project, which is not within the vicinity of an airport. The nearest airport is more than two miles away. Because of this distance, neither the

Project nor Reduced Intensity Alternative A would interfere with operations any local airports or airstrips. Impacts regarding airport safety under both Reduced Intensity Alternative A and the Project would, therefore, be similar and less than significant.

c. Emergency Response Plans

Reduced Intensity Alternative A, as with the Project, would not adversely affect existing emergency access routes. Medical Center Campus ingress and egress would be modified to create distinctions between access and parking for the general public and staff, including a new signalized public entrance on Carson Street. Vehicular access and circulation would avoid conflicts with traffic movements on local roadways and would facilitate the provision on-site emergency services. During construction, adjacent streets may be temporarily affected due to construction activity, such as temporary lane closures. Such occurrences would be implemented in accordance with a construction traffic management plan, which would allow for responses to emergency accessibility needs. The existing helistop, which would be temporarily relocated to one of two potential locations at the western end of the Medical Center Campus during construction of the new Hospital Tower, would remain operational. As with the Project, regulatory compliance and project features, such as improved access, would avoid the need to generate new emergency plans beyond those normally implemented to address on-site emergency situations. As with the Project, impacts related to emergency response plans would be less than significant. Impact levels would be similar under both the Reduced Intensity Alternative A and the Project.

7. Hydrology and Water Quality

a. Surface Water Hydrology

(1) Construction

As with the Project, construction activities under Reduced Intensity Alternative A would be subject to a Construction General Permit and associated NPDES requirements, which include development and implementation of a SWPPP with appropriate BMPs. BMPs to control stormwater runoff during construction could include, but are not limited to, the use of water bars, silt fences, and staked straw bales. Additional source-control BMPs might also be required to prevent runoff and eliminate non-stormwater discharges. Based on the depth to groundwater within the project site, dewatering and any related runoff are not anticipated. Compliance with NPDES requirements would reduce surface water runoff during construction to a less than significant level under both Reduced Intensity Alternative A and the Project. The level of impact related to surface water hydrology under both scenarios would be similar.

(2) Operation

As with the Project, Reduced Intensity Alternative A would convert more than three acres of existing pavement to turf area. Any proposed new storm drain connections to the reinforced concrete box channel or open channel owned by the Flood Control District would be conducted under a connection permit approved by the District. This permit would require a hydrology analysis and a comparison with the design peak flow rate of the facility. If the calculated peak flow rate exceeded the facility's design peak flow rate, the District will generally require detention to mitigate the increase in peak flow rates. As with the Project, Reduced Intensity Alternative A would be required to capture and infiltrate or reuse the difference in volume during the 0.75-inch storm event between a developed site and the site in an undeveloped condition (0 percent impervious) based on LID Standards. Several dry wells were previously constructed to meet this

requirement. This approach is likely to be implemented for future areas to be redeveloped under both the Project and Reduced Intensity Alternative A. LID features include resource conservation, flatter wider swales, flatter slopes, turf depression, landscape island storage, rooftop detention/retention, catch basins/seepage pits, sidewalk storage, permeable pavement, and other measures. With the increase in pervious area, the calculated peak flow of the future development will generally be less than under existing conditions; in addition, any future site development will require compliance with County of Los Angeles and LID standards for stormwater management. With implementation of LID measures and permitting from the District related to the reinforced concrete box channel and drainage ditch, surface water impacts associated with both Reduced Intensity Alternative A and the Project would be less than significant. Impacts related to surface water runoff would be similar under both Reduced Intensity Alternative A and the Project.

b. Surface and Groundwater Quality

(1) Construction

As with the Project, construction activities under Reduced Intensity Alternative A would be subject to existing regulations governing surface and groundwater quality. The required Construction General Permit and associated NPDES requirements include development and implementation of a SWPPP with appropriate BMPs to limit erosion, minimize sedimentation, and control stormwater runoff water quality during construction activities. Compliance with construction phase BMPs and other requirements are considered protective of water quality during construction and would ensure that water- and wind-related erosion would be confined to the construction area and not transported off-site. The NPDES Construction General Permit and SWPPP establish procedures and action protocols for the handling of construction-related chemicals and encountered groundwater. Based on existing and historical depths to groundwater within the project site, construction dewatering is not anticipated to be required. However, should groundwater be encountered that would require dewatering, the County would require contractors for individual Project components to apply for coverage and adhere to the monitoring and reporting program under RWQCB Order No. R8-2009-0003. Existing regulations would ensure that any potential dewatering activities would not result in the exceedance of water quality standards during construction, including TMDL limits applicable to Dominguez Channel. Therefore, impacts related to surface and groundwater quality would be less than significant and similar under both Reduced Intensity Alternative A and the Project.

(2) Operation

Stormwater discharge may include pollutants of concern, such as sediment, hydrocarbons, oil, grease, heavy metals, nutrients, herbicides, pesticides, fecal coliform bacteria, and trash. This runoff can flow directly into storm drains and continue through pipes until it is released, untreated, into the Dominguez Channel. Untreated stormwater runoff could degrade water quality in surface and waters and can affect drinking water, human health, and plant and animal habitats. Reduced Intensity Alternative A, as with the Project, would utilize landscaping in strategic ways to capture and clean stormwater runoff. Strategies include replacement of three acres of pavement with landscaping. The Project would avoid the use of pollutants, chemicals, or soil amendments that could enter surface water runoff. Organic maintenance methods or Integrated Pest Management may be used. Implementation of County LID features, including bioretention features, modifications to address the potential leaching of nutrients, and post-construction BMPs would ensure that operations would not degrade the quality of receiving waters to levels below standards considered acceptable by the Los Angeles RWQCB or other regulatory agencies, or impair the beneficial uses of the receiving waters. With compliance with existing regulations, both Reduced Intensity Alternative A and

the Project would have a similar, less than significant impact, related to surface and groundwater water quality.

8. Land Use

a. Applicable Plans and Policies

As with the Project, Reduced Intensity Alternative A would be consistent with the policies of the SCAG 2008 Regional Comprehensive Plan and Compass Growth Visioning (including the Compass 2% Blueprint Strategy) to focus growth in existing and emerging centers, along major transportation corridors, and in proximity to transit. Reduced Intensity Alternative A would be consistent with SCAG's 2016-2040 Regional Transportation Plan and Sustainable Communities Strategy (2016 RTP/SCS) by enhancing the pedestrian environment within the Medical Center Campus and along Carson Street, and improving pedestrian connectivity between the Medical Center Campus, the surrounding community, and the Carson Street Metro Transit Station. Reduced Intensity Alternative A would be consistent with applicable policies of General Plan Update in that it would be compatible with the existing adjacent off-site land uses, incorporate sustainable design, facilitate multiple modes of transportation (including alternative modes), provide interconnected and safe pedestrian and bicycle circulation, provide required green space and landscaped setbacks, result in less than significant impacts to biological, aesthetic and cultural resources after mitigation, result in less than significant seismic/geotechnical and noise impacts after mitigation, be developed with adequate public service and water, wastewater, and solid waste disposal capacity to serve the Project; and foster regional economic development.

Reduced Intensity Alternative A would also be consistent with the Los Angeles County General Plan's "P" GPLU land use designation, which permits a broad range of public and semi-public facilities and community-serving uses, and with the overall floor area ratio (FAR) not to exceed 3:1. The Project would have a maximum FAR of 0.78 and the Reduced Intensity Alternative A would be incrementally less. As with the Project, Reduced Intensity Alternative A would be consistent with the Los Angeles Planning and Zoning Code and would not exceed the development limits associated with the underlying C-3 zone. The Project and Reduced Intensity Alternative A would have a less than significant and similar impact with respect to applicable plans and policies.

b. Land Use Compatibility

As with the Project, Reduced Intensity Alternative A would alter the existing visual appearance of the Medical Center Campus through denser development than under existing conditions. However, the Site is located within a fully urbanized setting within the 110 Freeway/Carson Station TOD. The area is also undergoing a transition to greater urbanization, characterized in part by the recent development of higher density multi-family uses to the west and the construction of the Carson Street/Normandie Avenue Mall to the north. Reduced Intensity Alternative A, as with the Project, would provide landscaping and street trees along the street frontages where in some areas such landscaping and trees are lacking, and would be designed in compliance with unifying design guidelines which would improve the visual appearance of the Medical Center Campus. While the densification of land uses at the Medical Center Campus would be noticeable from adjacent off-site land uses, including the residential neighborhoods to the south east and west (commercial uses along the north side of Carson Street intervene between the Medical Center Campus and the residential neighborhood to the north), because of the urbanizing trend in the area and proposed streetscape/screening, the Reduced Intensity Alternative A, as with the Project, would result in less than

significant land use incompatibilities with adjacent off-site land uses. However, because Reduced Intensity Alternative A would have incrementally less density than under the Project, it would have less impact with respect to land use compatibility.

9. Noise

a. Construction Noise

As with the Project, construction of Reduced Intensity Alternative A would involve demolition, grading, building construction, and paving. Each stage would involve the use of different kinds of construction equipment and, therefore, has its own distinct noise characteristics. Demolition typically involves the use of excavator, tractor/loader/backhoe, concrete saw, dozer, water truck, and loader. Grading typically involves the use of drill water truck, dozer, tractor/loader/backhoe, and grader. Building construction typically involves the use of crane, forklift, welder, tractor/loader/backhoe, air compressor, and water truck. Paving typically involves the use of tractor/loader/backhoe, concrete mixer truck, roller, paver, and trencher. The Project would be constructed using typical construction techniques. Construction noise would exceed the significance threshold at the several receptor locations during various development phases. As with the Project, Reduced Intensity Alternative A would implement mitigation measures, such as MM NOISE-1 and project design features to achieve a noise reduction in areas where the line-of-sight between construction-period noise sources and off-site receptor locations is obstructed. However, even with implementation of the mitigation measure, construction-related noise would exceed the noise threshold at the multi-family residential uses across 220th Street during Phase C, Phase 5, and Phase 6. Although both the Project and Reduced Intensity Alternative A would result in a significant and unavoidable noise impact, because Reduced Intensity Alternative A is reduced in development scope and duration of construction, construction noise impacts would be incrementally less.

b. Operational Noise

As under the Project, noise sources associated with operation of Reduced Intensity Alternative A, including mechanical equipment, loading dock activity, refuse collection, parking structure activity, and traffic, would increase the ambient noise level at the nearest noise-sensitive receptor, but by a less than the threshold of significance. Composite noise level increases at all other receptor locations are also expected to be less than significant, given their distance from the site and the presence of intervening structures. As such, the operational noise level impacts due to the future operation of Project and Reduced Intensity Alternative A would be less than significant. However, because Reduced Intensity Alternative A is incrementally smaller in development scope than the Project and would generate less traffic, operational noise impacts would be less.

With regard to helicopter-related noise, the Project would result in less than significant impacts at Project buildout once the permanent rooftop helistop on the New Hospital Tower is operational. However, operation of the temporary helistop at either interim location would exceed established noise thresholds at nearby sensitive receptors to the south of the Medical Center Campus, and no mitigation exists that could reduce noise levels to acceptable levels. Therefore, impacts under the Project would be considered significant and unavoidable. Because Reduced Intensity Alternative A would also require operation of the temporary helistop locations (though only one would be operational at any given time, as under the Project), impacts under this alternative would be significant and unavoidable and similar to the Project.

c. Construction Vibration

The construction of Reduced Intensity Alternative A, as with the Project, would generate ground-borne construction vibration during demolition, shoring and excavation, and large bulldozer operation. Vibration velocities from operation of construction equipment would range from approximately 0.076 to 0.089 inches per second PPV at 25 feet from the source of activity. Maximum vibration velocities to which receptors could be exposed range from 0.01 to 0.027 inches per second PPV. This value is considerably lower than the impact threshold of 0.5 inches per second PPV, and as such, construction vibration would be less than significant at the nearest residential building. Although construction vibration levels would be less than significant under both the Project and Reduced Intensity Alternative A would be less than significant, because the development scope and duration of Reduced Intensity Alternative A's construction activities would be incrementally less than under the Project, construction vibration impacts would be less.

d. Operational Vibration

As with the Project, operation of Reduced Intensity Alternative A would include typical commercial-grade stationary mechanical and electrical equipment such as air handling units, condenser units, and exhaust fans, which would produce vibration. In addition, the primary sources of transient vibration would include passenger vehicle circulation within the parking area activity. Ground-borne vibration would be similar to existing sources (i.e., traffic on adjacent roadways) adjacent to the Medical Center Campus. Maximum potential vibration levels from all Project operational sources at the nearest off-site buildings would be up to 0.01 inches per second PPV and would be less than the significance threshold of 0.04 inches per second PPV for perceptibility. As such, under both the Project and Reduced Intensity Alternative A, vibration impacts associated with operation of the Project would be less than significant. However, because Reduced Intensity Alternative A would be incrementally smaller in development scope than the Project (would generate less traffic), operational vibration impacts would be less.

10. Population, Housing and Employment

(1) Construction

As with the Project, construction of Reduced Intensity Alternative A would employ a mobile regional construction work force. Given the mobility and short duration of work at a particular site, a construction labor pool that can be drawn upon in the region and workers are not expected to relocate as a result of such employment opportunities. The number of construction workers would vary from approximately 212 workers per day during less intensive construction activity up to a maximum of approximately 1,650 construction workers on a day during the peak construction period. Because of a large, regional construction pool and the mobility of construction workers, construction activities would not generate a notable demand for housing, or affect population patterns. Although the duration of construction would be incrementally less under Reduced Intensity Alternative A, as with the Project, construction of both Reduced Intensity Alternative A and the Project would have a less than significant impact relative to construction-related population, housing, and employment. However, because of an incrementally reduced scope of development, Reduced Intensity Alternative A would have slightly less impact than under the Project.

(2) Operation

Compared to the Project, Reduced Intensity Alternative A would reduce licensed hospital beds from 446 to approximately 375, construct two outpatient buildings (compared to three under the Project), reduce the

scale of the Central Plant, and only partially renovate of the Existing Hospital tower. There would be incrementally fewer annual patient visits than under the Project and Reduced Intensity Alternative A. Total employment at the site under the Project would represent a small percent of the projected growth in the South Bay Planning Area up to Year 2030 and very small percent of estimated growth in unincorporated Los Angeles County for this same period. Because the Project's employment increase would not exceed local and SCAG's growth projections for the period between 2016 and 2030, Reduced Intensity Alternative A, which would have incrementally fewer employees, would also not exceed growth projections. As with the Project, impacts regarding consistency with the projected employment growth would be less than significant. However, because of the reduced intensity, impacts under Reduced Intensity Alternative A would be incrementally less.

11. Public Services

a. Fire Protection and Emergency Services

(1) Construction

As with the Project, construction of Reduced Intensity Alternative A would include demolition, site preparation including trenching for utilities, and construction of new buildings and street/sidewalk improvements in various phases. These periodic construction activities could temporarily increase demand for fire protection and EMS, and may cause the occasional exposure of combustible materials such as wood, plastics, sawdust, coverings and coatings, heat sources including machinery and equipment sparking, exposed electrical lines, welding activities, and chemical reactions in combustible materials and coatings. However, compliance with California Division of Occupational Safety and Health Administration (Cal/OSHA) and Fire Code requirements; on-site fire suppression equipment specific to construction activities; compliance with applicable codes and ordinances related to the maintenance of mechanical equipment, handling and storage of flammable materials, and cleanup of spills of flammable materials would reduce demand for fire protection and EMS during construction to a less than significant level. Emergency access would be provided and maintained throughout construction to existing uses, new uses, and fire hydrants. While Reduced Intensity Alternative A and the Project would require the construction of off-site utility and roadway improvements, and potentially require temporary lane closures along one or more of the four streets bordering the Medical Center Campus, Reduced Intensity Alternative A, as with the Project, would provide a construction traffic management plan to establish temporary traffic controls, prohibit construction vehicle activities and parking in surrounding off-site areas, and require various safety precautions such as alternate routing and protection barriers. With the implementation of the traffic management plan, impacts related to emergency access, vehicular access, pedestrian and bicycle access and safety, public transit, and construction parking would be less than significant under both Reduced Intensity Alternative A and the Project. Although impacts would be less than significant under both the Project and Reduced Intensity Alternative A, impacts would be less under the Reduced Intensity Alternative A because of the incrementally shorter construction time frame.

(2) Operation

As with the Project, Reduced Intensity Alternative A would be subject to the requirements of the County Code (e.g., Building Code, Fire Code, and Utilities Code) for new construction that address structural design, building materials, site access, fire lanes, fire flow requirements, automatic sprinkler systems, alarms, and smoke detectors. The LACFD would review and approve all plans at the building permit and plan check phases of the Project to ensure compliance with applicable Fire Code requirements, thereby minimizing the

risk of increased operation fire safety hazards. An LACFD-approved Emergency Response Plan would include mapping of site access and emergency exits, evacuation routes for vehicles and pedestrians, and locations of the nearest hospitals and fire stations. Finally, because Reduced Intensity Alternative A would replace many aging on-site buildings that have not been constructed to current Fire Code standards with new buildings constructed to such standards, fire safety at the Medical Center Campus would be improved.

As with the Project, development of Reduced Intensity Alternative A would increase existing employee population and annual patient visits at the Medical Center Campus, and would increase operational traffic in the Project vicinity. According to Section 4.L., Transportation and Traffic, of this Draft EIR, because implementation of mitigation measures is not entirely within the control of the County, significant and unavoidable impacts would occur at the several intersections in the area, which could affect LACFD emergency vehicle response times in the area. However, as under the Project, Reduced Intensity Alternative A would provide traffic design measures, including the installation roadway and traffic control improvements that would enable emergency access to the Medical Center Campus. In addition, emergency response is routinely facilitated, particularly for high priority calls, through use of sirens to clear a path of travel, driving in the lanes of opposing traffic, use of alternate routes, and multiple station response. In light of the above, and the fact that emergency response times to the Medical Center Campus from Station 36 are currently within the LACFD's response time goals, operational impacts under the Project and Reduced Intensity Alternative A on emergency response times would be less than significant. However, because visitation and hospital beds would be reduced by approximately 16 percent under Reduced Intensity Alternative A, impacts with relation to emergency response would be incrementally less.

As with the Project, Reduced Intensity Alternative A would require greater fire flows at the site than required under existing conditions. As discussed in Section 4.K.1, Fire Protection and Emergency Services of this Draft EIS, water service to the Medical Center Campus are adequate to meet Project requirements and, as such, would be adequate to meet Reduced Intensity Alternative A fire flow requirements. Impacts related to fire flow would be less than significant under both the Reduced Intensity Alternative A and the Project. However, because of the reduced scope of development under the Reduced Intensity Alternative A, fire flow demand would be incrementally less.

b. Sheriff Protection

(1) Construction

Construction activities associated with Reduced Intensity Alternative A, as under the Project, would include demolition, site preparation including trenching for utilities, and construction of new buildings and street/sidewalk improvements in various phases through buildout. These periodic construction activities could temporarily increase demand for police protection associated with patrolling the construction site. However, as required by PDF SHER-1, the construction sites would be fully fenced, lighted with security lighting, and patrolled either by on-site LACSD personnel from the on-site LACSD satellite station or by private security hired by DHS. Furthermore, an LACSD satellite station is located on-site, and the Medical Center Campus has a 24-hour a day LACSD presence, which would both discourage construction site crimes and provide for almost immediate response to any observed or reported construction site crimes that are in process. Therefore, the demand for police protection services during construction of Reduced Intensity Alternative A would not require new or altered police protection facilities to maintain service, and the impact would be less than significant but incrementally reduced compared to the Project due to the reduction in overall construction activities on the Medical Center Campus.

Regarding police access and response times during construction, as would be the case under the Project, construction staging and construction worker parking associated with Reduced Intensity Alternative A would be accommodated on the Medical Center Campus, limiting potential conflicts with traffic on local streets. In addition, as required by the PDF-SHER-2, emergency access would be provided and maintained for existing and new on-site uses, and to off-site uses, throughout construction. Furthermore, while the Project and Reduced Intensity Alternative A would generate construction traffic, require the construction of off-site utility and roadway improvements, and potentially require temporary lane closures along one or more of the four streets bordering the Project Site, with the implementation of various traffic- and law enforcement-related Project Design Features, as under the Project, impacts on police access and response times during construction would not require new or altered police protection facilities to maintain service, and thus would be less than significant. However, given the reduction in overall development intensity under this Alternative, construction-related impacts would be incrementally reduced.

(2) Operation

The Master Plan Project would result in a net increase of 1,178,071 square feet of building floor area on-site, and net increases in total Campus-wide employees and annual patient visits of 2,030 employees and 185,745 annual patient visits, respectively. This, in turn, would create the need for additional space at LACSD's on-site satellite station to accommodate the additional officers. However, Reduced Intensity Alternative A would result in an overall increase in development intensity compared to existing conditions, but this increase would be less than that of the Project. Therefore, as with the Project, operational impacts on police protection services would be less than significant, but would be incrementally reduced compared to the Project due to the reduction in overall development intensity.

c. Parks and Recreation

(1) Construction

As with the Project, construction of Reduced Intensity Alternative A would not physically affect existing public parks and recreational facilities as no such facilities are located on or directly adjacent to the Medical Center Campus. Also, the staging of Project construction activities would occur on-site, and access to off-site uses would be maintained during construction. Given the mobility and short duration of work at a particular site, it is unlikely that a substantial number of construction workers would relocate to the Project area and use local parks and recreational facilities to the extent that new recreational facilities would be required or that substantial physical deterioration of such facilities would occur. Construction effects on parks under either the Reduced Intensity Alternative A or the Project would be less than significant; however, because of an incrementally reduced scale of development, Reduced Intensity Alternative A would have less impact than under the Project.

(2) Operation

Reduced Intensity Alternative A would generate incrementally fewer employees than the estimated 2,030 new employees under the Project. However, Reduced Intensity Alternative A represents a large percentage of the Project's development scale and would likely bring employees and their families to the area. As such, Reduced Intensity Alternative A could create a demand for public parks and recreational facilities. A portion of the new on-site employees would be expected to be derived from the existing local labor pool, and it is likely that these employees and their families likely already generate a demand for public parks and recreational facilities in the local area. Furthermore, any use of existing public parks and recreational

facilities by Project employees and their families would likely be dispersed over a wide geographic area rather than concentrated at any one of the eleven local public parks and recreational facilities. As with the Project, Reduced Intensity Alternative A would have a less than significant impact on parks and recreational facilities. However, because Reduced Intensity Alternative A would have incrementally fewer new employees than under the Project, impacts would be incrementally less.

d. Schools

(1) Construction

As with the Project, construction of Reduced Intensity Alternative A would not physically affect existing public schools as no public schools are located on or directly adjacent to the Medical Center Campus. Furthermore, the staging of Project construction activities would occur on-site, and access to off-site uses during construction would be maintained as required by the County Code, such that access to and parking at existing public schools would be maintained during Project construction. Given the general accessibility of the Medical Center Campus and the availability of construction workers in the Los Angeles area, it is unlikely that a substantial number of construction workers would relocate to the Project area and have children that would use local public schools. Hence, new or physically altered local public schools would not be required to provide service to the children of Project construction workers and maintain acceptable service ratios and other performance standards. Construction on schools, as with the Project, would be less than significant and similar under Reduced Intensity Alternative A.

(2) Operation

It is estimated that, under the Project, families of new employees would generate an estimated 29 grade K-5 students, 14 grade 6-8 students, and 18 grade 9-12 students. Reduced Intensity Alternative A would generate incrementally fewer employees and students. It is likely that student attendance under both Reduced Intensity Alternative A and the Project would be split among the 11 elementary and high schools in the local area, and possibly beyond. If all new students were distributed among the nearest schools, it is unlikely that these students alone would necessitate the need to construct new or physically altered school facilities given the small numbers of students involved. As with the Project, impacts on local schools under Reduced Intensity Alternative A and would be less than significant. However, because Reduced Intensity Alternative A is reduced in scale, impacts would be incrementally less.

e. Libraries

(1) Construction

As with the Project, construction of Reduced Intensity Alternative A would not physically affect existing libraries, none of which are located on or directly adjacent to the Medical Center Campus. In addition, the staging of Project construction activities would occur on-site, and access to off-site uses would be maintained during construction. Given the mobility and short duration of work at a particular site, it is unlikely that a substantial number of construction workers would relocate to the Project area and use local libraries to the extent that new libraries would be required or that substantial physical deterioration of such facilities would occur. Construction effects on libraries under either the Reduced Intensity Alternative A or the Project would be less than significant; however, because of an incrementally reduced scale of development, Reduced Intensity Alternative A would have less impact than under the Project.

(2) Operation

Reduced Intensity Alternative A would generate incrementally fewer employees than the Project's estimated net increase of 2,030 employees. Reduced Intensity Alternative A, however, represents a large percentage of the Project's development scope and would generate new employees, their families, and demand for library services. As with the Project, this increase in demand would not be expected to be substantial or result in the need for new or physically altered library facilities. A portion of new employees are expected to be derived from the existing local labor pool and thus already generate a demand for public libraries. The existing on-site AF Parlow Library of Health Sciences would be retained under Reduced Intensity Alternative A to help meet the demand for library facilities. Patients and visitors of existing public library facilities would also likely be split among the four public libraries in the vicinity; thus, avoiding the concentration of demand at any one library. As with the Project, Reduced Intensity Alternative A would have a less than significant impact on library services. However, because Reduced Intensity Alternative A would have generate incrementally fewer new employees than under the Project, impacts would be incrementally less.

12. Transportation and Parking

a. Construction

As with the Project, the implementation of a Construction Traffic Management Plan and pedestrian safety program under Reduced Intensity Alternative A would reduce potential construction impacts associated with hauling, deliveries and worker vehicles. Scheduling of construction-related traffic to avoid peak hours, prohibited on-street parking, temporary traffic controls, and the use of safety precautions, such as alternate routing and protection barriers in accordance would minimize the potential disruption of traffic flow, intersection operational impacts, conflicts with pedestrians and/or bicyclists, or loss of on-street parking in the commercial zones and residential neighborhoods. However, given the amount of development in the Project area, the uncertainty in terms of timing for each related Project and the potential for overlap of development, the Project could contribute to a cumulatively significant construction impact. Beyond compliance with County requirements regarding haul routes and implementation of traffic controls and safety procedures, no other feasible mitigation measures have been identified. As such, construction traffic impacts, under both Project-specific and cumulative conditions, would be significant and unavoidable. However, because of a shorter construction duration, construction traffic impacts would be incrementally less than under the Project.

b. Operation

(1) Intersection Service Levels

As with the Project, development of Reduced Intensity Alternative A would increase existing employee population and annual patient visits at the Medical Center Campus, and would increase operational traffic in the Project vicinity. Significant traffic impacts are anticipated at the following twelve (12) intersections: Normandie Avenue & Torrance Boulevard, Vermont Avenue & Torrance Boulevard, Normandie Avenue & Carson Street, Berendo Avenue & Carson Street, Medical Center Drive & Carson Street, Vermont Avenue & Carson Street, I-110 Southbound Ramps & Carson Street, Vermont Avenue & 220th Street, Figueroa Street and 220th Street/I-110 Northbound Ramps, Normandie Avenue & 223rd Street, Vermont Avenue & 223rd Street, and I-110 Southbound Ramps & 223rd Street. Compared to the Project, intersection traffic would be reduced by approximately 16 percent but are still anticipated to exceed threshold levels. Although implementation of proposed mitigation measures (MM TRAF-1 through MM TRAF-3) would reduce impacts

to less than significant levels for three of these intersections, because there is uncertainty whether other decision-making agencies will implement mitigation measures, impacts are considered significant and unavoidable under both Reduced Intensity Alternative A and the Project. However, because of the reduction in scale of Reduced Intensity Alternative A, impacts would be incrementally less than under the Project.

(2) CMP Transportation System

As with the Project, Reduced Intensity Alternative A would not exceed the minimum peak hour trip numbers at CMP arterial stations or freeway monitoring stations to require further analysis and, therefore, would not result in a change in the V/C ratio of 0.02 or greater. Impacts to regional CMP transportation systems are considered to be less than significant under both the Reduced Intensity Alternative A and the Project. However, because Reduced Intensity Alternative A would have incrementally fewer new vehicle trips than under the Project, impact levels would be less.

(3) Caltrans Facilities

(a) Freeway Mainlines and Intersections

As under the Project, development of Reduced Intensity Alternative A would increase existing employee population and annual patient visits at the Medical Center Campus, and would increase operational traffic at the northbound I-110 Freeway at 228th Street, the southbound 110 Freeway at El Segundo Boulevard, and the northbound I-405 Freeway at the I-710 Freeway. Potential mitigation measures, which include a contribution of a fair share to proposed Caltrans projects to address congestion in the study area (MM TRAF-4) relies on Caltrans cooperation and approval. Because this is out of the County's control, impacts at the three freeway segments are considered significant and unavoidable. However, because Reduced Intensity Alternative A would have incrementally fewer new vehicle trips than under the Project, impact levels would be less. Reduced Intensity Alternative A would also significantly impact the arterial intersection of Western Avenue (State Route 213) and Carson Street because, as with the Project, it would add more than 50 vehicle trips to this intersection. Although incrementally less under Reduced Intensity Alternative A, the impact at this intersection would be considered significant and unavoidable.

(b) Freeway Off-Ramps

As with the Project, Reduced Intensity Alternative A would increase traffic at freeway off-ramps. However, because the off-ramp queue would not extend beyond the length of the ramp onto the mainline of the freeway during the peak arrival period, impacts at freeway off-ramps would be less than significant. Although both the Reduced Intensity Alternative A and the Project would have less than significant impacts, Reduced Intensity Alternative A would result in fewer new vehicle trips than under the Project and less impact at freeway off-ramps.

(4) Public Transit and Alternative Transportation

Reduced Intensity Alternative A would result in an incremental decrease in the Project's estimated ridership of approximately 22 morning and 22 afternoon transit person trips. As with the Project, transit ridership would represent a small percentage of the 1,840 persons-trip capacity within ¼-mile of the Medical Center Campus. Because this is not likely to exceed transit capacity, as with the Project, Reduced Intensity Alternative A would have a less than significant impact on transit and alternative transportation. Although both the Reduced Intensity Alternative A and the Project would have less than significant impacts, Reduced

Intensity Alternative A would result in fewer new transit riders than under the Project and less impact on transit facilities.

(5) Access and Circulation

As under the Project, access to the site under Reduced Intensity Alternative A would be provided via seven driveways. Driveways would be designed to County standards and would accommodate left and right ingress/egress turning movements. Vehicular access would be improved by the addition of a new signalized public entrance on Carson Street and one additional unsignalized staff entrance on Vermont Avenue. The existing network of traffic lanes, public sidewalks and pedestrian crosswalks would be maintained or improved and the Project would not mix pedestrian and automobile traffic in such a manner that a safety hazard for vehicles or pedestrians would occur or that access would be limited. In addition, no safety or operational impact relative to bicycle traffic is anticipated. As with the Project, impacts with respect to vehicular, pedestrian, and bicycle access would be less than significant. However, because Reduced Intensity Alternative A would generate less overall traffic, potential pedestrian/vehicle conflicts would be incrementally less.

(6) Parking Supply

Reduced Intensity Alternative A would provide approximately 2,300 new parking spaces, which would reduce total parking provided under the Project. As with the Project, total parking is anticipated to exceed County Code requirements. A comprehensive signage and wayfinding plan would be developed to aid visitors and patients in finding ultimate destinations and parking intended for those uses. As with the Project, it is anticipated that Reduced Intensity Alternative A, in accordance with existing and proposed TDM measures or potential LEED requirements for future buildings, would provide additional bicycle parking facilities on the Medical Center Campus beyond what is required by the County Code. Because parking would exceed Code requirements, impacts related to parking supply under both the Project and Reduced Intensity Alternative A would be less than significant and similar.

13. Utilities and Service Systems

a. Water Supply

(1) Construction

Construction of Reduced Intensity Alternative A, as with the Project would include all necessary on- and off-site water system connections and improvements to tie into Cal Water's existing distribution system. All necessary improvements would be verified through the coordination with Cal Water and the LACFD regarding fire flow requirements. Impacts on water distribution systems would be less than significant under both the Project and Reduced Intensity Alternative A. However, because Reduced Intensity Alternative A would have incrementally less overall development than under the Project, impacts on local distribution infrastructure and potential water supply pipeline construction, if necessary, would be less under this Alternative.

(2) Operation

Reduced Intensity Alternative A would result in an incremental decrease in the Project's estimated water demand of 458.6 AFY (or a net increase of 251 AFY over existing conditions), as there would be a reduction

in overall development intensity relative to the Project. As the projected water demand under this Alternative would be within the projected demand for the Project, which was determined in the Project WSA to be within Cal Water's projected supplies, impacts related to water supply would be less than significant under both the Project and Reduced Intensity Alternative A. However, because Reduced Intensity Alternative A would have incrementally less overall development than under the Project, impacts on water supply would be less under this Alternative.

b. Wastewater

(1) Construction

Construction of the Reduced Intensity Alternative A, as with the Project would include all necessary on- and off-site sewer pipe improvements and connections to adequately connect to the LACSDs' existing sewer system. In the event that, during development, wastewater lines were found to be substandard or in deteriorated condition, the County would be required to make necessary improvements to achieve adequate service pursuant to applicable County requirements. All necessary improvements would be verified through the permit approval process of obtaining a sewer capacity and connection permit from the LACSDs. Impacts on conveyance systems would be less than significant under both the Project and Reduced Intensity Alternative A. However, because Reduced Intensity Alternative A would have less overall development than under the Project, impacts on local conveyance systems and potential sewer line construction would be incrementally less.

(2) Operation

Reduced Intensity Alternative A would result in an incremental decrease in the Project's estimated 171,998 gpd. The Project's wastewater generation represents approximately 0.114 percent of JWPCP's total remaining capacity of 120 mgd. As with the Project, the increase the overall demand on wastewater conveyance and treatment facilities in the area would not exceed the available capacity of affected wastewater facilities and, thus, would not directly or indirectly result in an exceedance of wastewater treatment requirements, require or result in the construction of new wastewater treatment facilities or expansion of existing facilities, or result in a determination by the LACSDs that it has inadequate capacity to serve the Project's projected demand in addition to the provider's existing commitments. Impacts related to wastewater conveyance and treatment would be less than significant under both the Project and Reduced Intensity Alternative A. However, because Reduced Intensity Alternative A would have less overall development than under the Project, impacts on treatment systems would be incrementally less.

c. Solid Waste

(1) Construction

Reduced Intensity Alternative A, as with the Project, would require demolition of some existing buildings and construction activities that would generate solid waste. Much of this would be accommodated at the County's inert landfill site (Azusa Land Reclamation) or one of a number on inert debris engineered fill operations that are located throughout Los Angeles County. There will be an additional approximately 40 cubic yards of soil removed for soil remediation due to the four Leaking Underground Storage Tanks found near the Central Plant. Not taking into account C&D Debris Recycling and Reuse Program and the Los Angeles County Green Buildings Standard Code (Reduced Intensity Alternative A must recycle or reuse 50 percent of the debris generated), the estimated debris is expected to be similar (or slightly less) to waste

generated by Project construction. Neither the Project nor Reduced Intensity Alternative A would exceed landfill capacity for construction debris or soil waste. Impacts under both the Project and Reduced Intensity Alternative A would have a less than significant and similar impact relative to solid waste capacity.

(2) Operation

Not taking into account the amount of solid waste that could potentially be diverted via source reduction and recycling programs, the Project would generate a net increase of total net increase in waste approximately 2,481 tons per year. If all of the Project's waste were taken to Sunshine Canyon Landfill, the Project's respective additions to the daily disposal, 1.4 tons, would be approximately 0.011 percent of the residual daily capacity at the landfill, assuming no diversion. With 60 percent diversion it would be approximately 0.004 percent. With an approximately 16 percent reduction in the Project's new beds and elimination of the Project's retail uses, Reduced Intensity Alternative A would provide an incremental decrease in operational waste. Because the Project would have not exceed landfill capacity, Reduced Intensity Alternative A, which would generate incrementally less waste, would also not exceed landfill capacity. Under both the Project and Reduced Intensity Alternative A, impacts on landfill capacity would be less than significant. However, because the scope of development under Reduced Intensity Alternative A is reduced, it would have incrementally less impact than the Project.

C. RELATIONSHIP OF THE ALTERNATIVE TO PROJECT OBJECTIVES

Reduced Intensity Alternative A would incrementally reduce the Project's significant and unavoidable traffic impacts at the intersections of Normandie Avenue & Torrance Boulevard, Vermont Avenue & Torrance Boulevard, Normandie Avenue & Carson Street, Berendo Avenue & Carson Street, Medical Center Drive & Carson Street, Vermont Avenue & Carson Street, I-110 Southbound Ramps & Carson Street, Vermont Avenue & 220th Street, Figueroa Street and 220th Street/I-110 Northbound Ramps, Normandie Avenue & 223rd Street, Vermont Avenue & 223rd Street, and I-110 Southbound Ramps & 223rd Street. It would also incrementally reduce the Project's significant and unavoidable construction noise at sensitive receptor sites along 220th Street during Phase C, Phase 5, and Phase 6. However, these impacts, while reduced compared to the Project, would remain significant and unavoidable. The significant unavoidable temporary operational helicopter noise impact that would occur under the Project would also occur under Reduced Intensity Alternative A.

Because Reduced Intensity Alternative A would be incrementally reduced compared to the Project, demand for public services and utilities would be incrementally reduced. However, Reduced Intensity Alternative A would have a relatively similar level of impact and require the implementation of mitigation measures, as under the Project, for potentially significant impacts associated with seismic safety, geologic stability, expansive soils, hazardous materials management, fire protection and emergency medical services, and sheriff protection.

Reduced Intensity Alternative A would incrementally reduce the Project's significant and less than significant impacts, and would not result in any new environmental impacts, and would also provide adequate beds to achieve the primary underlying purpose of the Project, which is secure timely compliance with SB 1953 (Alquist Hospital Facilities Seismic Safety Act) to maintain critical trauma services in the South Bay market area of the County of Los Angeles, although not to the extent the Project would. SB 1953 requires the

replacement of the current tertiary acute care hospital and other essential supporting facilities with upgrades/replacement before January 1, 2030.

Reduced Intensity Alternative A would support, but to a lesser extent, the Project's basic objectives to renovate existing health facilities to meet the Affordable Care Act of 2010 and to modernize and integrate healthcare delivery. It would update most facilities to modern standards by constructing new buildings and repurposing/remodeling existing buildings. It would substantially meet the objective to resolve existing deferred maintenance issues and optimize the quality of care and operational effectiveness, while reducing administrative, operational and maintenance costs. It would allow for the fundamental reorganization, expansion and integration of outpatient services; renovate and appropriate new medical Campus construction. However, because retail uses would be eliminated and outpatient buildings would be reduced from three (under the Project) to two buildings, it would not encourage the same vibrant, mixed-use setting as under the Project and would not achieve optimum public utilization of land and buildings under the ownership and control of the County.

However, Reduced Intensity Alternative A would support the continuing Harbor-UCLA mission of clinical care, education, and research, as well as the provision of modernized facilities for existing and future tenants of the Medical Center Campus. Reduced Intensity Alternative A would also meet the objective of creating durable, adaptable green infrastructure and buildings, promoting resource-efficient transportation solutions, or accommodate changing sustainable design practices. Reduced Intensity Alternative A would also provide opportunities for development up to 250,000 square feet of additional bioscience and support facilities in the Bioscience Tech Park and 225,000 square feet of expanded LA BioMed facilities.

5.0 ALTERNATIVES

C. ALTERNATIVE 3: REDUCED INTENSITY ALTERNATIVE B – FURTHER ACUTE BED AND OTHER PLAN REDUCTIONS

A. DESCRIPTION OF THE ALTERNATIVE

Alternative 3, Reduced Intensity Alternative B – Further Acute Bed and Other Plan Reductions, would implement the Master Plan Project but at an even lower overall intensity than proposed under the Project or Alternative 2. The reductions are attributable to a reduction in new outpatient building space and parking spaces under Alternative 3. Specifically, this Alternative would result in the construction of the New Hospital Tower, but with a reduction in the maximum number of licensed acute care beds from 446 to 375, as well as construction of only one outpatient buildings (compared to three under the Project and up to two under Reduced Intensity Alternative A), a reduced Central Plant, two parking structures with up to 1,800 parking spaces (compared to up to three structures with up to 2,300 spaces under Alternative 2), and complete renovation of the Existing Hospital tower (compared to a partial renovation in Alternative 2) in order to accommodate the outpatient services previously planned for the additional two outpatient buildings under the Project. Similar to Alternative 2, this Alternative would also eliminate all retail uses from the development plan. In addition, Alternative 3 would be phased so that the New Hospital Tower would be constructed by 2025, prior to new outpatient uses, with completion of construction activities anticipated in 2028. All development associated with LA BioMed and the proposed Bioscience Tech Park, as well as necessary infrastructure, landscaping, circulation, and other Medical Center Campus improvements would be implemented as under the proposed Master Plan Project.

B. ENVIRONMENTAL IMPACTS

1. Aesthetics

a. Visual Character

(1) Construction

Construction activities typically result in site disturbance, movement of construction equipment, import and export of materials, views of incomplete structures and other activities that generally contrast with the aesthetic character of an area. Under the Reduced Intensity Alternative B, construction activities would be visible at various times from Vermont Avenue, Carson Street, Normandie Avenue, and 220th Street. As with the Project, construction activities would occur over the course of several years and within specific areas of the half-mile-long Medical Center Campus, as well as in limited off-site areas related to infrastructure and utility improvements necessary to serve Reduced Intensity Alternative B. As such, visual character impacts experienced at any single viewing location, for both on-site and off-site construction activities, would be intermittent and temporary. Because adverse visual effects would be temporary and would be confined to portions of the Medical Center Campus or distinct off-site areas at any one time, such effects would not be experienced by nearby viewers continually during the buildout of Reduced Intensity Alternative B. As with the Project, construction impacts would be less than significant. However, because overall construction would be incrementally less and be completed in fewer years than under the Project (completed in

approximately 2028 instead of approximately 2030), the impact of construction on visual character would be incrementally less under Reduced Intensity Alternative B.

(2) Operation

Reduced Intensity Alternative B would allow for a reduced intensity with respect to the New Hospital Tower and would not completely renovate the existing Hospital Tower. The reduction in beds in the New Hospital Tower could allow for an incrementally smaller building, either in height or profile. Because a complete renovation of the old Hospital Tower would not be implemented, the Reduced Intensity Alternative B may not result in the same aesthetic character of the old Hospital Tower as under the Project. New sidewalks and street scape, internal landscaping, public art and other aesthetic amenities would be the same as under the Project. As with the Project, the transition of the Medical Center Campus to greater densification would be consistent with growth trends and buildout in the surrounding area and Reduced Intensity Alternative B would be contained within the existing Medical Center Campus, aside from temporary off-site improvements and would not directly adjoin any other existing neighborhood or community uses. New buildings under the Reduced Intensity Alternative B would be required to implement the Design Guidelines, in which individual buildings must complement each other and the character of surrounding spaces, streets, and walks; maintain view corridors, both to and from buildings; and align axes, corner lines and features of neighboring buildings and spaces. Under the Design Guidelines, overall heights, massing, styles, and materials of neighboring buildings within the Medical Center Campus must be compatible. Views of service areas and mechanical equipment located both on grade and on building roofs must be screened. With the implementation of the Design Guidelines, the massing of buildings within the site would create a visually pleasant skyline effect (cluster) that would contribute to the visual character of the community.

Reduced Intensity Alternative B, as with the Project, would enhance the existing pedestrian experience along Carson Street, Vermont Avenue, Normandie Avenue, and 220th Street with landscaping and streetscape, including the installation of canopy trees, provision of a landscaped parkway between the sidewalk and Carson Street, the removal of chain link fencing and walls along Vermont and Normandie Avenues and 220th Street, and other improvements in visual character and safety along 220th Street. As with the Project, Reduced Intensity Alternative B would create a more aesthetic public environment than under existing conditions. Because it would introduce elements that would enhance the public interface along all adjacent streets, as well as public access to gardens, public art, and other benefits, and maintain a high architectural standard, the Master Plan Project is not considered to substantially degrade the visual character of the Site or its surroundings because of height, bulk, pattern, scale, character, and other features. Impacts with respect to visual character under Reduced Intensity Alternative B would be similar to the Project and less than significant.

b. Views

Other than original and newer buildings and existing landscaping associated with the Medical Center Campus, the local area is not distinguished by historical or architecturally notable buildings or natural areas, focal views of which would be considered visual resources. The reduction in scale of the New Hospital Tower under Reduced Intensity Alternative B is likely to reduce the New Hospital Tower's height or width as represented in the Project's stacking profile. However, as with the Project, the new buildings of the Reduced Intensity Alternative B would be minimally visible in panoramic views of the Los Angeles Basin and, as such, would not cause any adverse view effects. However, development of the Project has the potential to affect existing views of the Medical Center Campus from adjacent public streets. The views of the Medical Center

Campus from Carson Street, Vermont Avenue, Normandie Avenue, and 220th Street would be improved by new, high quality construction, removal of hedging and fencing materials and surface parking lots, and installation of evergreen/semi-evergreen trees along the Medical Center Campus periphery that allow views into the Project's gardens, paths, buildings and public art. Views from Carson Street would also be upgraded by the streetscape program. Because no existing recognized valued publicly available views or scenic vistas are currently evident across the Medical Center Campus, as with the Project, the Reduced Intensity Alternative B would not block views of existing scenic resources. In addition, the Reduced Intensity Alternative B would upgrade overall views of the Medical Center Campus, while providing for deeper views into the proposed garden areas. The impact of Reduced Intensity Alternative B with respect to views would, thus, be less than significant and similar to that of the Project.

c. Light and Glare

(1) Construction

Lighting during construction would potentially cause minor light spillover in the vicinity of the Medical Center Campus, including the residential neighborhoods to the south, east, and west. However, construction activities would occur primarily during daylight hours and any construction-related illumination would be used for safety and security purposes only. As with the Project, construction lighting under Reduced Intensity Alternative B would only be located in specific locations within the approximately 72-acre site and would not be experienced by any sensitive, off-site receptors for a long duration. Any construction lighting would be limited and directed onto specific locations within construction sites to avoid impacts on-site medical patients. As with the Project, artificial light associated with construction activities would be limited to security lighting and specific construction tasks and would not adversely impact off-site sensitive receptors. Reduced Intensity Alternative B would also have a less than significant impact with respect to construction lighting. However, because overall construction would occur over a shorter timeframe (completed in approximately 2028 instead of approximately 2030 under the Project), construction lighting impacts under Reduced Intensity Alternative B would be incrementally less than those generated by the Project.

(2) Operation

(i) Artificial Light

As with the Project, the security and landscape lighting for Reduced Intensity Alternative B would be located near ground level, generally shielded from adjacent uses by landscaping, and low-intensity in character. Lighting would be directed downward to avoid glare at on-site occupied hospital rooms and to maintain a calm ambience for on-site visitors and employees. Landscaping and rooftop garden lighting would be low-level consistent with the proposed hospital use. Light spillage from the Project's multi-story components would be similar to existing conditions and would not be disruptive of off-site residential uses, the nearest of which would be more than 200 feet to the south of the New Hospital Tower. The removal of surface parking lots, including Parking Lot A, which is visible from residential uses to the east and the surface parking lot in the southwest corner of the Medical Center Campus, which is visible to uses at the south side of 220th Street, would reduce vehicle light sources and security lights currently visible from these residential areas. As with the Project, new lighting sources from Reduced Intensity Alternative B are not expected to substantially increase ambient light or cause light spill onto adjacent light-sensitive receptors. As such, artificial light impacts under Reduced Intensity Alternative B would be similar to those of the Project and less than significant.

(ii) Glare

Building surfaces associated with window glass and polished surfaces, such as metallic or glass curtain walls and trim, can reflect light. Glare can also occur between neighboring buildings when expanses of glass and metals are used for building sheathing. As with the Project, the Design Guidelines for Reduced Intensity Alternative B, would require that building materials, massing, and styles are consistent with neighboring buildings, including the Existing Hospital tower, and complement the character of the surrounding Medical Center Campus buildings. Buildings using expanses of metals and reflective glass would not meet these criteria, nor would such materials be consistent with the overall use of the Medical Center Campus as a medical facility. As such, Reduced Intensity Alternative B, as with the Project, would not generate glare from reflected sunlight that would alter the character of the off-site areas surrounding the Medical Center Campus. Therefore, glare impacts under Reduced Intensity Alternative B would be similar to the Project and less than significant.

2. Air Quality**a. Consistency with Air Quality Management Plan****(1) Construction**

Reduced Intensity Alternative B would result in an increase in short-term employment compared to existing conditions. Being relatively small in number and temporary in nature, construction jobs under both Reduced Intensity Alternative B and the Project would not conflict with the long-term employment projections upon which the AQMP is based. Reduced Intensity Alternative would comply with CARB requirements to minimize short-term emissions from on-road and off-road diesel equipment and, as such, would not conflict with implementation of AQMP strategies intended to reduce emissions from construction equipment and activities. Reduced Intensity Alternative B would also comply with SCAQMD regulations for controlling fugitive dust pursuant to SCAQMD Rule 403. Compliance with these requirements is consistent with and meets or exceeds the AQMP requirements for control strategies. Although both the Project and Reduced Intensity Alternative B would be smaller in total development, it would have incrementally less impact.

(2) Operation

As with the Project, Reduced Intensity Alternative B would be consistent with growth projections set forth in the AQMP, and would be supportive of relevant Transportation Control Measures aimed at reducing vehicle trips. Both the Project and Reduced Intensity Alternative B would have a less than significant impact relative to the AQMP; however, because Reduced Intensity Alternative B is smaller in total development, it would have incrementally less impact.

b. Violation of Air Quality Standards**(1) Construction**

Construction of Reduced Intensity Alternative B has the potential to create air quality impacts through the use of heavy-duty construction equipment and through vehicle trips generated from construction workers traveling to and from the Medical Center Campus. However, as with the Project, construction-related daily emissions for the criteria and precursor pollutants would not exceed the SCAQMD regional thresholds for VOC, NO_x, CO, SO_x, PM₁₀, and PM_{2.5}. Although emissions would be less than significant under both the Project

and Reduced Intensity Alternative B, because Reduced Intensity Alternative B would involve less construction, it would have incrementally less impact than the Project with respect to the SCAQMD regional thresholds.

(2) Operation

Operation of Reduced Intensity Alternative B has the potential to create air quality impacts based on daily trip generation and energy demand. As discussed in Section 4.B., Air Quality, of the Draft EIR, the Project's net operational-related daily emissions for the criteria and precursor pollutants (VOC, NO_x, CO, SO_x, PM₁₀, and PM_{2.5}) would not exceed SCAQMD regional thresholds for during interim operations when combined with on-going construction emissions. Additionally at full build-out, operation of the Project would not exceed the SCAQMD numeric indicators. As such both the Project and Reduced Intensity Alternative B would have a less than significant impact with respect to SCAQMD standards. However, because daily trips and the scope of development would be incrementally less under Reduced Intensity Alternative B, impacts relative to SCAQMD thresholds would be less than the Project.

c. Non-Attainment Pollutants

(1) Construction

As with the Project, construction of Reduced Intensity Alternative B would result in the emission of criteria pollutants for which the region is in nonattainment; however, the maximum daily emissions from construction of Reduced Intensity Alternative B would not exceed the numeric indicator of significance for criteria pollutants nor their precursors. As with the Project, compliance with CARB and SCAQMD control measures and the same design features implemented by the Project would minimize and reduce construction emissions. Neither Reduced Intensity Alternative B nor the Project would result in a cumulatively considerable net increase of a criteria pollutant for which the region is non-attainment. Although both the Project and Reduced Intensity Alternative B would result in a less than significant impact, because Reduced Intensity Alternative B would involve less construction, it would have fewer total emissions than under the Project.

(2) Operation

Operation of Reduced Intensity Alternative B would result in the emission of criteria pollutants for which the region is in nonattainment; however, as with the Project, maximum daily emissions from operation would not exceed the threshold of significance for any of pollutants in nonattainment nor their precursors. During interim operations that overlap with construction emissions and at full build-out, operation of Reduced Intensity Alternative B would not exceed the applicable thresholds of significance. Although both the Project and Reduced Intensity Alternative B would result in a less than significant impact, because Reduced Intensity Alternative B would be incrementally smaller in scale, it would generate fewer total emissions than under the Project.

d. Substantial Pollutant Concentrations

As with the Project, Reduced Intensity Alternative B would not exceed SCAQMD localized significance thresholds for NO_x, CO, PM₁₀, or PM_{2.5} at nearby sensitive receptors. Interim operation of either Reduced Intensity Alternative B or the Project, when combined with on-going construction emissions, would not exceed the localized significance thresholds for NO_x, CO, PM₁₀, or PM_{2.5}. Operation of the Reduced Intensity

Alternative B at full build-out would not exceed SCAQMD localized significance thresholds at nearby sensitive receptors for NO_x, CO, PM₁₀, or PM_{2.5}. Construction and operation of either the Project or Reduced Intensity Alternative B would not result in substantial emissions of TACs at nearby sensitive receptors. Construction activities would not result in health risks which exceed SCAQMD numeric indicators of an allowable incremental increase in cancer risk of 10 in one million and non-cancer health index of 1.0. Construction and operation of either the Project or Reduced Intensity Alternative B would not result in traffic congestion that would cause or contribute to formation of localized CO hotspots that exceed the CAAQS or NAAQS. Although both the Project and Reduced Intensity Alternative B would result in a less than significant impact, because Reduced Intensity Alternative B would be incrementally smaller in scale, it would generate fewer total emissions than under the Project.

e. Odors

(1) Construction

As with the Project, Reduced Intensity Alternative B may emit odors during construction associated with the use of architectural coatings and solvents. However, SCAQMD Rule 1113 limits the allowable amount of VOCs from architectural coatings and solvents. Since compliance with SCAQMD Rules governing these compounds is mandatory, no construction activities or materials are proposed that would create objectionable odors. Both the Project and Reduced Intensity Alternative B would result in a less than significant impact. Also, because SCAQMD Rule 1113 would be equally enforceable under both the Project and Reduced Intensity Alternative B, impact levels would be similar.

(2) Operation

As with the Project, Reduced Intensity Alternative B does not include any uses identified by the SCAQMD as being typically associated with objectionable or nuisance odors. Waste collection areas and disposal for the Reduced Intensity Alternative B would be covered and situated away from the property line and sensitive off-site uses. Under both the Project and Reduced Intensity Alternative B, medical waste would be properly sealed and stored in accordance with applicable rules to ensure that no objectionable medical waste-related odors would be created. Best management and good housekeeping practices would be sufficient to prevent nuisance odors. Therefore, potential odor impacts would be less than significant under both the Project and Reduced Intensity Alternative B and impact levels would be similar.

3. Energy

a. Construction

Construction would entail consumption of diesel for hauling and construction equipment, gasoline for some hauling and workers' transportation, and electricity to provide temporary power for lighting and electronic equipment and to power certain construction equipment. Some heavy-duty construction could be electric or alternatively fueled, such as tower cranes, based on commercial availability. As with the Project, Reduced Intensity Alternative B would utilize electric or alternatively fueled equipment as available and as feasible. It is estimated that the construction of the Project would require approximately 0.002 percent of the statewide annual gasoline consumption and 0.003 percent of the statewide annual diesel consumption. Compliance with anti-idling and emissions regulations would result in a more efficient use of construction-related energy. As with the Project, Reduced Intensity Alternative B would also meet or exceed the County's waste diversion targets. Neither the Project nor Reduced Intensity Alternative B would result in the wasteful,

inefficient, and unnecessary consumption of energy during construction, or preempt future energy conservation during construction. Although both the Project and Reduced Intensity Alternative B would result in a less than significant impact, because Reduced Intensity Alternative B would be incrementally smaller in scale, it would generate less energy demand than under the Project.

b. Operation

Operation of both Reduced Intensity Alternative B and the Project would utilize energy for necessary on-site activities and off-site transportation associated with Campus employees, patients, and visitors traveling to and from the site. The amount of energy used would not represent a substantial fraction of the available energy supply in terms of equipment and transportation fuels. Furthermore, the Project and Reduced Intensity Alternative B would meet or exceed energy standards by incorporating green building measures consistent with County policy that requires LEED Silver-level certification and the County's CCAP. The Project would also provide opportunities for future energy efficiency by promoting solar power and electric or alternatively-fueled vehicles. Neither the Project nor Reduced Intensity Alternative B would result in the wasteful, inefficient, and unnecessary consumption of energy during operation, or preempt future energy conservation during operation. Although both the Project and Reduced Intensity Alternative B would result in a less than significant impact, because Reduced Intensity Alternative B would be incrementally smaller in scale, it would generate less overall energy demand than under the Project.

4. Geology and Soils

a. Seismic Hazards

The Harbor-UCLA Campus is located within a seismically active region, with the potential for seismic ground shaking. The horizontal peak ground acceleration (PGA) for the site corresponds to the Targeted Maximum Considered Earthquake (MCE_R) of 0.65g. This would be the same under Reduced Intensity Alternative B and the Project. Based on these PGA estimates, ground shaking at the Harbor-UCLA Campus could have a potentially significant impact on people and proposed buildings on the Harbor-UCLA Campus. Although seismic risk exists, Reduced Intensity Alternative B would implement MM-GEO-1, discussed in Section 4.D., Geology and Soils, of this Draft EIR. MM-GEO-1, which requires adherence to the recommendations of an approved Geotechnical Evaluation, would reduce seismic impacts for Reduced Intensity Alternative B and the Project to a less than significant level. With the implementation of MM-GEO-1, the Project and Reduced Intensity Alternative B would have a less than significant and similar impact with respect to seismic hazards.

b. Soil Erosion and Topsoil

Reduced Intensity Alternative B would require potentially less grading, including clearing, excavation, stockpiling, than the project. As with the Project, all work would be performed in accordance with a National Pollutant Discharge Elimination System (NPDES) Permit, which incorporates a Storm Water Pollution Prevention Program (SWPPP) and Best Management Practices (BMPs) for erosion control. Implementation of BMPs would ensure that water- and wind-related erosion would be confined to the construction area and not transported off-site. Also, the relatively gentle topographic gradients at the Medical Center Campus would reduce the potential for soil erosion during construction. As with the Project, Reduced Intensity Alternative B would have a less than significant impact with respect to soil erosion and topsoil. However, because the potential exists that less area would be graded under Reduced Intensity Alternative B, Reduced Intensity Alternative B would have incrementally less impact with respect to soil erosion than under the Project.

c. Geologic Stability

As with the Project, Reduced Intensity Alternative B could be exposed to differential soil settlement and liquefaction beneath proposed buildings because of the presence of alluvium, possible undocumented fill, and relatively shallow depths to groundwater. If wet or saturated soil conditions are encountered during excavation, instability could present a constraint to the construction of foundations. Because the risk of compressible/collapsible soils and shallow groundwater exists, as with the Project, Reduced Intensity Alternative B would implement MM-GEO-2, discussed in Section 4.D., Geology and Soils, of this Draft EIR. MM-GEO-2, which provides several approaches to address settlement and shallow groundwater, would reduce the potential for these geologic hazards. With the implementation of MM-GEO-2, the Project and Reduced Intensity Alternative B would have a less than significant and similar impact with respect to geologic stability.

d. Expansive and Corrosive Soils

The near-surface soils at the Medical Center Campus are generally sandy silt and clayey and typically expansive when wetted. In addition, on-site soils are potentially corrosive to concrete and metal, which could cause premature deterioration of underground structures or foundations. The risk of expansive and corrosive soils would occur under both Reduced Intensity Alternative B and the Project. As with the Project, Reduced Intensity Alternative B would implement MM-GEO-3, discussed in Section 4.D., Geology and Soils, of this Draft EIR. MM-GEO-3, which provides performance standards and required assessments to address expansive and corrosive soils, would reduce the effects of these soils conditions. With the implementation of MM-GEO-3, the Project and Reduced Intensity Alternative B would have a less than significant and similar impact with respect to expansive and corrosive soils.

5. Greenhouse Gas Emissions

Consistency with CCAP

As with the Project, Reduced Intensity Alternative B would be consistent with the County's CCAP, which provides goals and strategies that would achieve a reduction target of at least 11 percent below 2010 levels for unincorporated areas of the County. Based on the conservatively estimated GHG emissions, the Project would result in a net increase in GHG emissions from 2010 levels. However, the potential increase is extremely small compared to the County's total inventory. One of the Project objectives to maintain critical trauma services in the South Bay service region of the County of Los Angeles by redeveloping the existing hospital site, would result in more GHG efficiency than developing a new hospital campus on a greenfield site. Therefore, while the Project and Reduced Intensity Alternative B results in a conservatively estimated minimal net increase in GHG emissions, both the Project and Reduced Intensity Alternative B would be consistent with applicable CCAP measure to minimize its GHG emissions. As such, both the Project and Reduced Intensity Alternative B would not be expected to conflict with the County's ability to achieve the CCAP target reduction. Both the Project and Reduced Intensity Alternative B would have a less than significant impact relative to the CCAP and because both the Project and Reduced Intensity Alternative B would be consistent, impact levels would be similar.

Greenhouse Gas Reduction Plans

Construction and operation of the Reduced Intensity Alternative B, as with the Project, would be consistent with applicable GHG emissions reductions plans, policies, or regulations. Design features, such as green

building measures would reduce GHG emissions by increasing energy-efficiency beyond regulatory requirements, reducing indoor and outdoor water demand, and incorporating waste reduction measures. The Project would also incorporate components to reduce transportation-related GHG emissions by providing bicycle and end-of-trip facilities, and by being located within one-quarter mile of transit, thereby encouraging alternative forms of transportation. As with the Project, Reduced Intensity Alternative B would be constructed and operated in a manner consistent with a Silver Certification from the USGBC's LEED program. The LEED features that would be incorporated in the Project would include building efficiency measures to reduce energy consumption, water-saving measures, and waste reduction measures. Both the Project and Reduced Intensity Alternative B would be designed to optimize energy performance. Trees planted on the Medical Center Campus as part of the planned landscaping would sequester CO₂ as they age (not included in the quantitative analysis). The Project would reduce indoor water use by a minimum of 20 percent with water fixtures that exceed applicable standards. As a result, construction and operation of the both the Project and Reduced Intensity Alternative B would not have a significance impact with respect to consistency with GHG reduction plans. Because both the Project and Reduced Intensity Alternative B would be consistent with applicable plans, impact levels would be similar.

6. Hazards and Hazardous Materials

a. Hazardous Materials Management

As with the Project, Reduced Intensity Alternative B would require the demolition of some buildings and equipment identified as having ACMs, LPB, and PCBs; the removal and/or relocation of USTs and ASTs that presently contain, or have contained in the past, fuels and other potentially hazardous materials; and the disturbance of soil potentially contaminated with hazardous materials as the result of on-site or off-site LUSTs. Remediation of these materials would be conducted by qualified professionals in accordance with regulations governing these activities, including SCAQMD's Rule 1403 (ACBMs); Cal-OSHA rules (LBP); the federal Toxics Substances Control Act (PCBs); and, for USTs, RCRA Subtitle I, the State Health and Safety Code, and LACFD's enforcement of the State's applicable CCR regulations, with oversight by the RWQCB where groundwater may be affected. Reduced Intensity Alternative B, as with the Project, has the potential to result in accidental upset and release of hazardous materials into the environment, which is a potentially significant impact. In addition, the potential extent of possible contamination of underlying groundwater with petroleum hydrocarbons originating with nearby off-site LUSTs is not known, and construction activities have the potential to result in a significant hazard related to potential contaminated soil and groundwater. As with the Project, Mitigation Measures HAZ-1 through HAZ-4, which require abatement in accordance with the recommendation of the Hazardous Building Materials Survey, removal of USTs pursuant to the LACFD review and closure letter, preparation and adherence to a Soils Management Plan, and investigation of the purpose and potential abandonment of existing on-site groundwater monitoring wells, would be implemented. With the implementation of Mitigation Measures HAZ-1 through HAZ-4, hazardous materials impacts associated with Reduced Intensity Alternative B and the Project would be reduced to less than significant levels. Because Reduced Intensity Alternative B involves demolition and excavation and development in an area with potential groundwater contamination, as under the Project, with mitigation, impacts with respect to hazardous materials management would be similar and less than significant.

b. Airport Safety Provisions

Reduced Intensity Alternative B is located on the same property as the Project, which is not within the vicinity of an airport. The nearest airport is more than two miles away. Because of this distance, neither the

Project nor Reduced Intensity Alternative B would interfere with operations any local airports or airstrips. Impacts regarding airport safety under both Reduced Intensity Alternative B and the Project would, therefore, be similar and less than significant.

c. Emergency Response Plans

Reduced Intensity Alternative B, as with the Project, would not adversely affect existing emergency access routes. Medical Center Campus ingress and egress would be modified to create distinctions between access and parking for the general public and staff, including a new signalized public entrance on Carson Street. Vehicular access and circulation would avoid conflicts with traffic movements on local roadways and would facilitate the provision on-site emergency services. During construction, adjacent streets may be temporarily affected due to construction activity, such as temporary lane closures. Such occurrences would be implemented in accordance with a construction traffic management plan, which would allow for responses to emergency accessibility needs. The existing helistop, which would be temporarily relocated to one of two potential locations at the western end of the Medical Center Campus during construction of the new Hospital Tower, would remain operational. As with the Project, regulatory compliance and project features, such as improved access, would avoid the need to generate new emergency plans beyond those normally implemented to address on-site emergency situations. As with the Project, impacts related to emergency response plans would be less than significant. Impact levels would be similar under both the Reduced Intensity Alternative B and the Project.

7. Hydrology and Water Quality

a. Surface Water Hydrology

(1) Construction

As with the Project, construction activities under Reduced Intensity Alternative B would be subject to a Construction General Permit and associated NPDES requirements, which include development and implementation of a SWPPP with appropriate BMPs. BMPs to control stormwater runoff during construction could include, but are not limited to, the use of water bars, silt fences, and staked straw bales. Additional source-control BMPs might also be required to prevent runoff and eliminate non-stormwater discharges. Based on the depth to groundwater within the project site, dewatering and any related runoff are not anticipated. Compliance with NPDES requirements would reduce surface water runoff during construction to a less than significant level under both Reduced Intensity Alternative Band the Project. The level of impact related to surface water hydrology under both scenarios would be similar.

(2) Operation

As with the Project, Reduced Intensity Alternative B would convert more than three acres of existing pavement to turf area. Any proposed new storm drain connections to the reinforced concrete box channel or open channel owned by the Flood Control District would be conducted under a connection permit approved by the District. This permit would require a hydrology analysis and a comparison with the design peak flow rate of the facility. If the calculated peak flow rate exceeded the facility's design peak flow rate, the District will generally require detention to mitigate the increase in peak flow rates. As with the Project, Reduced Intensity Alternative B would be required to capture and infiltrate or reuse the difference in volume during the 0.75-inch storm event between a developed site and the site in an undeveloped condition (0 percent impervious) based on LID Standards. Several dry wells were previously constructed to meet this

requirement. This approach is likely to be implemented for future areas to be redeveloped under both the Project and Reduced Intensity Alternative B. LID features include resource conservation, flatter wider swales, flatter slopes, turf depression, landscape island storage, rooftop detention/retention, catch basins/seepage pits, sidewalk storage, permeable pavement, and other measures. With the increase in pervious area, the calculated peak flow of the future development will generally be less than under existing conditions; in addition, any future site development will require compliance with County of Los Angeles and LID standards for stormwater management. With implementation of LID measures and permitting from the District related to the reinforced concrete box channel and drainage ditch, surface water impacts associated with both Reduced Intensity Alternative B and the Project would be less than significant. Impacts related to surface water runoff would be similar under both Reduced Intensity Alternative B and the Project.

b. Surface and Groundwater Quality

(1) Construction

As with the Project, construction activities under Reduced Intensity Alternative B would be subject to existing regulations governing surface and groundwater quality. The required Construction General Permit and associated NPDES requirements include development and implementation of a SWPPP with appropriate BMPs to limit erosion, minimize sedimentation, and control stormwater runoff water quality during construction activities. Compliance with construction phase BMPs and other requirements are considered protective of water quality during construction and would ensure that water- and wind-related erosion would be confined to the construction area and not transported off-site. The NPDES Construction General Permit and SWPPP establish procedures and action protocols for the handling of construction-related chemicals and encountered groundwater. Based on existing and historical depths to groundwater within the project site, construction dewatering is not anticipated to be required. However, should groundwater be encountered that would require dewatering, the County would require contractors for individual Project components to apply for coverage and adhere to the monitoring and reporting program under RWQCB Order No. R8-2009-0003. Existing regulations would ensure that any potential dewatering activities would not result in the exceedance of water quality standards during construction, including TMDL limits applicable to Dominguez Channel. Therefore, impacts related to surface and groundwater quality would be less than significant and similar under both Reduced Intensity Alternative B and the Project.

(2) Operation

Stormwater discharge may include pollutants of concern, such as sediment, hydrocarbons, oil, grease, heavy metals, nutrients, herbicides, pesticides, fecal coliform bacteria, and trash. This runoff can flow directly into storm drains and continue through pipes until it is released, untreated, into the Dominguez Channel. Untreated stormwater runoff could degrade water quality in surface and waters and can affect drinking water, human health, and plant and animal habitats. Reduced Intensity Alternative B, as with the Project, would utilize landscaping in strategic ways to capture and clean stormwater runoff. Strategies include replacement of three acres of pavement with landscaping. The Project would avoid the use of pollutants, chemicals, or soil amendments that could enter surface water runoff. Organic maintenance methods or Integrated Pest Management may be used. Implementation of County LID features, including bioretention features, modifications to address the potential leaching of nutrients, and post-construction BMPs would ensure that operations would not degrade the quality of receiving waters to levels below standards considered acceptable by the Los Angeles RWQCB or other regulatory agencies, or impair the beneficial uses of the receiving waters. With compliance with existing regulations, both Reduced Intensity Alternative B and

the Project would have a similar, less than significant impact, related to surface and groundwater water quality.

8. Land Use

a. Applicable Plans and Policies

As with the Project, Reduced Intensity Alternative B would be consistent with the policies of the SCAG 2008 Regional Comprehensive Plan and Compass Growth Visioning (including the Compass 2% Blueprint Strategy) to focus growth in existing and emerging centers, along major transportation corridors, and in proximity to transit. Reduced Intensity Alternative B would be consistent with SCAG's 2016 RTP/SCS by enhancing the pedestrian environment within the Medical Center Campus and along Carson Street, and improving pedestrian connectivity between the Medical Center Campus, the surrounding community, and the Carson Street Metro Transit Station. Reduced Intensity Alternative B would be consistent with applicable policies of General Plan Update in that it would be compatible with the existing adjacent off-site land uses, incorporate sustainable design, facilitate multiple modes of transportation (including alternative modes), provide interconnected and safe pedestrian and bicycle circulation, provide required green space and landscaped setbacks, result in less than significant impacts to biological, aesthetic and cultural resources after mitigation, result in less than significant seismic/geotechnical and noise impacts after mitigation, be developed with adequate public service and water, wastewater, and solid waste disposal capacity to serve the Project; and foster regional economic development.

Reduced Intensity Alternative B would also be consistent with the Los Angeles County General Plan's "P" GPLU land use designation, which permits a broad range of public and semi-public facilities and community-serving uses, and with the overall floor area ratio (FAR) not to exceed 3:1. The Project would have a maximum FAR of 0.78 and the Reduced Intensity Alternative B would be incrementally less. As with the Project, Reduced Intensity Alternative B would be consistent with the Los Angeles Planning and Zoning Code and would not exceed the development limits associated with the underlying C-3 zone. The Project and Reduced Intensity Alternative B would have a less than significant and similar impact with respect to applicable plans and policies.

b. Land Use Compatibility

As with the Project, Reduced Intensity Alternative B would alter the existing visual appearance of the Medical Center Campus through denser development than under existing conditions. However, the Site is located within a fully urbanized setting within the 110 Freeway/Carson Station TOD. The area is also undergoing a transition to greater urbanization, characterized in part by the recent development of higher density multi-family uses to the west and the construction of the Carson Street/Normandie Avenue Mall to the north. Reduced Intensity Alternative B, as with the Project, would provide landscaping and street trees along the street frontages where in some areas such landscaping and trees are lacking, and would be designed in compliance with unifying design guidelines which would improve the visual appearance of the Medical Center Campus. While the densification of land uses at the Medical Center Campus would be noticeable from adjacent off-site land uses, including the residential neighborhoods to the south east and west (commercial uses along the north side of Carson Street intervene between the Medical Center Campus and the residential neighborhood to the north), because of the urbanizing trend in the area and proposed streetscape/screening, the Reduced Intensity Alternative B, as with the Project, would result in less than significant land use incompatibilities with adjacent off-site land uses. However, because Reduced Intensity

Alternative B would have incrementally less density than under the Project, it would have less impact with respect to land use compatibility.

9. Noise

a. Construction Noise

As with the Project, construction of Reduced Intensity Alternative B would involve demolition, grading, building construction, and paving. Each stage would involve the use of different kinds of construction equipment and, therefore, has its own distinct noise characteristics. Demolition typically involves the use of excavator, tractor/loader/backhoe, concrete saw, dozer, water truck, and loader. Grading typically involves the use of drill water truck, dozer, tractor/loader/backhoe, and grader. Building construction typically involves the use of crane, forklift, welder, tractor/loader/backhoe, air compressor, and water truck. Paving typically involves the use of tractor/loader/backhoe, concrete mixer truck, roller, paver, and trencher. The Project would be constructed using typical construction techniques. Construction noise would exceed the significance threshold at the several receptor locations during various development phases. As with the Project, Reduced Intensity Alternative B would implement mitigation measures, such as MM NOISE-1 and project design features to achieve a noise reduction in areas where the line-of-sight between construction-period noise sources and off-site receptor locations is obstructed. However, even with implementation of the mitigation measure, construction-related noise would exceed the noise threshold a at the multi-family residential uses across 220th Street during Phase C, Phase 5, and Phase 6. Although both the Project and Reduced Intensity Alternative B would result in a significant and unavoidable noise impact, because Reduced Intensity Alternative B is reduced in scale and duration of construction, construction noise impacts would be incrementally less.

b. Operational Noise

As under the Project, noise sources associated with operation of Reduced Intensity Alternative B, including mechanical equipment, loading dock activity, refuse collection, parking structure activity, and traffic, would increase the ambient noise level at the nearest noise-sensitive receptor, but by a less than the threshold of significance. Composite noise level increases at all other receptor locations are also expected to be less than significant, given their distance from the site and the presence of intervening structures. As such, the operational noise level impacts due to the future operation of Project and Reduced Intensity Alternative B would be less than significant. However, because Reduced Intensity Alternative B is incrementally smaller in scale than the Project and would generate less traffic, operational noise impacts would be less.

With regard to helicopter-related noise, the Project would result in less than significant impacts at Project buildout once the permanent rooftop helistop on the New Hospital Tower is operational. However, operation of the temporary helistop at either interim location would exceed established noise thresholds at nearby sensitive receptors to the south of the Medical Center Campus, and no mitigation exists that could reduce noise levels to acceptable levels. Therefore, impacts under the Project would be considered significant and unavoidable. Because Reduced Intensity Alternative B would also require operation of the temporary helistop locations (though only one would be operational at any given time, as under the Project), impacts under this alternative would be significant and unavoidable and similar to the Project.

c. Construction Vibration

The construction of Reduced Intensity Alternative B, as with the Project, would generate ground-borne construction vibration during demolition, shoring and excavation, and large bulldozer operation. Vibration velocities from operation of construction equipment would range from approximately 0.076 to 0.089 inches per second PPV at 25 feet from the source of activity. Maximum vibration velocities to which receptors could be exposed range from 0.01 to 0.027 inches per second PPV. This value is considerably lower than the impact threshold of 0.5 inches per second PPV, and as such, construction vibration would be less than significant at the nearest residential building. Although construction vibration levels would be less than significant under both the Project and Reduced Intensity Alternative B would be less than significant, because the scope and duration of Reduced Intensity Alternative B's construction activities are incrementally less than under the Project, construction vibration impacts would be less.

d. Operational Vibration

As with the Project, operation of Reduced Intensity Alternative B would include typical commercial-grade stationary mechanical and electrical equipment such as air handling units, condenser units, and exhaust fans, which would produce vibration. In addition, the primary sources of transient vibration would include passenger vehicle circulation within the parking area activity. Ground-borne vibration would be similar to existing sources (i.e., traffic on adjacent roadways) adjacent to the Medical Center Campus. Maximum potential vibration levels from all Project operational sources at the nearest off-site buildings would be up to 0.01 inches per second PPV and would be less than the significance threshold of 0.04 inches per second PPV for perceptibility. As such, under both the Project and Reduced Intensity Alternative B, vibration impacts associated with operation of the Project would be less than significant. However, because Reduced Intensity Alternative B would be incrementally smaller in scale than the Project (would generate less traffic), operational vibration impacts would be less.

10. Population, Housing and Employment

a. Construction

As with the Project, construction of Reduced Intensity Alternative B would employ a mobile regional construction work force. Given the mobility and short duration of work at a particular site, a construction labor pool that can be drawn upon in the region and workers are not expected to relocate as a result of such employment opportunities. The number of construction workers would vary from approximately 212 workers per day during less intensive construction activity up to a maximum of approximately 1,650 construction workers on a day during the peak construction period. Because of a large, regional construction pool and the mobility of construction workers, construction activities would not generate a notable demand for housing, or affect population patterns. Although the duration of construction would be incrementally less under Reduced Intensity Alternative B, as with the Project, construction of both Reduced Intensity Alternative B and the Project would have a less than significant impact relative to construction-related population, housing, and employment. However, because of an incrementally reduced scope of development, Reduced Intensity Alternative B would have slightly less impact than under the Project.

b. Operation

Compared to the Project, Reduced Intensity Alternative B would reduce hospital beds from 446 to 375, construct one outpatient buildings (compared to three under the Project), reduce the scale of the Central

Plant, and only partially renovate of the Existing Hospital tower. Overall intensity would be reduced compared to the Project and Reduced Intensity Alternative A. There would be incrementally fewer annual patient visits than under the Project and Reduced Intensity Alternative A. Compared to the Project, Reduced Intensity Alternative A would reduce hospital beds from 446 to 375, construct two outpatient buildings (compared to three under the Project), reduce the scale of the Central Plant, and only partially renovate of the Existing Hospital tower. Total employment at the site under the Project would represent a small percentage of the projected growth in the South Bay Planning Area up to Year 2030 and very small percentage of estimated growth in unincorporated Los Angeles County for this same period. Because the Project's employment increase would not exceed local and SCAG's growth projections for the period between 2016 and 2030, Reduced Intensity Alternative B, which would have incrementally fewer employees, would also not exceed growth projections. As with the Project, impacts regarding consistency with the projected employment growth would be less than significant. However, because of the reduced intensity, impacts under Reduced Intensity Alternative B would be incrementally less than the Project.

11. Public Services

a. Fire Protection and Emergency Services

(1) Construction

As with the Project, construction of Reduced Intensity Alternative B would include demolition, site preparation including trenching for utilities, and construction of new buildings and street/sidewalk improvements in various phases. These periodic construction activities could temporarily increase demand for fire protection and EMS, and may cause the occasional exposure of combustible materials such as wood, plastics, sawdust, coverings and coatings, heat sources including machinery and equipment sparking, exposed electrical lines, welding activities, and chemical reactions in combustible materials and coatings. However, compliance with California Division of Occupational Safety and Health Administration (Cal/OSHA) and Fire Code requirements; on-site fire suppression equipment specific to construction activities; compliance with applicable codes and ordinances related to the maintenance of mechanical equipment, handling and storage of flammable materials, and cleanup of spills of flammable materials would reduce demand for fire protection and EMS during construction to a less than significant level. Emergency access would be provided and maintained throughout construction to existing uses, new uses, and fire hydrants. While Reduced Intensity Alternative B and the Project would require the construction of off-site utility and roadway improvements, and potentially require temporary lane closures along one or more of the four streets bordering the Medical Center Campus, Reduced Intensity Alternative B, as with the Project, would provide a construction traffic management plan to establish temporary traffic controls, prohibit construction vehicle activities and parking in surrounding off-site areas, and require various safety precautions such as alternate routing and protection barriers. With the implementation of the traffic management plan, impacts related to emergency access, vehicular access, pedestrian and bicycle access and safety, public transit, and construction parking would be less than significant under both Reduced Intensity Alternative B and the Project. Although impacts would be less than significant under both the Project and Reduced Intensity Alternative B, impacts would be less under the Reduced Intensity Alternative B because of the incrementally shorter construction time frame.

(2) Operation

As with the Project, Reduced Intensity Alternative B would be subject to the requirements of the County Code (e.g., Building Code, Fire Code, Utilities Code, and Subdivision Code) for new construction that address

structural design, building materials, site access, fire lanes, fire flow requirements, automatic sprinkler systems, alarms, and smoke detectors. The LACFD would review and approve all plans at the building permit and plan check phases of the Project to ensure compliance with applicable Fire Code requirements, thereby minimizing the risk of increased operation fire safety hazards. An LACFD-approved Emergency Response Plan would include mapping of site access and emergency exits, evacuation routes for vehicles and pedestrians, and locations of the nearest hospitals and fire stations. Finally, because Reduced Intensity Alternative B would replace many aging on-site buildings that have not been constructed to current Fire Code standards with new buildings constructed to such standards, fire safety at the Medical Center Campus would be improved.

As with the Project, development of Reduced Intensity Alternative B would increase existing employee population and annual patient visits at the Medical Center Campus, and would increase operational traffic in the Project vicinity. According to Section 4.L., Transportation and Traffic, of this Draft EIR, because implementation of mitigation measures is not entirely within the control of the County, significant and unavoidable impacts would occur at the several intersections in the area, which could affect LACFD emergency vehicle response times in the area. However, as under the Project, Reduced Intensity Alternative B would provide traffic design measures, including the installation roadway and traffic control improvements that would enable emergency access to the Medical Center Campus. In addition, emergency response is routinely facilitated, particularly for high priority calls, through use of sirens to clear a path of travel, driving in the lanes of opposing traffic, use of alternate routes, and multiple station response. In light of the above, and the fact that emergency response times to the Medical Center Campus from Station 36 are currently within the LACFD's response time goals, operational impacts under the Project and Reduced Intensity Alternative B on emergency response times would be less than significant. However, because visitation and hospital beds would be reduced by approximately 16 percent under Reduced Intensity Alternative B, impacts with relation to emergency response would be incrementally less.

As with the Project, Reduced Intensity Alternative B would require greater fire flows at the site than required under existing conditions. As discussed in Section 4.K.1, Fire Protection and Emergency Services of this Draft EIR, water service to the Medical Center Campus are adequate to meet Project requirements and, as such, would be adequate to meet Reduced Intensity Alternative B fire flow requirements. Impacts related to fire flow would be less than significant under both the Reduced Intensity Alternative B and the Project. However, because of reduced scale under the Reduced Intensity Alternative B, fire flow demand would be incrementally less.

b. Sheriff Protection

(1) Construction

Construction activities associated with Reduced Intensity Alternative B, as under the Project, would include demolition, site preparation including trenching for utilities, and construction of new buildings and street/sidewalk improvements in various phases through buildout. These periodic construction activities could temporarily increase demand for police protection associated with patrolling the construction site. However, as required by PDF SHER-1, the construction sites would be fully fenced, lighted with security lighting, and patrolled either by on-site LACSD personnel from the on-site LACSD satellite station or by private security hired by DHS. Furthermore, an LACSD satellite station is located on-site, and the Medical Center Campus has a 24-hour a day LACSD presence, which would both discourage construction site crimes and provide for almost immediate response to any observed or reported construction site crimes that are in process. Therefore, the demand for police protection services during construction of Reduced Intensity

Alternative B would not require new or altered police protection facilities to maintain service, and the impact would be less than significant but incrementally reduced compared to the Project due to the reduction in overall construction activities on the Medical Center Campus.

Regarding police access and response times during construction, as would be the case under the Project, construction staging and construction worker parking associated with Reduced Intensity Alternative B would be accommodated on the Medical Center Campus, limiting potential conflicts with traffic on local streets. In addition, as required by the PDF-SHER-2, emergency access would be provided and maintained for existing and new on-site uses, and to off-site uses, throughout construction. Furthermore, while the Project and Reduced Intensity Alternative B would generate construction traffic, require the construction of off-site utility and roadway improvements, and potentially require temporary lane closures along one or more of the four streets bordering the Project Site, with the implementation of various traffic- and law enforcement-related Project Design Features, as under the Project, impacts on police access and response times during construction would not require new or altered police protection facilities to maintain service, and thus would be less than significant. However, given the reduction in overall development intensity under this Alternative, construction-related impacts would be incrementally reduced.

(2) Operation

The Master Plan Project would result in a net increase of 1,178,071 square feet of building floor area on-site, and net increases in total Campus-wide employees and annual patient visits of 2,030 employees and 185,745 annual patient visits, respectively. This, in turn, would create the need for additional space at LACSD's on-site satellite station to accommodate the additional officers. However, Reduced Intensity Alternative B would result in an overall increase in development intensity compared to existing conditions, but this increase would be less than that of the Project. Therefore, as with the Project, operational impacts on police protection services would be less than significant, but would be incrementally reduced compared to the Project due to the reduction in overall development intensity.

c. Parks and Recreation

(1) Construction

As with the Project, construction of Reduced Intensity Alternative B would not physically affect existing public parks and recreational facilities as no such facilities are located on or directly adjacent to the Medical Center Campus. Also, the staging of Project construction activities would occur on-site, and access to off-site uses would be maintained during construction. Given the mobility and short duration of work at a particular site, it is unlikely that a substantial number of construction workers would relocate to the Project area and use local parks and recreational facilities to the extent that new recreational facilities would be required or that substantial physical deterioration of such facilities would occur. Construction effects on parks under either the Reduced Intensity Alternative B or the Project would be less than significant; however, because of an incrementally reduced scale of development, Reduced Intensity Alternative B would have less impact than under the Project.

(2) Operation

Reduced Intensity Alternative B would generate incrementally fewer employees than the estimated 2,030 new employees under the Project. However, Reduced Intensity Alternative B represents a large percentage of the Project's growth and would potentially bring employees and their families to the area. As such,

Reduced Intensity Alternative B could create a demand for public parks and recreational facilities. A portion of the new on-site employees would be expected to be derived from the existing local labor pool, and it is likely that these employees and their families likely already generate a demand for public parks and recreational facilities in the local area. Furthermore, any use of existing public parks and recreational facilities by Project employees and their families would likely be dispersed over a wide geographic area rather than concentrated at any one of the eleven local public parks and recreational facilities. As with the Project, Reduced Intensity Alternative B would have a less than significant impact on parks and recreational facilities. However, because Reduced Intensity Alternative B would have incrementally fewer new employees than under the Project, impacts would be incrementally less.

d. Schools

(1) Construction

As with the Project, construction of Reduced Intensity Alternative B would not physically affect existing public schools as no public schools are located on or directly adjacent to the Medical Center Campus. Furthermore, the staging of Project construction activities would occur on-site, and access to off-site uses during construction would be maintained as required by the County Code, such that access to and parking at existing public schools would be maintained during Project construction. Given the general accessibility of the Medical Center Campus and the availability of construction workers in the Los Angeles area, it is unlikely that a substantial number of construction workers would relocate to the Project area and have children that would use local public schools. Hence, new or physically altered local public schools would not be required to provide service to the children of Project construction workers and maintain acceptable service ratios and other performance standards. Construction on schools, as with the Project, would be less than significant and similar under Reduced Intensity Alternative B.

(2) Operation

It is estimated that, under the Project, families of new employees would generate an estimated 29 grade K-5 students, 14 grade 6-8 students, and 18 grade 9-12 students. Reduced Intensity Alternative B would generate fewer employees fewer students than under the Project and Reduced Intensity Alternative A. It is likely that student attendance under both Reduced Intensity Alternative B and the Project would be split among the 11 elementary and high schools in the local area, and possibly beyond. If all new students were distributed among the nearest schools, it is unlikely that these students alone would necessitate the need to construct new or physically altered school facilities given the small numbers of students involved. As with the Project, impacts on local schools would be less than significant under Reduced Intensity Alternative B. However, because Reduced Intensity Alternative B is reduced in scale, impacts would be incrementally less.

e. Libraries

(1) Construction

As with the Project, construction of Reduced Intensity Alternative B would not physically affect existing libraries, none of which are located on or directly adjacent to the Medical Center Campus. In addition, the staging of Project construction activities would occur on-site, and access to off-site uses would be maintained during construction. Given the mobility and short duration of work at a particular site, it is unlikely that a substantial number of construction workers would relocate to the Project area and use local libraries to the extent that new libraries would be required or that substantial physical deterioration of such facilities

would occur. Construction effects on libraries under either the Reduced Intensity Alternative B or the Project would be less than significant; however, because of an incrementally reduced scale of development, Reduced Intensity Alternative B would have less impact than under the Project.

(2) Operation

Reduced Intensity Alternative B would generate incrementally fewer employees than the Project's estimated net increase of 2,030 employees. Reduced Intensity Alternative B, however, represents a large percentage of the Project's development scope and would generate new employees, their families, and demand for library services. As with the Project, this increase in demand would not be expected to be substantial or result in the need for new or physically altered library facilities. A portion of new employees are expected to be derived from the existing local labor pool and thus already generate a demand for public libraries. The existing on-site AF Parlow Library of Health Sciences would be retained under Reduced Intensity Alternative B to help meet the demand for library facilities. Patients and visitors of existing public library facilities would also likely be split among the four public libraries in the vicinity; thus, avoiding the concentration of demand at any one library. As with the Project, Reduced Intensity Alternative B would have a less than significant impact on library services. However, because Reduced Intensity Alternative B would have generate incrementally fewer new employees than under the Project or Reduced Intensity Alternative A, impacts would be incrementally less.

12. Transportation and Parking

a. Construction

As with the Project, the implementation of a Construction Traffic Management Plan and pedestrian safety program under Reduced Intensity Alternative B would reduce potential construction impacts associated with hauling, deliveries and worker vehicles. Scheduling of construction-related traffic to avoid peak hours, prohibited on-street parking, temporary traffic controls, and the use of safety precautions, such as alternate routing and protection barriers in accordance would minimize the potential disruption of traffic flow, intersection operational impacts, conflicts with pedestrians and/or bicyclists, or loss of on-street parking in the commercial zones and residential neighborhoods. However, given the amount of development in the Project area, the uncertainty in terms of timing for each related Project and the potential for overlap of development, the Project could contribute to a cumulatively significant construction impact. Beyond compliance with County requirements regarding haul routes and implementation of traffic controls and safety procedures, no other feasible mitigation measures have been identified. As such, construction traffic impacts would be significant and unavoidable. However, because of a shorter construction duration, construction traffic impacts would be incrementally less than under the Project.

b. Operation

(1) Intersection Service Levels

As with the Project, development of Reduced Intensity Alternative B would increase existing employee population and annual patient visits at the Medical Center Campus, and would increase operational traffic in the Project vicinity. Significant traffic impacts are anticipated at the following twelve (12) intersections: Normandie Avenue & Torrance Boulevard, Vermont Avenue & Torrance Boulevard, Normandie Avenue & Carson Street, Berendo Avenue & Carson Street, Medical Center Drive & Carson Street, Vermont Avenue & Carson Street, I-110 Southbound Ramps & Carson Street, Vermont Avenue & 220th Street, Figueroa Street

and 220th Street/I-110 Northbound Ramps, Normandie Avenue & 223rd Street, Vermont Avenue & 223rd Street, and I-110 Southbound Ramps & 223rd Street. Compared to the Project, intersection traffic would be reduced by approximately 16 percent but are anticipated to exceed threshold levels. Although implementation of proposed mitigation measures (MM TRAF-1 through MM TRAF-3) would reduce impacts to less than significant levels, because there is uncertainty whether other decision-making agencies will implement mitigation measures, impacts are considered significant and unavoidable under both Reduced Intensity Alternative B and the Project. However, because of the reduction in scale of Reduced Intensity Alternative B, impacts would be incrementally less than under the Project.

(2) CMP Transportation System

As with the Project, Reduced Intensity Alternative B would not exceed the minimum peak hour trip numbers at CMP arterial stations or freeway monitoring stations to require further analysis and, therefore, would not result in a change in the V/C ratio of 0.02 or greater. Impacts to regional CMP transportation systems are considered to be less than significant under both the Reduced Intensity Alternative B and the Project. However, because Reduced Intensity Alternative B would have incrementally fewer new vehicle trips than under the Project, impact levels would be less.

(3) Caltrans Facilities

(a) Freeway Mainlines and Intersections

As under the Project, development of Reduced Intensity Alternative B would increase existing employee population and annual patient visits at the Medical Center Campus, and would increase operational traffic at the northbound I-110 Freeway at 228th Street, the southbound 110 Freeway at El Segundo Boulevard, and the northbound I-405 Freeway at the I-710 Freeway. Potential mitigation measures, which include a contribution of a fair share to proposed Caltrans projects to address congestion in the study area (MM TRAF-4) relies on Caltrans cooperation and approval. Because this is out of the County's control, impacts at the three freeway segments are considered significant and unavoidable. However, because Reduced Intensity Alternative B would have incrementally fewer new vehicle trips than under the Project, impact levels would be less. Reduced Intensity Alternative B would also significantly impact the arterial intersection of Western Avenue (State Route 213) and Carson Street because, as with the Project, it would add more than 50 vehicle trips to this intersection. Although incrementally less under Reduced Intensity Alternative B, the impact at this intersection would be considered significant and unavoidable.

(b) Freeway Off-Ramps

As with the Project, Reduced Intensity Alternative B would increase traffic at freeway off-ramps. However, because the off-ramp queue would not extend beyond the length of the ramp onto the mainline of the freeway during the peak arrival period, impacts at freeway off-ramps would be less than significant. Although both the Reduced Intensity Alternative B and the Project would have less than significant impacts, Reduced Intensity Alternative B would result in fewer new vehicle trips than under the Project and less impact at freeway off-ramps.

(4) Public Transit and Alternative Transportation

Reduced Intensity Alternative B would result in an incremental decrease in the Project's estimated ridership of approximately 22 morning and 22 afternoon transit person trips. As with the Project, transit ridership

would represent a small percentage of the 1,840 persons-trip capacity within ¼-mile of the Medical Center Campus. Because this is not likely to exceed transit capacity, as with the Project, Reduced Intensity Alternative A would have a less than significant impact on transit and alternative transportation. Although both the Reduced Intensity Alternative B and the Project would have less than significant impacts, Reduced Intensity Alternative B would result in fewer new transit riders than under the Project and less impact on transit facilities.

(5) Access and Circulation

As under the Project, access to the site under Reduced Intensity Alternative B would be provided via seven driveways. Driveways would be designed to County standards and would accommodate left and right ingress/egress turning movements. Vehicular access would be improved by the addition of a new signalized public entrance on Carson Street and one additional unsignalized staff entrance on Vermont Avenue. The existing network of traffic lanes, public sidewalks and pedestrian crosswalks would be maintained or improved and the Project would not mix pedestrian and automobile traffic in such a manner that a safety hazard for vehicles or pedestrians would occur or that access would be limited. In addition, no safety or operational impact relative to bicycle traffic is anticipated. As with the Project, impacts with respect to vehicular, pedestrian, and bicycle access would be less than significant. However, because Reduced Intensity Alternative B would generate less overall traffic, potential pedestrian/vehicle conflicts would be incrementally less.

(6) Parking Supply

Reduced Intensity Alternative B would provide approximately 1,800 new parking spaces, which would reduce total parking provided under the Project. As with the Project, total parking is anticipated to exceed County Code requirements. A comprehensive signage and wayfinding plan would be developed to aid visitors and patients in finding ultimate destinations and parking intended for those uses. As with the Project, it is anticipated that Reduced Intensity Alternative B, in accordance with existing and proposed TDM measures or potential LEED requirements for future buildings, would provide additional bicycle parking facilities on the Medical Center Campus beyond what is required by the County Code. Because parking would exceed Code requirements, impacts related to parking supply under both the Project and Reduced Intensity Alternative B would be less than significant and similar.

13. Utilities and Service Systems

a. Water Supply

(1) Construction

Construction of Reduced Intensity Alternative B, as with the Project would include all necessary on- and off-site water system connections and improvements to tie into Cal Water's existing distribution system. All necessary improvements would be verified through the coordination with Cal Water and the LACFD regarding fire flow requirements. Impacts on water distribution systems would be less than significant under both the Project and Reduced Intensity Alternative B. However, because Reduced Intensity Alternative B would have incrementally less overall development than under the Project, impacts on local distribution infrastructure and potential water supply pipeline construction, if necessary, would be less under this Alternative.

(2) Operation

Reduced Intensity Alternative B would result in an incremental decrease in the Project's estimated water demand of 458.6 AFY (or a net increase of 251 AFY over existing conditions), as there would be a reduction in overall development intensity relative to the Project. As the projected water demand under this Alternative would be within the projected demand for the Project, which was determined in the Project WSA to be within Cal Water's projected supplies, impacts related to water supply would be less than significant under both the Project and Reduced Intensity Alternative B. However, because Reduced Intensity Alternative B would have incrementally less overall development than under the Project, impacts on water supply would be less under this Alternative.

b. Wastewater**(1) Construction**

Construction of the Reduced Intensity Alternative B, as with the Project would include all necessary on- and off-site sewer pipe improvements and connections to adequately connect to the LACSDs' existing sewer system. In the event that, during development, wastewater lines were found to be substandard or in deteriorated condition, the County would be required to make necessary improvements to achieve adequate service pursuant to applicable County requirements. All necessary improvements would be verified through the permit approval process of obtaining a sewer capacity and connection permit from the LACSDs. Impacts on conveyance systems would be less than significant under both the Project and Reduced Intensity Alternative B. However, because Reduced Intensity Alternative B would have less overall development than under the Project, impacts on local conveyance systems and potential sewer line construction would be incrementally less.

(2) Operation

Reduced Intensity Alternative B would result in an incremental decrease in the Project's estimated 171,998 gpd. The Project's wastewater generation represents approximately 0.114 percent of JWPCP's total remaining capacity of 120 mgd. As with the Project, the increase the overall demand on wastewater conveyance and treatment facilities in the area would not exceed the available capacity of affected wastewater facilities and, thus, would not directly or indirectly result in an exceedance of wastewater treatment requirements, require or result in the construction of new wastewater treatment facilities or expansion of existing facilities, or result in a determination by the LACSDs that it has inadequate capacity to serve the Project's projected demand in addition to the provider's existing commitments. Impacts related to wastewater conveyance and treatment would be less than significant under both the Project and Reduced Intensity Alternative B. However, because Reduced Intensity Alternative B would have less overall development than under the Project, impacts on treatment systems would be incrementally less.

c. Solid Waste**(1) Construction**

Reduced Intensity Alternative B, as with the Project, would require demolition of some existing buildings and construction activities that would generate solid waste. Much of this would be accommodated at the County's inert landfill site (Azusa Land Reclamation) or one of a number on inert debris engineered fill operations that are located throughout Los Angeles County. There will be an additional approximately 40 cubic yards of soil removed for soil remediation due to the four Leaking Underground Storage Tanks found

near the Central Plant. Not taking into account C&D Debris Recycling and Reuse Program and the Los Angeles County Green Buildings Standard Code (Reduced Intensity Alternative B must recycle or reuse 50 percent of the debris generated), the estimated debris is expected to be similar (or slightly less) to waste generated by Project construction. Neither the Project nor Reduced Intensity Alternative B would exceed landfill capacity for construction debris or soil waste. Impacts under both the Project and Reduced Intensity Alternative B would have a less than significant and similar impact relative to solid waste capacity.

(2) Operation

Not taking into account the amount of solid waste that could potentially be diverted via source reduction and recycling programs, the Project would generate a net increase of total net increase in waste approximately 2,481 tons per year. If all of the Project's waste were taken to Sunshine Canyon Landfill, the Project's respective additions to the daily disposal, 1.4 tons, would be approximately 0.011 percent of the residual daily capacity at the landfill, assuming no diversion. With 60 percent diversion it would be approximately 0.004 percent. With an approximately 16 percent reduction in the Project's new beds and elimination of the Project's retail uses, Reduced Intensity Alternative B would provide an incremental decrease in operational waste. Because the Project would have not exceed landfill capacity, Reduced Intensity Alternative B, which would generate incrementally less waste, would also not exceed landfill capacity. Under both the Project and Reduced Intensity Alternative B, impacts on landfill capacity would be less than significant. However, because the scope of development under Reduced Intensity Alternative B is reduced, it would have incrementally less impact than under the Project.

C. RELATIONSHIP OF THE ALTERNATIVE TO PROJECT OBJECTIVES

Reduced Intensity Alternative B would incrementally reduce the Project's significant and unavoidable traffic impacts at the intersections of Normandie Avenue & Torrance Boulevard, Vermont Avenue & Torrance Boulevard, Normandie Avenue & Carson Street, Berendo Avenue & Carson Street, Medical Center Drive & Carson Street, Vermont Avenue & Carson Street, I-110 Southbound Ramps & Carson Street, Vermont Avenue & 220th Street, Figueroa Street and 220th Street/I-110 Northbound Ramps, Normandie Avenue & 223rd Street, Vermont Avenue & 223rd Street, and I-110 Southbound Ramps & 223rd Street. It would also incrementally reduce the Project's significant and unavoidable construction noise at sensitive receptor sites along 220th Street during Phase C, Phase 5, and Phase 6. However, these impacts, while reduced compared to the Project, would remain significant and unavoidable. The significant unavoidable temporary operational helicopter noise impact that would occur under the Project would also occur under Reduced Intensity Alternative B.

Because Reduced Intensity Alternative B would be incrementally reduced compared to the Project, demand for public services and utilities would be incrementally reduced. However, Reduced Intensity Alternative B would have a relatively similar level of impact and require the implementation of mitigation measures, as under the Project, for potentially significant impacts associated with seismic safety, geologic stability, expansive soils, hazardous materials management, fire protection and emergency medical services, and sheriff protection.

Reduced Intensity Alternative B would incrementally reduce the Project's significant and less than significant impacts, and would not result in any new environmental impacts, and would also provide adequate beds to achieve the primary underlying purpose of the Project, which is secure timely compliance with SB 1953

(Alquist Hospital Facilities Seismic Safety Act) to maintain critical trauma services in the South Bay market area of the County of Los Angeles, although not to the extent the Project would. SB 1953 requires the replacement of the current tertiary acute care hospital and other essential supporting facilities with upgrades/replacement before January 1, 2030.

However, Reduced Intensity Alternative B would support, but to a lesser extent than under Reduced Intensity Alternative A, the Project's basic objectives to renovate existing health facilities to meet the intent of the Affordable Care Act of 2010 to modernize and integrate healthcare delivery. It would update most facilities to modern standards by constructing new buildings and repurposing/remodeling existing buildings. It would substantially meet the objective to resolve existing deferred maintenance issues and optimize the quality of care and operational effectiveness, while reducing administrative, operational and maintenance costs. It would also allow for the fundamental reorganization, expansion and integration of outpatient services; renovate and appropriate new medical Campus construction. However, because retail uses would be eliminated and outpatient buildings would be reduced from three buildings (under the Project) to one building, it would not encourage the same vibrant, mixed-use setting as under the Project and would not achieve optimum public utilization of land and buildings under the ownership and control of the County.

Reduced Intensity Alternative B would support the continuing Harbor-UCLA mission of clinical care, education, and research, as well as the provision of modernized facilities for existing and future tenants of the Medical Center Campus. Reduced Intensity Alternative A would also meet the objective of creating durable, adaptable green infrastructure and buildings, promoting resource-efficient transportation solutions, or accommodate changing sustainable design practices. Reduced Intensity Alternative B would also would provide opportunities for development up to 250,000 square feet of Bioscience Tech Park uses and support facilities, as well as 225,000 square feet of expanded LA BioMed facilities.

5.0 ALTERNATIVES

D. ALTERNATIVE 4: REDUCED INTENSITY ALTERNATIVE C – NEW ACUTE BED HOSPITAL TOWER ONLY

A. DESCRIPTION OF THE ALTERNATIVE

Alternative 4, Reduced Intensity Alternative C – New Acute Bed Hospital Tower Only, would implement the Master Plan Project but would focus development on the replacement of hospital beds with the construction of the New Hospital Tower that meets seismic safety requirements, and reconstruction and replacement of outpatient/medical office, research, utilities, and other supporting uses at the same intensity as under existing conditions. Specifically, this Alternative would result in the construction of the New Hospital Tower with a maximum of 446 licensed acute care beds (the same number as under the Project), or up to 379 budgeted/staffed beds, as well as relocation of all existing outpatient services to renovated space within the Existing Hospital tower, a reduced Central Plant, and complete renovation of the Existing Hospital tower in order to accommodate the outpatient services and other administrative activities previously housed within existing modular buildings throughout the Medical Center Campus. These modular buildings would be removed from the Medical Center Campus. This Alternative would also eliminate all retail uses from the development plan, as would also occur under Alternatives 2 and 3. In addition, Alternative 4 would be phased so that the New Hospital Tower would be constructed by 2025, prior to relocation of outpatient uses to the renovated Existing Hospital tower, with completion of relocation activities anticipated in 2028. No additional development associated with LA BioMed or the proposed Bioscience Tech Park would occur under this Alternative. However, necessary infrastructure, landscaping, circulation, and other Medical Center Campus improvements would be implemented, to the extent necessary to serve proposed uses, as under the proposed Master Plan Project. As such, implementation of this Alternative would result in no net increase in development intensity on the Medical Center Campus relative to existing conditions, as it would maintain the existing capacity of outpatient services (housed in the renovated Existing Hospital tower or existing outpatient buildings) and would provide a comparable level of acute care beds and services as under the Project while meeting State-mandated seismic safety standards.

B. ENVIRONMENTAL IMPACTS

1. Aesthetics

a. Visual Character

(1) Construction

Construction activities typically result in site disturbance, movement of construction equipment, import and export of materials, views of incomplete structures and other activities that generally contrast with the aesthetic character of an area. Under Reduced Intensity Alternative C, construction activities would be visible at various times from Vermont Avenue, Carson Street, Normandie Avenue, and 220th Street. As with the Project, construction activities would occur over the course of several years and within specific areas of the half-mile-long Medical Center Campus, as well as in limited off-site areas related to infrastructure and utility improvements necessary to serve Reduced Intensity Alternative C. As such, visual character impacts

experienced at any single viewing location, for both on-site and off-site construction activities, would be intermittent and temporary. Because adverse visual effects would be temporary and would be confined to portions of the Medical Center Campus or distinct off-site areas at any one time, such effects would not be experienced by nearby viewers continually during the buildout of Reduced Intensity Alternative C. As with the Project, construction impacts would be less than significant. However, because overall construction would be incrementally less and be completed in fewer years than under the Project (completed in approximately 2028 instead of approximately 2030), the impact of construction on visual character would be incrementally less under Reduced Intensity Alternative C.

(2) Operation

Reduced Intensity Alternative C would allow for a reduced intensity overall with provision of the New Hospital Tower and complete renovation of the existing Hospital Tower to house outpatient and administrative functions, but no construction of new outpatient uses or Bioscience Tech Park uses or future expansion of LA BioMed uses. Given that the same number of proposed beds would be housed within the New Hospital Tower, it is anticipated that Reduced Intensity Alternative C would result in a nearly identical building in terms of height, architecture, and profile. Because a complete renovation of the Existing Hospital tower would be implemented, Reduced Intensity Alternative C would result in a similar aesthetic character of the Existing Hospital tower as under the Project. It is anticipated that existing modular buildings that have historically housed outpatient and other services in the north-central portion of the Medical Center Campus (i.e., where new outpatient buildings would be constructed under the Master Plan Project) would be removed. New sidewalks and street scape, internal landscaping, public art and other aesthetic amenities would be similar to under the Project. Unlike the Project, however, Reduced Intensity Alternative C would not result in an overall increase in development intensity on the Medical Center Campus relative to existing conditions, though it would still require temporary off-site improvements but not to the extent the Master Plan Project would. New construction under Reduced Intensity Alternative C, most notably the New Hospital Tower, would be required to implement the Design Guidelines, in which individual buildings must complement each other and the character of surrounding spaces, streets, and walks; maintain view corridors, both to and from buildings; and align axes, corner lines and features of neighboring buildings and spaces. Under the Design Guidelines, overall heights, massing, styles, and materials of newly constructed neighboring buildings within the Medical Center Campus must be compatible. Views of service areas and mechanical equipment located both on grade and on building roofs must be screened. With the implementation of the Design Guidelines, the massing of buildings within the site would create a visually pleasant skyline effect (cluster) that would contribute to the visual character of the community, but at a lower intensity than under the Master Plan Project.

Reduced Intensity Alternative C, as with the Project, would enhance the existing pedestrian experience along Carson Street, Vermont Avenue, Normandie Avenue, and 220th Street with landscaping and streetscape, including the installation of canopy trees, provision of a landscaped parkway between the sidewalk and Carson Street, the removal of chain link fencing and walls along Vermont and Normandie Avenues and 220th Street, and other improvements in visual character and safety along 220th Street. As with the Project, Reduced Intensity Alternative C would create a more aesthetic public environment than under existing conditions. Because it would introduce elements that would enhance the public interface along all adjacent streets, as well as public access to gardens, public art, and other benefits, and maintain a high architectural standard, the Master Plan Project is not considered to substantially degrade the visual character of the Site or its surroundings because of height, bulk, pattern, scale, character, and other features. Similarly, because Reduced Intensity Alternative C would remove all but one of the remaining modular structures from the

property and would provide new, well designed visually compatible structures, landscaping, and other visual improvements on the Medical Center Campus, impacts with respect to visual character under Reduced Intensity Alternative C would be similar to the Project and less than significant.

b. Views

Other than original and newer buildings and existing landscaping associated with the Medical Center Campus, the local area is not distinguished by historical or architecturally notable buildings or natural areas, focal views of which would be considered visual resources. Despite the reduction in overall development intensity, Reduced Intensity Alternative C would construct the New Hospital Tower with a comparable height and bulk as represented in the Project's stacking profile. However, as with the Project, the new buildings of Reduced Intensity Alternative C would be minimally visible in panoramic views of the Los Angeles Basin and, as such, would not cause any adverse view effects. In addition, while development of the Project has the potential to affect existing views of the Medical Center Campus from adjacent public streets, the views of the Medical Center Campus from Carson Street, Vermont Avenue, Normandie Avenue, and 220th Street would be improved by new, high quality construction, removal of hedging and fencing materials and surface parking lots, and installation of evergreen/semi-evergreen trees along the Medical Center Campus periphery that allow views into the Project's gardens, paths, buildings and public art. Views from Carson Street would also be upgraded by the streetscape program. Because no existing recognized valued publicly available views or scenic vistas are currently evident across the Medical Center Campus, as with the Project, Reduced Intensity Alternative C would not block views of existing scenic resources, and in fact given the absence of new outpatient buildings, Bioscience Tech Park buildings, or additional LA BioMed structures, the potential for view obstruction would be incrementally reduced. In addition, Reduced Intensity Alternative C would upgrade overall views of the Medical Center Campus, while providing for deeper views into the proposed garden areas. The impact of Reduced Intensity Alternative C with respect to views would, thus, be less than significant and less than that of the Project.

c. Light and Glare

(1) Construction

Lighting during construction would potentially cause minor light spillover in the vicinity of the Medical Center Campus, including the residential neighborhoods to the south, east, and west. However, construction activities would occur primarily during daylight hours and any construction-related illumination would be used for safety and security purposes only. As with the Project, construction lighting under Reduced Intensity Alternative C would only be located in specific locations within the approximately 72-acre site and would not be experienced by any sensitive, off-site receptors for a long duration. Any construction lighting would be limited and directed onto specific locations within construction sites to avoid impacts on-site medical patients. As with the Project, artificial light associated with construction activities would be limited to security lighting and specific construction tasks and would not adversely impact off-site sensitive receptors. Reduced Intensity Alternative C would also have a less than significant impact with respect to construction lighting. However, because overall construction would occur over a shorter timeframe (completed in approximately 2028 instead of approximately 2030 under the Project), with less overall intensity given the lack of new outpatient buildings or biomedical research uses (e.g., Bioscience Tech Park or LA BioMed), and within a smaller construction footprint on the Medical Center Campus, construction lighting impacts under Reduced Intensity Alternative C would be incrementally less than those generated by the Project.

(2) Operation

(i) Artificial Light

As with the Project, the security and landscape lighting for Reduced Intensity Alternative C would be located near ground level, generally shielded from adjacent uses by landscaping, and low-intensity in character. Lighting would be directed downward to avoid glare at on-site occupied hospital rooms and to maintain a calm ambience for on-site visitors and employees. Landscaping and rooftop garden lighting would be low-level consistent with the proposed hospital use. Light spillage from the Project's multi-story components would not be dissimilar from existing conditions and would not be disruptive of off-site residential uses, the nearest of which would be more than 200 feet to the south of the New Hospital Tower. The removal of surface parking lots, some of which are visible from residential uses to the east and from uses at the south side of 220th Street, would reduce vehicle light sources and security lights currently visible from these residential areas. As with the Project, new lighting sources from Reduced Intensity Alternative C are not expected to substantially increase ambient light or cause light spill onto adjacent light-sensitive receptors. In fact, due to the elimination of new outpatient buildings and new Bioscience Tech Park and LA BioMed structures, artificial light generation under Reduced Intensity Alternative C would be substantially reduced relative to the Master Plan Project. As such, artificial light impacts under Reduced Intensity Alternative C would be less than those of the Project and less than significant.

(ii) Glare

Building surfaces associated with window glass and polished surfaces, such as metallic or glass curtain walls and trim can reflect light. Glare can also occur between neighboring buildings when expanses of glass and metals are used for building sheathing. As with the Project, the Design Guidelines for Reduced Intensity Alternative C would require that building materials, massing, and styles must be consistent with neighboring buildings, including the Existing Hospital tower, and to complement the character of the surrounding Medical Center Campus buildings. Buildings using expanses of metals and reflective glass would not meet these criteria, nor would such materials be consistent with the overall use of the Medical Center Campus as a medical campus. As such, Reduced Intensity Alternative C, as with the Project, would not generate glare from reflected sunlight that would alter the character of the off-site areas surrounding the Medical Center Campus. Furthermore, based on the substantial reduction in development intensity under this Alternative, glare impacts under Reduced Intensity Alternative C would be reduced compared to the Project and would be less than significant.

2. Air Quality

a. Consistency with Air Quality Management Plan

(1) Construction

Reduced Intensity Alternative C would result in an increase in short-term employment compared to existing conditions. Being relatively small in number and temporary in nature, construction jobs under both Reduced Intensity Alternative C and the Project would not conflict with the long-term employment projections upon which the AQMP is based. Reduced Intensity Alternative C would comply with CARB requirements to minimize short-term emissions from on-road and off-road diesel equipment and, as such, would not conflict with implementation of AQMP strategies intended to reduce emissions from construction equipment and activities. Reduced Intensity Alternative C would also comply with SCAQMD regulations for controlling fugitive dust pursuant to SCAQMD Rule 403. Compliance with these requirements is consistent with and

meets or exceeds the AQMP requirements for control strategies. As such, given the substantial reduction in overall development intensity compared to the Project, impacts in this regard under Reduced Intensity Alternative C would be less than the Project and less than significant.

(2) Operation

As with the Project, Reduced Intensity Alternative C would be consistent with growth projections set forth in the AQMP, and would be supportive of relevant Transportation Control Measures aimed at reducing vehicle trips. Both the Project and Reduced Intensity Alternative C would have a less than significant impact relative to the AQMP; however, because Reduced Intensity Alternative C is substantially reduced in terms of overall development intensity, it would have incrementally less impact.

b. Violation of Air Quality Standards

(1) Construction

Construction of Reduced Intensity Alternative C has the potential to create air quality impacts through the use of heavy-duty construction equipment and through vehicle trips generated from construction workers traveling to and from the Medical Center Campus. However, as with the Project, construction-related daily emissions for the criteria and precursor pollutants would not exceed the SCAQMD regional thresholds for VOC, NO_x, CO, SO_x, PM₁₀, and PM_{2.5}. Although emissions would be less than significant under both the Project and Reduced Intensity Alternative C, because Reduced Intensity Alternative C would involve substantially less construction, it would have incrementally less impact with respect to the SCAQMD regional thresholds.

(2) Operation

Operation of Reduced Intensity Alternative C has the potential to create air quality impacts based on daily trip generation and energy demand. As discussed in Section 4.B., Air Quality, of the Draft EIR, the Project's net operational-related daily emissions for the criteria and precursor pollutants (VOC, NO_x, CO, SO_x, PM₁₀, and PM_{2.5}) would not exceed SCAQMD regional thresholds for during interim operations when combined with on-going construction emissions. Additionally at full build-out, operation of the Project would not exceed the SCAQMD numeric indicators. As such, both the Project and Reduced Intensity Alternative C would have a less than significant impact with respect to SCAQMD standards. However, because daily trips and the scope of development would be substantially reduced under Reduced Intensity Alternative C, impacts relative to SCAQMD thresholds would be less.

c. Non-Attainment Pollutants

(1) Construction

As with the Project, construction of Reduced Intensity Alternative C would result in the emission of criteria pollutants for which the region is in nonattainment. However, maximum daily emissions from construction of Reduced Intensity Alternative C would not exceed the numeric indicator of significance for criteria pollutants nor their precursors. As with the Project, compliance with CARB and SCAQMD control measures and the same design features implemented by the Project would minimize and reduce construction emissions. Neither Reduced Intensity Alternative C nor the Project would result in a cumulatively considerable net increase of a criteria pollutant for which the region is non-attainment. Although both the Project and Reduced Intensity Alternative C would result in a less than significant impact, because Reduced

Intensity Alternative C would involve substantially less construction, it would result in fewer total emissions than under the Project and impacts would therefore be less.

(2) Operation

Operation of Reduced Intensity Alternative C would result in the emission of criteria pollutants for which the region is in nonattainment. As with the Project, however, such daily emissions from operation would not exceed the threshold of significance for any of pollutants in nonattainment nor their precursors. Even during interim operations that could overlap with construction emissions and at full build-out, operation of Reduced Intensity Alternative C would not exceed the applicable thresholds of significance, though such overlap of operational and construction emissions would be substantially reduced given the lack of outpatient and biomedical research uses proposed under this Alternative. Although both the Project and Reduced Intensity Alternative C would result in a less than significant impact, because Reduced Intensity Alternative C would be substantially reduced in terms of development intensity, it would generate fewer total emissions than under the Project and impacts would therefore be less.

d. Substantial Pollutant Concentrations

As with the Project, Reduced Intensity Alternative C would not exceed SCAQMD localized significance thresholds for NO_x, CO, PM₁₀, or PM_{2.5} at nearby sensitive receptors. Interim operation of the either Reduced Intensity Alternative C or the Project, when combined with on-going construction emissions, would not exceed the localized significance thresholds for NO_x, CO, PM₁₀, or PM_{2.5}, though as noted above, the potential for combined emissions would be incrementally less than under the Project. Operation of Reduced Intensity Alternative C at full build-out, based on the reduced development intensity, would not exceed SCAQMD localized significance thresholds at nearby sensitive receptors for NO_x, CO, PM₁₀, or PM_{2.5}. Construction and operation of either the Project or Reduced Intensity Alternative C would not result in substantial emissions of TACs at nearby sensitive receptors. Construction activities would not result in health risks which exceed SCAQMD numeric indicators of an allowable incremental increase in cancer risk of 10 in one million and non-cancer health index of 1.0. Construction and operation of either the Project or Reduced Intensity Alternative C would not result in traffic congestion that would cause or contribute to formation of localized CO hotspots that exceed the CAAQS or NAAQS. Although both the Project and Reduced Intensity Alternative C would result in a less than significant impact, because Reduced Intensity Alternative C would be substantially reduced in terms of development intensity, it would generate fewer total emissions than under the Project and impacts would be incrementally less.

e. Odors

(1) Construction

As with the Project, Reduced Intensity Alternative C may emit odors during construction associated with the use of architectural coatings and solvents. However, SCAQMD Rule 1113 limits the allowable amount of VOCs from architectural coatings and solvents. Since compliance with SCAQMD Rules governing these compounds is mandatory, no construction activities or materials are proposed that would create objectionable odors. Both the Project and Reduced Intensity Alternative C would result in a less than significant impact. Also, although SCAQMD Rule 1113 would be equally enforceable under both the Project and Reduced Intensity Alternative C, impact levels would be reduced under this Alternative given the substantial reduction in total construction activity on the Medical Center Campus.

(2) Operation

As with the Project, Reduced Intensity Alternative C does not include any uses identified by the SCAQMD as being typically associated with objectionable or nuisance odors. Waste collection areas and disposal for Reduced Intensity Alternative C would be covered and situated away from the property line and sensitive off-site uses. Under both the Project and Reduced Intensity Alternative C, medical waste would be properly sealed and stored in accordance with applicable rules to ensure that no objectionable medical waste-related odors would be created. Best management and good housekeeping practices would be sufficient to prevent nuisance odors. Therefore, potential odor impacts would be less than significant under both the Project and Reduced Intensity Alternative C, though impact levels would be incrementally less based on the sizably reduced development intensity and associated potential for new or increased odor sources.

3. Energy

a. Construction

Construction would entail consumption of diesel for hauling and construction equipment, gasoline for some hauling and workers' transportation, and electricity to provide temporary power for lighting and electronic equipment and to power certain construction equipment. Some heavy-duty construction could be electric or alternatively fueled, such as tower cranes, based on commercial availability. As with the Project, Reduced Intensity Alternative C would utilize electric or alternatively fueled equipment as available and as feasible. It is estimated that the construction of the Project would require approximately 0.002 percent of the statewide annual gasoline consumption and 0.003 percent of the statewide annual diesel consumption. Compliance with anti-idling and emissions regulations would result in a more efficient use of construction-related energy. As with the Project, Reduced Intensity Alternative C would also meet or exceed the County's waste diversion targets. Neither the Project nor Reduced Intensity Alternative C would result in the wasteful, inefficient, and unnecessary consumption of energy during construction, or preempt future energy conservation during construction. Although both the Project and Reduced Intensity Alternative C would result in a less than significant impact, because Reduced Intensity Alternative C would be incrementally smaller in scale, it would generate less energy demand than under the Project and impacts would therefore be reduced.

b. Operation

Operation of both Reduced Intensity Alternative C and the Project would utilize energy for necessary on-site activities and off-site transportation associated with Campus employees, patients, and visitors traveling to and from the site. The amount of energy used would not represent a substantial fraction of the available energy supply in terms of equipment and transportation fuels. Furthermore, the Project and Reduced Intensity Alternative C would meet or exceed energy standards by incorporating green building measures consistent with County policy that requires LEED Silver-level certification and the County's CCAP. The Project would also provide opportunities for future energy efficiency by promoting solar power and electric or alternatively-fueled vehicles. Neither the Project nor Reduced Intensity Alternative C would result in the wasteful, inefficient, and unnecessary consumption of energy during operation, or preempt future energy conservation during construction. Although both the Project and Reduced Intensity Alternative C would result in a less than significant impact, because Reduced Intensity Alternative C would be incrementally smaller in scale, it would generate less overall energy demand than under the Project and impacts would therefore be reduced.

4. Geology and Soils

a. Seismic Hazards

The Harbor-UCLA Campus is located within a seismically active region, with the potential for seismic ground shaking. The horizontal peak ground acceleration (PGA) for the site corresponds to the Targeted Maximum Considered Earthquake (MCE_R) of 0.65g. This would be the same under Reduced Intensity Alternative C and the Project. Based on these PGA estimates, ground shaking at the Harbor-UCLA Campus could have a potentially significant impact on people and proposed buildings on the Harbor-UCLA Campus. Although seismic risk exists, Reduced Intensity Alternative C would implement MM-GEO-1, discussed in Section 4.D, Geology and Soils, of this Draft EIR. MM-GEO-1, which requires adherence to the recommendations of an approved Geotechnical Evaluation, would reduce seismic impacts for Reduced Intensity Alternative C and the Project to a less than significant level. With the implementation of MM-GEO-1, the Project and Reduced Intensity Alternative C would have a less than significant impact with respect to seismic hazards, but would be incrementally reduced compared to the Project given the substantial reduction in development intensity on the Medical Center Campus and associated potential to expose people or structures to adverse effects associated with seismic hazards.

b. Soil Erosion and Topsoil

Reduced Intensity Alternative C would require incrementally less grading, including clearing, excavation, stockpiling, than the Project. As with the Project, all work would be performed in accordance with a National Pollutant Discharge Elimination System (NPDES) Permit, which incorporates a Storm Water Pollution Prevention Program (SWPPP) and Best Management Practices (BMPs) for erosion control. Implementation of BMPs would ensure that water- and wind-related erosion would be confined to the construction area and not transported off-site. Also, the relatively gentle topographic gradients at the Medical Center Campus would reduce the potential for soil erosion during construction. As with the Project, Reduced Intensity Alternative C would have a less than significant impact with respect to soil erosion and topsoil. However, because the potential exists that substantially less area could be graded under Reduced Intensity Alternative C, Reduced Intensity Alternative C would have incrementally less impact with respect to soil erosion than under the Project.

c. Geologic Stability

As with the Project, Reduced Intensity Alternative C could be exposed to differential soil settlement and liquefaction beneath proposed buildings because of the presence of alluvium, possible undocumented fill, and relatively shallow depths to groundwater. If wet or saturated soil conditions are encountered during excavation, instability could present a constraint to the construction of foundations. Because the risk of compressible/collapsible soils and shallow groundwater exists, as with the Project, Reduced Intensity Alternative C would implement MM-GEO-2, discussed in Section 4.D., Geology and Soils, of this Draft EIR. MM-GEO-2, which provides several approaches to address settlement and shallow groundwater, would reduce the potential for these geologic hazards. With the implementation of MM-GEO-2, the Project and Reduced Intensity Alternative C would have a less than significant impact with respect to geologic stability, but would be incrementally reduced compared to the Project given the substantial reduction in development intensity on the Medical Center Campus that could be affected by geologic instability.

d. Expansive and Corrosive Soils

The near-surface soils at the Medical Center Campus are generally sandy silt and clayey and typically expansive when wetted. In addition, on-site soils are potentially corrosive to concrete and metal, which could cause premature deterioration of underground structures or foundations. The risk of expansive and corrosive soils would occur under both Reduced Intensity Alternative C and the Project. As with the Project, Reduced Intensity Alternative C would implement MM-GEO-3, discussed in Section 4.D., Geology and Soils, of this Draft EIR. MM-GEO-3, which provides performance standards and required assessments to address expansive and corrosive soils, would reduce the effects of these soils conditions. With the implementation of MM-GEO-3, the Project and Reduced Intensity Alternative C would have a less than significant impact with respect to expansive and corrosive soils, but would be incrementally reduced compared to the Project given the substantial reduction in development intensity on the Medical Center Campus and associated potential for proposed structures to be adversely affected by such soil conditions.

5. Greenhouse Gas Emissions

Consistency with CCAP

As with the Project, Reduced Intensity Alternative C would be consistent with the County's CCAP, which provides goals and strategies that would achieve a reduction target of at least 11 percent below 2010 levels for unincorporated areas of the County. Based on the conservatively estimated GHG emissions, the Project would result in a net increase in GHG emissions from 2010 levels. However, the potential increase is extremely small compared to the County's total inventory. One of the Project objectives to maintain critical trauma services in the South Bay service region of the County of Los Angeles by redeveloping the existing hospital site, would result in more GHG efficiency than developing a new hospital campus on a greenfield site. Therefore, while the Project and Reduced Intensity Alternative C results in a conservatively estimated minimal net increase in GHG emissions, both the Project and Reduced Intensity Alternative C would be consistent with applicable CCAP measure to minimize its GHG emissions. As such, both the Project and Reduced Intensity Alternative C would not be expected to conflict with the County's ability to achieve the CCAP target reduction. Both the Project and Reduced Intensity Alternative C would have a less than significant impact relative to the CCAP and because both the Project and Reduced Intensity Alternative C would be consistent, impact levels would be similar despite the substantial reduction in overall development intensity under this Alternative.

Greenhouse Gas Reduction Plans

Construction and operation of Reduced Intensity Alternative C, as with the Project, would be consistent with applicable GHG emissions reductions plans, policies, or regulations. Design features, such as green building measures would reduce GHG emissions by increasing energy-efficiency beyond regulatory requirements, reducing indoor and outdoor water demand, and incorporating waste reduction measures. The Project would also incorporate components to reduce transportation-related GHG emissions by providing bicycle and end-of-trip facilities, and by being located within one-quarter mile of transit, thereby encouraging alternative forms of transportation. As with the Project, Reduced Intensity Alternative C would be constructed and operated in a manner consistent with a Silver Certification from the USGBC's LEED program. The LEED features that would be incorporated in the Project would include building efficiency measures to reduce energy consumption, water-saving measures, and waste reduction measures. Both the Project and Reduced Intensity Alternative C would be designed to optimize energy performance. Trees planted on the Medical Center Campus as part of the planned landscaping would sequester CO₂ as they age (not included in

the quantitative analysis). The Project would reduce indoor water use by a minimum of 20 percent with water fixtures that exceed applicable standards. As a result, construction and operation of the both the Project and Reduced Intensity Alternative C would not have a significant impact with respect to consistency with GHG reduction plans. Because both the Project and Reduced Intensity Alternative C would be consistent with applicable plans, impact levels would be similar despite the substantial reduction in overall development intensity under this Alternative.

6. Hazards and Hazardous Materials

a. Hazardous Materials Management

As with the Project, Reduced Intensity Alternative C would require the demolition of some buildings and equipment identified as having ACMs, LPB, and PCBs; the removal and/or relocation of USTs and ASTs that presently contain, or have contained in the past, fuels and other potentially hazardous materials; and the disturbance of soil potentially contaminated with hazardous materials as the result of on-site or off-site LUSTs. Remediation of these materials would be conducted by qualified professionals in accordance with regulations governing these activities, including SCAQMD's Rule 1403 (ACBMs); Cal-OSHA rules (LBP); the federal Toxics Substances Control Act (PCBs); and, for USTs, RCRA Subtitle I, the State Health and Safety Code, and LACFD's enforcement of the State's applicable CCR regulations, with oversight by the RWQCB where groundwater may be affected. Reduced Intensity Alternative C, as with the Project, has the potential to result in accidental upset and release of hazardous materials into the environment, which is a potentially significant impact. In addition, the potential extent of possible contamination of underlying groundwater with petroleum hydrocarbons originating with nearby off-site LUSTs is not known, and construction activities have the potential to result in a significant hazard related to potential contaminated soil and groundwater. As with the Project, Mitigation Measures HAZ-1 through HAZ-4, which require abatement in accordance with the recommendation of the Hazardous Building Materials Survey, removal of USTs pursuant to the LACFD review and closure letter, preparation and adherence to a Soils Management Plan, and investigation of the purpose and potential abandonment of existing on-site groundwater monitoring wells, would be implemented. With the implementation of Mitigation Measures HAZ-1 through HAZ-4, hazardous materials impacts associated with Reduced Intensity Alternative C and the Project would be reduced to less than significant levels. Because Reduced Intensity Alternative C involves demolition and excavation and development in an area with potential groundwater contamination, as under the Project, with mitigation, impacts with respect to hazardous materials management would be less than significant. However, based on the substantial reduction in development intensity on the Medical Center Campus and associated potential to encounter or otherwise expose people to risks associated with hazardous materials conditions, impacts under Reduced Intensity Alternative C would be less than under the Project.

b. Airport Safety Provisions

Reduced Intensity Alternative C is located on the same property as the Project, which is not within the vicinity of an airport. The nearest airport is more than two miles away. Because of this distance, neither the Project nor Reduced Intensity Alternative C would interfere with operations any local airports or airstrips. Impacts regarding airport safety under both Reduced Intensity Alternative C and the Project would, therefore, be similar and less than significant.

c. Emergency Response Plans

Reduced Intensity Alternative C, as with the Project, would not adversely affect existing emergency access routes. Campus ingress and egress would be modified to create distinctions between access and parking for the general public and staff, including a new signalized public entrance on Carson Street. Vehicular access and circulation would avoid conflicts with traffic movements on local roadways and would facilitate the provision on-site emergency services. During construction, adjacent streets may be temporarily affected due to construction activity, such as temporary lane closures, though the need for such closures would be incrementally reduced under this Alternative given the reduction in development intensity. Such occurrences would be implemented in accordance with a construction traffic management plan, which would allow for responses to emergency accessibility needs. The existing helistop, which would be temporarily relocated to the western end of the Medical Center Campus during construction of the new Hospital Tower, would remain operational. As with the Project, regulatory compliance and project features, such as improved access, would avoid the need to generate new emergency plans beyond those normally implemented to address on-site emergency situations. As with the Project, impacts related to emergency response plans would be less than significant, but would be reduced under Reduced Intensity Alternative C compared to the Project.

7. Hydrology and Water Quality

a. Surface Water Hydrology

(1) Construction

As with the Project, construction activities under Reduced Intensity Alternative C would be subject to a Construction General Permit and associated NPDES requirements, which include development and implementation of a SWPPP with appropriate BMPs. BMPs to control stormwater runoff during construction could include, but are not limited to, the use of water bars, silt fences, and staked straw bales. Additional source-control BMPs might also be required to prevent runoff and eliminate non-stormwater discharges. Based on the depth to groundwater within the project site, dewatering and any related runoff are not anticipated. Compliance with NPDES requirements would reduce surface water runoff during construction to a less than significant level under both Reduced Intensity Alternative C and the Project. The level of impact related to surface water hydrology under Reduced Intensity Alternative C, however, would be incrementally reduced given the reduction in development intensity and associated extent of impervious surfaces on the Medical Center Campus.

(2) Operation

As with the Project, Reduced Intensity Alternative C would convert more than three acres of existing pavement to turf area. Any proposed new storm drain connections to the reinforced concrete box channel or open channel owned by the Flood Control District would be conducted under a connection permit approved by the District. This permit would require a hydrology analysis and a comparison with the design peak flow rate of the facility. If the calculated peak flow rate exceeded the facility's design peak flow rate, the District will generally require detention to mitigate the increase in peak flow rates. As with the Project, Reduced Intensity Alternative C would be required to capture and infiltrate or reuse the difference in volume during the 0.75-inch storm event between a developed site and the site in an undeveloped condition (0 percent impervious) based on LID Standards. Several dry wells were previously constructed to meet this requirement. This approach is likely to be implemented for future areas to be redeveloped under both the

Project and Reduced Intensity Alternative C. LID features include resource conservation, flatter wider swales, flatter slopes, turf depression, landscape island storage, rooftop detention/retention, catch basins/seepage pits, sidewalk storage, permeable pavement, and other measures. With the increase in pervious area, the calculated peak flow of the future development will generally be less than under existing conditions; in addition, any future site development will require compliance with County of Los Angeles and LID standards for stormwater management. With implementation of LID measures and permitting from the District related to the reinforced concrete box channel and drainage ditch, surface water impacts associated with both Reduced Intensity Alternative C and the Project would be less than significant. Impacts related to surface water runoff, however, would be less under Reduced Intensity Alternative C given the incremental reduction in development intensity and associated impervious surface area compared to the Project.

b. Surface and Groundwater Quality

(1) Construction

As with the Project, construction activities under Reduced Intensity Alternative C would be subject to existing regulations governing surface and groundwater quality. The required Construction General Permit and associated NPDES requirements include development and implementation of a SWPPP with appropriate BMPs to limit erosion, minimize sedimentation, and control stormwater runoff water quality during construction activities. Compliance with construction phase BMPs and other requirements are considered protective of water quality during construction and would ensure that water- and wind-related erosion would be confined to the construction area and not transported off-site. The NPDES Construction General Permit and SWPPP establish procedures and action protocols for the handling of construction-related chemicals and encountered groundwater. Based on existing and historical depths to groundwater within the project site, construction dewatering is not anticipated to be required. However, should groundwater be encountered that would require dewatering, the County would require contractors for individual Project components to apply for coverage and adhere to the monitoring and reporting program under RWQCB Order No. R8-2009-0003. Existing regulations would ensure that any potential dewatering activities would not result in the exceedance of water quality standards during construction, including TMDL limits applicable to Dominguez Channel. Therefore, impacts related to surface and groundwater quality would be less than significant under both Reduced Intensity Alternative C and the Project, but would be reduced under this Alternative given the reduced duration and intensity of construction activities and potential for introduction of pollutants into stormwater flows.

(2) Operation

Stormwater discharge may include pollutants of concern, such as sediment, hydrocarbons, oil, grease, heavy metals, nutrients, herbicides, pesticides, fecal coliform bacteria, and trash. This runoff can flow directly into storm drains and continue through pipes until it is released, untreated, into the Dominguez Channel. Untreated stormwater runoff could degrade water quality in surface and waters and can affect drinking water, human health, and plant and animal habitats. Reduced Intensity Alternative C, as with the Project, would utilize landscaping in strategic ways to capture and clean stormwater runoff. Strategies include replacement of three acres of pavement with landscaping. The Project would avoid the use of pollutants, chemicals, or soil amendments that could enter surface water runoff. Organic maintenance methods or Integrated Pest Management may be used. Implementation of County LID features, including bioretention features, modifications to address the potential leaching of nutrients, and post-construction BMPs would ensure that operations would not degrade the quality of receiving waters to levels below standards considered acceptable by the Los Angeles RWQCB or other regulatory agencies, or impair the beneficial uses

of the receiving waters. With compliance with existing regulations, both Reduced Intensity Alternative C and the Project would have a less than significant impact related to surface and groundwater water quality, though impacts under this Alternative would be incrementally reduced.

8. Land Use

a. Applicable Plans and Policies

As with the Project, Reduced Intensity Alternative C would be consistent with the policies of the SCAG 2008 Regional Comprehensive Plan and Compass Growth Visioning (including the Compass 2% Blueprint Strategy) to focus growth in existing and emerging centers, along major transportation corridors, and in proximity to transit. Reduced Intensity Alternative C would be consistent with SCAG's 2016 RTP/SCS by enhancing the pedestrian environment within the Medical Center Campus and along Carson Street, and improving pedestrian connectivity between the Medical Center Campus, the surrounding community, and the Carson Street Metro Transit Station. Reduced Intensity Alternative C would be consistent with applicable policies of General Plan Update in that it would be compatible with the existing adjacent off-site land uses, incorporate sustainable design, facilitate multiple modes of transportation (including alternative modes), provide interconnected and safe pedestrian and bicycle circulation, provide required green space and landscaped setbacks, result in less than significant impacts to biological, aesthetic and cultural resources after mitigation, result in less than significant seismic/geotechnical and noise impacts after mitigation, be developed with adequate public service and water, wastewater, and solid waste disposal capacity to serve the Project; and foster regional economic development.

Reduced Intensity Alternative C would also be consistent with the Los Angeles County General Plan's "P" GPLU land use designation, which permits a broad range of public and semi-public facilities and community-serving uses. The Project would have a maximum FAR of 0.78 and Reduced Intensity Alternative C would be incrementally less with an FAR of approximately 0.5:1. As with the Project, Reduced Intensity Alternative C would be consistent with the Los Angeles Planning and Zoning Code and would not exceed the maximum density or other development standards associated with the underlying C-3 zone. The Project and Reduced Intensity Alternative C would have a less than significant and similar impact with respect to applicable plans and policies.

b. Land Use Compatibility

As with the Project, Reduced Intensity Alternative C would alter the existing visual appearance of the Medical Center Campus through denser development than under existing conditions. However, the Site is located within a fully urbanized setting within the 110 Freeway/Carson Station TOD. The area is also undergoing a transition to greater urbanization, characterized in part by the recent development of higher density multi-family uses to the west and the construction of the Carson Street/Normandie Avenue Mall to the north. Reduced Intensity Alternative C, as with the Project, would provide landscaping and street trees along the street frontages where in some areas such landscaping and trees are lacking, and would be designed in compliance with unifying design guidelines which would improve the visual appearance of the Medical Center Campus. While the densification of land uses at the Medical Center Campus would be noticeable from adjacent off-site land uses, including the residential neighborhoods to the south east and west (commercial uses along the north side of Carson Street intervene between the Medical Center Campus and the residential neighborhood to the north), because of the urbanizing trend in the area and proposed streetscape/screening, Reduced Intensity Alternative C, as with the Project, would result in less than significant land use

incompatibilities with adjacent off-site land uses. However, because Reduced Intensity Alternative C would have substantially less development intensity than under the Project, it would have less impact with respect to land use compatibility.

9. Noise

a. Construction Noise

As with the Project, construction of Reduced Intensity Alternative C would involve demolition, grading, building construction, and paving. Each stage would involve the use of different kinds of construction equipment and, therefore, has its own distinct noise characteristics. Demolition typically involves the use of excavator, tractor/loader/backhoe, concrete saw, dozer, water truck, and loader. Grading typically involves the use of drill water truck, dozer, tractor/loader/backhoe, and grader. Building construction typically involves the use of crane, forklift, welder, tractor/loader/backhoe, air compressor, and water truck. Paving typically involves the use of tractor/loader/backhoe, concrete mixer truck, roller, paver, and trencher. The Project would be constructed using typical construction techniques. Construction noise would exceed the significance threshold at the several receptor locations during various development phases. As with the Project, Reduced Intensity Alternative C would implement mitigation measures, such as MM NOISE-1 and project design features to achieve a noise reduction in areas where the line-of-sight between construction-period noise sources and off-site receptor locations is obstructed. However, even with implementation of the mitigation measure, construction-related noise could still exceed the noise threshold at the multi-family residential uses across 220th Street during some phases of construction. Although both the Project and Reduced Intensity Alternative C would result in a significant and unavoidable noise impact, because Reduced Intensity Alternative C in an overall reduced scale and duration of construction, construction noise impacts would be incrementally less.

b. Operation Noise

As under the Project, noise sources associated with operation of Reduced Intensity Alternative C, including mechanical equipment, loading dock activity, refuse collection, parking structure activity, and traffic, would increase the ambient noise level at the nearest noise-sensitive receptor, but by a less than the threshold of significance. Composite noise level increases at all other receptor locations are also expected to be less than significant, given their distance from the site and the presence of intervening structures. As such, the operational noise level impacts due to the future operation of Project and Reduced Intensity Alternative C would be less than significant. However, because Reduced Intensity Alternative C is incrementally smaller in scale than the Project and would generate substantially less traffic, operational noise impacts would be less than under the Project.

With regard to helicopter-related noise, the Project would result in less than significant impacts at Project buildout once the permanent rooftop helistop on the New Hospital Tower is operational. However, operation of the temporary helistop at either interim location would exceed established noise thresholds at nearby sensitive receptors to the south of the Medical Center Campus, and no mitigation exists that could reduce noise levels to acceptable levels. Therefore, impacts under the Project would be considered significant and unavoidable. Because Reduced Intensity Alternative C would also require operation of the temporary helistop locations (though only one would be operational at any given time, as under the Project), impacts under this alternative would be significant and unavoidable and similar to the Project.

c. Construction Vibration

The construction of Reduced Intensity Alternative C, as with the Project, would generate ground-borne construction vibration during demolition, shoring and excavation, and large bulldozer operation. Vibration velocities from operation of construction equipment would range from approximately 0.076 to 0.089 inches per second PPV at 25 feet from the source of activity. Maximum vibration velocities to which receptors could be exposed range from 0.01 to 0.027 inches per second PPV. This value is considerably lower than the impact threshold of 0.5 inches per second PPV, and as such, construction vibration would be less than significant at the nearest residential building. Although construction vibration levels would be less than significant under both the Project and Reduced Intensity Alternative C, because the scope and duration of Reduced Intensity Alternative C's construction activities are substantially less than under the Project, construction vibration impacts would also be incrementally less than those of the Project.

d. Operation Vibration

As with the Project, operation of Reduced Intensity Alternative C would include typical commercial-grade stationary mechanical and electrical equipment such as air handling units, condenser units, and exhaust fans, which would produce vibration. In addition, the primary sources of transient vibration would include passenger vehicle circulation within the parking area activity. Ground-borne vibration would be similar to existing sources (i.e., traffic on adjacent roadways) adjacent to the Medical Center Campus. Maximum potential vibration levels from all Project operational sources at the nearest off-site buildings would be up to 0.01 inches per second PPV and would be less than the significance threshold of 0.04 inches per second PPV for perceptibility. As such, under both the Project and Reduced Intensity Alternative C, vibration impacts associated with operation of the Project would be less than significant. However, because Reduced Intensity Alternative C would be substantially smaller in scale than the Project (and thus would generate much less traffic), operational vibration impacts would be reduced.

10. Population, Housing and Employment

a. Construction

As with the Project, construction of Reduced Intensity Alternative C would employ a mobile regional construction work force. Given the mobility and short duration of work at a particular site, a construction labor pool that can be drawn upon in the region and workers are not expected to relocate as a result of such employment opportunities. The number of construction workers would vary from approximately 212 workers per day during less intensive construction activity up to a maximum of approximately 1,650 construction workers on a day during the peak construction period. It should be noted that although this level of employment may not be necessary depending on the specific phasing of construction activities, it has been assumed to represent a worst-case condition for the purposes of this analysis. Because of a large, regional construction pool and the mobility of construction workers, construction activities would not generate a notable demand for housing, or affect population patterns. Although the duration and overall intensity of construction would be incrementally less under Reduced Intensity Alternative C, as with the Project, construction of both Reduced Intensity Alternative C and the Project would have a less than significant impact relative to construction-related population, housing, and employment. However, because of an incrementally reduced scope of development, Reduced Intensity Alternative C would have less impact than under the Project.

b. Operation

Compared to the Project, Reduced Intensity Alternative C would result in the same number of licensed hospital beds (446 beds) but would not construct any new outpatient buildings (compared to three under the Project), would reduce the scale of the Central Plant, and would fully renovate of the Existing Hospital tower. Overall intensity would be substantially reduced compared to the Project and Reduced Intensity Alternatives A and B, most notably due to the lack of new construction associated with the Bioscience Tech Park and future expansion of LA BioMed uses. There would be incrementally fewer annual outpatient visits than under the Project and Reduced Intensity Alternatives A and B. Total employment at the site under the Project would represent a small percentage of the projected growth in the South Bay Planning Area up to Year 2030 and very small percentage of estimated growth in unincorporated Los Angeles County for this same period. Because the Project's employment increase would not exceed local and SCAG's growth projections for the period between 2016 and 2030, Reduced Intensity Alternative C, which would have incrementally fewer employees, would also not exceed growth projections. As with the Project, impacts regarding consistency with the projected employment growth would be less than significant. However, because of the reduced intensity, impacts under Reduced Intensity Alternative C would be incrementally less.

11. Public Services

a. Fire Protection and Emergency Services

(1) Construction

As with the Project, construction of Reduced Intensity Alternative C would include demolition, site preparation including trenching for utilities, and construction of new buildings and street/sidewalk improvements in various phases. These periodic construction activities could temporarily increase demand for fire protection and EMS, and may cause the occasional exposure of combustible materials such as wood, plastics, sawdust, coverings and coatings, heat sources including machinery and equipment sparking, exposed electrical lines, welding activities, and chemical reactions in combustible materials and coatings. However, compliance with California Division of Occupational Safety and Health Administration (Cal/OSHA) and Fire Code requirements; on-site fire suppression equipment specific to construction activities; compliance with applicable codes and ordinances related to the maintenance of mechanical equipment, handling and storage of flammable materials, and cleanup of spills of flammable materials would reduce demand for fire protection and EMS during construction to a less than significant level. Emergency access would be provided and maintained throughout construction to existing uses, new uses, and fire hydrants. While Reduced Intensity Alternative C and the Project would both require the construction of off-site utility and roadway improvements, and potentially require temporary lane closures along one or more of the four streets bordering the Medical Center Campus, Reduced Intensity Alternative C, as with the Project, would provide a construction traffic management plan to establish temporary traffic controls, prohibit construction vehicle activities and parking in surrounding off-site areas, and require various safety precautions such as alternate routing and protection barriers. With the implementation of the traffic management plan, impacts related to emergency access, vehicular access, pedestrian and bicycle access and safety, public transit, and construction parking would be less than significant under both Reduced Intensity Alternative C and the Project. Although impacts would be less than significant under both the Project and Reduced Intensity Alternative C, impacts would be less under Reduced Intensity Alternative C because of the substantially shorter construction time frame.

(2) Operation

As with the Project, Reduced Intensity Alternative C would be subject to the requirements of the County Code (e.g., Building Code, Fire Code, and Utilities Code) for new construction that address structural design, building materials, site access, fire lanes, fire flow requirements, automatic sprinkler systems, alarms, and smoke detectors. The LACFD would review and approve all plans at the building permit and plan check phases of the Project to ensure compliance with applicable Fire Code requirements, thereby minimizing the risk of increased operation fire safety hazards. An LACFD-approved Emergency Response Plan would include mapping of site access and emergency exits, evacuation routes for vehicles and pedestrians, and locations of the nearest hospitals and fire stations. Finally, because Reduced Intensity Alternative C would replace many aging on-site buildings that have not been constructed to current Fire Code standards with new buildings constructed to such standards, fire safety at the Medical Center Campus would be improved.

Unlike the Project, development of Reduced Intensity Alternative C would not measurably increase existing employee population and annual patient visits at the Medical Center Campus, and similarly would not increase operational traffic in the Project vicinity. According to Section 4.L., Transportation and Traffic, of this Draft EIR, because implementation of mitigation measures is not entirely within the control of the County, significant and unavoidable impacts would occur at the several intersections in the area, which could affect LACFD emergency vehicle response times in the area. However, although its implementation would not increase traffic in the area, Reduced Intensity Alternative C would still provide traffic design measures, including the installation roadway and traffic control improvements that would enable emergency access to the Medical Center Campus. In addition, emergency response is routinely facilitated, particularly for high priority calls, through use of sirens to clear a path of travel, driving in the lanes of opposing traffic, use of alternate routes, and multiple station response. In light of the above, and the fact that emergency response times to the Medical Center Campus from Station 36 are currently within the LACFD's response time goals, operational impacts under the Project and Reduced Intensity Alternative C on emergency response times would be less than significant. However, given the lack of expanded outpatient services and new or expanded biomedical research uses, overall traffic impacts and associated potential to affect emergency vehicle response times under Reduced Intensity Alternative C would be incrementally less than under the Project.

As with the Project, Reduced Intensity Alternative C would require greater fire flows at the site than required under existing conditions. As discussed in Section 4.K.1, Fire Protection and Emergency Services of this Draft EIR, water service to the Medical Center Campus are adequate to meet Project requirements and, as such, would be adequate to meet Reduced Intensity Alternative C fire flow requirements. Impacts related to fire flow would be less than significant under both Reduced Intensity Alternative C and the Project. However, because of reduced scale under Reduced Intensity Alternative C, fire flow demand would be incrementally less.

b. Sheriff Protection

(1) Construction

Construction activities associated with Reduced Intensity Alternative C, as under the Project, would include demolition, site preparation including trenching for utilities, and construction of new buildings and street/sidewalk improvements in various phases through buildout. These periodic construction activities could temporarily increase demand for police protection associated with patrolling the construction site. However, as required by PDF SHER-1, the construction sites would be fully fenced, lighted with security lighting, and patrolled either by on-site LACSD personnel from the on-site LACSD satellite station or by private security hired by DHS. Furthermore, an LACSD satellite station is located on-site, and the Medical

Center Campus has a 24-hour a day LACSD presence, which would both discourage construction site crimes and provide for almost immediate response to any observed or reported construction site crimes that are in process. Therefore, the demand for police protection services during construction of Reduced Intensity Alternative C would not require new or altered police protection facilities to maintain service, and the impact would be less than significant but incrementally reduced compared to the Project due to the reduction in overall construction activities on the Medical Center Campus.

Regarding police access and response times during construction, as would be the case under the Project, construction staging and construction worker parking associated with Reduced Intensity Alternative C would be accommodated on the Medical Center Campus, limiting potential conflicts with traffic on local streets. In addition, as required by the PDF-SHER-2, emergency access would be provided and maintained to existing and new on-site uses, and to off-site uses, throughout construction. Furthermore, while the Project and Reduced Intensity Alternative C would generate construction traffic, require the construction of off-site utility and roadway improvements, and potentially require temporary lane closures along one or more of the four streets bordering the Project Site. However, with the implementation of various traffic- and law enforcement-related Project Design Features, as under the Project, impacts on police access and response times during construction would not require new or altered police protection facilities to maintain service, and the impact would be less than significant. However, given the reduction in overall development intensity under this Alternative, construction-related impacts would be incrementally reduced.

(2) Operation

The Master Plan Project would result in a net increase of 1,178,071 square feet of building floor area on-site, and net increases in total Campus-wide employees and annual patient visits of 2,030 employees and 185,745 annual patient visits, respectively. This, in turn, would create the need for additional space at LACSD's on-site satellite station to accommodate the additional officers. However, Reduced Intensity Alternative C would result in the in-kind replacement and/or relocation of existing inpatient hospital beds and outpatient services within the Medical Center Campus and would not result in an overall increase in development intensity compared to existing conditions. Therefore, no new operational impacts on police protection services would occur under Reduced Intensity Alternative C and thus impacts in this regard would be reduced compared to the Project.

c. Parks and Recreation

(1) Construction

As with the Project, construction of Reduced Intensity Alternative C would not physically affect existing public parks and recreational facilities as no such facilities are located on or directly adjacent to the Medical Center Campus. Also, the staging of Project construction activities would occur on-site, and access to off-site uses would be maintained during construction. Given the mobility and short duration of work at a particular site, it is unlikely that a substantial number of construction workers would relocate to the Project area and use local parks and recreational facilities to the extent that new recreational facilities would be required or that substantial physical deterioration of such facilities would occur. Construction effects on parks under either Reduced Intensity Alternative C or the Project would be less than significant; however, because of an incrementally reduced scale of development, Reduced Intensity Alternative C would have less impact than under the Project.

(2) Operation

Reduced Intensity Alternative C would generate incrementally fewer employees than the estimated 2,030 new employees under the Project. However, Reduced Intensity Alternative C would not increase the overall intensity of development (square footage of outpatient and support services and number of inpatient hospital beds), and thus it would not have a notable potential to bring additional employees and their families to the area. As such, Reduced Intensity Alternative C would not create a demand, either directly or indirectly, for public parks and recreational facilities. Furthermore, any use of existing public parks and recreational facilities by employees and their families under Reduced Intensity Alternative C, as under existing conditions, would likely be dispersed over a wide geographic area rather than concentrated at any one of the eleven local public parks and recreational facilities. As with the Project, Reduced Intensity Alternative C would have a less than significant impact on parks and recreational facilities. However, because Reduced Intensity Alternative C would have substantially fewer employees than under the Project, impacts would be incrementally less.

d. Schools

(1) Construction

As with the Project, construction of Reduced Intensity Alternative C would not physically affect existing public schools as no public schools are located on or directly adjacent to the Medical Center Campus. Furthermore, the staging of Project construction activities would occur on-site, and access to off-site uses during construction would be maintained as required by the County Code, such that access to and parking at existing public schools would be maintained during Project construction. Given the general accessibility of the Medical Center Campus and the availability of construction workers in the Los Angeles area, it is unlikely that a substantial number of construction workers would relocate to the Project area and have children that would use local public schools. Hence, new or physically altered local public schools would not be required to provide service to the children of Project construction workers and maintain acceptable service ratios and other performance standards. Construction impacts on schools, as with the Project, would be less than significant but incrementally reduced under Reduced Intensity Alternative C.

(2) Operation

It is estimated that, under the Project, families of new employees would generate an estimated 29 grade K-5 students, 14 grade 6-8 students, and 18 grade 9-12 students. Reduced Intensity Alternative C would generate fewer employees fewer students than under the Project and Reduced Intensity Alternatives A and B. It is likely that student attendance under both Reduced Intensity Alternative C and the Project would be split among the 11 elementary and high schools in the local area, and possibly beyond. If all new students were distributed among the nearest schools, it is unlikely that these students alone would necessitate the need to construct new or physically altered school facilities given the small numbers of students involved. As with the Project, impacts on local schools would be less than significant under Reduced Intensity Alternative C. However, because Reduced Intensity Alternative C is substantially reduced in development intensity, impacts would be incrementally less.

e. Libraries

(1) Construction

As with the Project, construction of Reduced Intensity Alternative C would not physically affect existing

libraries, none of which are located on or directly adjacent to the Medical Center Campus. In addition, the staging of Project construction activities would occur on-site, and access to off-site uses would be maintained during construction. Given the mobility and short duration of work at a particular site, it is unlikely that a substantial number of construction workers would relocate to the Project area and use local libraries to the extent that new libraries would be required or that substantial physical deterioration of such facilities would occur. Construction effects on libraries under either Reduced Intensity Alternative C or the Project would be less than significant; however, because of an incrementally reduced scale of development, Reduced Intensity Alternative C would have less impact than under the Project.

(2) Operation

Reduced Intensity Alternative C would generate incrementally fewer employees than the Project's estimated net increase of 2,030 employees. However, Reduced Intensity Alternative C would not increase the overall intensity of development (square footage of outpatient and support services and number of inpatient hospital beds), and thus it would not have a notable potential to bring additional employees and their families to the area such that there would be an increase in demand for library services. Thus this Alternative would not result in the need for new or physically altered library facilities. Employees working at the Medical Center Campus under Reduced Intensity Alternative C are expected to be derived from the existing local labor pool and thus already generate a demand for public libraries. As under the Project, the existing on-site AF Parlow Library of Health Sciences would be relocated to new space within the New Hospital Tower under Reduced Intensity Alternative C to help meet the demand for library facilities. Patients and visitors of existing public library facilities would also likely be split among the four public libraries in the vicinity; thus, avoiding the concentration of demand at any one library. As with the Project, Reduced Intensity Alternative C would have a less than significant impact on library services. However, because Reduced Intensity Alternative C would generate substantially fewer employees than the Project or Reduced Intensity Alternatives A or B, impacts would be incrementally less.

12. Transportation and Parking

a. Construction

As with the Project, the implementation of a Construction Traffic Management Plan and pedestrian safety program under Reduced Intensity Alternative C would reduce potential construction impacts associated with hauling, deliveries and worker vehicles. Scheduling of construction-related traffic to avoid peak hours, prohibited on-street parking, temporary traffic controls, and the use of safety precautions, such as alternate routing and protection barriers in accordance would minimize the potential disruption of traffic flow, intersection operational impacts, conflicts with pedestrians and/or bicyclists, or loss of on-street parking in the commercial zones and residential neighborhoods. However, given the amount of development in the Project area, the uncertainty in terms of timing for each related Project and the potential for overlap of development, the Project could contribute to a cumulatively significant construction impact. Beyond compliance with County requirements regarding haul routes and implementation of traffic controls and safety procedures, no other feasible mitigation measures have been identified. As such, construction traffic impacts would be significant and unavoidable. However, because of a shorter construction duration, construction traffic impacts would be incrementally less than under the Project.

b. Operation**(1) Intersection Service Levels**

Unlike the Project, development of Reduced Intensity Alternative C is not expected to result in a net increase in existing employment, population, or annual patient visits at the Medical Center Campus, and thus would not increase operational traffic in the Project vicinity. Significant traffic impacts are anticipated at the following twelve (12) intersections: Normandie Avenue & Torrance Boulevard, Vermont Avenue & Torrance Boulevard, Normandie Avenue & Carson Street, Berendo Avenue & Carson Street, Medical Center Drive & Carson Street, Vermont Avenue & Carson Street, I-110 Southbound Ramps & Carson Street, Vermont Avenue & 220th Street, Figueroa Street and 220th Street/I-110 Northbound Ramps, Normandie Avenue & 223rd Street, Vermont Avenue & 223rd Street, and I-110 Southbound Ramps & 223rd Street. As Reduced Intensity Alternative C would not increase vehicle trips compared to existing conditions, based on the in-kind replacement of existing inpatient and outpatient facilities, impacts to these intersections are not anticipated. As such, implementation of proposed mitigation measures (MM TRAF-1 through MM TRAF-3) would not be necessary. As such, because of the reduction in development intensity under Reduced Intensity Alternative C, and associated lack of net new vehicle trips generated at the Medical Center Campus, impacts would be incrementally less than under the Project and less than significant. Thus, this Alternative would eliminate the significant unavoidable impact to intersections that would occur under the Master Plan Project.

(2) CMP Transportation System

As with the Project, Reduced Intensity Alternative C would not exceed the minimum peak hour trip numbers at CMP arterial stations or freeway monitoring stations to require further analysis and, therefore, would not result in a change in the V/C ratio of 0.02 or greater. Impacts to regional CMP transportation systems are considered to be less than significant under both Reduced Intensity Alternative C and the Project. However, because Reduced Intensity Alternative C would result in no net increase in vehicle trips, impact levels would be less compared to the Project.

(3) Caltrans Facilities**(a) Freeway Mainlines and Intersections**

Development under the Master Plan Project would increase existing employee population and annual patient visits at the Medical Center Campus, and would increase operational traffic at the northbound I-110 Freeway at 228th Street, the southbound 110 Freeway at El Segundo Boulevard, and the northbound I-405 Freeway at the I-710 Freeway, and due to uncertainties regarding implementation of applicable mitigation measures, impacts are considered significant and unavoidable. However, because Reduced Intensity Alternative C would not result in any net new vehicle trips, impact levels would be less than significant without the need for mitigation measures. Reduced Intensity Alternative C would also not significantly impact the arterial intersection of Western Avenue (State Route 213) and Carson Street, as would occur under the Project, because it would not add more than 50 vehicle trips to this intersection. Given the lack of new vehicle trips under Reduced Intensity Alternative C, this Alternative would avoid a significant and unavoidable impact that would occur at this location under the Project.

(b) Freeway Off-Ramps

Unlike the Project, Reduced Intensity Alternative C would not increase traffic at freeway off-ramps. As such, the off-ramp queue would not be expected to extend beyond the length of the ramp onto the mainline of the

freeway during the peak arrival period, and thus impacts at freeway off-ramps would be less than significant. Although both Reduced Intensity Alternative C and the Project would have less than significant impacts, Reduced Intensity Alternative C would result in no new vehicle trips and thus would have an incrementally reduced impact at freeway off-ramps.

(4) Public Transit and Alternative Transportation

Reduced Intensity Alternative C would not result in an increase in transit person trips since the overall intensity of development would be comparable to existing conditions. Because implementation of this Alternative would not increase transit ridership, and thus would not have the potential to exceed transit capacity, Reduced Intensity Alternative C would have a less than significant impact on transit and alternative transportation. Although both Reduced Intensity Alternative C and the Project would have less than significant impacts, Reduced Intensity Alternative C would result in fewer transit riders than under the Project and therefore would have less impact on transit facilities and services.

(5) Access and Circulation

As under the Project, access to the site under Reduced Intensity Alternative C would be provided via seven driveways. Driveways would be designed to County standards and would accommodate left and right ingress/egress turning movements. Vehicular access would be improved by the addition of a new signalized public entrance on Carson Street and one additional unsignalized staff entrance on Vermont Avenue. The existing network of traffic lanes, public sidewalks and pedestrian crosswalks would be maintained or improved and the Project would not mix pedestrian and automobile traffic in such a manner that a safety hazard for vehicles or pedestrians would occur or that access would be limited. In addition, no safety or operational impact relative to bicycle traffic is anticipated. As with the Project, impacts with respect to vehicular, pedestrian, and bicycle access would be less than significant. However, because Reduced Intensity Alternative C would generate less overall traffic, potential pedestrian/vehicle conflicts would be incrementally less.

(6) Parking Supply

Reduced Intensity Alternative C would not provide any net new parking spaces, but rather would consolidate existing parking spaces on the Medical Center Campus within new surface and structured parking facilities. Nonetheless, as with the Project, total parking is anticipated to exceed County Code requirements. A comprehensive signage and wayfinding plan would be developed to aid visitors and patients in finding ultimate destinations and parking intended for those uses. As with the Project, it is anticipated that Reduced Intensity Alternative C, in accordance with existing and proposed TDM measures or potential LEED requirements for future buildings, would provide additional bicycle parking facilities on the Medical Center Campus beyond what is required by the County Code. Because parking would exceed Code requirements, impacts related to parking supply under both the Project and Reduced Intensity Alternative C would be less than significant and similar.

13. Utilities and Service Systems

a. Water Supply

(1) Construction

Construction of Reduced Intensity Alternative C, as with the Project would include all necessary on- and off-site water system connections and improvements to tie into Cal Water's existing distribution system. All necessary improvements would be verified through the coordination with Cal Water and the LACFD regarding fire flow requirements. Impacts on water distribution systems would be less than significant under both the Project and Reduced Intensity Alternative C. However, because Reduced Intensity Alternative C would have substantially less overall development than under the Project, impacts on local distribution infrastructure and potential water supply pipeline construction, if necessary, would be incrementally less under this Alternative.

(2) Operation

Reduced Intensity Alternative C would result in an incremental decrease in the Project's estimated water demand of 458.6 AFY (or a net increase of 251 AFY over existing conditions), as there would be no net increase in overall development intensity relative to existing conditions. As such, Reduced Intensity Alternative C would be expected to have a water demand comparable to existing conditions, or approximately 208 AFY. As no increase in water demand is anticipated under this Alternative, impacts related to water supply would be less than significant under both the Project and Reduced Intensity Alternative C. However, because Reduced Intensity Alternative C would have substantially less overall development than under the Project, impacts on water supply would be incrementally less.

b. Wastewater

(1) Construction

Construction of Reduced Intensity Alternative C, as with the Project would include all necessary on- and off-site sewer pipe improvements and connections to adequately connect to the LACSDs' existing sewer system. In the event that, during development, wastewater lines were found to be substandard or in deteriorated condition, the County would be required to make necessary improvements to achieve adequate service pursuant to applicable County requirements. All necessary improvements would be verified through the permit approval process of obtaining a sewer capacity and connection permit from the LACSDs. Impacts on conveyance systems would be less than significant under both the Project and Reduced Intensity Alternative C. However, because Reduced Intensity Alternative C would have substantially less overall development than under the Project, impacts on local conveyance systems and potential sewer line construction would be incrementally less.

(2) Operation

Reduced Intensity Alternative C would not result in any notable increase in wastewater generation, compared to the Project's estimated wastewater generation of 171,998 gpd, which represents approximately 0.114 percent of JWPCP's total remaining capacity of 120 mgd. Given the lack of a measurable increase in wastewater generation on-site, Reduced Intensity Alternative C would not exceed the available capacity of affected wastewater facilities and, thus, would not directly or indirectly result in an exceedance of wastewater treatment requirements, require or result in the construction of new wastewater treatment

facilities or expansion of existing facilities, or result in a determination by the LACSDs that it has inadequate capacity to serve the Project's projected demand in addition to the provider's existing commitments. Impacts related to wastewater conveyance and treatment would be less than significant under both the Project and Reduced Intensity Alternative C. However, because Reduced Intensity Alternative C would have less overall development than under the Project, impacts on treatment systems would be incrementally less.

c. Solid Waste

(1) Construction

Reduced Intensity Alternative C, as with the Project, would require demolition of some existing buildings and construction activities that would generate solid waste. Much of this would be accommodated at the County's inert landfill site (Azusa Land Reclamation) or one of a number on inert debris engineered fill operations that are located throughout Los Angeles County. There will be an additional approximately 40 cubic yards of soil removed for soil remediation due to the four Leaking Underground Storage Tanks found near the Central Plant. Not taking into account C&D Debris Recycling and Reuse Program and the Los Angeles County Green Buildings Standard Code (Reduced Intensity Alternative C must recycle or reuse 50 percent of the debris generated), the estimated debris is expected to be considerably less than the waste generated by Project construction given the substantial reduction in development intensity. Neither the Project nor Reduced Intensity Alternative C would exceed landfill capacity for construction debris or soil waste. Impacts under both the Project and Reduced Intensity Alternative C would have a less than significant impact relative to solid waste capacity, but impacts under Reduced Intensity Alternative C would be substantially reduced.

(2) Operation

Not taking into account the amount of solid waste that could potentially be diverted via source reduction and recycling programs, the Project would generate a net increase of total net increase in waste approximately 2,481 tons per year. If all of the Project's waste were taken to Sunshine Canyon Landfill, the Project's respective additions to the daily disposal, 1.4 tons, would be approximately 0.011 percent of the residual daily capacity at the landfill, assuming no diversion. With 60 percent diversion it would be approximately 0.004 percent. With the same number of inpatient beds and elimination of the Project's outpatient buildings and proposed Bioscience Tech Park and expanded LA BioMed research uses, Reduced Intensity Alternative C would provide a substantial decrease in operational solid waste generation. Because the Project would have not exceed landfill capacity, Reduced Intensity Alternative C, which would generate incrementally less waste, would also not exceed landfill capacity. Under both the Project and Reduced Intensity Alternative C, impacts on landfill capacity would be less than significant. However, because the scope of development under Reduced Intensity Alternative C is reduced, it would have incrementally less impact than under the Project.

C. RELATIONSHIP OF THE ALTERNATIVE TO PROJECT OBJECTIVES

Unlike Reduced Intensity Alternatives A and B, Reduced Intensity Alternative C would eliminate the Project's significant and unavoidable traffic impacts at the intersections of Normandie Avenue & Torrance Boulevard, Vermont Avenue & Torrance Boulevard, Normandie Avenue & Carson Street, Berendo Avenue & Carson Street, Medical Center Drive & Carson Street, Vermont Avenue & Carson Street, I-110 Southbound Ramps & Carson Street, Vermont Avenue & 220th Street, Figueroa Street and 220th Street/I-110 Northbound Ramps, Normandie Avenue & 223rd Street, Vermont Avenue & 223rd Street, and I-110

Southbound Ramps & 223rd Street. It would also incrementally reduce the Project's significant and unavoidable construction noise at sensitive receptor sites along 220th Street during future construction phases, though impacts in this regard are conservatively considered to remain significant and unavoidable. The significant unavoidable temporary operational helicopter noise impact that would occur under the Project would also occur under Reduced Intensity Alternative C.

Because Reduced Intensity Alternative C would be substantially reduced compared to the Project and Reduced Intensity Alternatives A and B, demand for public services and utilities would be incrementally reduced. However, Reduced Intensity Alternative C would have a relatively similar or incrementally reduced level of impact that would still require the implementation of mitigation measures, as under the Project, for potentially significant impacts associated with seismic safety, geologic stability, expansive soils, hazardous materials management, fire protection and emergency medical services, and sheriff protection.

Reduced Intensity Alternative C would incrementally reduce the Project's other significant and less than significant impacts, would eliminate the significant traffic impacts of the Project, and would not result in any new or increased environmental impacts, and further, it would achieve the primary underlying purpose of the Project, which is secure timely compliance with SB 1953 (Alquist Hospital Facilities Seismic Safety Act) to maintain critical trauma services in the South Bay market area of the County of Los Angeles. SB 1953 requires the replacement of the current tertiary acute care hospital and other essential supporting facilities with upgrades/replacement before January 1, 2030.

Reduced Intensity Alternative C would support, albeit to a lesser extent than under Reduced Intensity Alternatives A and B, the Project's basic objectives to renovate existing health facilities to meet the intent of the Affordable Care Act of 2010 to modernize and integrate healthcare delivery. It would update most facilities to modern standards by constructing new buildings and repurposing/remodeling existing buildings. It would partially meet the objective to resolve existing deferred maintenance issues and optimize the quality of care and operational effectiveness, while reducing administrative, operational and maintenance costs. It would also, to a limited degree, allow for the fundamental reorganization, expansion and integration of outpatient services, and would also renovate and appropriate new Medical Center Campus construction. However, because retail uses and new outpatient buildings would be eliminated, it would not encourage the same vibrant, mixed-use setting as under the Project and would not achieve optimum public utilization of land and buildings under the ownership and control of the County.

Reduced Intensity Alternative C would not support the continuing Harbor-UCLA mission of clinical care, education, and research, as well as the provision of modernized facilities for existing and future tenants of the Medical Center Campus, as all Bioscience Tech Park and expanded LA BioMed uses would be eliminated. However, this Alternative would still meet the objective of creating durable, adaptable green infrastructure and buildings, promoting resource-efficient transportation solutions, or accommodate changing sustainable design practices, though not to the extent the Master Plan Project would. However, Reduced Intensity Alternative C would not provide any opportunities for development up to 250,000 square feet of additional bioscience and support facilities or 225,000 square feet of expanded LA BioMed facilities.

5.0 ALTERNATIVES

E. ENVIRONMENTALLY SUPERIOR ALTERNATIVE

Section 15126.6(e)(2) of the State *CEQA Guidelines* indicates that an analysis of alternatives to a proposed project shall identify an environmentally superior alternative among the alternatives evaluated in an EIR and that if the “no project” alternative is the environmentally superior alternative, the EIR shall identify another environmentally superior alternative among the remaining alternatives. With respect to identifying an Environmentally Superior Alternative among those analyzed in this Draft EIR, the range of feasible Alternatives includes the No Project/No Build Alternative, Reduced Intensity Alternative A, Reduced Intensity Alternative B, and Reduced Intensity Alternative C.

A comparative summary of the environmental impacts anticipated under each Alternative to the environmental impacts associated with the Project is provided in **Table 5-1, Comparison of Impacts Associated with the Alternatives and Impacts of the Project**, below, based on the detailed evaluation of the potential impacts associated with each Alternative provided in the previous sections. Pursuant to Section 15126.6(c) of the State *CEQA Guidelines*, the analysis below addresses the ability of the Alternatives to “avoid or substantially lessen one or more of the significant effects” of the Project.

As discussed above, and as depicted in Table 5-1, the No Project/No Build Alternative is considered the overall environmentally superior Alternative as it would avoid nearly all of the impacts that would occur under the Project. Although adverse impacts would be avoided under the No Project/No Build Alternative, it would not achieve the primary beneficial aspects of the Project to implement SB 1953 (Alquist Hospital Facilities Seismic Safety Act) to maintain critical trauma services in the South Bay market area of the County of Los Angeles and to replacement of the current tertiary acute care hospital and other essential supporting facilities with upgrades/replacement before January 1, 2030.

The No Project/No Build Alternative would also not achieve the aesthetic benefits of the Project or achieve optimum public utilization of land and buildings under the ownership and control of the County. As indicated above, without development of Project, the No Project/No Build Alternative would not meet any of the Project objectives. A comparative summary of the extent to which the Project Alternatives would meet the Project’s Objectives is summarized in **Table 5-2, Comparison of Alternatives - Ability to Meet Project Objectives**. However, note that although Reduced Intensity Alternative A would partially meet the objectives of the Project in the same categories as Reduced Intensity Alternative B, the latter would meet the same objectives to a lesser degree. Furthermore, Reduced Intensity Alternative C would not achieve two of the Project objectives, only partially achieve five of the objectives, and fully achieve only one of the objectives. Nevertheless, in accordance with the State *CEQA Guidelines* requirement to identify an environmentally superior Alternative other than the No Project/No Action Alternative, a comparative evaluation of the remaining Alternatives indicates that Reduced Intensity Alternative C, the New Acute Bed Hospital Tower Only Alternative, would be the environmentally superior Alternative.

Table 5-1

**Comparison of Impacts Associated with the Alternatives
and Impacts of the Project**

	Project Impact	Alternative 1 No Project/No Build	Alternative 2 Reduced Intensity Alternative A	Alternative 3 Reduced Intensity Alternative B	Alternative 4 Reduced Intensity Alternative C
A. Aesthetics					
Visual Character					
Construction	Less than Significant	Less Impact (No Impact)	Less Impact (Less than Significant)	Less Impact (Less than Significant)	Less Impact (Less than Significant)
Operation	Less than Significant	Less Impact (No Impact)	Similar Impact (Less than Significant)	Similar Impact (Less than Significant)	Similar Impact (Less than Significant)
Views	Less than Significant	Less Impact (No Impact)	Similar Impact (Less than Significant)	Similar Impact (Less than Significant)	Less Impact (Less than Significant)
Light and Glare					
Construction	Less than Significant	Less Impact (No Impact)	Less Impact (Less than Significant)	Less Impact (Less than Significant)	Less Impact (Less than Significant)
Operation					
Artificial Light	Less than Significant	Less Impact (No Impact)	Similar Impact (Less than Significant)	Similar Impact (Less than Significant)	Less Impact (Less than Significant)
Glare	Less than Significant	Less Impact (No Impact)	Similar Impact (Less than Significant)	Similar Impact (Less than Significant)	Less Impact (Less than Significant)
B. Air Quality					
Consistency with Air Quality Management Plan					

Table 5-1(Continued)

**Comparison of Impacts Associated with the Alternatives
and Impacts of the Project**

	Project Impact	Alternative 1 No Project/No Build	Alternative 2 Reduced Intensity Alternative A	Alternative 3 Reduced Intensity Alternative B	Alternative 4 Reduced Intensity Alternative C
Construction	Less than Significant	Less Impact (No Impact)	Less Impact (Less than Significant)	Less Impact (Less than Significant)	Less Impact (Less than Significant)
Operation	Less than Significant	Less Impact (No Impact)	Less Impact (Less than Significant)	Less Impact (Less than Significant)	Less Impact (Less than Significant)
Violation of Air Quality Standards					
Construction	Less than Significant	Less Impact (No Impact)	Less Impact (Less than Significant)	Less Impact (Less than Significant)	Less Impact (Less than Significant)
Operation	Less than Significant	Less Impact (No Impact)	Less Impact (Less than Significant)	Less Impact (Less than Significant)	Less Impact (Less than Significant)
Non-Attainment Pollutants					
Construction	Less than Significant	Less Impact (No Impact)	Less Impact (Less than Significant)	Less Impact (Less than Significant)	Less Impact (Less than Significant)
Operation	Less than Significant	Less Impact (No Impact)	Less Impact (Less than Significant)	Less Impact (Less than Significant)	Less Impact (Less than Significant)
Substantial Pollutant Concentrations	Less than Significant	Less Impact (No Impact)	Less Impact (Less than Significant)	Less Impact (Less than Significant)	Less Impact (Less than Significant)
Odors					
Construction	Less than Significant	Less Impact (No Impact)	Similar (Less than Significant)	Similar (Less than Significant)	Less Impact (Less than Significant)

Table 5-1(Continued)

**Comparison of Impacts Associated with the Alternatives
and Impacts of the Project**

	Project Impact	Alternative 1 No Project/No Build	Alternative 2 Reduced Intensity Alternative A	Alternative 3 Reduced Intensity Alternative B	Alternative 4 Reduced Intensity Alternative C
Operation	Less than Significant	Less Impact (No Impact)	Similar Impact (Less than Significant)	Similar Impact (Less than Significant)	Less Impact (Less than Significant)
C. Energy					
Construction	Less than Significant	Less Impact (No Impact)	Less Impact (Less than Significant)	Less Impact (Less than Significant)	Less Impact (Less than Significant)
Operation	Less than Significant	Less Impact (No Impact)	Less Impact (Less than Significant)	Less Impact (Less than Significant)	Less Impact (Less than Significant)
D. Geology and Soils					
Seismic Hazards	Less than Significant with Mitigation	Less Impact (No Impact)	Similar Impact (Less than Significant with Mitigation)	Similar Impact (Less than Significant with Mitigation)	Less Impact (Less than Significant with Mitigation)
Soil Erosion and Topsoil	Less than Significant	Less Impact (No Impact)	Less Impact (Less than Significant)	Less Impact (Less than Significant)	Less Impact (Less than Significant)
Geologic Stability	Less than Significant with Mitigation	Less Impact (No Impact)	Similar Impact (Less than Significant with Mitigation)	Similar Impact (Less than Significant with Mitigation)	Less Impact (Less than Significant with Mitigation)
Expansive and Corrosive Soils	Less than Significant with Mitigation	Less Impact (No Impact)	Similar Impact (Less than Significant with Mitigation)	Similar Impact (Less than Significant with Mitigation)	Less Impact (Less than Significant with Mitigation)

Table 5-1(Continued)

**Comparison of Impacts Associated with the Alternatives
and Impacts of the Project**

	Project Impact	Alternative 1 No Project/No Build	Alternative 2 Reduced Intensity Alternative A	Alternative 3 Reduced Intensity Alternative B	Alternative 4 Reduced Intensity Alternative C
E. Greenhouse Gas Emissions					
Consistency with CCAP	Less than Significant	Less Impact (No Impact)	Similar Impact (Less than Significant)	Similar Impact (Less than Significant)	Similar Impact (Less than Significant)
Consistency with Greenhouse Gas Reduction Plans	Less than Significant	Less Impact (No Impact)	Similar Impact (Less than Significant)	Similar Impact (Less than Significant)	Similar Impact (Less than Significant)
F. Hazards and Hazardous Materials					
Hazardous Materials Management	Less than Significant with Mitigation	Less Impact (No Impact)	Similar Impact (Less than Significant with Mitigation)	Similar Impact (Less than Significant with Mitigation)	Less Impact (Less than Significant with Mitigation)
Airport Safety Provisions	Less than Significant	Less Impact (No Impact)	Similar Impact (Less than Significant)	Similar Impact (Less than Significant)	Similar Impact (Less than Significant)
Emergency Response Plans	Less than Significant	Less Impact (No Impact)	Similar Impact (Less than Significant)	Similar Impact (Less than Significant)	Less Impact (Less than Significant)

Table 5-1(Continued)

**Comparison of Impacts Associated with the Alternatives
and Impacts of the Project**

	Project Impact	Alternative 1 No Project/No Build	Alternative 2 Reduced Intensity Alternative A	Alternative 3 Reduced Intensity Alternative B	Alternative 4 Reduced Intensity Alternative C
G. Hydrology and Water Quality					
Surface Water Hydrology					
Construction	Less than Significant	Less Impact (No Impact)	Similar Impact (Less than Significant)	Similar Impact (Less than Significant)	Less Impact (Less than Significant)
Operation	Less than Significant	Less Impact (No Impact)	Similar Impact (Less than Significant)	Similar Impact (Less than Significant)	Less Impact (Less than Significant)
Surface and Groundwater Water Quality					
Construction	Less than Significant	Less Impact (No Impact)	Similar Impact (Less than Significant)	Similar Impact (Less than Significant)	Less Impact (Less than Significant)
Operation	Less than Significant	Less Impact (No Impact)	Similar Impact (Less than Significant)	Similar Impact (Less than Significant)	Less Impact (Less than Significant)
H. Land Use					
Applicable Plans and Policies	Less than Significant	Less Impact (No Impact)	Similar Impact (Less than Significant)	Similar Impact (Less than Significant)	Similar Impact (Less than Significant)
Land Use Compatibility	Less than Significant	Less Impact (No Impact)	Less Impact (Less than Significant)	Less Impact (Less than Significant)	Less Impact (Less than Significant)

Table 5-1(Continued)

**Comparison of Impacts Associated with the Alternatives
and Impacts of the Project**

	Project Impact	Alternative 1 No Project/No Build	Alternative 2 Reduced Intensity Alternative A	Alternative 3 Reduced Intensity Alternative B	Alternative 4 Reduced Intensity Alternative C
I. Noise					
	Construction Noise	Significant and Unavoidable	Less Impact (No Impact)	Less Impact (Significant and Unavoidable)	Less Impact (Significant and Unavoidable)
	Operation Noise	Less than Significant	Less Impact (No Impact)	Less Impact (Less than Significant)	Less Impact (Less than Significant)
	Construction Vibration	Less than Significant	Less Impact (No Impact)	Less Impact (Less than Significant)	Less Impact (Less than Significant)
	Operation Vibration	Less than Significant	Less Impact (No Impact)	Less Impact (Less than Significant)	Less Impact (Less than Significant)
J. Population, Housing and Employment					
	Construction	Less than Significant	Less Impact (No Impact)	Less Impact (Less than Significant)	Less Impact (Less than Significant)
	Operation	Less than Significant	Less Impact (No Impact)	Less Impact (Less than Significant)	Less Impact (Less than Significant)
K. Public Services					
	Fire Protection and Emergency Services				
	Construction	Less than Significant	Less Impact (No Impact)	Less Impact (Less than Significant)	Less Impact (Less than Significant)

Table 5-1(Continued)

**Comparison of Impacts Associated with the Alternatives
and Impacts of the Project**

	Project Impact	Alternative 1 No Project/No Build	Alternative 2 Reduced Intensity Alternative A	Alternative 3 Reduced Intensity Alternative B	Alternative 4 Reduced Intensity Alternative C
Operation	Less than Significant With Mitigation	Less Impact (No Impact)	Less Impact (Less than Significant With Mitigation)	Less Impact (Less than Significant With Mitigation)	Less Impact (Less than Significant With Mitigation)
Sheriff Protection					
Construction	Less than Significant	Less Impact (No Impact)	Less Impact (Less than Significant)	Less Impact (Less than Significant)	Less Impact (Less than Significant)
Operation	Less than Significant With Mitigation	Less Impact (No Impact)	Less Impact (Less than Significant With Mitigation)	Less Impact (Less than Significant With Mitigation)	Less Impact (Less than Significant With Mitigation)
Schools					
Construction	Less than Significant	Less Impact (No Impact)	Similar Impact (Less than Significant)	Similar Impact (Less than Significant)	Less Impact (Less than Significant)
Operation	Less than Significant	Less Impact (No Impact)	Less Impact (Less than Significant)	Less Impact (Less than Significant)	Less Impact (Less than Significant)
Parks and Recreation					
Construction	Less than Significant	Less Impact (No Impact)	Less Impact (Less than Significant)	Less Impact (Less than Significant)	Less Impact (Less than Significant)
Operation	Less than Significant	Less Impact (No Impact)	Less Impact (Less than Significant)	Less Impact (Less than Significant)	Less Impact (Less than Significant)
Libraries					
Construction	Less than Significant	Less Impact (No Impact)	Less Impact (Less than Significant)	Less Impact (Less than Significant)	Less Impact (Less than Significant)

Table 5-1(Continued)

**Comparison of Impacts Associated with the Alternatives
and Impacts of the Project**

		Project Impact	Alternative 1 No Project/No Build	Alternative 2 Reduced Intensity Alternative A	Alternative 3 Reduced Intensity Alternative B	Alternative 4 Reduced Intensity Alternative C
	Operation	Less than Significant	Less Impact (No Impact)	Less Impact (Less than Significant)	Less Impact (Less than Significant)	Less Impact (Less than Significant)
L. Transportation and Parking						
Construction		Significant and Unavoidable	Less Impact (No Impact)	Less Impact (Significant and Unavoidable)	Less Impact (Significant and Unavoidable)	Less Impact (Significant and Unavoidable)
Operation						
	Intersection Service Levels	Significant and Unavoidable	Less Impact (No Impact)	Less Impact (Significant and Unavoidable)	Less Impact (Significant and Unavoidable)	Less Impact (No Impact)
	CMP Transportation System	Less than Significant	Less Impact (No Impact)	Less Impact (Less Than Significant)	Less Impact (Less Than Significant)	Less Impact (Less Than Significant)
Caltrans Facilities						
	Freeway Mainlines and Intersections	Significant and Unavoidable	Less Impact (No Impact)	Less Impact (Significant and Unavoidable)	Less Impact (Significant and Unavoidable)	Less Impact (No Impact)
	Freeway Off-Ramps	Less than Significant	Less Impact (No Impact)	Less Impact (Less Than Significant)	Less Impact (Less Than Significant)	Less Impact (Less Than Significant)
	Public Transit and Alternative Transportation	Less than Significant	Less Impact (No Impact)	Less Impact (Less Than Significant)	Less Impact (Less Than Significant)	Less Impact (Less Than Significant)

Table 5-1(Continued)

**Comparison of Impacts Associated with the Alternatives
and Impacts of the Project**

		Project Impact	Alternative 1 No Project/No Build	Alternative 2 Reduced Intensity Alternative A	Alternative 3 Reduced Intensity Alternative B	Alternative 4 Reduced Intensity Alternative C
	Access and Circulation	Less than Significant	Less Impact (No Impact)	Less Impact (Less Than Significant)	Less Impact (Less Than Significant)	Less Impact (Less Than Significant)
	Parking Supply	Less than Significant	Less Impact (No Impact)	Less Impact (Less Than Significant)	Less Impact (Less Than Significant)	Less Impact (Less Than Significant)
M. Utilities and Service Systems						
Water Supply						
	Construction	Less than Significant	Less Impact (No Impact)	Less Impact (Less than Significant)	Less Impact (Less than Significant)	Less Impact (Less than Significant)
	Operation	Less than Significant	Less Impact (No Impact)	Less Impact (Less than Significant)	Less Impact (Less than Significant)	Less Impact (Less than Significant)
Wastewater						
	Construction	Less than Significant	Less Impact (No Impact)	Less Impact (Less than Significant)	Less Impact (Less than Significant)	Less Impact (Less than Significant)
	Operation	Less than Significant	Less Impact (No Impact)	Less Impact (Less than Significant)	Less Impact (Less than Significant)	Less Impact (Less than Significant)
Solid Waste						
	Construction	Less than Significant	Less Impact (No Impact)	Similar Impact (Less than Significant)	Similar (Less than Significant)	Less Impact (Less than Significant)
	Operation	Less than Significant	Less Impact (No Impact)	Less Impact (Less than Significant)	Less Impact (Less than Significant)	Less Impact (Less than Significant)

Table 5-1(Continued)

**Comparison of Impacts Associated with the Alternatives
and Impacts of the Project**

	Project Impact	Alternative 1 No Project/No Build	Alternative 2 Reduced Intensity Alternative A	Alternative 3 Reduced Intensity Alternative B	Alternative 4 Reduced Intensity Alternative C
<p>Source: ESA PCR, 2016</p>					

Table 5-2

Comparison of Alternatives - Ability to Meet Project Objectives

PROJECT OBJECTIVES & CRITERIA	Alternative 1 No Project/No Build			Alternative 2 Reduced Intensity A			Alternative 3 Reduced Intensity B			Alternative 4 Reduced Intensity Alternative C		
	No	Partial	Yes	No	Partial	Yes	No	Partial	Yes	No	Partial	Yes
1. Secure timely compliance with the Alquist Hospital Facilities Seismic Safety Act (also known as Senate Bill [SB] 1953) to maintain critical trauma services in the South Bay service region of the County of Los Angeles, which requires replacement of the current tertiary acute care Existing Hospital tower and other essential supporting facilities with upgrades/replacement before January 1, 2030.	X					X			X			X
2. Support the renovation of existing healthcare facilities to implement the County’s strategy to respond to the Affordable Care Act of 2010 and modernize and integrate healthcare delivery and update facilities to modern standards by constructing new buildings and repurposing/remodeling existing buildings on the campus to improve operational efficiencies, resolve existing deferred maintenance issues, and consolidate inpatient and outpatient services in dedicated buildings, to optimize the quality of care and operational effectiveness while reducing administrative, operational and maintenance costs.	X				X			X			X	
3. Provide for a fundamental reorganization, expansion, and integration of outpatient services with the specific goals of being a) more community-based and patient-centered, b) more efficient, and c) configured to include clear wayfinding and pedestrian walkways.	X				X			X			X	
4. Plan renovation and appropriate new medical campus construction for a mix of inpatient, outpatient, and supporting facilities to respond to healthcare needs in the South Bay service region, based on the Harbor-UCLA Medical Center Master Plan Project’s current services and market projections for the planning horizon.	X				X			X			X	
5. Provide opportunities for development up to 250,000 square feet of new Bioscience Tech Park uses and support facilities, as well as 225,000 square feet of expanded LA BioMed facilities.	X				X			X		X		

Table 5-2(Continued)

Comparison of Alternatives - Ability to Meet Project Objectives

PROJECT OBJECTIVES & CRITERIA	Alternative 1 No Project/No Build			Alternative 2 Reduced Intensity A			Alternative 3 Reduced Intensity B			Alternative 4 Reduced Intensity Alternative C		
	No	Partial	Yes	No	Partial	Yes	No	Partial	Yes	No	Partial	Yes
6. Encourage a vibrant, mixed-use setting that supports the continuing Harbor-UCLA mission of clinical care, education, and research as well as the provision of modernized facilities for existing and future tenants of the Medical Center Campus.	X					X			X		X	
7. Achieve optimum public utilization of land and buildings under the ownership and control of the County and maintain flexibility to respond to future shifts in medical care and technology.	X				X			X			X	
8. Develop the campus in ways that do not compromise environmental quality, social equity, or economic opportunity for future generations by: a) creating durable, adaptable green infrastructure and buildings, promoting resource-efficient transportation solutions, and seeking climate-positive outcomes, b) establishing goals to reduce net greenhouse gas emissions, including: energy, buildings and land use, transportation, water and waste, and c) accommodating changing sustainable design practices, from current standards to a future vision for a “Regenerative Campus.”	X				X			X			X	
TOTAL OBJECTIVES SCORE	8	0	0	0	6	2	0	6	2	1	6	1

Source: ESA PCR, 2016.