

3.11 TRAFFIC AND TRANSPORTATION

As a result of the analysis undertaken in the Initial Study for the Long Beach Memorial Medical Center Expansion (proposed project),¹ the City of Long Beach (City) Department of Planning and Building determined that the proposed project may result in environmental impacts to traffic and transportation. Therefore, this issue is being carried forward for detailed analysis in this Environmental Impact Report (EIR). This analysis was undertaken to identify opportunities to avoid, reduce, or otherwise mitigate potential significant impacts to traffic and transportation and to identify potential alternatives.

The analysis of traffic and transportation includes a description of the regulatory framework that guides the decision-making process, existing conditions of the proposed project area, thresholds for determining if the proposed project would result in significant impacts, anticipated impacts (direct, indirect, and cumulative), mitigation measures, and level of significance after mitigation.

Traffic and transportation at the proposed project site were evaluated in accordance with the City of Long Beach General Plan² and the County of Los Angeles Congestion Management Plan (CMP). The full technical impact report is available in the traffic impact analysis (Appendix J, *Traffic Analysis*).³

3.11.1 Regulatory Framework

State

California Water Code

The proposed project is subject to the State of California Water Code, Division 12, Part 5, Chapter 1, Article 4, Section 31060 titled "Construction of Rights of Way."⁴ Any mitigation measure required to be implemented in a state right-of-way would require a State of California Department of Transportation (Caltrans) Encroachment Permit. Mitigation in excess of \$300,000 would require a Caltrans Project Study Report. Caltrans recommended that large-sized trucks transporting construction materials and equipment be limited to off-peak commute periods and any heavy construction equipment that requires the use of oversized transport vehicles on state roadways or facilities would require a Caltrans transportation permit. The construction scenario defined for the proposed project would not require the transport of oversized vehicles on state facilities.

¹ City of Long Beach, Department of Planning and Building. 20 August 2004. *Initial Study for the Long Beach Memorial Medical Center Expansion Project*. Prepared by: Sapphos Environmental, Inc., 133 Martin Alley, Pasadena, CA 91105.

² City of Long Beach, Department of Planning and Building. December 1991. *Transportation Element of the Long Beach General Plan*. Prepared by: City of Long Beach, Department of Planning and Building, City Hall, 333 West Ocean Boulevard, Long Beach, CA 90802.

³ Linscott, Law & Greenspan Engineers. 4 November 2004. *Traffic Impact Analysis*. Prepared for: Sapphos Environmental, Inc., 133 Martin Alley, Pasadena, CA 91105. Prepared by: Linscott, Law & Greenspan Engineers, 1580 Corporate Drive, Suite 122, Costa Mesa, CA 92626. Contact: City of Long Beach, Department of Community Development, 333 West Ocean Boulevard, Long Beach, CA 90802.

⁴ West's Annotated California Codes. 1984. *Water Code Sections 30000 to 38999. Official California Water Code Classification*. Vol. 69. St. Paul, MN: West Publishing Company.

Regional

Southern California Association of Governments Regional Transportation Plan

The proposed project lies within the jurisdiction of the Southern California Association of Governments (SCAG) Regional Transportation Plan (RTP). The RTP is a long-range plan that provides a blueprint for future transportation improvements and investments based on specific transportation goals, objectives, policies, and strategies. The RTP is based on federal transportation law requiring comprehensive, cooperative, and continuous transportation planning. SCAG meets these requirements by developing comprehensive transportation plans that include all surface transportation modes (multimodal planning) to ensure efficient movement of people and goods throughout the region. The RTP includes an assessment of overall growth and economic trends in the region and provides strategic direction for transportation capital investments. The RTP serves the following functions:

- Addresses how to improve mobility and solve congestion problems
- Evaluates federal, state, and local funding available for transportation improvements
- Estimates costs of projects and develops funding strategies to meet these costs
- Achieves air quality requirements

Local

Metropolitan Transportation Authority Congestion Management Plan

The Congestion Management Program (CMP) for the County of Los Angeles (County) is a state-mandated program that was enacted by state legislature with the passage of Proposition 111 in 1990.⁵ The program is intended to address the impact of local growth on the regional transportation system. As required by the 2002 CMP for the County, a Traffic Impact Assessment (TIA)⁶ has been prepared for the proposed project to determine the potential impacts to designated monitoring locations on the CMP highway system. The hallmark of the CMP program is that it is intended to address the impact of local growth on the regional transportation system.

City of Long Beach General Plan

Transportation Element

The Transportation element of the City of Long Beach (City) General Plan includes pertinent policies related to traffic and transportation and circulation, issues related to land use, and various traffic analyses of traffic conditions within the City.

⁵ County of Los Angeles, Metropolitan Transportation Authority. June 2002. *2002 Congestion Management Program for Los Angeles County*. Contact: Metropolitan Transportation Authority, One Gateway Plaza, Los Angeles, CA 90012-2952.

⁶ Linscott, Law & Greenspan Engineers. 4 November 2004. *Traffic Impact Analysis*. Prepared for: Sapphos Environmental, Inc., 133 Martin Alley, Pasadena, CA 91105. Prepared by: Linscott, Law & Greenspan Engineers, 1580 Corporate Drive, Suite 122, Costa Mesa, CA 92626. Contact: City of Long Beach, Department of Community Development, 333 West Ocean Boulevard, Long Beach, CA 90802.

3.11.2 Existing Conditions

Regional Roadway System

The proposed project is located in the City of Long Beach, County of Los Angeles, California (Figure 2.1-1, *Regional Vicinity*). The Long Beach Memorial Medical Center campus (Campus) is located less than 1 mile south of U.S. Interstate 405 (San Diego Freeway), approximately 1 mile east of U.S. Interstate 710 (Long Beach Freeway), and approximately 1 mile north of State Route 1 (Pacific Coast Highway). The Campus is located approximately 3.5 miles northeast of the Port of Long Beach, approximately 1 mile east of the Los Angeles River, and approximately 1 mile west of the Long Beach Airport.

U.S. Interstate 405 (I-405) primarily provides regional access to the proposed project site. The I-405 generally runs in a northwest to southeast direction in the vicinity of the proposed project site. This eight-lane facility is a major highway, which extends through the County of Los Angeles and links Long Beach with the neighboring communities of Westminster, Seal Beach, Lakewood, and Carson, as well as more distant locations such as the near-coastal areas of both Los Angeles and Orange County, as well as San Diego. High-occupancy vehicle (HOV) lanes exist on the I-405 throughout Los Angeles and Orange County. In the proposed project vicinity, there is one HOV lane in each direction; there are a total of 10 travel lanes on the I-405. Freeway access to the proposed project site is provided via the Long Beach Boulevard/I-405 interchange, Atlantic Avenue/I-405 interchange, Orange Avenue/I-405 southbound (SB) ramps interchange, and the 32nd Street/I-405 northbound (NB) ramps interchange.

Street Network

The Campus is bound on the north by East Spring Street, on the east by Atlantic Avenue, on the south by Willow Street, and on the west by Long Beach Boulevard (Figure 2.1-2, *Long Beach Memorial Medical Center Location*). Access to the site is provided via East Spring Street from the north, Atlantic Avenue from the east, Willow Street and 27th Street to the south, and Long Beach Boulevard to the west.

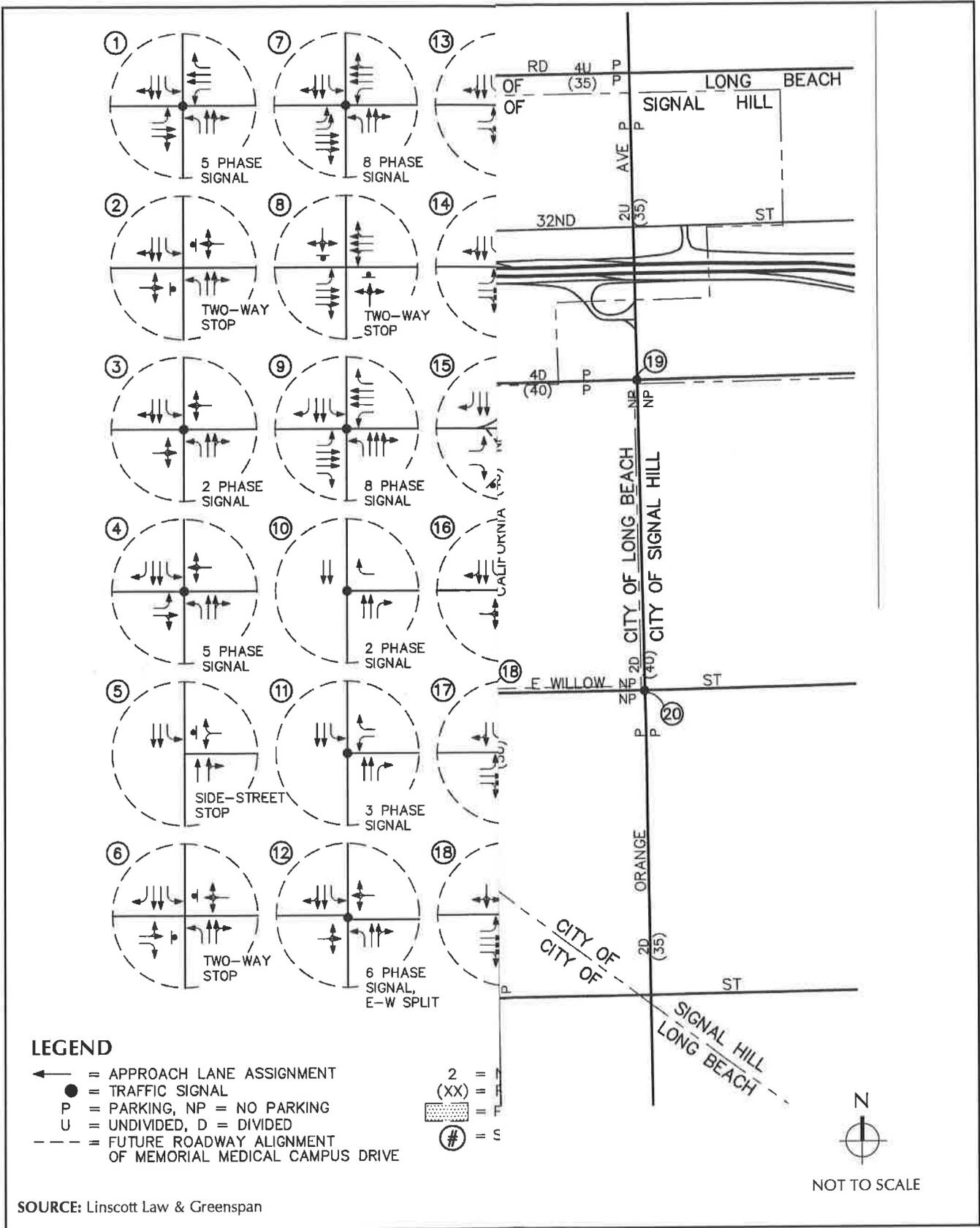
The principal local network of streets serving the proposed project includes Atlantic Avenue, Long Beach Boulevard, Wardlow Road, Spring Street, and Willow Avenue. The existing lane configurations were documented as part of the traffic impact analysis (Appendix J). Coordination was undertaken with the City of Long Beach staff to define study intersections impacted by the proposed project (Figure 3.11.2-1, *Existing Roadway Conditions and Intersection Controls*).⁷

Each of the local network streets serving the proposed project are listed and analyzed below:

Atlantic Avenue

Atlantic Avenue is a four-lane, divided roadway oriented in the north-south direction, with a raised center median along the project frontage, providing two lanes of travel in each direction. Parking is not permitted along the east side of this roadway, but it is permitted on the west side of this roadway along the project frontage. North of Spring Street, curbside parking is prohibited on both sides of Atlantic Avenue. On-street parking is permitted along either side of this roadway south of

⁷ Richard Barretto, Linscott, Law & Greenspan Engineers, *Personal Communication*, September 2004. Dave Roseman, Traffic Engineer, City of Long Beach.



SOURCE: Linscott Law & Greenspan



FIGURE 3.11.2-1
 Planning Roadway Conditions and Intersection Controls

Willow Street. The posted speed limit on Atlantic Avenue is 35 miles per hour (mph). Traffic signals control the study intersections on Atlantic Avenue at Wardlow Road, I-405 SB ramps, Spring Street, Columbia Street, 28th Street (Memorial Medical Center), Willow Street, and Hill Street.

Long Beach Boulevard

Long Beach Boulevard is a four-lane, divided roadway oriented in the north-south direction, which borders the proposed project site to the west. Parking is permitted on either side of this roadway, within the vicinity of the proposed project. The posted speed limit on Long Beach Boulevard is 35 mph north of Columbia Street and 30 mph south of Willow Street. Traffic signals control the study intersections on Long Beach Boulevard at Wardlow Road, Spring Street, Columbia Street, Patterson Street (Memorial Drive), 27th Street, Willow Street, and Hill Street.

Wardlow Road

Wardlow Road is a four-lane, divided roadway oriented in the east-west direction. In general, on-street parking is permitted along this roadway in the vicinity of the proposed project. The posted speed limit on Wardlow Road is 40 mph west of Long Beach Boulevard and 35 mph east of Long Beach Boulevard. Traffic signals control the study intersections on Wardlow Road at Long Beach Boulevard and Atlantic Avenue.

Spring Street

Spring Street is a four-lane, divided roadway oriented in the east-west direction, which borders the proposed project site to the north. Spring Street is a two-lane, divided roadway west of Del Mar Avenue. Parking is not permitted on either side of this roadway, within the vicinity of the proposed project. The posted speed limit on Spring Street is 30 mph west of Long Beach Boulevard and 40 mph east of Long Beach Boulevard. Traffic signals control the study intersections on Spring Street at Pacific Avenue, Long Beach Boulevard, Atlantic Avenue, California Avenue, and Orange Avenue.

Willow Street

Willow Street is a six-lane, divided roadway oriented in the east-west direction, with a raised median, providing three travel lanes in each direction. In general, parking is permitted along either side of this roadway, within the vicinity of the proposed project. The posted speed limit on Willow Street is 35 mph west of Atlantic Avenue and 40 mph east of Atlantic Avenue.

Traffic Volumes

Twenty-eight (28) key intersections were identified and selected for evaluation as the locations at which to assess existing and future traffic operating conditions. Some portion of potential project-related traffic would pass through each of these intersections, and their analysis would reveal the expected relative impacts of the proposed project. The 28 key intersections were selected for evaluation based on discussions with the City and in consideration of the criteria in the current County CMP traffic impact guidelines. The 28 key intersections are listed below:

- 1) Atlantic Avenue/Spring Street
- 2) Atlantic Avenue/East 29th Street
- 3) Atlantic Avenue/Columbia Street

- 4) Atlantic Avenue/Memorial Medical Center–28th Street
- 5) Atlantic Avenue/East Patterson Street
- 6) Atlantic Avenue/27th Street
- 7) Atlantic Avenue/Willow Street
- 8) Pasadena Avenue/Willow Street
- 9) Long Beach Boulevard/Willow Street
- 10) Long Beach Boulevard/27th Street
- 11) Long Beach Boulevard/East Patterson Street
- 12) Long Beach Boulevard/Columbia Street
- 13) Long Beach Boulevard/Spring Street
- 14) Atlantic Avenue/Wardlow Road
- 15) Atlantic Avenue/I-405 Southbound (SB) Ramps
- 16) Atlantic Avenue/Hill Street
- 17) California Avenue/Spring Street
- 18) California Avenue/Willow Street
- 19) Orange Avenue/Spring Street
- 20) Orange Avenue/Willow Street
- 21) Long Beach Boulevard/Wardlow Road
- 22) Long Beach Boulevard/I-405 Northbound (NB) Ramps
- 23) I-405 SB Ramps/Crest Drive
- 24) Long Beach Boulevard/Crest Drive
- 25) Long Beach Boulevard/Hill Street
- 26) Pacific Avenue/Spring Street
- 27) Pacific Avenue/Willow Street
- 28) Pasadena Avenue/Spring Street

The existing a.m. and p.m. peak-hour traffic counts were conducted in October 2004 (Appendix J).⁸ The existing a.m. and p.m. peak-hour traffic volumes at key study intersections (Figure 3.11.2-2a, *Existing A.M. Peak-Hour Traffic Volumes*, and Figure 3.11.2-2b, *Existing P.M. Peak-Hour Traffic Volumes*).

Public Transit

Long Beach Transit (LBT), the Los Angeles Metropolitan Transit Authority (MTA), and the Metro Blue Line Light Rail Transit System provide public transit services in the vicinity of the proposed project.

Long Beach Transit

LBT Route No. 5 travels north and south on Long Beach Boulevard adjacent to the proposed project site, with a bus stop at the intersection of Long Beach Boulevard and Willow Street and Long Beach and Memorial Medical Center/28th Street. LBT Route Nos. 45, 46, 61, 66, 81, 101, 102, 103, 131, 171, 172, 173, 174, 191, and 192 all provide direct access to LBT Route No. 5.

⁸ Linscott, Law & Greenspan Engineers. 4 November 2004. *Traffic Impact Analysis*. Prepared for: Sapphos Environmental, Inc., 133 Martin Alley, Pasadena, CA 91105. Prepared by: Linscott, Law & Greenspan Engineers, 1580 Corporate Drive, Suite 122, Costa Mesa, CA 92626. Contact: City of Long Beach, Department of Community Development, 333 West Ocean Boulevard, Long Beach, CA 90802.

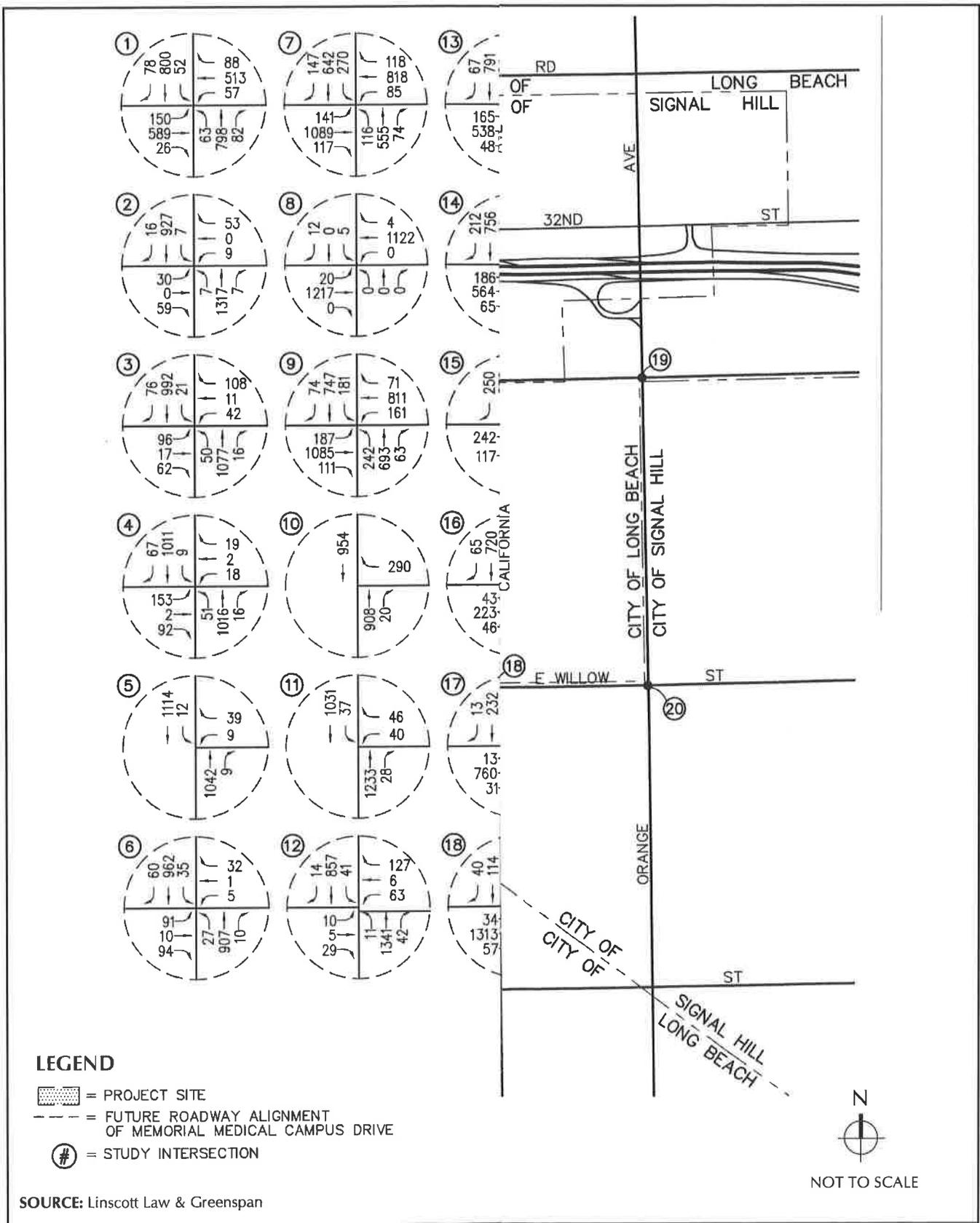


FIGURE 3.11.2-2b
Existing P.M. Peak-Hour Traffic Volumes

LBT Route Nos. 61 and 62 travel north and south on Atlantic Avenue east of the proposed project site, with a bus stop at the intersection of Atlantic Avenue and Willow Street. LBT Route Nos. 5, 7, 45, 46, 81, 101, 102, 103, 131, 171, 172, 173, 174, 191, and 192 all provide direct access to LBT Route Nos. 61 and 62.

Metropolitan Transportation Authority

MTA Route Red No. 60, Route Orange No. 232, and Route Green No. 360 travel north and south on Long Beach Boulevard near the proposed project site. Red Route No. 60 travels from Long Beach Boulevard to Pacific Boulevard to Santa Fe Avenue to Downtown Los Angeles. Orange Route No. 232 travels from Long Beach Boulevard to Anaheim Street to Pacific Coast Highway to Sepulveda Boulevard to the Los Angeles International Airport (LAX) City Bus Center.

The LBT service area extends beyond the City in portions of Signal Hill, Cerritos, Lakewood, San Pedro, Paramount, Compton, Los Angeles, Hawaiian Gardens, and Seal Beach. All LBT routes connect with the Metro Blue Line Light Rail Rapid Transit System. Bus transfers provide for discounted fares on the Blue Line.

Metro Blue Line Light Rail Transit System

Given that bus service via LBT is provided between Willow Station and the proposed project site, patrons would be able to utilize the existing Metro Blue Line Light Rail Transit System via Willow Station. In addition, Willow Station is located immediately south of the proposed project site by less than 0.25 mile, allowing patrons to walk to the Campus.

Intersection Conditions

Level of service (LOS) is a qualitative measure used to describe the condition of traffic flow, ranging from excellent conditions at LOS A to overloaded conditions at LOS F. The City of Long Beach and the City of Signal Hill consider LOS D to be the minimum acceptable condition that should be maintained during the peak commute hours for roads and highways in the vicinity of the proposed project site.

Existing a.m. and p.m. peak-hour operating conditions for the 28 key study intersections were evaluated using the Intersection Capacity Utilization (ICU) methodology for signalized intersections and the methodology outlined in the Highway Capacity Manual 2000⁹ for unsignalized intersections (Table 3.11.2-1, *Level of Service Criteria for Unsignalized Intersections*, and Table 3.11.2-2, *Existing Peak Hours of Service*).

⁹ Highway Research Board. 1965. *Highway Capacity Manual* (Special Report No. 87). Washington, DC: Highway Research Board.

**TABLE 3.11.2-1
LEVEL OF SERVICE CRITERIA FOR UNSIGNALIZED INTERSECTIONS**

LOS	Highway Capacity Manual Delay Value (sec/veh)	LOS Description
A	≤ 10.0	Little or no delay
B	> 10.0 and ≤ 15.0	Short traffic delays
C	> 15.0 and ≤ 25.0	Average traffic delays
D	> 25.0 and ≤ 35.0	Long traffic delays
E	> 35.0 and ≤ 50.0	Very long traffic delays
F	> 50.0	Severe congestion

SOURCE:

Linscott, Law & Greenspan Engineers. 4 November 2004. *Traffic Impact Analysis*. Prepared for: Sapphos Environmental, Inc., 133 Martin Alley, Pasadena, CA 91105; and City of Long Beach, Department of Community Development, 333 West Ocean Boulevard, Long Beach, CA 90802. Prepared by: Linscott, Law & Greenspan Engineers, 1580 Corporate Drive, Suite 122, Costa Mesa, CA 92626.

**TABLE 3.11.2-2
EXISTING PEAK HOURS OF SERVICE**

	Key Intersections	Time Period	Control Type	ICU/HCM Delay Value (sec/veh)	LOS
1.	Atlantic Avenue/ Spring Street	a.m. p.m.	5Ø Traffic Signal	0.781 0.687	C B
2.	Atlantic Avenue/ East 29th Street	a.m. p.m.	Two-Way Stop	1.40 5.40	A A
3.	Atlantic Avenue/ Columbia Street	a.m. p.m.	2Ø Traffic Signal	0.582 0.574	A A
4.	Atlantic Avenue/Memorial Medical Center–East 28th Street	a.m. p.m.	5Ø Traffic Signal	0.565 0.588	A A
5.	Atlantic Avenue/ East Patterson Street	a.m. p.m.	Side Street Stop	0.30 0.60	A A
6.	Atlantic Avenue/ 27th Street	a.m. p.m.	Two-Way Stop	4.50 29.30	A D
7.	Atlantic Avenue/ Willow Street	a.m. p.m.	8Ø Traffic Signal	0.732 0.850	C D
8.	Pasadena Avenue/ Willow Street	a.m. p.m.	Two-Way Stop	0.60 0.40	A A
9.	Long Beach Boulevard/ Willow Street	a.m. p.m.	8Ø Traffic Signal	0.878 0.891	D D
10.	Long Beach Boulevard/ 27th Street	a.m. p.m.	2Ø Traffic Signal	0.454 0.579	A A
11.	Long Beach Boulevard/ East Patterson Street	a.m. p.m.	3Ø Traffic Signal	0.421 0.553	A A
12.	Long Beach Boulevard/ Columbia Street	a.m. p.m.	6Ø Traffic Signal	0.541 0.789	A C
13.	Long Beach Boulevard/ Spring Street	a.m. p.m.	3Ø Traffic Signal	0.859 1.004	D F
14.	Atlantic Avenue/ Wardlow Road	a.m. p.m.	8Ø Traffic Signal	0.834 0.795	D C
15.	Atlantic Avenue/ I-405 SB Ramps	a.m. p.m.	2Ø Traffic Signal	0.584 0.683	A B
16.	Atlantic Avenue/ Hill Street	a.m. p.m.	2Ø Traffic Signal	0.568 0.576	A A
17.	California Avenue/ Spring Street	a.m. p.m.	2Ø Traffic Signal	0.548 0.532	A A
18.	California Avenue/ Willow Street	a.m. p.m.	2Ø Traffic Signal	0.506 0.561	A A
19.	Orange Avenue/ Spring Street	a.m. p.m.	2Ø Traffic Signal	0.745 0.708	C C
20.	Orange Avenue/ Willow Street	a.m. p.m.	5Ø Traffic Signal	0.743 0.819	C D
21.	Long Beach Boulevard/ Wardlow Road	a.m. p.m.	8Ø Traffic Signal	0.934 0.949	E E

**TABLE 3.11.2-2
EXISTING PEAK HOURS OF SERVICE, Continued**

	Key Intersections	Time Period	Control Type	ICU/HCM Delay Value (sec/veh)	LOS
22.	Long Beach Boulevard/ I-405 NB Ramp	a.m. p.m.	Side Street Stop	30.10 40.00	D E
23.	I-405 SB Ramps/ Crest Drive	a.m. p.m.	Side Street Stop	19.20 6.90	C A
24.	Long Beach Boulevard/ Crest Drive	a.m. p.m.	Side Street Stop	2.10 1.90	A A
25.	Long Beach Boulevard/ Hill Street	a.m. p.m.	5Ø Traffic Signal	0.605 0.676	B B
26.	Pacific Avenue/ Spring Street	a.m. p.m.	2Ø Traffic Signal	0.667 0.723	B C
27.	Pacific Avenue/ Willow Street	a.m. p.m.	5Ø Traffic Signal	0.717 0.764	C C
28.	Pasadena Avenue/ Spring Street	a.m. p.m.	Two-Way Stop	2.20 16.20	A C

NOTES:

Bold ICU/LOS values indicate adverse service levels based on City LOS standards.
sec/veh = seconds per vehicle (delay).

SOURCE:

Linscott, Law & Greenspan Engineers. 4 November 2004. *Traffic Impact Analysis*. Prepared for: Sapphos Environmental, Inc., 133 Martin Alley, Pasadena, CA 91105; and City of Long Beach, Department of Community Development, 333 West Ocean Boulevard, Long Beach, CA 90802. Prepared by: Linscott, Law & Greenspan Engineers, 1580 Corporate Drive, Suite 122, Costa Mesa, CA 92626.

Table 3.11.2-2 summarizes the existing peak-hour LOS calculations for the 28 study intersections based on existing year 2004 traffic volumes and current street geometry. Review of Table 3.11.2-2 indicates that, based on the ICU/HCM method of analysis and the City's LOS criteria, 3 of the 28 key study intersections currently operate at an unacceptable LOS (LOS E or worse) during the a.m. and/or p.m. peak hours. The intersections that currently operate at LOS E and/or LOS F during the a.m. peak hour and/or p.m. peak hour include Long Beach Boulevard/Spring Street, Long Beach Boulevard/Wardlow Road, and Long Beach Boulevard/I-405 NB ramps. The remaining 25 key study intersections currently operate at LOS D or better during the commuter peak hours.

Existing Development

The existing uses at the Campus include inpatient medical facilities, outpatient medical facilities, and mixed-use facilities, including a child care center, nutrition programs, and outpatient clinics. There are approximately 1,213,945 gross square feet of structures located within the Campus. Table 3.11.2-3, *Existing Development Tabulation*, summarizes the existing development tabulation at the Campus. There are two licensed hospitals within the Campus with a total floor area of 872,792 square feet: the Long Beach Memorial Medical Center (LBMMC) with 459 licensed beds and Miller Children's Hospital (MCH) with 281 licensed beds. These facilities are centrally located on the Campus, north of 27th Street, east of Long Beach Boulevard, south of Columbia Street, and west of Atlantic Avenue. In addition to inpatient services, outpatient services are provided in structures located north and south of LBMMC and MCH.

**TABLE 3.11.2-3
EXISTING DEVELOPMENT TABULATION**

Building Number per Existing Building Plan¹	Building	Gross Floor Areas (Square Foot)
1	Miller Children's Hospital	175,162
2	Long Beach Memorial Medical Center	697,630
3	Administration Building	129,531
4	Memorial West Facility (Rehab) ²	107,622
5	Miller House	25,000
6	Ranch House / WIC Medical Center	12,000
8	Memorial Guest Residence Hotel	12,000
9	Research Building	20,000
17	Buffums Plaza	35,000
	Total	1,213,945

NOTES:

¹ Building numbers as shown on diagram. Taylor, July 2004. "Existing Buildings." Contact: Taylor, 2220 University Drive, Newport Beach, CA 92660.

² Gross floor area of the Memorial West Facility includes the Rehab (31,167 square feet).

Based on a comprehensive inventory of on-site spaces, the traffic impact analysis (Appendix J)¹⁰ determined that there are 3,452 parking spaces located in 11 locations throughout the Campus. Figure 2.2-3, *Existing Parking*, identifies the parking locations of the Campus, whereas Table 3.11.2-4, *Existing Parking Supply*, presents the existing parking supply within each parking location and parking type/designation (i.e., patient/visitor, staff/employee, doctor/physician, reserved, etc.).

¹⁰ Linscott, Law & Greenspan Engineers. 4 November 2004. *Traffic Impact Analysis*. Prepared for: Sapphos Environmental, Inc., 133 Martin Alley, Pasadena, CA 91105. Prepared by: Linscott, Law & Greenspan Engineers, 1580 Corporate Drive, Suite 122, Costa Mesa, CA 92626. Contact: City of Long Beach, Department of Community Development, 333 West Ocean Boulevard, Long Beach, CA 90802.

**TABLE 3.11.2-4
EXISTING PARKING SUPPLY**

Parking Lot	Staff/Employee Spaces	Patient/Visitor Spaces	Doctor Spaces	Total Spaces
Lot A	675	—	—	675
Lot B	—	217	—	217
Lot C	—	74	—	74
Lot D	—	—	28*	28
Lot E	85	—	—	85
Lot F	—	26	60	86
Lot G	—	—	87	87
Lot H	—	29	—	29
Lot I	150	—	—	150
Lot J	1,430	164	—	1,594
Lot K	—	427	—	427
Total	2,340	937	175	3,452

NOTE:

*Spaces shared with patients and visitors.

SOURCE:

Linscott, Law & Greenspan Engineers. 4 November 2004. *Traffic Impact Analysis*. Prepared for: Sapphos Environmental, Inc., 133 Martin Alley, Pasadena, CA 91105; and City of Long Beach, Department of Community Development, 333 West Ocean Boulevard, Long Beach, CA 90802. Prepared by: Linscott, Law & Greenspan Engineers, 1580 Corporate Drive, Suite 122, Costa Mesa, CA 92626.

3.11.3 Significance Thresholds

The potential for the proposed project to result in impacts related to traffic and transportation was analyzed in relation to the questions contained in Appendix G of the State of California Environmental Quality Act (CEQA) Guidelines, as modified by the County CMP and City of Long Beach General Plan. Thresholds of significance for traffic levels are separated into areas deemed deficient and those identified as significant. The term *deficiency* refers to the operational level below which traffic movement is no longer considered acceptable. Although the County CMP states that LOS E or better is acceptable, the City of Long Beach General Plan states that LOS D is the lowest acceptable LOS at intersections. Thus, any intersections operating at LOS E or F are considered deficient.

The proposed project would normally be considered to have a significant impact to traffic and transportation when the potential for any one of the following seven thresholds occurs:

- Increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume-to-capacity (V/C) ratio on roads, or congestion at intersections)
- Exceedance, either individually or cumulatively, of a LOS standard established by the County CMP and City of Long Beach General Plan for designated roads or highways. Impacts to local and regional transportation systems are considered significant if one of two conditions occur:
 - An unacceptable peak-hour LOS (i.e., LOS E or F) at any of the key intersections is projected. The City of Long Beach considers LOS D (ICU =

0.801 to 0.900) to be the minimum acceptable LOS for all other intersections. For the City, the current LOS, if worse than LOS D, should also be maintained.

- The project increases traffic demand at the study intersection by 2 percent of capacity (ICU increase ≥ 0.020), causing or worsening LOS E or F (ICU > 0.901). At unsignalized intersections, a significant adverse traffic impact is defined as a project that adds 2 percent of more traffic to delay (seconds per vehicle) at an intersection operating at LOS E or F.
- Change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks
- Substantial increase in hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)
- Inadequate emergency access
- Inadequate parking capacity
- Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)

3.11.4 Impact Analysis

This section analyzes the potential for significant impacts on traffic and transportation that would occur from the implementation of the proposed project. A project's traffic and transportation impacts can be separated into operational and future impacts, usually long-term impacts and construction impacts, which are short-term impacts.

The relative impact of the added project traffic volumes generated by the proposed project during the a.m. and p.m. peak hours was evaluated based on analysis of future operating conditions at the 28 key study intersections, both with and without the proposed project. The significance of the potential impacts of the proposed project at each key intersection was then evaluated using the City's LOS standards and traffic impact criteria.

Implementation of the proposed project would be expected to have a potentially significant effect on the V/C ratio of existing streets and intersections in the vicinity of the proposed project. The LOS for several of the surrounding streets and freeways would degrade to below an acceptable level with the implementation of the proposed project. In addition, the implementation of the proposed project may have a significant impact on LOS standards established by the County for the CMP roadway system.

Direct and Indirect Impacts

Project Traffic Generation

The proposed project would lead to a physical change in the environment, the development of currently undeveloped land; therefore, it would result in impacts to the LOS of the surrounding

local roadways and the CMP roadway system. Where a CMP deficiency has been projected, necessary mitigation measures have been identified to restore traffic operation, the proposed project's share of new traffic on the impacted CMP facility has been calculated, and the cost of improvements necessary to restore traffic operations to an acceptable LOS has been estimated.

Traffic generation is expressed in vehicle trip ends, defined as one-way vehicular movements, either entering or exiting the generating land use. Generation factors and equations used in the traffic forecasting procedure are typically found in Trip Generation.¹¹

Table 3.11.4-1, *Project Traffic Generation Rates*, summarizes the trip generation rates used in forecasting the vehicular trips generated by the proposed project.

**TABLE 3.11.4-1
PROJECT TRAFFIC GENERATION RATES**

ITE Land Use Code / Project Description	Daily 2-Way	A.M. Peak Hour			P.M. Peak Hour		
		Enter	Exit	Total	Enter	Exit	Total
Generation Factors							
610: Hospital (TE/bed)	11.81	0.79	0.34	1.13	0.47	0.83	1.30
720: Medical-Dental Office Building (TE/1,000 square feet)	36.13	1.96	0.52	2.48	1.00	2.72	3.72

NOTES:

TE/bed = Trip ends per bed

TE/1,000 square feet = Trip ends per 1,000 square feet of development.

SOURCE:

Institute of Transportation Engineers. 2003. *Trip Generation*. Seventh Edition. Washington, DC: Institute of Transportation Engineers.

Table 3.11.4-2, *Project Traffic Generation Forecast*, summarizes the trip generation forecast for the proposed project. Table 3.11.4-2 indicates that the proposed expansion project, at build-out, is expected to generate approximately 9,377 daily trips, with 696 trips (534 inbound, 162 outbound) produced in the a.m. peak hour and 979 trips (283 inbound, 696 outbound) produced in the p.m. peak hour on a typical weekday.

¹¹ Institute of Transportation Engineers. 2003. *Trip Generation*. Seventh Edition. Washington, DC: Institute of Transportation Engineers.

**TABLE 3.11.4-2
PROJECT TRAFFIC GENERATION FORECAST**

Project Description	Daily 2-Way	A.M. Peak Hour			P.M. Peak Hour		
		Enter	Exit	Total	Enter	Exit	Total
Year 2008							
TCI Phase I (83,630 square feet)	3,022	164	43	207	84	227	311
MCH pediatric inpatient tower Phase I (72 beds)	850	57	24	81	34	60	94
MCH pediatric outpatient tower (80,000 square feet)	2,890	157	42	199	80	218	298
Year 2008 Subtotal:	6,762	378	109	487	198	505	703
Year 2014							
TCI Phase II (42,300 square feet)	1,528	83	22	105	42	115	157
MCH pediatric inpatient tower Phase II (92 beds)	1,087	73	31	104	43	76	119
Year 2014 Subtotal:	2,615	156	53	209	85	191	276
Project Total:	9,377	534	162	696	283	696	979

SOURCE:

Institute of Transportation Engineers. 2003. *Trip Generation*. Seventh Edition. Washington, DC: Institute of Transportation Engineers.

Phase I of the proposed project is forecast to generate 6,762 daily trips, with 487 trips produced in the a.m. peak hour and 703 trips produced in the p.m. peak hour on a typical weekday. Phase II of the proposed project is forecast to generate 2,615 daily trips, with 209 trips produced in the a.m. peak hour and 276 trips produced in the p.m. peak hour on a typical weekday.

Air Traffic Impact

Implementation of the proposed project would not be expected to result in significant impacts to air traffic patterns. The proposed project is located approximately 1 mile west of the Long Beach Airport. The proposed project would be developed completely within the existing footprint of the Campus. There would be no change in land use patterns in relation to existing air traffic patterns; similarly, there would be no anticipated impacts related to safety in relation to land uses for the proposed project area.

Hazards Due to Design Feature Impacts

Implementation of the proposed project would not be expected to result in design modifications to roadway features. However, there would be no expected increase in hazards (e.g., sharp curves or dangerous intersections). The proposed project would likely require minor modifications to the adjacent external street system and the improvements to the internal circulation system. The result of any modifications would be designed to improve overall traffic flow and circulation patterns in the immediate vicinity of the proposed project site, as well as improve site access and internal circulation.

Emergency Vehicle Access Impact

Implementation of the proposed project would have the potential to result in significant impacts to emergency access, thus requiring the consideration of mitigation measures. Construction trips would be expected to use emergency access routes to the Campus during the anticipated 10-year

build-out of the proposed project, thus requiring the development of a Traffic Safety Plan for each phase of construction to ensure the provision of adequate emergency access throughout construction of the proposed project. Similarly, operation of the proposed project improvements would be expected to increase the trips generated by the Campus by as much as 50 percent at build-out, thus requiring the consideration of mitigation measures that ensure emergency access is not compromised. The mitigation measures will address the development of a Traffic Safety Plan for each phase of construction to ensure that emergency vehicle routes operate properly.

Parking Impact

Implementation of the proposed project would be expected to result in significant impacts on parking capacity, thus requiring the consideration of mitigation measures. The proposed project would result in the displacement of existing parking during each phase of construction. There are five elements of the proposed project that require the removal of parking or that generate demand for new parking: (1) TCI Phases I and II; (2) MCH pediatric inpatient tower Phases I and II, utility trench, and central plant building; (3) MCH pediatric outpatient building; (4) MCH link building; and (5) roadway realignment. The initial phase of construction would utilize the 259 available parking spaces. When available parking is exhausted in the later phase of construction, additional parking spaces would be required. A minimum of 860 additional parking spaces would be required to be in place to facilitate the initiation of the first three proposed project elements: (1) TCI Phase I; (2) MCH pediatric inpatient tower Phase I, utility trench, and central plant building; and (3) roadway realignment.

To determine the number of parking spaces required to support the proposed project, parking demand was calculated using parking codes per the City of Long Beach Title 21, Zoning Regulations, Chapter 21.41: "Off-Street Parking and Loading Requirements."¹²

The City zoning code specifies a parking ratio of two spaces per bed for hospitals and five spaces per 1,000 gross floor area (GFA) of medical office uses. The City parking codes were applied to the existing and proposed development tabulation of the LBMMC. Table 3.11.4-3, *City Code Parking Requirements*, summarizes the square-footage information and the parking requirements for the existing land uses and proposed project. As shown, direct application of the City's code to the existing development results in a code requirement of 3,193 parking spaces, whereas the proposed project has a code requirement of 1,418 parking spaces, for a combined code requirement of 4,611 parking spaces.

¹² City of Long Beach, Department of Planning and Building. 1988. Title 21, Zoning Regulations, Chapter 21.41: "Off-Street Parking and Loading Requirements." Prepared by: City of Long Beach, Department of Planning and Building, City Hall, 333 West Ocean Boulevard, Long Beach, CA 90802. Available at: <http://www.longbeach.gov/apps/cityclerk/lbmc/title-21/frame.htm>

**TABLE 3.11.4-3
CITY CODE PARKING REQUIREMENTS**

Project Description	Size (Square footage or number of beds)		City of Long Beach Code Parking Ratio	Spaces Required
Existing Development				
LBMMC	462	Beds	2 spaces per bed	924
Miller Children's Hospital	281	Beds	2 spaces per bed	562
LBMMC remaining medical facilities	341,153	SF	5 spaces per 1,000 SF	1,707
Subtotal – Existing Development Code Parking Requirement:				3,193
Existing Parking Supply:				3,452
Parking Surplus/Deficiency (+/-):				+ 259
Proposed Development				
Todd Cancer Institute	125,930	SF	5 spaces per 1,000 SF	630
Miller Children's Hospital pediatric inpatient tower	164	Beds	2 spaces per bed	328
Miller Children's Hospital pediatric outpatient building	80,000	SF	5 spaces per 1,000 SF	400
Millers Children's Hospital link building	20,000	SF	—	50
Millers Children's Hospital central plant building	3,500	SF	—	10
Subtotal – Proposed Development Code Parking Requirement:				1,418
Total Code Parking Requirement (Existing + Proposed):				4,611
Existing Parking Supply:				3,452
Net Parking Surplus/Deficiency (+/-) per Code:				-1,159

NOTE:

SF = Square footage

SOURCE:

City of Long Beach, Department of Planning and Building. 1988. Title 21, Zoning Regulations, Chapter 21.41: "Off-Street Parking and Loading Requirements." Prepared by: City of Long Beach, Department of Planning and Building, City Hall, 333 West Ocean Boulevard, Long Beach, CA 90802. Available at: <http://www.longbeach.gov/apps/cityclerk/lbmc/title-21/frame.htm>

In addition, a total of 577 parking spaces would be permanently lost due to development of five project elements: (1) TCI Phase I; (2) MCH patient inpatient tower Phase I, utility trench, and central plant building; (3) roadway realignment; (4) MCH pediatric outpatient building; and (5) TCI Phase II (Table 3.11.4-4, *Existing Parking Spaces Converted to Development*). In addition, construction staging and soil remediation impacts on existing parking were also considered. Concurrent staging for TCI Phase I and the MCH pediatric inpatient tower, utility trench, and central plant building would be expected to result in temporary impacts to an additional 190 parking spaces (Table 3.11.4-5, *Additional Parking Spaces Required During Construction*).

**TABLE 3.11.4-4
EXISTING PARKING SPACES CONVERTED TO DEVELOPMENT**

Project Element	Construction Schedule	Parking Spaces Removed
Construction Parking Requirements July 2005 to December 2007		
Todd Cancer Institute Phase I	Jul 2005 to Dec 2007	171
Miller Children's Hospital pediatric inpatient tower Phase I, utility trench, and central plant building	Jul 2005 to Dec 2007	100
Roadway realignment	Jul 2005 to Jun 2006	195
Total Parking Converted During Construction July 2005 to December 2007		466
Construction Parking Requirements January 2006 to June 2007		
Miller Children's Hospital pediatric outpatient building	Jan 2006 to Jun 2007	43
Total Parking Converted During Construction January 2006 to June 2007		43
Construction Parking Requirements January 2010 to June 2011		
Todd Cancer Institute Phase II	Jul 2010 to Jun 2011	68
Miller Children's Hospital link building	Jul 2010 to Jun 2011	-
Total Parking Converted During Construction July 2010 to June 2011		68
Construction Parking Requirements January 2012 to June 2013		
Miller Children's Hospital pediatric inpatient tower Phase II	Jan 2012 to Jun 2013	-
Total Parking Converted During Construction July 2010 to June 2011		-
Net Reduction of Existing Parking Spaces		577

**TABLE 3.11.4-5
ADDITIONAL PARKING SPACES REQUIRED DURING CONSTRUCTION**

Project Element	Construction Schedule	Temporary Construction Impacts to Parking Spaces
Construction Parking Requirements July 2005 to December 2007		
Todd Cancer Institute Phase I	Jul 2005 to Dec 2007	135
Miller Children's Hospital pediatric inpatient tower Phase I, utility trench, and central plant building	Jul 2005 to Dec 2007	55
Roadway realignment	Jul 2005 to Jun 2006	—
Total Additional Parking Required During Construction July 2005 to December 2007		190
Construction Parking Requirements January 2006 to June 2007		
Miller Children's Hospital pediatric outpatient building	Jan 2006 to Jun 2007	—
Total Additional Parking Required During Construction January 2006 to June 2007		—
Construction Parking Requirements January 2010 to June 2011		
Todd Cancer Institute Phase II	Jul 2010 to Jun 2011	207
Miller Children's Hospital link building	Jul 2010 to Jun 2011	—
Total Additional Parking Required During Construction July 2010 to June 2011		207
Construction Parking Requirements January 2012 to June 2013		
Miller Children's Hospital pediatric inpatient tower Phase II	Jan 2012 to Jun 2013	20
Total Additional Parking Required During Construction July 2010 to June 2011		20
Maximum Temporary Construction Impacts to Parking		207

With a current parking supply of 3,452 parking spaces, the Campus would have a deficiency of 1,153 parking spaces when compared to the City parking code requirement. The proposed project includes a parking program that would meet all parking deficiencies.

In recognition of the demand for parking generated by the elements of the proposed project, LBMHC identified opportunities to accommodate additional parking within and immediately adjacent to the Campus (Table 3.11.4-6, *Parking Opportunities*).

**TABLE 3.11.4-6
PARKING OPPORTUNITIES**

Proposed Parking Site	Potential Surface Parking
Off-Site Lease Opportunities	
Site L	296
Site M	238
Capacity of Off-Site Lease Opportunities	534
On-Site Conversion to Surface Parking	
Site N	121
Site P	68
Site Q	71
Site R	96
Site S	72
Site T	87
Capacity of On-Site Conversion to Surface Parking	515
Total Available Parking Opportunities	1,049

Based on the existing available resources, LBMCC defined a parking program to accommodate the parking demand resulting from construction and operation of the elements of the proposed project (Table 3.11.4-7, *Construction Parking Program*, and Table 3.11.4-8, *Operation Parking Program*). The combined use of existing on-site parking, leasing immediately adjacent parking, and development of additional on-site parking would provide sufficient parking to support construction and operation of three elements of the proposed project: (1) TCI Phase I; (2) MCH pediatric inpatient tower Phase I, utility trench, and central plant building; and (3) roadway realignment. However, the identified parking opportunities would be insufficient by approximately 681 parking spaces to support operation of the last four elements of the proposed project: (1) MCH pediatric outpatient building, (2) TCI Phase II, (3) MCH link building Phase II, and (4) MCH Phase II. If the lease of Lots L and M could not be renewed in year 2015, there would be a need to replace the 534 parking spaces provided at that location, thus suggesting a total possible shortfall of 1,215 parking spaces in year 2015. It would be feasible to address this shortfall through development of a parking structure at the location of the existing surface Lot K. Development of a structure on Lot K would displace 189 parking spaces during construction that would need to be incorporated into the design of the parking structure for a total capacity of 1,404. Thus, the inclusion of the parking program will provide a sufficient number of parking spaces that will be provided throughout the construction of the proposed project.

**TABLE 3.11.4-7
CONSTRUCTION PARKING PROGRAM**

	Period	Parking Required	Parking Program
STEP A	Roadway realignment: July 2005 to October 2005	195	
	Existing available capacity (259)		195
	MCH pediatric inpatient tower Phase I, central plant building, and utility trench: October 2005 to January 2008	155	
	Existing available capacity (259)		64
	On-site Parking Lot N (121)		91
	TCI Phase I: July 2005 to December 2006	306	
	Off-site Parking Lot L (296)		163
	Off-site Parking Lot M (238)		143
STEP B	MCH pediatric outpatient building: October 2005 to May 2007	43	
	On-site Parking Lot R (68)		43
STEP C	TCI Phase II: July 2010 to June 2011	275	
	Parking structure at Lot K (1,404)		275
	MCH link building: July 2010 June 2011	0	
STEP D	MCH pediatric inpatient tower Phase II: January 2012 to June 2013	20	
	Parking structure at Lot K (1,404)		20

**TABLE 3.11.4-8
OPERATION PARKING PROGRAM**

	Period	Parking Required	Parking Program
STEP A	Roadway realignment: November 2005	195	
	Existing available capacity (259)		195
	MCH pediatric inpatient tower Phase I, central plant building, and utility trench: January 2008	254	
	Existing available capacity (259)		64
	On-site Parking Lot N (121)		121
	Off-site Parking Lot L (296)		59
	Central plant building parking (10)		10
	TCI Phase I: January 2007	589	
	Lot L		237
	Lot M		238
	On-site Parking Lot P (68)		68
	On-site Parking Lot Q (71)		46
STEP B	MCH pediatric outpatient building: June 2007	443	
	On-site Parking Lot Q (71)		25
	On-site Parking Lot R (96)		96
	On-site Parking Lot S (72)		72
	On-site Parking Lot T (87)		87
	Parking structure at Lot K (1,404)		161
STEP C	TCI Phase II: July 2011	280	
	Parking structure at Lot K (1,404)		280
	MCH link building: July 2011	50	
	Parking structure at Lot K (1,404)		50
STEP D	MCH pediatric inpatient tower Phase II: July 2013	184	
	Parking structure at Lot K (1,404)		184

Alternative Transportation

As required by the 2004 CMP for the County, a review has been made of the CMP transit service. A number of transit services exist in the proposed project area, necessitating the following transit impact review. Pursuant to the CMP guidelines, the proposed project is forecasted to generate 34 transit trips (26 inbound and 8 outbound) during the a.m. peak hour and 48 transit trips (14 inbound and 34 outbound) during the p.m. peak hour. Over a 24-hour period, the proposed project is forecasted to generate 459 daily weekday transit trips. It is anticipated that the existing transit service in the proposed project area would be able to accommodate the proposed project-generated transit trips.

Because the CMP does not provide guidance as to what constitutes a transit impact, it cannot be determined whether these person trips would have a significant impact. Nevertheless, given the number of transit trips generated by the proposed project and the existing transit routes in the proposed project vicinity, it can be concluded that the public transit system would not be significantly impacted by the proposed project.

The CMP guidelines require that arterial monitoring intersection locations must be examined if the proposed project would add 50 or more trips during either the a.m. or p.m. weekday peak hours (of adjacent street traffic) at CMP monitoring intersections. Based on the proposed project's trip generation potential, trip distribution, and trip assignment, the proposed project would not add 50 or more trips at the identified CMP intersections during either the weekday a.m. peak hour or p.m. peak hour. Therefore, a CMP intersection traffic impact analysis is not required.

The proposed project would not add 150 or more trips (in either direction) during the weekday a.m. and p.m. peak hours at CMP mainline freeway monitoring locations, as stated in the CMP manual as the threshold for a traffic impact assessment. Therefore, a CMP freeway traffic impact analysis is not required. Based on the result of this CMP evaluation, it is concluded that the proposed project would not have any significant traffic impact on the CMP highway system.

3.11.5 Cumulative Impacts

Future Traffic Operations

For interim years 2008 and 2014, the proposed project, if implemented, would significantly impact the LOS of local intersections. Future traffic operations were evaluated for interim years 2008 and 2014, both with and without proposed project scenarios. The objective of the future traffic operations analysis is to project future traffic growth and the operating conditions that would be expected to result from regional growth in the vicinity of the proposed project site, with and without the proposed project.

To make a realistic estimate of future on-street conditions prior to implementation of the proposed project, the status of other known development projects (related projects) in the area has been researched at the City of Long Beach and the City of Signal Hill (Appendix J).¹³ With this information, the potential impact of the proposed project can be evaluated within the context of the cumulative impact of all ongoing development. There are 33 related projects in the City of Long Beach and 10 related projects in the City of Signal Hill that have either been built, but not yet fully occupied, or are being processed for approval. These 43 related projects have been included as part of the cumulative background settings.

Roadway Realignment

As a component of the proposed project, vehicular and pedestrian circulation patterns would be improved through the realignment of selected internal roadways.

Atlantic Avenue/Memorial Medical Center—East 28th Street

During Phase I, the proposed project proposes to remove the west leg of the intersection, in order for the Memorial Drive to be realigned and extended to intersect at East Patterson Street; it will remove the traffic signal and install a stop sign on the east leg, and remove the existing NB left-turn lane.

¹³ Linscott, Law & Greenspan Engineers. 4 November 2004. *Traffic Impact Analysis*. Prepared for: Sapphos Environmental, Inc., 133 Martin Alley, Pasadena, CA 91105. Prepared by: Linscott, Law & Greenspan Engineers, 1580 Corporate Drive, Suite 122, Costa Mesa, CA 92626. Contact: City of Long Beach, Department of Community Development, 333 West Ocean Boulevard, Long Beach, CA 90802.

Atlantic Avenue/East Patterson Street

Based on the traffic impact analysis (Appendix J),¹⁴ as part of the proposed realignment, it has been determined that in order to improve this intersection, the raised median on the south leg will need to be modified to provide an exclusive NB left-turn lane. The SB approach will need to be restriped to add an exclusive SB right-turn lane. A red curb will need to be installed on the west side of Atlantic Avenue for 100 feet north of the intersection to prohibit parking. In addition, the west leg of the intersection (the realignment of the Memorial Drive) will need to be developed to provide an exclusive left-turn lane and a shared through/right-turn lane. Finally, a five-phase traffic signal providing protected/permitted left-turn phasing in the NB and SB directions will be installed.

Pasadena Avenue/Willow Street

Based on the traffic analysis (Appendix J),¹⁵ it has been recommended to install a two-phase traffic signal.

Related-Projects Traffic Characteristics

To estimate future on-street conditions prior to implementation of the proposed project, the status of other known development projects (related projects) in the area has been researched at the City of Long Beach and the City of Signal Hill. With this information, the potential impact of the proposed project can be evaluated within the context of the cumulative impact of all ongoing development. There are 33 related projects located in the City of Long Beach and 10 related projects in the City of Signal Hill that have either been built, but not yet fully occupied, or are being processed for approval. These 43 related projects have been included as part of the cumulative background settings.

The traffic impact analysis (Appendix J)¹⁶ provides the location and a brief description for each of the 43 related projects, as well as the development totals and resultant trip generation for the related projects. The related projects are expected to generate a combined total of 97,016 daily trips on a typical weekday, with 7,720 trips (4,983 inbound and 2,737 outbound) forecasted during the a.m. peak hour and 9,497 (3,801 inbound and 5,696 outbound) during the p.m. peak hour.

The 33 related projects in the City of Long Beach are expected to generate 81,031 trips on a daily basis, with 6,453 trips occurring in the a.m. peak hour and 8,069 trips occurring in the p.m. peak hour.

¹⁴ Linscott, Law & Greenspan Engineers. 4 November 2004. *Traffic Impact Analysis*. Prepared for: Sapphos Environmental, Inc., 133 Martin Alley, Pasadena, CA 91105. Prepared by: Linscott, Law & Greenspan Engineers, 1580 Corporate Drive, Suite 122, Costa Mesa, CA 92626. Contact: City of Long Beach, Department of Community Development, 333 West Ocean Boulevard, Long Beach, CA 90802.

¹⁵ Linscott, Law & Greenspan Engineers. 4 November 2004. *Traffic Impact Analysis*. Prepared for: Sapphos Environmental, Inc., 133 Martin Alley, Pasadena, CA 91105. Prepared by: Linscott, Law & Greenspan Engineers, 1580 Corporate Drive, Suite 122, Costa Mesa, CA 92626. Contact: City of Long Beach, Department of Community Development, 333 West Ocean Boulevard, Long Beach, CA 90802.

¹⁶ Linscott, Law & Greenspan Engineers. 4 November 2004. *Traffic Impact Analysis*. Prepared for: Sapphos Environmental, Inc., 133 Martin Alley, Pasadena, CA 91105. Prepared by: Linscott, Law & Greenspan Engineers, 1580 Corporate Drive, Suite 122, Costa Mesa, CA 92626. Contact: City of Long Beach, Department of Community Development, 333 West Ocean Boulevard, Long Beach, CA 90802.

The 10 related projects located in the City of Signal Hill are expected to generate 15,985 trips during a typical weekday, with 1,267 trips occurring in the a.m. peak hour and 1,428 trips occurring in the p.m. peak hour. The trip generation potential of these related projects have been included in both year 2008 and year 2014 cumulative background setting, with one exception: The Douglass Park project was not considered in the year 2008 cumulative traffic setting because the anticipated completion year for this related project is year 2020. However, to remain conservative, the traffic impact analysis (Appendix J) included it as part of the year 2014 cumulative traffic setting.

Future analysis was completed for future background traffic conditions for both year 2008 and year 2014. These two traffic projections are listed below.

Year 2008: Future Background Traffic (Existing + Ambient Growth + Related Projects)

An analysis of future (year 2008) background traffic conditions indicates that the same three intersections currently operating at an adverse LOS would continue to operate at an adverse LOS. Furthermore, six additional intersections are projected to operate at an unacceptable operating condition during the a.m. and p.m. peak hour based on the City's LOS standards, with the addition of ambient traffic growth and related projects traffic. There are a total of nine intersections forecast to operate at LOS E or LOS F during the peak hour indicated (Table 3.11.5-1, *Year 2008 Key Impacted Intersections*).

**TABLE 3.11.5-1
YEAR 2008 KEY IMPACTED INTERSECTIONS**

Key Intersections		A.M. Peak-Hour ICU or HCM/LOS	P.M. Peak-Hour ICU or HCM/LOS
6.	Atlantic Avenue/27th Street	—	420.20 sec/veh LOS F
7.	Atlantic Avenue/Willow Street	—	0.929 LOS E
9.	Long Beach Boulevard/Willow Street	0.935 LOS E	0.958 LOS E
13.	Long Beach Boulevard/Spring Street	0.925 LOS E	1.141 LOS F
19.	Orange Avenue/Spring Street	—	0.964 LOS E
20.	Orange Avenue/Willow Street	—	0.903 LOS E
21.	Long Beach Boulevard/Wardlow Road	0.997 LOS E	1.028 LOS F
22.	Long Beach Boulevard/I-405 NB Ramp	45.00 sec/veh LOS E	58.40 sec/veh LOS F
28.	Pasadena Avenue/Spring Street	—	41.00 sec/veh LOS E

The remaining 19 key study intersections are expected to operate at adequate service levels (LOS D or better) during the weekday a.m. and p.m. peak commute hours.

Year 2008: Future Background Traffic (Phase I)

Significant impacts occur when the project increases traffic demand at a signalized study intersection by 2 percent of capacity (ICU \geq 0.020), or increases the overall intersection delay by more than 2 percent at unsignalized intersections operating at LOS E or F. Traffic associated with the proposed project would significantly impact 11 of the 28 key study intersections (Table 3.11.5-2, Year 2008 Key Impacted Intersections: Phase I).

**TABLE 3.11.5-2
YEAR 2008 KEY IMPACTED INTERSECTIONS: PHASE I**

Key Intersections		A.M. Peak Hour ICU or HCM/LOS	P.M. Peak Hour ICU or HCM/LOS
1.	Atlantic Avenue/Spring Street	0.910 LOS E	—
2.	Atlantic Avenue/East 29th Street	—	625.2 sec/veh LOS F
6.	Atlantic Avenue/27th Street	—	510.6 sec/veh LOS F
7.	Atlantic Avenue/Willow Street	—	0.958 LOS F
8.	Pasadena Avenue/ Willow Street	—	654.6 sec/veh LOS F*
9.	Long Beach Boulevard/Willow Street	0.949 LOS E	0.978 LOS E
13.	Long Beach Boulevard/Spring Street	0.954 LOS E	1.193 LOS F
21.	Long Beach Boulevard/Wardlow Road	1.016 LOS F	1.065 LOS F
22.	Long Beach Boulevard/I-405 NB Ramps	45.90 sec/veh LOS E	608.20 sec/veh LOS F
23.	I-405 SB Ramps/Crest Drive	46.70 sec/veh LOS E	—
28.	Pasadena Avenue/Spring Street	—	1942.1 sec/veh LOS F

NOTE:

* The LOS for this intersection represents the anticipated LOS with the addition of rerouted traffic due to the recommended eastbound (EB) left-turn restrictions at the Atlantic Avenue and 27th Street intersection.

The implementation of planned and/or recommended improvements at these 11 study intersections completely offsets the impact of the proposed project traffic. The remaining 17 key study intersections would not be impacted by the proposed project.

Year 2014: Future Background (Existing + Ambient Growth + Related Projects)

The traffic impact analysis (Appendix J) indicates that the same 11 intersections identified in year 2008 with Phase I traffic conditions are projected to operate poorly under year 2014 conditions. The remaining 17 key study intersections are forecast to operate at LOS D or better during the commuter peak hours.

Year 2014: Phase I and Phase II Project Traffic

The traffic impact analysis (Appendix J) indicates that traffic associated with Phase I and Phase II of the proposed project would significantly impact the same 11 intersections identified in year 2008 with Phase I traffic conditions. For the other 17 key study intersections, the project ICU and delay (seconds/vehicle) increment at the intersections forecast to operate at an adverse LOS during the a.m. peak hour or p.m. peak hour are less than the maximum allowable thresholds.

The transportation impacts associated with the proposed project were determined based on both year 2008 and year 2014 traffic analysis. The development of the proposed project is anticipated to create 11 significant impacts. As such, the proposed project would be expected to pay a proportional "fair share" of the improvement costs of 7 of the 11 impacted intersections to mitigate the proposed project's traffic impacts.

3.11.6 Mitigation Measures

The following mitigation measures are recommended to reduce significant impacts to traffic and parking. The proposed project should comply with all requirements of the CMP for the City of Long Beach. This shall include, but not be limited to, trip reduction, deficiency plans, traffic and public transportation improvement requirements, and impact fees, as required. This section identifies recommended roadway improvements that change the intersection geometry to increase capacity. Mitigation measures Transportation-1 and Transportation-2 involve roadway restriping to reconfigure (add lanes to) specific approaches of a key intersection. The identified improvements are expected to mitigate the impact of future nonproject (ambient growth and cumulative projects) traffic, and/or improve LOS to an acceptable range. Mitigation measure Transportation-1 includes recommended improvements for year 2008. Mitigation measure Transportation-2 includes recommended improvements for year 2014. Mitigation measure Transportation-3 includes recommended improvements for parking.

Measure Transportation-1

The following improvements are potential recommendation measures identified to mitigate significantly impacted intersections. The proposed project can be expected to pay a fair share of the construction costs to implement these mitigation measures.

- 1) Atlantic Avenue/Spring Street
 - Modify existing median and restripe Spring Street to provide a second eastbound (EB) left-turn lane and a second westbound (WB) left-turn lane.
 - Modify the traffic signal as needed.
- 2) Atlantic Avenue/East 29th Street
 - Restrict EB left-turn movements from 29th Street to northbound (NB) Atlantic Avenue.
- 6) Atlantic Avenue/East 27th Street
 - Restrict EB left-turn movements from 27th Street to NB Atlantic Avenue.

- 7) Atlantic Avenue/Willow Street
 - No physical mitigation measure is feasible; any additional turn lanes would require widening and additional right-of-way.
- 9) Long Beach Boulevard/Willow Street
 - No physical mitigation measure is feasible; any additional turn lanes would require widening and additional right-of-way.
- 13) Long Beach Boulevard/Spring Street
 - Widen and/or restripe to provide an exclusive NB and southbound (SB) right-turn lane.
 - Modify the traffic signal, as needed.
- 21) Long Beach Boulevard/Wardlow Road
 - No physical mitigation measure is feasible; any additional turn lanes would require widening and additional right-of-way.
- 22) Long Beach Boulevard/I-405 NB Ramps
 - Install a traffic signal.
- 23) I-405 SB Ramps/Crest Drive
 - Restripe to provide an exclusive WB right-turn lane.
- 29) Pasadena Avenue/Spring Street
 - Widen and/or restripe to provide an exclusive NB left-turn lane and an EB right-turn lane.
 - Install a traffic signal.

Measure Transportation-2

The following improvements are potential recommendation measures identified to mitigated significantly impacted intersections. The proposed project can be expected to pay a fair share of the construction costs to implement these mitigation measures.

- 1) Atlantic Avenue/Spring Street
 - Widen and/or restripe to provide an exclusive northbound (NB) and southbound (SB) right-turn lane.
 - Widen and/or restripe to provide a second eastbound (EB) and westbound (WB) left-turn lane.
 - Modify the traffic signal, as needed.
- 7) Atlantic Avenue/Willow Street
 - No physical mitigation measure is feasible; any additional turn lanes would require widening and additional right-of-way.
- 9) Long Beach Boulevard/Willow Street
 - No physical mitigation measure is feasible; any additional turn lanes would require widening and additional right-of-way.

- 13) Long Beach Boulevard/Spring Street
 - Widen and/or restripe to provide an exclusive NB, SB, and EB right-turn lane.
 - Widen and/or restripe to provide a second EB through lane.
 - Modify the traffic signal, as needed.

- 21) Long Beach Boulevard/Wardlow Road
 - No physical mitigation measure is feasible; any additional turn lanes would require widening and additional right-of-way.

Impacts would be mitigated through the specified scenario or other comparable scenarios that adhere to the same performance standards.

Measure Transportation-3

Construction and operation impacts to parking for each element of the proposed project shall be mitigated through the implementation of a parking program or comparable measure that provides sufficient long-term parking to meet City of Long Beach code requirements. Long Beach Memorial Medical Center shall keep the City of Long Beach informed of any modifications to the parking program for the proposed project. Construction parking plans shall be submitted to the City of Long Beach at least 30 days prior to the anticipated issuance of a grading permit for each element of the proposed project. Operation parking plans shall be submitted to the City of Long Beach at least 30 days prior to the anticipated issuance of occupancy permits or operation of the specified element of the proposed project.

Roadway Realignment

Construction

Miller Children's Hospital shall submit a construction parking plan to address the 195 parking spaces that are expected to be removed from Lot K as a result of the construction of the roadway realignment element of the proposed project. The parking analysis identified the availability of 259 excess parking spaces available within the Long Beach Memorial Medical Center campus. It is anticipated that the loss of the 195 parking spaces shall be offset through the use of 195 of the existing available 259 parking spaces.

Operation

Miller Children's Hospital shall submit an operation parking plan to address the permanent need for 195 parking spaces to replace parking spaces that are expected to be removed from Lot K as a result of the roadway realignment element of the proposed project. The parking analysis identified the availability of 259 excess parking spaces available within the Long Beach Memorial Medical Center campus. During construction, it is anticipated that the permanent loss of the 195 parking spaces shall be offset through the use of 195 of the existing available 259 parking spaces.

Miller Children's Hospital–Pediatric Inpatient Tower Phase I, Utility Trench, and Central Plant Building

Construction

Miller Children's Hospital shall submit a construction parking plan to address the 155 parking spaces that are expected to be removed from demolition of Parking Lot F (86-space parking structure), existing maintenance yard (14 spaces), and the additional temporary loss of spaces during construction from Lot K (55 spaces) as a result of the construction of the Miller Children's Hospital pediatric inpatient tower Phase I, utility trench, and central plant building element of the proposed project. The parking analysis identified the availability of 259 excess parking spaces available within the Long Beach Memorial Medical Center campus. It is anticipated that the loss of the 70 parking spaces shall be offset through the use of 70 of the existing available 259 parking spaces. The remaining 85 spaces shall be offset through the use of 85 of the 121 available spaces in Lot N.

Operation

Miller Children's Hospital shall submit an operation parking plan to address the permanent need for 254 additional parking spaces (replace 100 spaces lost as a result of construction, provide 144 spaces for operation of Miller Children's Hospital pediatric inpatient tower Phase I, and provide 10 spaces for operation of the central plant building). The parking analysis identified the availability of 259 excess parking spaces available within the Long Beach Memorial Medical Center campus. It is anticipated that the permanent loss of the 254 parking spaces shall be offset through the use of existing available parking spaces, Lot N, lease of off-site parking spaces, and construction of new parking spaces at the central plant building. The 86 spaces lost from Lot F and the 144 additional spaces required to operate Miller Children's Hospital pediatric inpatient tower Phase I would be provided through the use of 70 existing available spaces within the Long Beach Memorial Medical Center campus, use of the 121 spaces in Lot N, and use of 53 spaces to be leased off site at Lot L (296 space lot). A 10-car parking area would be provided at the central plant building to support operations.

Todd Cancer Institute Phase I

Construction

The Long Beach Memorial Medical Center shall submit a construction parking plan to address the 306 parking spaces that are expected to be removed from Parking Lot A, including 171 spaces permanently removed by the footprint of the building and additional 135 parking spaces to be temporarily removed as a result of construction staging. It is anticipated that the loss of the 306 parking spaces shall be offset through the use of 163 spaces to be leased off site at Lot L, and 143 spaces to be leased off site at Lot M.

Operation

Miller Children's Hospital shall submit an operation parking plan to address the permanent need for 589 additional parking spaces (replace 171 spaces lost as a result of construction, and provide 418 spaces for operation of Todd Cancer Institute Phase I). It is anticipated that the loss of the 589 parking spaces shall be offset through the use of 243 spaces to be leased off site at Lot L, 238 spaces to be leased off site at Lot M, 68 spaces to be provided through development of Lot P on site, and 40 spaces to be provided through development of Lot Q.

Miller Children's Hospital–Pediatric Outpatient Building

Construction

Miller Children's Hospital shall submit a construction parking plan to address the 43 parking spaces that are expected to be removed from Lot K. It is anticipated that the loss of the 43 parking spaces shall be offset through the use of 43 spaces to be provided through development of Lot R.

Operation

Miller Children's Hospital shall submit an operation parking plan to address the permanent need for 443 additional parking spaces (replace 43 spaces lost as a result of construction and provide 400 spaces for operation of the Miller Children's Hospital pediatric outpatient building). It is anticipated that the permanent need for 443 parking spaces shall be offset through the use of 31 spaces in Lot Q, 96 spaces in Lot R, 72 spaces in Lot S, 87 spaces in Lot T, and 157 spaces provided by development of a 1,404-space parking structure within the existing footprint of Lot K, which would also accommodate the 189 parking spaces removed as a result of construction of the parking structure itself.

Todd Cancer Institute Phase II

Construction

The Long Beach Memorial Medical Center shall submit a construction parking plan to address the 275 parking spaces that would be lost to construction (68 parking spaces) and construction staging (207 parking spaces). It is anticipated that the loss of the 275 parking spaces shall be offset through the provision of 275 parking spaces in a 1,404-space parking structure to be developed within the existing footprint of Lot K.

Operation

The Long Beach Memorial Medical Center shall submit a construction parking plan to address the 280 parking spaces that would be lost to construction (68 parking spaces) and operation of the Todd Cancer Institute Phase II (212 parking spaces). It is anticipated that the loss of the 280 parking spaces shall be offset the provision of 280 parking spaces in the 1,404-space parking structure to be developed within the existing footprint of Lot K.

Miller Children's Hospital–Link Building

Construction

Not required.

Operation

Miller Children's Hospital shall submit an operation parking plan to address the 50 parking spaces to support operation of the MCH link building. It is anticipated that the 50 parking spaces required to support operation of the MCH link building shall be provided in the 1,404-space parking structure to be constructed within the existing footprint of Lot K.

Miller Children's Hospital–Pediatric Inpatient Tower Phase II

Construction

Miller Children's Hospital shall submit a construction parking plan to address the 20 parking spaces that would be lost to construction staging. It is anticipated that the loss of the 20 parking spaces shall be provided in the 1,404-space parking structure to be constructed within the existing footprint of Lot K.

Operation

Miller Children's Hospital shall submit an operation parking plan to address the 184 parking spaces required to support operation of the Miller Children's Hospital pediatric inpatient tower Phase II. It is anticipated that the 184 parking spaces, required to operate the Miller Children's Hospital pediatric inpatient tower Phase II, shall be provided in the 1,404-space parking structure to be constructed within the existing footprint of Lot K.

3.11.7 Level of Significance after Mitigation

Implementation of mitigation measures Transportation-1 and Transportation-2 would reduce significant impacts related to traffic and transportation to below the level of significance. The impacts to 3 of 10 intersections would not be mitigated below the level of significance for the year 2008 planning horizon. The impacts to 5 of 10 intersections would not be mitigated to below the level of significance for the year 2014 planning horizon. The study area intersections are projected to operate at LOS D or better with a V/C ratio less than 1.00 during the peak hours if all of the recommended off-site improvements for interim years 2008 and 2014 are accomplished.

Implementation of mitigation measure Transportation-3 would reduce construction and operation impacts on parking to below the level of significance.

3.12 UTILITIES AND SERVICE SYSTEMS

As a result of the analysis undertaken in the Initial Study for the Long Beach Memorial Medical Center Expansion (proposed project),¹ the City of Long Beach (City) Department of Planning and Building determined that the proposed project may result in environmental impacts to utilities and service systems. Therefore, this issue is being carried forward for detailed analysis in this Environmental Impact Report (EIR). This analysis was undertaken to identify opportunities to avoid, reduce, or otherwise mitigate potential significant impacts to utilities and service systems and to identify potential alternatives.

The analysis of utilities and service systems includes a description of the regulatory framework that guides the decision-making process, existing conditions of the proposed project area, thresholds for determining if the proposed project would result in significant impacts, anticipated impacts (direct, indirect, and cumulative), mitigation measures, and level of significance after mitigation.

The potential for impacts to utilities and service systems has been analyzed in accordance with the methodologies and information provided by the Land Use element of the Long Beach General Plan,² the Open Space element of the Long Beach General Plan,³ and the City of Long Beach Municipal Code.⁴

3.12.1 Regulatory Framework

State

California Urban Water Management Planning Act

The California Urban Water Management Planning Act (CUWMPA)⁵ requires urban water suppliers to initiate planning strategies to ensure an appropriate level of reliability in its water service. The CUWMPA states that every urban water supplier that provides water to 3,000 or more customers, or that provides more than 3,000 acre-feet of water service annually, should make every effort to ensure the appropriate level of reliability in its water service to meet the needs of its various categories of customers during normal, dry, and multiple-dry years. The CUWMPA describes the contents of Urban Water Management Plans, as well as methods for urban water suppliers to adopt and implement the plans. Under the CUWMPA, the proposed project would be subject to the City of Long Beach Stormwater Management Plan (LBSWMP).

¹ City of Long Beach, Department of Planning and Building. 20 August 2004. *Initial Study for the Long Beach Memorial Medical Center Expansion Project*. Prepared by: Sapphos Environmental, Inc., 133 Martin Alley, Pasadena, CA 91105.

² City of Long Beach, Department of Planning and Building. July 1991. *Land Use Element of the Long Beach General Plan*. Prepared by: City of Long Beach, Department of Planning and Building, City Hall, 333 West Ocean Boulevard, Long Beach, CA 90802.

³ City of Long Beach, Department of Planning and Building. 30 April 1973. *Open Space Element of the Long Beach General Plan*. Prepared by: City of Long Beach, Department of Planning and Building, City Hall, 333 West Ocean Boulevard, Long Beach, CA 90802.

⁴ City of Long Beach, 1982. City of Long Beach Municipal Code (Ord. C-5831 § 1, 1982), Chapter 21. Available at: <http://www.longbeach.gov/apps/cityclerk/lbmc/title-21/frame.htm>

⁵ State of California. 1983. Urban Water Management Planning Act. California Water Code, Section 10610 et seq. Available at: <http://www.leginfo.ca.gov/calaw.html>

Local

County of Los Angeles General Plan

Public Facilities Element

The Public Facilities element of the County of Los Angeles General Plan⁶ describes existing systems in the County of Los Angeles that provide water supply and distribution, flood protection, water conservation, sewerage, water reclamation, and solid waste disposal. This document sets forth County policy on these systems by identifying a series of five broad goals and 25 supporting policies. There are five goals presented in the Public Facilities element that are relevant to the evaluation of the proposed project.

- Mitigation of hazards and elimination of adverse impacts in providing water and waste services
- Protection of the health, safety, and welfare of all residents in providing water and waste services
- Improved systems of resource use, recovery, and reuse
- Efficient water and waste management services
- A high quality of coastal water, surface water, and groundwater

Policies in support of these goals include improving coordination among operating agencies of all water and waste management systems, promoting the advancement of technology to reduce the volume of liquid waste, and facilitating the recycling of wastes such as metal, glass, paper, and textiles. The County of Los Angeles General Plan provides land use guidance for the area within which the proposed project would be located.

City of Long Beach Stormwater Management Plan

The CUWMPA requires water suppliers to develop water management plans every five years to identify short-term and long-term water demand management measures to meet growing water demands during normal, dry, and multiple-dry years.⁷ The LBSWMP⁸ is being implemented to meet the objectives of effectively prohibiting non-storm water discharges and reducing the discharge of pollutants to the maximum extent practicable (MEP), such that these discharges will not adversely impact the beneficial uses of receiving waters. Essentially, the City's ultimate objective is to comply with the federal Clean Water Act and the state Porter-Cologne Water Quality Control Act.

⁶ County of Los Angeles, Department of Regional Planning. 1993. *Streamlined County of Los Angeles General Plan*. Contact: 320 West Temple Street, Room 1348, Los Angeles, CA 90012.

⁷ State of California. 1983. Urban Water Management Planning Act. California Water Code, Section 10610 et seq. Available at: <http://www.leginfo.ca.gov/calaw.html>

⁸ City of Long Beach. Revised August 2001. *Stormwater Management Plan*. Available at <http://www.lbstormwater.org/plan/>

The LBSWMP is a comprehensive program containing several elements, practices, and activities aimed at reducing or eliminating pollutants in storm water to the MEP. The programs that are relevant to the proposed project that contribute toward preventing and mitigating storm water pollution include the following:

- Street Maintenance, which consists of Street Sweeping, Sidewalk and Alley Cleaning, and Maintenance Operations
- Sewage Systems Operations and Maintenance
- Storm Drain Systems Operation and Maintenance
- Municipal Facilities Maintenance
- Public Construction Activities
- Landscaping Maintenance

The LBSWMP also addresses the planning of development projects and construction of projects not within the public street right-of-ways.

Los Angeles County Integrated Waste Management Plan

The California Integrated Waste Management Act of 1989 (AB 939) requires that the responsibility for solid waste management be shared between state and local governments. The State of California has directed the County of Los Angeles to prepare and implement a local integrated waste management plan in accordance with AB 939. The Los Angeles County Integrated Waste Management Plan Executive Summary presents the countywide goals and objectives for integrated solid waste management and describes the County of Los Angeles's system of governmental solid waste management infrastructure and the current system of solid waste management in the cities and unincorporated areas of the County. This document also summarizes the types of programs planned for individual jurisdictions and describes countywide programs that could be consolidated.⁹

The Los Angeles County Integrated Waste Management Plan, 2000 Annual Report on the Countywide Summary Plan and Countywide Siting Element, describes the County of Los Angeles's approach to dealing with a broad range of solid waste issues, including processing capacity, markets for recovered materials, waste reduction mandates, waste disposed at Class I and Class II disposal facilities, allocation of orphan waste (waste that comes from an unknown origin), the accuracy of the State Disposal Reporting System (DRS), and California Integrated Waste Management Board (CIWMB) enforcement policy. This document also reports the Los Angeles County Integrated Waste Management Task Force recommendations that can be implemented at the state and local levels to improve the current waste management system. The task force's recommendations focus on improving the quality of programs, rather than relying on quantity measurements in complying with the State of California's waste reduction mandates.¹⁰ The proposed project would be subject to the Los Angeles County Integrated Waste Management Plan.

⁹ County of Los Angeles, Department of Public Works. 1997. *Los Angeles County Integrated Waste Management Summary Plan, Executive Summary*. Contact: 900 South Fremont Avenue, Alhambra, CA 91803.

¹⁰ County of Los Angeles, Department of Public Works. 2001. *Los Angeles County Integrated Waste Management Plan, 2000 Annual Report on the Countywide Summary Plan and Countywide Siting Element*. Contact: 900 South Fremont Avenue, Alhambra, CA 91803.

3.12.2 Existing Conditions

Wastewater Treatment

Existing sewer lines serve the proposed project area (Figure 3.12.2-1, *Existing Sanitary Sewer, Storm Drain, and Water Lines in the Proposed Project Vicinity*). Sanitary sewer service is provided by the Long Beach Water Department. In Atlantic Avenue, from 28th Street north to Columbia Street, there is an existing 18-inch sewer line east of the Atlantic Avenue centerline. This sewer line connects to an existing 21-inch sewer line located approximately at the centerline of Columbia Street. From this point, the sewer line flows west to Long Beach Boulevard then flows south in an 18-inch sewer line that connects to a manhole west of the Long Beach Boulevard centerline and north of Patterson Street.

The majority of wastewater from the City of Long Beach is treated at the Joint Water Pollution Control Plant (JWPCP) of the County Sanitation District of Los Angeles, which is operated by the County of Los Angeles. The remaining portion of the City's wastewater is delivered to the Long Beach Water Reclamation Plant. The Long Beach Water Reclamation Plant provides primary, secondary, and tertiary treatment for 25 million gallons of wastewater per day. The plant serves a population of approximately 250,000 people, including a portion of the 460,000 residents of the City of Long Beach, with nearly 5 million gallons per day of the treated water directed for reuse at more than 40 sites (Appendix K, *Utilities Analysis*).¹¹ The City of Long Beach Water Department operates and maintains nearly 765 miles of sanitary sewer line and delivers more than 40 million gallons per day to County of Los Angeles sanitation facilities located on the north and south sides of the City of Long Beach.

Storm Drain System

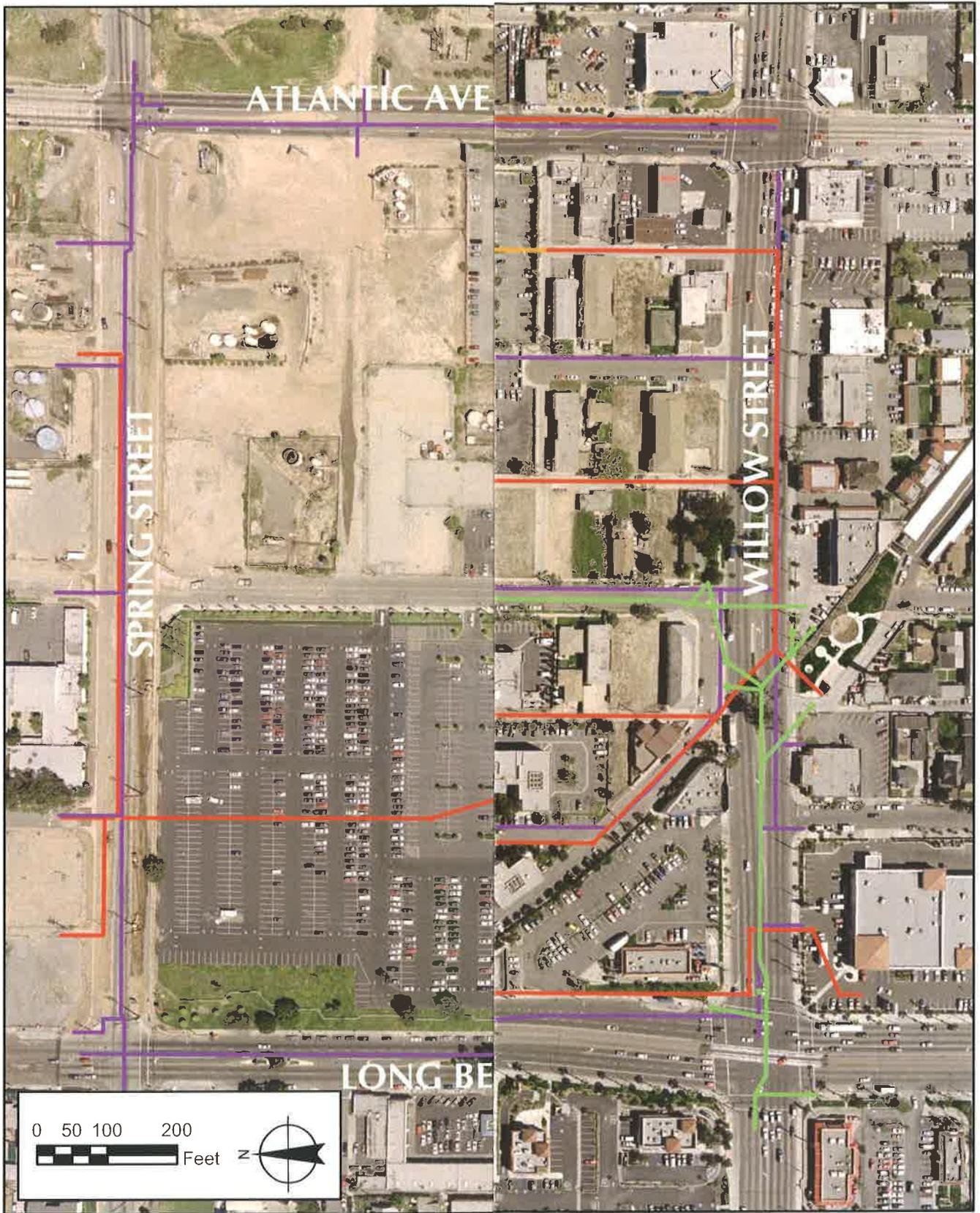
There are existing 12-, 15-, 18-, and 21-inch storm drain lines located in Willow Street (Figure 3.12.2-1). The regional storm drain system is sized in a manner to handle the storm water flows from surrounding areas, accounting for numerous acres of land area that feed into the local storm drain system. Storm water runoff from areas east of Atlantic Avenue and areas north of Spring Street are conveyed to a 54-inch storm drain that traverses east-west through the hospital site. A pump station is located at the west side of the railroad tracks, which leads the storm water toward the Los Angeles River.¹²

Water Supply

Water service is provided by the City of Long Beach Water Department. An existing 12-inch water line is located approximately 15 feet east of Long Beach Boulevard centerline between Willow Street and Spring Street. At Patterson Street, an 8-inch water line connects from the Long Beach Boulevard 12-inch water line to the Atlantic Avenue 8-inch water line (Figure 3.12.2-1). There are existing fire hydrants and water service vaults behind the existing curb line. Fire hydrant laterals are present on larger water services lines.

¹¹ Moffatt & Nichol. 12 October 2004. *Long Beach Memorial Medical Center Expansion, Utilities Analysis*. Prepared for: Long Beach Memorial Medical Center, 2801 Atlantic Avenue, Long Beach, CA 90801. Prepared by: Moffatt & Nichol, 250 West Wardlow Road, Long Beach, CA 90807.

¹² Moffatt & Nichol. 12 October 2004. *Long Beach Memorial Medical Center Expansion, Utilities Analysis*. Prepared for: Long Beach Memorial Medical Center, 2801 Atlantic Avenue, Long Beach, CA 90801. Prepared by: Moffatt & Nichol, 250 West Wardlow Road, Long Beach, CA 90807.



- Water
 - Sanitary Sewer
- Storm Drain
 - Private Lines

FIGURE 3.12.2-1
Existing Sanitary Sewer, Storm Drain,
and Water Lines in the Proposed Project Vicinity

Potable water would be supplied by the City of Long Beach Water Department. According to the 2002 Water Quality Report of the City of Long Beach Water Department, approximately 46 percent of the water serving the City of Long Beach is supplied by groundwater, and the remaining 54 percent is provided through purchased, imported surface water. The City of Long Beach Water Department purchases treated surface water from the Metropolitan Water District of Southern California and treats groundwater pumped from 29 wells around the Long Beach area at its groundwater treatment plant.

Solid Waste

Long Beach Memorial Medical Center (LBMMC) waste is collected under private contract to a certified waste hauler, which takes the waste to the Sunshine Canyon, Puente Hills, Brea Canyon, and Prima Desheca permitted landfills in Los Angeles and Orange Counties. The waste hauler anticipates that the proposed project's approximately 50-percent expansion in capacity could be accommodated by these existing permitted landfills.¹³ Only the Puente Hills landfill is certified to receive red-bag hazardous medical waste. The cost of accepting red-bag waste at the landfill is approximately 50 percent more per ton; therefore, implementation of a waste disposal separation program would reduce the costs of disposal and allow use of the other permitted landfills on a continuing basis.

3.12.3 Significance Threshold

The potential for the proposed project to result in impacts related to utilities and service systems was analyzed in relation to the questions contained in Appendix G of the State of California Environmental Quality Act (CEQA) Guidelines:

A project would normally be considered to have a significant impact to utilities and service systems when the potential for any one of the following seven thresholds occurs:

- Exceeds wastewater treatment requirements of the applicable Regional Water Quality Control Board
- Requires or results in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects
- Requires or results in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects
- Lacks sufficient water supplies available to serve the proposed project from existing entitlements and resources or will require new or expanded entitlements
- Results in a determination by the wastewater treatment provider that serves or may serve the proposed project that it does not have adequate capacity to serve the proposed project's projected demand in addition to the provider's existing commitments

¹³ Gerald Perissi, *Personal Communication*, 7 July 2004. General Manager, BFI, Inc., Gardena Division, 14905 South San Pedro, Gardena, CA 90247.

- Is not served by a landfill with sufficient permitted capacity to accommodate the proposed project's solid waste disposal needs
- Does not comply with federal, state, and local statutes and regulations related to solid waste

3.12.4 Impact Analysis

Wastewater Treatment

The proposed project would include an approximately 50-percent increase in the capacity and a commensurate increase in wastewater treatment requirements. Sewer laterals serving the Miller Children's Hospital (MCH) outpatient building, link building, and central plant building would connect to an 18-inch sewer line in Atlantic Avenue. The City of Long Beach Water Department is presently completing a study of ways to improve the available capacity in the 18-inch and 21-inch trunk sewer that passes around and through the LBMMC campus (Campus). This work is being prepared in anticipation of receiving the LBMMC sewer connection application for the new buildings. Within the proposed project area, manholes would be adjusted to the street design grade. Sewer laterals serving the Todd Cancer Institute (TCI) would connect to the 15-inch City of Long Beach sewer line in an easement running north and south through the LBMMC property east of the proposed TCI building. Capacity of the 15-inch sewer line in the adjacent easement would require further study and discussions with the City of Long Beach Water Department. The 15-inch sewer line traversing the parking lot in a north-south direction from Spring Street to Columbia Street is anticipated to be relocated on the ultimate build-out of TCI.¹⁴

The proposed project would not result in significant impacts relating to the wastewater treatment requirements of the Los Angeles Regional Water Quality Control Board¹⁵ or result in the expansion or construction of new water or wastewater treatment facilities. The proposed project would, therefore, not result in the evaluation of constituents regulated by wastewater treatment requirements. All wastewater from the proposed project would flow into the existing sewer system. Incorporation of best management practices (BMP) would be capable of reducing the amount of polluted runoff from parking lots and landscaped areas, therefore making the runoff from the site less polluted than the existing condition. Therefore, the proposed project would not be expected to result in an exceedance of wastewater treatment requirements, or the expansion or construction of new water or wastewater treatment facilities.

Storm Drain System

The proposed improvements do not carry a component that would otherwise increase storm water runoff beyond normal rainfall amounts, as it is in the existing condition.

¹⁴ Moffatt & Nichol. 12 October 2004. *Long Beach Memorial Medical Center Expansion, Utilities Analysis*. Prepared for: Long Beach Memorial Medical Center, 2801 Atlantic Avenue, Long Beach, CA 90801. Prepared by: Moffatt & Nichol, 250 West Wardlow Road, Long Beach, CA 90807.

¹⁵ California Regional Water Quality Board, Los Angeles Region (4). 13 June 1994. *Water Quality Control Plan Los Angeles Region, Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties*. Contact: 320 West Fourth Street, Suite 200, Los Angeles, CA 90013.

Storm water drainage conditions that result from the planned project would be substantially the same as existing conditions. The drainage would continue to follow a similar pattern, with similar velocities and quantities.¹⁶

The proposed project would not result in significant impacts related to the need for new or expanded storm water drainage systems. The proposed project's storm water would be accommodated by the existing storm drain system. The drainage would continue to follow a similar pattern, with similar velocities and quantities. Therefore, the proposed project would not be expected to result in significant impacts to storm drain systems.

Water Supply

Implementation of the proposed project would have a less than significant impact on the supply of water resources. The existing 8-inch water line in Long Beach Memorial Drive is in conflict with the proposed location of the acute care building. The 8-inch water line would be relocated to the realigned Patterson Street and connected to an existing 8-inch water line east of the Atlantic Avenue centerline. Additional 6-inch fire water lines would be installed to new fire hydrant locations.

The City of Long Beach Water Department has informed the Long Beach Memorial Medical Center that there are sufficient supplies to serve the proposed project from existing entitlements and resources (Appendix K). Therefore, the proposed project would not be expected to exceed existing entitlements allocated for the City of Long Beach.

Solid Waste

Both the construction and operational phases of the proposed project would be expected to generate wastes requiring disposal in accordance with local and state laws, including recycling requirements. Because construction of the proposed project would result in outpatient cancer services encompassing approximately 125,930 gross square feet of new space and approximately 200,000 gross square feet in the MCH, additional medical waste would be generated at the site. Medical waste is considered to be hazardous waste and is governed by the State of California Medical Waste Management Act (MWMA), which is enforced by the City of Long Beach as its own local enforcement agency in a (Certified Unified Program Agency) CUPA agreement with the City of Signal Hill.

Implementation of the proposed project would generate solid waste during both construction and operation. Construction of the proposed project would require the demolition of the WIC Building (4,500 square feet [SF]) and parking structure (50,216 SF), thereby generating solid waste from building debris, which constitutes a significant impact requiring the consideration of mitigation to ensure compliance with the California Solid Waste Management Act of 1989.

Postdevelopment-related activities over the life of the proposed project would increase the generation of solid waste. The increase could result in a potentially significant impact to the County of Los Angeles's solid waste management infrastructure, requiring the consideration of mitigation measures that would ensure compliance with the California Solid Waste Reuse and Recycling Access Act of 1991.

¹⁶ Moffatt & Nichol. 12 October 2004. *Long Beach Memorial Medical Center Expansion, Utilities Analysis*. Prepared for: Long Beach Memorial Medical Center, 2801 Atlantic Avenue, Long Beach, CA 90801. Prepared by: Moffatt & Nichol, 250 West Wardlow Road, Long Beach, CA 90807.

3.12.5 Cumulative Impact

The incremental impact of the proposed project, when added to the related past, present, or reasonably foreseeable, probable future projects listed in Section 2, Project Description, Table 2.6-1, *List of Related Projects*, would not result in cumulative impacts related to utilities and service systems. Because the impacts from utilities and service systems expected from the implementation of the proposed project do not affect lands outside the boundaries of the proposed project site, these impacts do not create any cumulative impacts on the environment outside of the proposed project boundaries.

3.12.6 Mitigation Measures

Measure Utilities-1

Diversion of at least 50 percent of the construction solid waste shall be undertaken to ensure compliance with applicable federal, state, and local statutes related to solid waste and reduce direct and cumulative impacts from construction to below the level of significance. Prior to advertising for construction bids for the Miller Children's Hospital (MCH) pediatric inpatient tower Phases I and II, central plant building, and utility trench, the Office of Statewide Health Planning and Development (OSHPD) shall ensure that the plans and specifications include the requirement for the construction contractor to comply with the Solid Waste Management Act of 1989. To ensure conformance with the Solid Waste Management Act of 1989, the OSHPD shall require the construction contractor to manage the solid waste generated during construction of each element of the proposed project by diverting at least 50 percent of it from disposal in landfills, particularly Class III landfills, through source reduction, reuse, and recycling of construction and demolition debris. The construction contractor shall submit a construction solid waste management plan to the OSHPD for approval prior to initiation of demolition activities for the MCH pediatric inpatient tower Phase I, central plant building, and utility trench. The construction contractor shall demonstrate compliance with the solid waste management plan through the submission of monthly reports during demolition activities that estimate total solid waste generated and diversion of 50 percent of the solid waste.

Measure Utilities-2

Diversion of at least 50 percent of the construction solid waste shall be undertaken to ensure compliance with applicable federal, state, and local statutes related to solid waste and reduce direct and cumulative impacts from construction to below the level of significance. Prior to advertising for construction bids for Todd Cancer Institute (TCI) Phases I and II, Miller Children's Hospital (MCH) pediatric outpatient building, MCH link building, roadway realignment, and parking facilities, the City of Long Beach shall ensure that the plans and specifications include the requirement for the construction contractor to comply with the Solid Waste Management Act of 1989. To ensure conformance with the Solid Waste Management Act of 1989, the City of Long Beach shall require the construction contractor to manage the solid waste generated during construction of each element of the proposed project by diverting at least 50 percent of it from disposal in landfills, particularly Class III landfills, through source reduction, reuse, and recycling of construction and demolition debris. The construction contractor shall submit a construction solid waste management plan to the City of Long Beach for approval prior to initiation of demolition activities for TCI Phases I and II, MCH pediatric outpatient building, MCH link building, roadway realignment, and parking facilities. The construction contractor shall demonstrate compliance with the solid waste management plan through the submission of monthly reports during demolition activities that estimate total solid waste generated and diversion of 50 percent of the solid waste.

Measure Utilities-3

The Office of Statewide Health Planning and Development (OSHPD) shall review the plans and specifications for the Miller Children's Hospital pediatric inpatient tower Phases I and II and central plant building to ensure that the existing Long Beach Memorial Medical Center service area has adequate trash and recycling receptacles for compliance with applicable federal, state, and local statutes related to solid waste and to reduce direct and cumulative impacts from project operation and maintenance to below the level of significance. Such compliance may be partially attained through the provision of a service area for the central plant building. Prior to advertising for construction bids for each new building, the OSHPD shall ensure that the plans and specifications designating locations for trash receptacles and recycling receptacles are in conformance with the California Solid Waste Reuse and Recycling Access Act of 1991. Wherever trash receptacles are provided throughout the proposed project site, a recycling receptacle for plastic, aluminum, and metal shall also be provided. Signs encouraging patrons to recycle shall be posted near each recycling receptacle.

Measure Utilities-4

The City of Long Beach shall review the plans and specifications for the Todd Cancer Institute Phases I and II, Miller Children's Hospital (MCH) pediatric outpatient building, MCH link building, and parking facilities to ensure that adequate service areas are provided for trash and recycling receptacles for compliance with applicable federal, state, and local statutes related to solid waste and to reduce direct and cumulative impacts from project operation and maintenance to below the level of significance. Prior to advertising for construction bids for each new building, the City of Long Beach shall ensure that the plans and specifications designating locations for trash receptacles and recycling receptacles are in conformance with the California Solid Waste Reuse and Recycling Access Act of 1991. Wherever trash receptacles are provided through the proposed project site, a recycling receptacle for plastic, aluminum, and metal shall also be provided. Signs encouraging patrons to recycle shall be posted near each recycling receptacle.

3.12.7 Level of Significance after Mitigation

Implementation of mitigation measures Utilities-1 through Utilities-4 would reduce potential impacts related to utilities and service systems to below the level of significance.

SECTION 4.0

ALTERNATIVES TO THE PROPOSED PROJECT

This section of the Environmental Impact Report (EIR) describes alternatives to the Long Beach Memorial Medical Center Expansion (proposed project). Alternatives have been analyzed in a manner that is consistent with the recommendations of Section 15126.6 of the State of California Environmental Quality Act (CEQA) Guidelines, which require a comparative evaluation of a range of reasonable alternatives to the proposed project, or to alternative locations for the proposed project that would feasibly attain most of the basic objectives of the proposed project but would avoid or substantially lessen any of the significant effects of the proposed project. The discussion of alternatives is intended to address four requirements pursuant to CEQA:

- The provision of alternatives to the proposed project or its location that may be capable of avoiding or substantially reducing any significant effects that a proposed project may have on the environment
- The provisions of alternatives capable of accomplishing most of the basic objectives of the proposed project and potentially avoiding or substantially lessening one or more of the significant effects
- The provision of sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project
- The No Project Alternative analysis of what would be reasonably expected to occur in the foreseeable future if the proposed project were not approved

Pursuant to Section 15126.6(e)(2) of the State CEQA Guidelines, if the environmentally superior alternative is the No Project Alternative, the EIR shall also identify an environmentally superior alternative among the feasible action alternatives. The analysis of alternatives should be limited to those that the City of Long Beach (City), the Lead Agency, determines could feasibly attain most of the basic objectives of the proposed project. Section of 15364 of the State CEQA Guidelines defines feasibility as “capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental legal, social, and technological factors.”

Alternatives addressed in this EIR were derived from comments received in response to the Notice of Preparation (NOP), comments provided at EIR scoping meetings and other community meetings, and information derived from the technical analysis. During the year 2030 visioning process to meet the requirements of the Office of Statewide Health Planning and Development (OSHPD), the Long Beach Memorial Medical Center (LBMMC) and Miller Children’s Hospital (MCH) evaluated the feasibility of using off-site properties to accommodate anticipated demands for services.¹ There are several properties, located north, south, and east of the existing LBMMC campus (Campus) that are available for development. However, these properties were determined to be socially and economically unacceptable for the expansion of the MCH and the consolidation and relocation of the Todd Cancer Institute (TCI) for two key reasons: (1) the properties are separated from the existing licensed hospitals by major thoroughfares, and (2) the cost of property acquisition would significantly increase the cost of

¹ K. McLaughlin Diaz. 28 May 2004. *Memorial Care, Memorial Health Services, Master Plan: Long Beach Memorial Medical Center, Miller Children’s Hospital*. Prepared for: Memorial Health Services, Long Beach Memorial Medical Center and Miller Children’s Hospital, 2801 Atlantic Avenue, Long Beach, CA90806-1737. Contact: 222 Vallejo Street, San Francisco, CA 94111.

each improvement. Therefore, LBMMC and MCH determined that the proposed project objectives would be best achieved through a more effective utilization of properties currently owned by Memorial Health Services.

The alternatives analysis is directed toward parking. The proposed project seeks a variance to accommodate parking through the leasing of off-site parking. In addition to the No Project Alternative required to be analyzed pursuant to CEQA, this EIR considers two other alternatives that avoid the reliance on off-site parking, thus providing a reasonable range of alternatives:

- No Project Alternative
- Alternative A—Consists of delaying the construction start for TCI Phase I for one year to accomplish the development of six on-site surface parking areas (Lot N, Lot P, Lot Q, Lot R, Lot S, and Lot T)
- Alternative B—Consists of expedited construction of the 1,700-space parking structure to be operational by January 2007

A summary inventory of the proposed land areas under Alternatives A and B is presented in Table 4.0-1, *Summary of Proposed Land Areas under Alternatives A and B*.

**TABLE 4.0-1
SUMMARY OF PROPOSED LAND AREAS UNDER ALTERNATIVES A AND B**

	TCI Phase I	TCI Phase II	MCH Pediatric Inpatient Tower Phase I	MCH Pediatric Inpatient Tower Phase II	MCH Utility Trench	MCH Central Plant Building	MCH Pediatric Outpatient Building	MCH Link Building	Roadway Realignment	Parking Program
Alternative A										
Number of required parking spaces	418	212	144	184	0	10	400	50	0	1,730
Height of building (feet)	54	33	84	148	0	20	84	54	0	84
Building space (gross square feet)	83,360	42,360	129,220	86,030	1,000 linear feet	3,500	80,000	20,000	N/A	N/A
Building levels	3 stories	2 stories	4 stories + basement	3 stories	0	1 story	5 stories + basement	3 stories	N/A	4 stories
Number of employees	122 ¹	60	310	100	0	0	138 ²	20	0	0
Alternative B										
Number of required parking spaces	360	282	124	204	0	10	400	50	0	1,730
Height of building (feet)	54	33	84	148	0	20	84	54	0	84
Building space (gross square feet)	71,690	54,030	111,129	104,121	1,000 linear feet	3,500	80,000	20,000	N/A	N/A
Building levels	3 stories	2 stories	4 stories + basement	3 stories	0	1 story	5 stories + basement	3 stories	N/A	4 stories
Number of employees	105*	77	267	143	0	0	138**	20	0	0

NOTES:

* Existing employees who would be consolidated from other locations on and off the Campus.

** Existing employees who would be consolidated from other locations on the Campus

The effectiveness of each of the alternatives in achieving the basic objectives of the proposed project has been evaluated with regard to each of the proposed alternative's ability to meet the statement of project objectives. A summary of the ability of the proposed project and alternatives under consideration to meet the objectives of the proposed project is presented in Table 4.0-2, *Summary of Ability of Proposed Project and Alternatives to Attain Project Objectives*. As shown in the table, the proposed project would meet all of the basic objectives of the project. Although the No Project Alternative is not capable of meeting any of the basic objectives of the proposed project, it has been included in this EIR and analyzed as required by CEQA.

**TABLE 4.0-2
SUMMARY OF ABILITY OF PROPOSED PROJECT AND ALTERNATIVES
TO ATTAIN PROJECT OBJECTIVES**

Proposed Project	No Project Alternative	Delayed Start of TCI	Expedited Construction of Parking Structure
Objectives			
1. Continue the legacy of providing a high-quality environment that supports the health and well-being of patrons through the provision of a comprehensive system of programs and facilities that provide prevention, screening, diagnosis, treatment, and monitoring services to meet existing and anticipated demand in the community through the year 2020.			
Yes	No	No	Yes
2. Expand and reorganize the existing approximately 1,000,000 square feet of combined inpatient, outpatient, and appurtenant facilities by approximately 500,000 square feet to accommodate existing and anticipated demand through the year 2020.			
Yes	No	Yes	Yes
3. Comply with the regulations developed by OSHPD as mandated by Senate Bill (SB) 1953 (Chapter 740, 1994), an amendment to and furtherance of the Alfred E. Alquist Hospital Seismic Safety Act of 1983.			
Yes	No	Yes	Yes
4. Consolidate and relocate the 24 diverse outpatient treatment modalities of the TCI that are currently dispersed in 24 sites, located on and off the Campus, to a single facility in proximity to the inpatient services provided at the LBMMC.			
Yes	No	No	Yes
5. Provide a dedicated facility for the outpatient well care, screening, imaging, diagnosis, treatment, and monitoring of cancer and non-cancer patients to accommodate the anticipated need for 375 patients to be served per day by year 2007, and to accommodate approximately 500 patients per day to meet anticipated needs through 2020.			
Yes	No	No	No
6. In the immediate proximity of the MCH, provide a pediatric inpatient tower that would increase capacity for pediatric surgical cases that would satisfy a mandate from the California Department of Health Services to provide seven operating rooms by January 2008. An additional three operating rooms would need to be provided between years 2008 and 2015 to meet anticipated demand through the year 2020.			
Yes	No	Yes	No
7. In the immediate proximity of the MCH, provide a pediatric inpatient tower that would increase capacity for newborn intensive care services and general pediatric patients. The new pediatric inpatient tower will be sized to accommodate the 10-percent increase in the need for pediatric inpatient treatment of children under the age of 15 between years 2000 and 2003, and the projected additional increase of 1 percent per year through year 2020. The increase in capacity would require 72 additional beds by year 2008 and another 92 additional beds between years 2008 and 2015 to meet anticipated demand through year 2020.			
Yes	No	Yes	Yes
8. Consolidate and relocate the diverse pediatric outpatient services, well care, screening, diagnosis, treatment, and monitoring into a single, dedicated building in close proximity to the MCH.			
Yes	No	Yes	Yes
9. Within the Campus, provide a building designated for mixed uses to accommodate retail uses, such as a gift shop, florist, and food and beverage service, to serve MCH employees, patients, and visitors.			
Yes	No	Yes	Yes
10. Provide adequate access and egress to the Campus from Long Beach Boulevard and Atlantic Avenue.			
Yes	Yes	Yes	Yes
11. Provide adequate infrastructure to support circulation within the Campus.			
Yes	Yes	Yes	Yes
12. Provide sufficient parking capacity to comply with the City of Long Beach parking ordinance.			
Yes	Yes	Yes	Yes

As a result of the analysis undertaken in this EIR, it was determined that the No Project Alternative would not be capable of meeting most of the basic objectives of the proposed project. Although the No Project Alternative would avoid significant impacts to air quality and traffic and transportation through avoiding construction of new facilities, it would fail to address the existing and anticipated demand for expanded inpatient and outpatient health care services in the community. Alternatives A and B were identified as means of addressing feasible engineering solutions to avoiding the reliance on the use of parking spaces leased at off-site locations to meet City of Long Beach Code requirements for parking. Although Alternatives A and B would be feasible in relation to engineering, the alternatives would create social and economic issues that would compromise the overall feasibility of the proposed project. Specifically, the TCI has a compelling existing need for a new facility. In Alternative A, the delay of construction by a year to accommodate development of Lots N, P, Q, R, S, and T would exacerbate the existing logistical and operational concerns for the approximately 375 patients per day served by that institution within the LBMMC. In Alternative B, the need to initiate construction of the parking structure in year 2005 would increase the cost to provide sufficient parking in the initial phases of construction from \$5.94 million (estimated cost to support development of off-site parking lots that would be leased to LBMMC and MCH) to \$23.8 million to construct an on-site parking structure (Table 2.4-1, *Estimated Capital Improvement Costs*).

Like many projects, the No Project Alternative is an environmentally superior alternative in that it does not involve significant impacts to air quality and traffic and transportation. Of the action alternatives, the significant impacts are comparable; however, the proposed project would reduce peak-quarter construction impacts to air quality from heavy equipment emissions by better distributing the use of heavy equipment on the Campus over a longer construction period.

4.1 NO PROJECT ALTERNATIVE

Under the No Project Alternative, the Campus would continue to function with the approximately 1,213,945 gross square feet of existing conditioned on-site facilities (Figure 4.1-1, *No Project Alternative*). As in the existing condition, the demand for space would be augmented through the lease of off-site facilities. The Master Plan of Land Uses would remain in its existing configuration and distribution of six general land uses: inpatient medical facilities, outpatient medical facilities, mixed use, utilities, circulation, and parking. The two licensed hospitals, LBMMC and MCH, would remain in their existing configuration. However, MCH would not be able to conform to licensing requirements by January 2008.

The No Project Alternative fails to meet most of the basic objectives of the proposed project:

- **Objective 1.** Although the existing programs and facilities would continue the legacy of providing a high-quality environment that supports the health and well-being of patrons through the provision of a comprehensive system of programs and facilities that provide prevention, screening, diagnosis, treatment, and monitoring services to meet existing needs, the No Project Alternative would not provide additional space to support the growth of 6 to 9 percent expected through year 2020.
- **Objective 2.** The No Project Alternative would not provide the combined 500,000 square feet of additional space anticipated to be needed to accommodate inpatient, outpatient, and appurtenant facilities required by year 2020.
- **Objective 3.** The No Project Alternative would not allow MCH to comply with OSHPD regulations by year 2008.



LEGEND	
	Inpatient
	Outpatient
	Mixed Use
	Utilities
	Circulation
	Parking
	LBMCC Boundary
	Buildings Controlled by LBMCC
	Buildings Controlled by Others
	Blue Line (Willow Station)
	Bus Stop (Long Beach Transit)
	Miller Children's Hospital
	Long Beach Memorial Medical Center
	Administration Building
	West Facility/Rehabilitation Building
	Rehabilitation Gym/Parking
	Miller House
	Ranch House / WIC Medical Center
	Memorial Guest Residence
	Research Building
	Elm Medical Plaza
	3-Story Medical Office Building
	Convalescent Home
	MOB with CT & MRI Orthopedics
	Hillside Medical Plaza
	2-Story Atlantic MOB
	Medical Office Building - 1 Story
	Buffums Plaza - 1 Story
	CT & MRI Center
	Medical Office Building
	Aloha Motel
	Medical Office Building
	4-Story Atlantic MOB
	Residential Buildings



FIGURE 4.1-1
No Project Alternative

- **Objective 4.** The No Project Alternative would fail to provide a dedicated facility to accommodate the diverse outpatient treatment modalities of the TCI that are currently dispersed in 24 sites located on and off the Campus.
- **Objective 5.** The No Project Alternative fails to provide a dedicated facility for the outpatient well care, screening, imaging, diagnosis, treatment, and monitoring of cancer and non-cancer patients to accommodate the anticipated need for 375 patients to be served per day by year 2007, and to accommodate approximately 500 patients per day to meet anticipated needs through year 2020.
- **Objective 6.** The No Project Alternative fails to provide a pediatric inpatient tower that would increase capacity for pediatric surgical cases in accordance with the California Department of Health Services licensing specification to provide dedicated pediatric operating rooms by January 2008.
- **Objective 7.** The No Project Alternative fails to provide a pediatric inpatient tower with the required capacity to accommodate the anticipated 1 percent per year increase in demand for newborn intensive care services and general pediatric patients under the age of 15, through year 2020.
- **Objective 8.** The No Project Alternative fails to consolidate and relocate the diverse pediatric outpatient services, well care, screening, diagnosis, treatment, and monitoring into a single, dedicated building in close proximity to the MCH.
- **Objective 9.** The No Project Alternative fails to provide a building designated for mixed uses to accommodate retail uses, such as a gift shop, florist, and food and beverage service, to serve MCH employees, patients, and visitors.
- **Objective 10.** The No Project Alternative would maintain the existing pattern of internal traffic and circulation, which provides adequate access and egress to the Campus from Long Beach Boulevard and Atlantic Avenue.
- **Objective 11.** The No Project Alternative would maintain the existing network of public streets and private driveways, which provides adequate infrastructure to support circulation within the Campus.
- **Objective 12.** The No Project Alternative would maintain the use of existing surface parking lots and parking structures, which provide sufficient parking supplies and 259 parking spaces in excess of City of Long Beach Code requirements.

4.1.1 Design, Architecture, and Setting

The No Project Alternative would retain the design, architecture, and setting of the existing Campus (Figure 4.1-1).

4.1.2 No Project Alternative Elements

The visioning process undertaken by LBMMC and MCH to develop facilities strategies meeting the mandates of SB 1953 (Chapter 740, 1994), as well as for the modernization of the existing facilities to meet current and projected need and to anticipate the future growth demonstrated that these goals

would not be met by the existing Campus facilities. In the No Project Alternative, the two licensed hospitals, LBMMC and MCH, would continue functioning within the existing hospitals on the Campus. The screening, treatment, and monitoring modalities offered by the TCI would remain dispersed at 11 locations on and off the Campus. Pediatric outpatient, including a child care center, nutrition programs, and outpatient clinics, would remain housed in various structures located on and off the Campus. Memorial Medical Campus Drive, as it extends through the Campus, would remain curved as it is now to meet Atlantic Avenue. Circulation, not including public right-of-ways, within the Campus would generally remain in their existing configuration. A total of 3,452 spaces, including 259 surplus parking spaces, would be expected to remain located in 11 locations throughout the Campus.

4.1.3 Programming

The combined 726 beds provided by the two existing licensed hospital would be expected to be insufficient to support the full range of health services provided to the community of Long Beach in 2001 for several reasons:

- Existing licensed hospitals are at capacity.
- The City of Long Beach General Plan anticipates 6- to 9-percent growth through year 2020.
- There is more and sometimes larger on-unit equipment.
- The Health Insurance Portability and Accountability Act (HIPAA) of 1996 has privacy and confidentiality requirements that have created a need for more space between patient treatment modules, as well as some additional spaces.
- There is increasing recognition of the value of support from family and significant others, creating the need for family zones within patient rooms and additional amenities for families.
- More stringent industry and code standards have created a need for increased space, including around beds, fixtures, and other equipment: Americans with Disabilities Act (ADA) toilet and clearances require greater clearances and larger spaces, and direct observation requirements in intensive care units (ICUs) create a need for additional space.
- Changing patterns of care, such as decentralized nursing and bedside charting, require additional space.
- Infrastructure is growing in areas such as structure, information technology, electrical, and security that would require the utilization of existing space within the two existing licensed hospitals.

4.1.4 Economic Characteristics

The No Project Alternative would preclude LBMMC and MCH from using the funds allocated by the voters of the State of California, through their November 2004 approval of Proposition 61, Children's Hospital Bond Act of 2004.

4.1.5 Engineering Characteristics

The year 2030 visioning process resulted in a determination that strengthening of existing facilities is possible to conform to the mandates of SB 1953 (Chapter 740, 1994) through year 2030. However, it is not possible to strengthen all existing acute care facilities to Category IV, the standard required after year 2030. Therefore, the No Project Alternative would compromise efforts to be prepared to conform to the year 2030 standard for acute care facilities.

4.1.6 Construction Scenario

There would be no construction in the No Project Alternative.

4.1.7 Comparative Impacts

Aesthetics

As with the proposed project, the No Project Alternative would not result in significant impacts related to aesthetics. The operation of the existing structures would continue to remain as they are now. Approximately 1,213,945 gross square feet of structures would likely retain existing facades. As in the existing condition, the buildings would be linked by a series of public roadways, private driveways, sidewalks, lighting, landscaping, and directional signs.

The No Project Alternative would not result in any significant impact to aesthetics, as there would be no anticipated potential to alter existing scenic vistas, state-designated scenic highways, visual character, or light and glare changes. The No Project Alternative would not contribute to the introduction to any new sources of substantial light and glare. However, without the proposed project, the long-term visual character effects would not benefit from improved aesthetic improvement to the proposed project area since it is located in a blighted, physically degraded area designated by the City of Long Beach as the Central Long Beach Redevelopment Area. Furthermore, the existing project area would not be benefited by the long-term visual enhancement to be derived from the completed project and its provision of visually attractive structural and landscape amenities consistent with the existing character of the community.

Air Quality

The No Project Alternative would avoid construction of the TCI building; the MCH inpatient tower, utility trench, and central plant building; the MCH pediatric outpatient building; the MCH link building; roadway realignment; and parking elements. The No Project Alternative would not generate construction emissions with the potential to substantially degrade air quality, or contribute to substantial increases in peak-period emissions. Therefore, the No Project Alternative would not be expected to result in significant impacts to air quality and would not require the implementation of mitigation measures Air-1 through Air-13 specified for the proposed project.

Cultural Resources

The No Project Alternative avoids potential impacts to cultural resources that would result from the implementation of the proposed project. Unlike the proposed project, this alternative would not entail grading (excavation and fill), modification of existing structures, or construction of new structures, thus avoiding the potential for disturbance of paleontological resources or the unanticipated discovery of prehistoric archeological resources or human remains. Therefore, the No Project Alternative would not

require implementation of mitigation measures Cultural-1 through Cultural-3 specified for the proposed project.

Geology and Soils

The No Project Alternative avoids potential impacts to geology and soils that could result from the implementation of the proposed project. Unlike the proposed project, this alternative would not entail grading (excavation and fill), modification of existing structures, or construction of new structures. However, the failure to upgrade existing facilities or construct new facilities to meet the mandates of SB 1953 would ultimately expose people and the existing acute care facilities to potential adverse effects, including the risk of loss, injury, or death. Although the No Project Alternative would not require implementation of mitigation measures Geology-1 through Geology-6 specified for the proposed project, it would preclude LBMMC and MCH from conforming to the mandates of SB 1953 and create a socially unacceptable level of risk to people and property.

Hazards and Hazardous Materials

The No Project Alternative would avoid potential impacts from exposure of people to hazards and hazardous materials (asbestos-containing materials, lead-based paints, and mold). Unlike the proposed project, this alternative would not entail transport, use, emission, or disposal of hazardous materials above the levels currently required for operation of LBMMC, MCH, and appurtenant facilities. Therefore, the No Project Alternative would not require implementation of mitigation measures Hazards-1 through Hazards-15 specified for the proposed project.

Hydrology and Water Quality

The No Project Alternative would avoid potential impacts to hydrology and water quality that could result from the implementation of the proposed project. Unlike the proposed project, this alternative would not entail grading (excavation and fill), modification of existing structures, or construction of new structures. Therefore, the No Project Alternative would not require implementation of mitigation measures Hydro-1 through Hydro-7 specified for the proposed project.

Land Use and Planning

As with the proposed project, the No Project Alternative would not result in significant impacts related to land use and planning. The operation of the two licensed hospitals, LBMMC and MCH, and related facilities and infrastructure, would not conflict with land use designation and adopted goals and policies of the City of Long Beach General Plan Land Use element,² which designates the Campus as Land Use Designation (LUD) No. 7 Mixed-Use District. Unlike the proposed project, which would require a change to the existing zoning designation for a portion of land between Spring Street and 29th Street from Regional Highway (CHW) to Planning Development (PD-29) District, Subarea 1, the No Project Alternative would retain the existing zoning designations for the Campus: Institutional (I), PD-29, CHW, and Community Automobile-Oriented (CCA) Districts.³

² City of Long Beach, Department of Planning and Building, July 1991. *Land Use Element of the Long Beach General Plan*. Prepared by: City of Long Beach, Department of Planning and Building, City Hall, 333 West Ocean Boulevard, Long Beach, CA 90802.

³ City of Long Beach. 1982. City of Long Beach Municipal Code (Ord. C-5831 § 1, 1982), Chapter 21. Available at: <http://www.longbeach.gov/apps/cityclerk/lbmc/title-21/frame.htm>

National Pollution Discharge Elimination System

The No Project Alternative would avoid potential impacts related to surface water quality and the need for a National Pollution Discharge Elimination System (NPDES) permit. Unlike the proposed project, this alternative would not entail grading (excavation and fill), modification of existing structures, or construction of new structures. Therefore, the No Project Alternative would not be expected to generate new sources of storm water runoff or contributed pollutants to existing surface waters. Thus the No Project Alternative would not be required to develop a Standard Urban Storm Water Management Plan or implement mitigation measure NPDES-1 specified for the proposed project.

Noise

The No Project Alternative would avoid impacts to the ambient noise that would be expected during the construction phases of the proposed project. Unlike the proposed project, this alternative would entail no demolition of existing buildings, grading, modification of existing structures, or construction of new structures. Thus, there would be no need to operate heavy equipment within 500 feet of sensitive receptors, particularly the existing MCH. Therefore, the No Project Alternative would not require implementation of mitigation measures Noise-1 through Noise-3 specified for the proposed project.

Public Services

As with the proposed project, the No Project Alternative would not result in significant impacts related to public services. The No Project Alternative would continue operation of existing acute and outpatient facilities. Therefore, there would be no need for the provision of, or need for, new or physically altered fire protection, police protection, school, or other public facilities that would require physical alteration of the environment. However, the No Project Alternative would fail to provide adequate capacity to meet the existing and anticipated demand within the City of Long Beach for health care services, which is projected to increase by 6 to 9 percent through year 2020.

Traffic and Transportation

The No Project Alternative would avoid potential impacts to traffic and transportation that could result from the implementation of the proposed project. Unlike the proposed project, this alternative would not accommodate additional capacity to provide health care services; therefore, there would be no anticipated increase in trips and the related contribution to the loads placed on surrounding intersections. The existing 3,452 parking spaces would be sufficient to support ongoing operation of LBMHC, MCH, and appurtenant facilities. Therefore, the No Project Alternative would not require implementation of mitigation measures Transportation-1 through Transportation-3.

Utilities and Service Systems

The No Project Alternative would avoid potential impacts to utilities and service systems that could result from the implementation of the proposed project. Unlike the proposed project, this alternative would not entail major site grading (excavation and fill), demolition of existing structures, or construction of new structures; therefore, the No Project Alternative would not generate solid waste from construction. In addition, the hospital would continue to operate at its existing capacity; therefore, the No Project Alternative would not generate increased levels of solid waste from operations such as that anticipated for the proposed project. Therefore, the No Project Alternative does

not require implementation of mitigation measures Utilities-1 and Utilities-4 specified for the proposed project.

4.2 ALTERNATIVE A

Alternative A differs from the proposed project in that Alternative A delays construction of the TCI until the development of on-site parking (Lots N, P, Q, R, S, and T) is completed (Figure 4.2-1, *Alternative A Site Plan*). All the other elements of the proposed project would be constructed as planned in the proposed project. The delayed construction of the TCI would delay the consolidation and relocation of cancer facilities to a single building dedicated to cancer treatment from the 11 existing locations on and off Campus for a period of approximately one year.

Alternative A meets 11 of the 12 basic objectives of the proposed project:

- **Objective 1.** Alternative A would allow LBMMC and MCH to continue the legacy of providing a high-quality environment that supports the health and well-being of patrons through the provision of a comprehensive system of programs and facilities that provide prevention, screening, diagnosis, treatment, and monitoring services to meet existing needs. Alternative A would provide additional space to support the 6- to 9-percent population growth in the City of Long Beach expected through year 2020.
- **Objective 2.** Alternative A would provide the combined 500,000 square feet of additional space required to accommodate inpatient, outpatient, and appurtenant facilities required by year 2020.
- **Objective 3.** Alternative A would allow MCH to comply with the regulations developed by OSHPD by year 2008.
- **Objective 4.** Alternative A would provide a dedicated facility, in close proximity to the inpatient services provided at the LBMMC, to accommodate the diverse outpatient treatment modalities of the TCI that are currently dispersed in 24 sites on and off the Campus.
- **Objective 5.** Alternative A would fail to provide a dedicated facility for the outpatient well care, screening, imaging, diagnosis, treatment, and monitoring of cancer and non-cancer patients to accommodate the anticipated need for 375 patients to be served per day by year 2007. In this alternative, construction of TCI Phase I would be delayed by a year; thus, the facility would not be available until year 2008. There would be no change in the ability to complete Phase II to accommodate approximately 500 patients per day to meet anticipated needs through year 2020.
- **Objective 6.** Alternative A would provide a pediatric inpatient tower that would increase capacity for pediatric surgical cases, in accordance with the California Department of Health Services licensing specification to provide dedicated pediatric operating rooms by January 2008, through construction of the MCH pediatric inpatient tower Phase I, utility trench, and central plant building. Construction of the MCH pediatric inpatient tower Phase II would be sufficient to accommodate anticipated demand for services through year 2020.

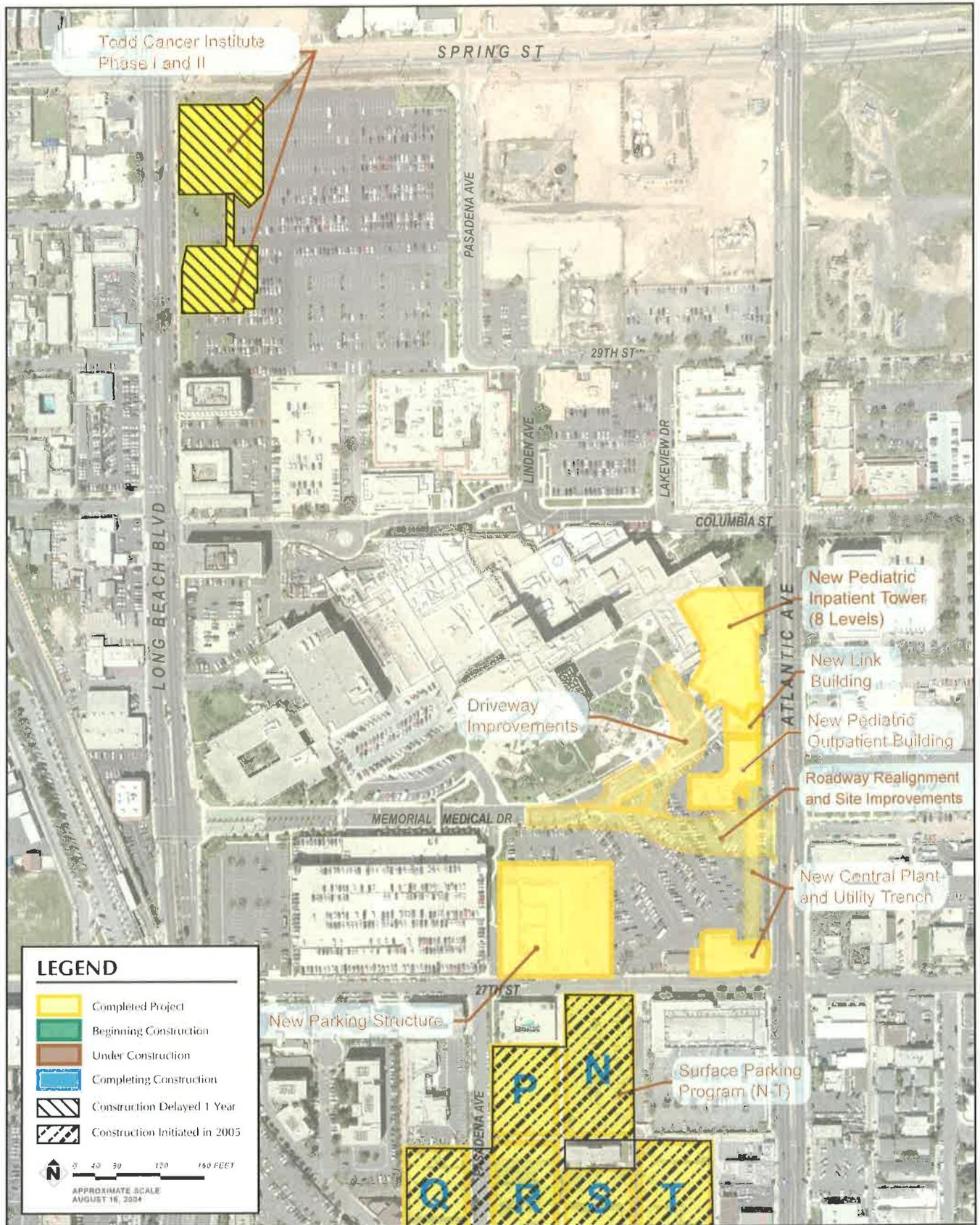


FIGURE 4.2-1
Alternative A Site Plan

- **Objective 7.** Alternative A would provide a pediatric inpatient tower with the required capacity to accommodate the anticipated 1 percent per year increase in demand for newborn intensive care services and general pediatric patients under the age of 15, through year 2020.
- **Objective 8.** Alternative A would allow for consolidation and relocation of the diverse pediatric outpatient services, well care, screening, diagnosis, treatment, and monitoring into a single, dedicated building, the MCH pediatric outpatient building, in close proximity to the MCH.
- **Objective 9.** Alternative A would provide a building designated for mixed uses, the MCH link building, to accommodate retail uses, such as a gift shop, florist, and food and beverage service, to serve MCH employees, patients, and visitors.
- **Objective 10.** Alternative A would provide adequate access and egress to the Campus from Long Beach Boulevard and Atlantic Avenue, through the realignment of Patterson Street.
- **Objective 11.** Alternative A would provide adequate infrastructure to support circulation within the Campus through various improvements to roadways, driveways, sidewalks, security lighting, and landscaping.
- **Objective 12.** Alternative A would provide sufficient parking capacity to comply with the City of Long Beach parking ordinance through use of existing excess parking spaces, development of additional on-site surface parking (Lots N, P, Q, R, S, and T), short-term (10 year) lease of adjacent off-site parking, and construction of a 1,700-car parking structure.

4.2.1 Design, Architecture, and Setting

As with the proposed project, Alternative A would be developed in accordance with the Master Plan and related design guidelines, including standards for landscape, lighting, security, and wayfinding. As with the proposed project, mature trees, pleasant vistas, and the creative use of surface materials would create a sense of wellness and define Campus boundaries and reinforce pedestrian and vehicular entry points. Each building would be designed to reflect its intended use, thus facilitating wayfinding within the 54-acre Campus.

4.2.2 Alternative A Elements

Alternative A would include the same elements as the proposed project, with the same building spaces and characteristics (Table 4.0-1). However, Alternative A would delay the initiation of construction of TCI Phase I until July 2006. Alternative A would also require that the development of on-site parking lots (Lots N, P, Q, R, S, and T) be initiated immediately in July 2005.

4.2.3 Programming

Upon build-out, Alternative A would accommodate the same programming for health care services provided by the proposed project (Table 4.0-1). However, the associated one-year delay in the initiation of construction would delay the benefits intended to be achieved through relocation and consolidation of cancer treatment modalities to a single location:

- Provision of adequate space to serve the approximately 375 patients per day currently seen by the various entities within the TCI
- Provision of a safer and more “user friendly” environment for patients, employees, medical staff, and volunteers
- Accessibility of multiple services at a single location
- Proximity to LBMCC for care required to be provided in an acute care facility
- Operational efficiency
- Quality of care

4.2.4 Economic Characteristics

As with the proposed project, the total estimated construction cost for Alternative A would likely be in excess of \$200 million (Table 4.0-3). However, a one-year delay in the initiation of construction of TCI Phase I could increase construction cost by 4 to 7 percent, thus requiring identification of additional funds to augment the increased cost of construction or a reduction in the size of the facility to stay within the existing identified construction funds.⁴

4.2.5 Engineering Characteristics

As with the proposed project, Alternative A facilitates year 2008 and year 2030 compliance with the mandates of SB 1953 (Chapter 740, 1994) by relocating health care services from LBMCC and MCH, acute care facilities, to new inpatient and outpatient structures conforming to the requirements of the OSHPD and the City of Long Beach Department of Public Works. This relocation would allow more effective utilization of the two existing acute care facilities within the Campus.

4.2.6 Construction Scenario

The construction scenario for Alternative A would conform to that described for the proposed project for all but two elements: TCI Phase I and development of on-site parking (Lots N, P, Q, R, S, and T). The initiation of construction of TCI Phase I would be delayed by one year, pending development of on-site parking. As such, the development of on-site parking Lots N, P, Q, R, S, and T would be required to be initiated in July 2005, concurrent with mobilization for the MCH pediatric inpatient tower, utility trench, and central plant building.

⁴ Davis Langdon Adamson. 2004. “California Construction Industry Market Escalation Report, 2004 Mid-Year Update.” Contact: 301 Arizona Avenue, Suite 301, Santa Monica, CA 90401. Available at: http://www.aaesc.com/_news/2004

4.2.7 Comparative Impacts

Aesthetics

As with the proposed project, Alternative A would not result in significant impacts to aesthetics. Since the project area is not located near a scenic coastal or waterway view or state-designated scenic highway, Alternative A would not impact any viewsheds or scenic highways. Due to the delayed construction for the TCI, short-term impacts from demolition and construction activities would also be delayed. Upon build-out, Alternative A would result in a relative aesthetic improvement in the Central Long Beach Redevelopment Area. These improvements would be consistent with the visual character of the community, and the short-term impacts during construction would be outweighed by the long-term visual enhancement to be derived from the completed project and its provision of visually attractive structural and landscape amenities.

Air Quality

As with the proposed project, Alternative A results in significant impacts to air quality. The one-year delay in construction of TCI Phase I would be concurrent with the later phase of construction of the MCH pediatric inpatient tower. However, it is anticipated that the utility trench and central plant building would be completed prior to the initiation of TCI Phase I. However, development of the six on-site parking areas (Lots N, P, Q, R, S, and T) would need to be undertaken concurrent with the first year of construction for the MCH pediatric inpatient building, utility trench, and central plant building.

As with the proposed project, Alternative A would generate impacts to ambient air quality during construction as a result of trips to and from the site by construction workers, the use of heavy equipment for site grading, demolition of existing structures, soil removal, transport of construction materials for new construction, fuel consumption by on-site construction equipment, application of architectural coatings, and asphalt operation. Alternative A would require more concurrent demolition work and more trucks to transport demolition debris at one time, and greater total land area exposed at one time. As a result, the peak-period emissions would be greater than that of the proposed project and would remain significant for carbon monoxide (CO), nitrogen oxides (NO_x), reactive organic gases (ROGs), and particulate matter less than 10 microns in aerodynamic diameter (PM₁₀).

As with the proposed project, Alternative A would require implementation of mitigation measures Air-1 through Air-13 to minimize to the extent feasible the amount of pollutants emitted by construction activities. As with the proposed project, implementation of mitigation measures Air-1 through Air-13 would reduce significant impacts to air quality from Alternative A related to fugitive dust emissions to below the level of significance. The specified measures would not reduce impacts from peak-day and peak-quarter emissions of CO, NO_x, and ROGs to a less than significant level.

As with the proposed project, there would be anticipated impacts to air quality related to odors during construction of Alternative A.

As with the proposed project, implementation of mitigation measures Air-1 through Air-13 would not reduce significant impacts from Alternative A related to the conformance to the current air quality standard to below the level of significance.

As with the proposed project, implementation of mitigation measures Air-1 through Air-13 would not reduce significant impacts from Alternative A related to the cumulatively considerable net increase of any criteria pollutant for which the proposed project region is in nonattainment under an applicable

federal or state ambient air quality standard (including release in emissions that exceed quantitative thresholds for ozone precursor) to below the level of significance.

Cultural Resources

As with the proposed project, Alternative A would require excavation and grading activities that would have the potential to adversely affect paleontological resources, previously unrecorded prehistoric archeological resources, or the unanticipated discovery of human remain, thus requiring the consideration of mitigation measures. As with the proposed project, potential impacts to the cultural resources from the potential to encounter prehistoric and historic archaeological resources and paleontological resources would be reduced to below the level of significance with the incorporation of mitigation measures Cultural-1 through Cultural-3.

Geology and Soils

As with the proposed project, Alternative A would have the potential to expose people and property to the risk of loss or injury involving seismic ground shaking from the operation of the MCH pediatric inpatient tower Phases I and II and the central plant building, MCH pediatric outpatient building, TCI Phases I and II, and the 1,700-space parking structure. All new construction would be designed to the current life safety standard specified in the Uniform Building Code. In addition, the excavation and grading required to construct the TCI Phases I and II, MCH pediatric inpatient tower Phases I and II and the central plant building, MCH pediatric outpatient building, MCH link building, roadway realignment, surface parking lots, and the parking structure would have the potential for impacts related to a substantial increase in soil erosion or loss of topsoil. Erosion potential during construction would be managed to the maximum extent practicable with best management practices (BMPs) as part of compliance with the required NPDES permit and associated Urban Storm Water Management Plan. As with the proposed project, impacts related to geology and soils would be reduced to below the threshold of significance through the incorporation of mitigation measures Geology-1 through Geology-6.

Hazards and Hazardous Materials

As with the proposed project, Alternative A would have the potential to expose people and property to hazards and hazardous materials through construction and operation activities:

- Demolition of buildings with the potential to contain asbestos-containing materials and lead-based paints
- Excavation and transport of petroleum hydrocarbon–contaminated soil and water
- Construction near former oil wells that have not been abandoned to current standards of the California Department of Conservation, Division of Oil, Gas, and Geothermal Resources
- Placement of structures at locations that have the potential accumulate methane, hydrogen sulfide, or other petroleum-related gases into underground areas or buildings
- Potential to encounter previously unrecorded underground storage tanks during excavation and grading activities

- Routine transport and disposal of construction debris and solid waste that have the potential to contain hazardous waste
- Construction in proximity to areas necessary to emergency response and evacuation plans
- Excavation and grading activities in soils with the potential to contain chemicals of potential concern, including volatile organic compounds

As with the proposed projects, impacts related to hazards and hazardous materials from construction and operation of Alternative A would be expected to be mitigated to below the threshold of significance through the incorporation of mitigation measures Hazards-1 through Hazards-15.

Hydrology and Water Quality

As with the proposed project, Alternative A delays construction of the TCI until adequate on-site or off-site parking is secured. The other five elements of the proposed project would be constructed as planned in the proposed project; thus, Alternative A would result in significant impacts to hydrology and water quality, requiring the consideration of mitigation measures. As with the proposed project, potential impacts to water quality from increased soil erosion, siltation, or increased surface runoff during construction would be expected to be reduced to a less than significant level through conformance with BMPs. The BMPs in the construction scenario were specified to ensure conformance with all applicable federal, state, and local statutes and regulations related to control of surface water and runoff during construction. As with the proposed project, significant impacts related to hydrology and water quality resulting from Alternative A would be mitigated to a less than significant level through the incorporation of mitigation measures Hydro-1 through Hydro-7.

Land Use and Planning

As with the proposed project, Alternative A would not result in significant impacts related to land use and planning. As with the proposed project, the land uses specified in the Master Plan of Land Uses are consistent with LUD No. 7 Mixed-Use District. As with the proposed project, Alternative A would require a change to the existing zoning designation for a portion of land between Spring Street and 29th Street from CHW to PD-29 District, Subarea 1. As with the proposed project, Alternative A would not result in any significant impact to land use and planning.

National Pollution Discharge Elimination System

As with the proposed project, Alternative A would involve concurrent grading and excavation in an area of sufficient size to require compliance with the NPDES permit, thus requiring the development and incorporation of BMPs for reducing discharge of the pollutants into the storm drain and waterway system. As with the proposed project, significant impacts related to NPDES resulting from Alternative A would be mitigated to below the threshold of significance through the incorporation of mitigation measure NPDES-1.

Noise

As with the proposed project, Alternative A would result in significant impacts to ambient noise levels during construction. As with the proposed project, Alternative A requires the use of heavy construction equipment in close proximity to sensitive receptors: pediatric patients in the existing MCH. In addition,

as with the proposed project, Alternative A would generate additional trips to and from the Campus as a result of the increase in the medical staff, employees, patients, and corresponding increase in visitors. As with the proposed project, construction impacts to ambient noise levels would be reduced to the maximum extent practicable through the incorporation of mitigation measures Noise-1 through Noise-3.

Public Services

As with the proposed project, Alternative A would not result in significant impacts related to public services. As with the proposed project, the Alternative A would not require the provision of, or need for, new or physically altered fire protection, police protection, school, or other public facilities that would require physical alteration of the environment. As with the proposed project, Alternative A would be expected to expose people and property to security-related issues and vandalism during the operation of the TCI Phases I and II; MCH pediatric inpatient tower Phases I and II, utility trench, and central plant building; MCH pediatric outpatient building; MCH link building; and surface parking lots, leased off-site parking lots, and parking structure. As with the proposed project, impacts related to security and vandalism from Alternative A would be reduced to below the threshold of significance through mitigation measures Public Services-1 and Public Services-2.

Traffic and Transportation

Future Traffic Operations

Alternative A provides delayed consolidation of outpatient treatment modalities of the TCI until adequate on-site or off-site parking is secured (Figure 4.2-1). This alternative would have traffic and transportation impacts similar to the proposed project because projected construction and mitigation measures are expected to continue once on-site or off-site parking is secured. A Congestion Management Program (CMP) deficiency would not be anticipated with the implementation of the mitigation measures specified for the proposed project. Contributions to intersection loads from construction and operation of Phase I would be delayed by one year. This would reduce the daily two-way project traffic generation forecast from 6,762 to 3,740 daily trips, eliminating the 3,022 daily trips projected from the Phase I construction of TCI. However, these daily trips are expected to be added once Phase I starts. As with the proposed project, impacts to 3 of 10 intersections would not be mitigated to below the level of significance for the year 2008 planning horizon. The impacts to 5 of 10 intersections would not be mitigated to below the level of significance for the year 2014 planning horizon. Potential operations impacts related to traffic and transportation for all other intersections would be expected to be mitigated to below the level of significance through the incorporation of project-specific improvements and mitigation measures Transportation-1 through Transportation-3.

Parking Impacts

As with the proposed project, construction and operation of Alternative A would be expected to result in impacts to parking capacity, thus requiring the consideration of mitigation measures (Table 4.2.7-1, *Alternative A Construction Parking Program*, and Table 4.2.7-2, *Alternative A Operation Parking Program*). Impacts to parking capacity would result from the conversion of 577 existing parking spaces to development and the generation of demand for an additional 1,159 parking spaces through provision of additional inpatient hospital beds and increased total square feet of spaces dedicated to outpatient services and mixed use. As with the proposed project, implementation of mitigation measure Transportation-3 would be expected to reduce impacts on parking to below the threshold of

significance. The parking program specified in measure Transportation-3 would need to be modified in accordance with Table 4.2.7-1 and Table 4.2.7-2.

**TABLE 4.2.7-1
ALTERNATIVE A CONSTRUCTION PARKING PROGRAM**

	Period	Parking Required	Parking Program
Step A	Roadway realignment: July 2005 to October 2005	195	
	Existing available capacity (259)		195
	MCH pediatric inpatient tower Phase I, central plant building, and utility trench: October 2005 to January 2008	155	
	Existing available capacity (259)		64
	On-site Parking Lot N (121)		91
	TCI Phase I: July 2006 to December 2007	306	
	On-site Parking Lot N (121)		30
	On-site Parking Lot P (68)		68
	On-site Parking Lot Q (71)		71
	On-site Parking Lot R (96)		96
On-site Parking Lot S (72)		41	
Step B	MCH pediatric outpatient building: October 2005 to May 2007	43	
	On-site Parking Lot S (72)		31
	On-site Parking Lot T (87)		12
Step C	TCI Phase II: July 2010 to June 2011	275	
	Parking structure at Lot K (1,404)		275
Step D	MCH link building: July 2010 June 2011	0	
	MCH pediatric inpatient tower Phase II: January 2012 to June 2013	20	
	Parking structure at Lot K (1,404)		20

**TABLE 4.2.7-2
ALTERNATIVE A OPERATION PARKING PROGRAM**

	Period	Parking Required	Parking Program
Step A	Roadway realignment: November 2005	195	
	Existing available capacity (259)		195
	MCH pediatric inpatient tower Phase I, central plant building, and utility trench: January 2008	254	
	Existing available capacity (259)		64
	On-site Parking Lot N (121)		121
	On-site Parking Lot P (68)		59
	Central plant building parking (10)		10
	TCI Phase I: January 2008	589	
	On-site Parking Lot P (68)		9
	On-site Parking Lot Q (71)		71
	On-site Parking Lot R (96)		96
	On-site Parking Lot S (72)		72
	On-site Parking Lot T (87)		87
Off-site Parking Lot L (296)		254	
Step B	MCH pediatric outpatient building: June 2007	443	
	Lot L (296)		42
	Lot M (238)		238
	Parking structure at Lot K (1,404)		163
Step C	TCI Phase II: July 2011	280	
	Parking structure at Lot K (1,404)		280
	MCH link building: July 2011	50	
	Parking structure at Lot K (1,404)		50
Step D	MCH pediatric inpatient tower, Phase II: July 2013	184	
	Parking structure at Lot K (1,404)		184

Utilities and Service Systems

As with the proposed project, Alternative A would generate solid waste during construction from the demolition of the WIC Building (4,500 square feet [SF]) and parking structure (50,216 SF) Operation of the capital improvements recommended as elements of the proposed project would increase the generation of solid waste. As with the proposed project, impacts to utilities from solid waste generated during construction and operation of Alternative A would be reduced to below the threshold for significance with the implementation of mitigation measures Utilities-1 and Utilities-4.

4.3 ALTERNATIVE B

Alternative B differs from the proposed project in that Alternative B expedites the commitment to construct an on-site parking structure with a 1,700-car capacity (Figure 4.3-1, *Alternative B Site Plan*). Alternative B would expedite construction of a multilevel parking structure on the Campus capable of accommodating 1,700 car spaces with up to 400 spaces per level and sited in an area designated for interim or permanent use of parking in the Master Plan of Land Uses. The parking structure would provide sufficient parking to accommodate any existing parking spaces displaced by construction and sufficient additional parking to accommodate the parking demand generated by the construction of the proposed project element. The need to initiate construction of the parking structure in year 2005 would increase the cost to provide sufficient parking in the initial phases of construction from \$5.94 million (estimated cost to support development of off-site parking lots that would be leased to LBMHC and MCH) to \$23.8 million to construct an on-site parking structure (*Table 2.4-1, Estimated Capital Improvement Costs*). The additional \$17.86 million required to construct the parking structure would likely be taken from the funds allocated for construction of Phase I of the TCI and Phase I of the MCH pediatric inpatient building, thus reducing the available funds by approximately 14 percent. The reduction in construction funding would likely result in a comparable downsizing of the proposed facilities and their capacity to provide service.

Alternative B meets most of the basic objectives of the proposed project:

- **Objective 1.** Alternative B would allow LBMHC and MCH to continue the legacy of providing a high-quality environment that supports the health and well-being of patrons through the provision of a comprehensive system of programs and facilities that provide prevention, screening, diagnosis, treatment, and monitoring services to meet existing needs. Alternative B would provide additional space to support the 6- to 9-percent population growth in the City of Long Beach expected through year 2020.
- **Objective 2.** Alternative B would provide the combined 500,000 square feet of additional space required to accommodate inpatient, outpatient, and appurtenant facilities required by year 2020.
- **Objective 3.** Alternative B would allow MCH to comply with OSHPD regulations by year 2008.
- **Objective 4.** Alternative B would provide a dedicated facility, in close proximity to the inpatient services provided at the LBMHC, to accommodate the diverse outpatient treatment modalities of the TCI that are currently dispersed in 24 sites on and off the Campus.
- **Objective 5.** Alternative B would provide a dedicated facility, TCI Phase I, for the outpatient well care, screening, imaging, diagnosis, treatment, and monitoring of cancer and non-cancer patients. However, the required downsizing of Phase I to divert funding for construction of the parking structure would allow the facility to accommodate 323 patients rather than the anticipated need for 375 patients to be served per day by year 2007. TCI Phase II would provide sufficient capacity to accommodate approximately 500 patients per day to meet anticipated needs through year 2020.

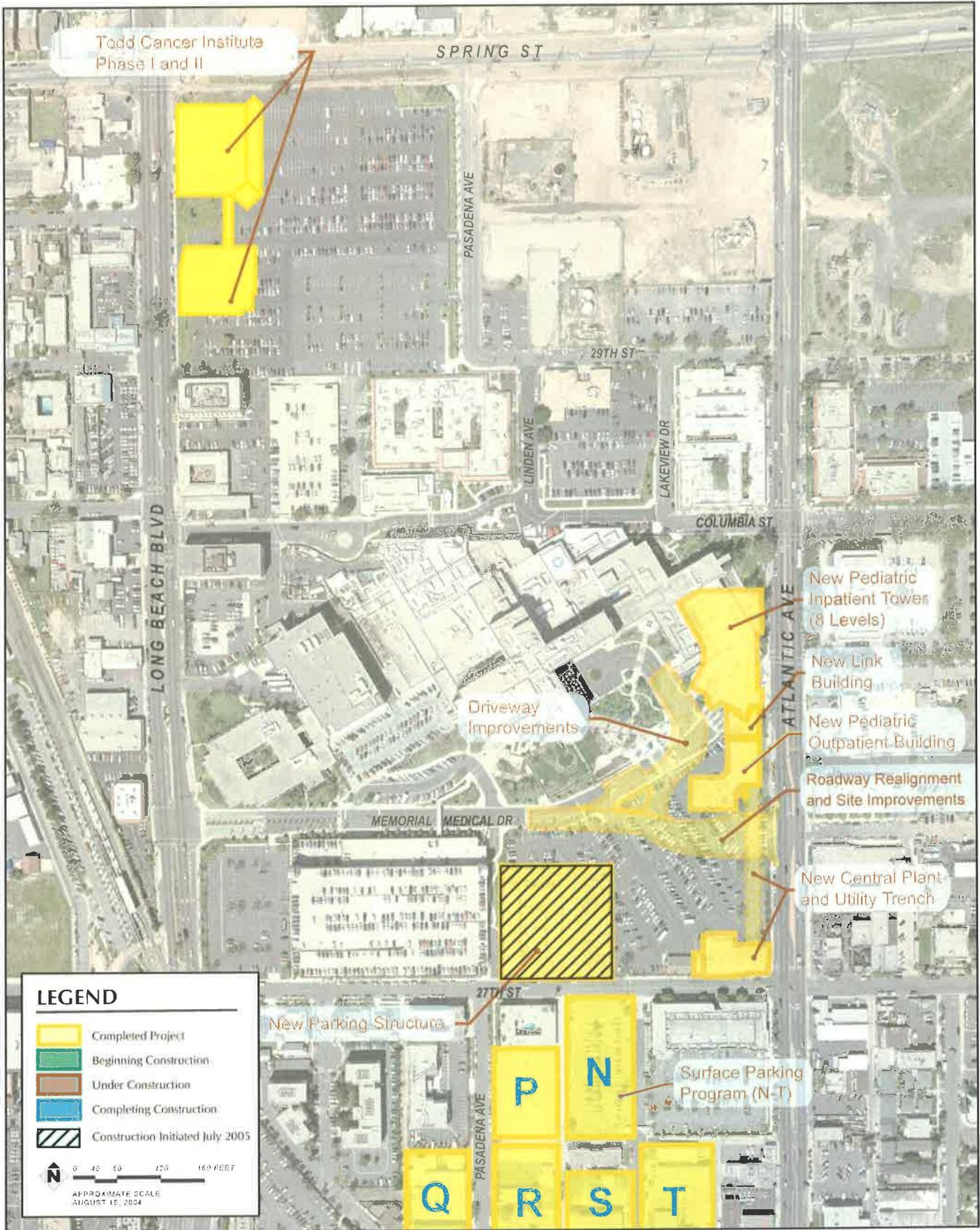


FIGURE 4.3-1
Alternative B Site Plan

- **Objective 6.** Alternative B would provide a pediatric inpatient tower that would increase capacity for pediatric surgical cases. However, the diversion of funds to construct a parking structure would compromise the ability of the MCH pediatric inpatient tower to fully comply with the California Department of Health Services licensing specifications to provide dedicated pediatric operating rooms by January 2008. Construction of the MCH pediatric inpatient tower Phase II would be sufficient to accommodate anticipated demand for services through year 2020.
- **Objective 7.** Alternative B would provide a pediatric inpatient tower with the required capacity to accommodate the anticipated 1 percent per year increase in demand for newborn intensive care services and general pediatric patients under the age of 15, through year 2020.
- **Objective 8.** Alternative B would allow for consolidation and relocation of the diverse pediatric outpatient services, well care, screening, diagnosis, treatment, and monitoring into a single, dedicated building, the MCH pediatric outpatient building, in close proximity to the MCH.
- **Objective 9.** Alternative B would provide a building designated for mixed uses, the MCH link building, to accommodate retail uses, such as a gift shop, florist, and food and beverage service, to serve MCH employees, patients, and visitors.
- **Objective 10.** Alternative B would provide adequate access and egress to the Campus from Long Beach Boulevard and Atlantic Avenue, through the realignment of Patterson Street.
- **Objective 11.** Alternative B would provide adequate infrastructure to support circulation within the Campus through various improvements to roadways, driveways, sidewalks, security lighting, and landscaping.
- **Objective 12.** Alternative B would provide sufficient parking capacity to comply with the City of Long Beach parking ordinance through the use of existing excess parking spaces, development of additional on-site surface parking (Lots N, P, Q, R, S, and T), short-term (10 year) lease of adjacent off-site parking, and construction of a 1,700-car parking structure.

4.3.1 Design, Architecture, and Setting

As with the proposed project, Alternative B would be developed in accordance with the Master Plan and related design guidelines, including standards for landscape, lighting, security, and wayfinding. As with the proposed project, mature trees, pleasant vistas, and the creative use of surface materials would create a sense of wellness and define Campus boundaries and reinforce pedestrian and vehicular entry points. Each building would be designed to reflect its intended use, thus facilitating wayfinding within the 54-acre Campus.

4.3.2 Alternative B Elements

Alternative B would include the same elements as the proposed project, with the same building spaces and characteristics (Table 4.0-1). However, Alternative B would expedite construction of the 1,700-space parking structure to begin in July 2005, thus avoiding the interim use of leased parking in off-site

locations immediately adjacent to the Campus. However, the need to dedicate \$23.8 million to the construction of a parking structure at the beginning of the expansion effort would likely reduce the size of Phase I of the TCI and Phase I of the MCH pediatric inpatient tower by 14 percent and increase Phase II of the TCI and Phase II of the MCH pediatric inpatient tower by 14 percent to offset the reduction in space in Phase I.

4.3.3 Programming

Upon build-out, Alternative B would accommodate the same programming for health care services provided by the proposed project (Table 4.0-1). However, the anticipated reduction in the sizing of Phase I facilities for the TCI and MCH pediatric inpatient tower would not delay the accommodation of anticipated demand from year 2008 to year 2013 and the related benefits:

- Provision of a safer and more “user friendly” environment for patients, employees, medical staff, and volunteers
- Accessibility of multiple services at a single location
- Proximity to MCH for care required to be provided in an acute care facility
- Operational efficiency
- Quality of care

4.3.4 Economic Characteristics

As with the proposed project, the total estimated construction cost for Alternative B would likely be in excess of \$200 million (Table 4.0-3). The need for immediate construction of parking facility would result in a corresponding reduction of approximately 14 percent of the sizing of Phase I of the TCI and Phase I of the MCH pediatric inpatient tower. The anticipated increase of 4 to 7 percent per year in construction cost would then be expected to result in a corresponding increase of \$2.5 to \$4.4 million, when applied to the upsizing of Phase II of the TCI and Phase II of the MCH pediatric inpatient tower.⁵

4.3.5 Engineering Characteristics

As with the proposed project, Alternative B facilitates year 2030 compliance with the mandates of SB 1953 (Chapter 740, 1994) by relocating health care services from LBMCC and MCH, acute care facilities, to new inpatient and outpatient structures conforming to the requirements of the OSHPD and the City of Long Beach Department of Public Works. This relocation would allow more effective utilization of the two existing acute care facilities within the Campus. However, the reduction in Phase I of the MCH pediatric inpatient tower may compromise the ability to fully comply with year 2008 licensing requirements of the California Department of Health Services.

4.3.6 Construction Scenario

The construction scenario for Alternative B would conform to that described for the proposed project for all but two elements: parking and the MCH pediatric outpatient building. In this scenario, the

⁵ Davis Langdon Adamson. 2004. “California Construction Industry Market Escalation Report, 2004 Mid-Year Update.” Contact: 301 Arizona Avenue, Suite 301, Santa Monica, CA 90401. Available at: http://www.aaesc.com/_news/2004

construction of the 1,700-space parking structure would begin in July 2005, thus eliminating the need for the interim lease of off-site parking. As such, the development of the on-site parking structure would be required to be initiated in July 2005, concurrent with mobilization for the MCH pediatric inpatient tower, utility trench, and central plant building, and TCI Phase I. The capital outlay required to initiate construction of the 1,700-space parking structure would likely require a 14 percent reduction in Phase I of the TCI and Phase I of the MCH inpatient tower. Phase II of the TCI and Phase II of the MCH pediatric inpatient tower would be upsized by 14 percent to compensate for the Phase I reduction.

4.3.7 Comparative Impacts

Aesthetics

As with the proposed project, Alternative B would not result in significant impacts to aesthetics. Since the proposed project area is not located near a scenic coastal or waterway view or state-designated scenic highway, Alternative B would not impact any viewsheds or scenic highways. Upon build-out, Alternative B would result in a relative aesthetic improvement in the Central Long Beach Redevelopment Area. These improvements would be consistent with the visual character of the community, and the short-term impacts during construction would be outweighed by the long-term visual enhancement to be derived from the completed project and its provision of visually attractive structural and landscape amenities.

Air Quality

As with the proposed project, Alternative B results in significant impacts to air quality. Expedited construction of the parking structure would be concurrent with construction of the TCI Phase I and the MCH pediatric inpatient tower, utility trench, and central plant building. As with the proposed project, Alternative B would generate impacts to ambient air quality during construction as a result of trips to and from the site by construction workers, the use of heavy equipment for site grading, demolition of existing structures, soil removal, transport of construction materials for new construction, fuel consumption by on-site construction equipment, application of architectural coatings, and asphalt operation. Alternative B would require more concurrent demolition work and more trucks to transport demolition debris at one time and greater total land area exposed at one time. As a result, the peak-period emissions would be greater than that of the proposed project and would remain significant for CO, NO_x, ROG_s, and PM₁₀.

As with the proposed project, Alternative B would require implementation of mitigation measures Air-1 through Air-13 to minimize to the maximum extent feasible the amount of pollutants emitted by construction activities. As with the proposed project, implementation of mitigation measures Air-1 through Air-13 would reduce significant impacts to air quality from Alternative B, related to fugitive dust emissions, to below the level of significance. The specified mitigation measures would not reduce impacts from peak-day and peak-quarter emissions of CO, NO_x, and ROG_s to a less than significant level.

As with the proposed project, there would be anticipated impacts to air quality related to odors during the construction of Alternative B.

As with the proposed project, implementation of mitigation measures Air-1 through Air-13 would not reduce significant impacts from Alternative B, related to the conformance to the current air quality standard, to below the level of significance.

As with the proposed project, implementation of mitigation measures Air-1 through Air-13 would not reduce significant impacts from Alternative B related to the cumulatively considerable net increase of any criteria pollutant for which the proposed project region is in nonattainment under an applicable federal or state ambient air quality standard (including release in emissions that exceed quantitative thresholds for ozone precursor) to below the level of significance.

Cultural Resources

As with the proposed project, Alternative B would require excavation and grading activities that would have the potential to adversely affect paleontological resources, previously unrecorded prehistoric archeological resources, or the unanticipated discovery of human remain, thus requiring the consideration of mitigation measures. As with the proposed project, potential impacts to the cultural resources from the potential to encounter prehistoric and historic archaeological resources and paleontological resources would be reduced to below the level of significance with the incorporation of mitigation measures Cultural-1 through Cultural-3.

Geology and Soils

As with the proposed project, Alternative B would have the potential to expose people and property to the risk of loss or injury involving seismic ground shaking from the operation of the MCH pediatric inpatient tower Phases I and II and the central plant building, MCH pediatric outpatient building, TCI Phases I and II, and the 1,700-space parking structure. All new construction would be designed to the current life safety standard specified in the Uniform Building Code. In addition, the excavation and grading required to construct the TCI Phases I and II, MCH pediatric inpatient tower Phases I and II and central plant building, MCH pediatric outpatient building, MCH link building, roadway realignment, surface parking lots, and the parking structure would have the potential for impacts related to a substantial increase in soil erosion or loss of topsoil. Erosion potential during construction would be managed to the maximum extent practicable with BMPs as part of compliance with the required NPDES permit and associated Urban Storm Water Management Plan.

As with the proposed project, impacts related to geology and soils would be reduced to below the threshold of significance through the incorporation of mitigation measures Geology-1 through Geology-6.

Hazards and Hazardous Materials

As with the proposed project, Alternative B would have the potential to expose people and property to hazards and hazardous materials through construction and operation activities:

- Demolition of buildings with the potential to contain asbestos-containing materials and lead-based paints
- Excavation and transport of petroleum hydrocarbon–contaminated soil and water
- Construction near former oil wells that have not been abandoned to current standards of the California Department of Conservation, Division of Oil, Gas, and Geothermal Resources

- Placement of structures at locations that have the potential accumulate methane, hydrogen sulfide, or other petroleum-related gases into underground areas or buildings
- Potential to encounter previously unrecorded underground storage tanks during excavation and grading activities
- Routine transport and disposal of construction debris and solid waste that have the potential to contain hazardous waste
- Construction in proximity to areas necessary to emergency response and evacuation plans
- Excavation and grading activities in soils with the potential to contain chemicals of potential concern, including volatile organic compounds

As with the proposed projects, impacts related to hazards and hazardous materials from construction and operation of Alternative B would be expected to be mitigated to below the threshold of significance through the incorporation of mitigation measures Hazards-1 through Hazards-15.

Hydrology and Water Quality

As with the proposed project, Alternative B would result in significant impacts to hydrology and water quality, requiring the consideration of mitigation measures. As with the proposed project, potential impacts to the water quality from increased soil erosion, siltation, or increased surface runoff during construction would be expected to be reduced to a less than significant level through conformance with BMPs. The BMPs specified in the construction scenario were specified to ensure conformance with all applicable federal, state, and local statutes and regulations related to control of surface water and runoff during construction. As with the proposed project, significant impacts related to hydrology and water quality resulting from Alternative B would be mitigated to below the level of significance through the incorporation of mitigation measures Hydro-1 through Hydro-7.

Land Use and Planning

As with the proposed project, Alternative B would not result in significant impacts related to land use and planning. As with the proposed project, the land uses specified in the Master Plan of Land Uses are consistent with LUD No. 7 Mixed-Use District. As with the proposed project, Alternative B would require a change to the existing zoning designation for a portion of land between Spring Street and 29th Street from CHW to PD-29 District, Subarea 1. As with the proposed project, Alternative B would not result in any significant impact to land use and planning.

National Pollution Discharge Elimination System

As with the proposed project, Alternative B would involve concurrent grading and excavation in an area of sufficient size to require compliance with the NPDES permit, thus requiring the development and incorporation of BMPs for reducing discharge of the pollutants into the storm drain and waterway system. As with the proposed project, significant impacts related to NPDES resulting from Alternative B would be mitigated to below the threshold for significance through the incorporation of mitigation measure NPDES-1.

Noise

As with the proposed project, Alternative B would result in significant impacts to ambient noise levels during construction. As with the proposed project, Alternative B requires the use of heavy construction equipment in close proximity to sensitive receptors: pediatric patients in the existing MCH. In addition, as with the proposed project, Alternative B would generate additional trips to and from the Campus as a result of the increase in the medical staff, employees, patients, and corresponding increase in visitors. As with the proposed project, construction impacts to ambient noise levels would be reduced to the maximum extent practicable through the incorporation of mitigation measures Noise-1 through Noise-3.

Public Services

As with the proposed project, Alternative B would not result in significant impacts related to public services. As with the proposed project, Alternative B would not require the provision of, or need for, new or physically altered fire protection, police protection, school, or other public facilities that would require physical alteration of the environment. As with the proposed project, Alternative B would be expected to expose people and property to security-related issues and vandalism during the operation of the TCI Phases I and II; MCH pediatric inpatient tower Phases I and II, utility trench, and central plant building; MCH pediatric outpatient building; MCH link building; surface parking lots; and parking structure. As with the proposed project, impacts related to security and vandalism from Alternative B would be reduced to below the threshold for significance through mitigation measures Public Services-1 and Public Services-2.

Traffic and Transportation

Future Traffic Operations

Alternative B would expedite construction of the parking structure concurrent with construction of the MCH pediatric inpatient tower Phase I, utility trench, and central plant building (Figure 4.3-1), thus creating significant impacts to local intersections during peak hours when considered in conjunction with ambient growth, related projects, and Alternative B construction- and operation-generated trips. As with the proposed project, Alternative B would require implementation of the same mitigation measures because it takes into account increased traffic due to construction activities and additional parking provided by the expedited parking structure. A CMP deficiency would not be anticipated with implementation of the mitigation measures specified for the proposed project. As with the proposed project, impacts to 3 of 10 intersections would not be mitigated to below the level of significance for the year 2008 planning horizon. The impacts to 5 of 10 intersections would not be mitigated to below the level of significance for the year 2014 planning horizon. Potential operations impacts related to traffic and transportation for all other intersections would be expected to be mitigated to below the level of significance through the incorporation of project-specific improvements and mitigation measures Transportation-1 through Transportation-3.

Parking Impacts

As with the proposed project, construction and operation of Alternative B would be expected to result in impacts to parking capacity, thus requiring the consideration of mitigation measures (Table 4.3.7-1 *Alternative B Construction Parking Program*, and Table 4.3.7-2, *Alternative B Operation Parking Program*). Impacts to parking capacity would result from the conversion of 577 existing parking spaces to development and the generation of demand for an additional 1,159 parking spaces through

provision of additional inpatient hospital beds and increased total square feet of spaces dedicated to outpatient services and mixed use. As with the proposed project, implementation of mitigation measure Transportation-3 would be expected to reduce impacts on parking to below the threshold of significance. The parking program specified in mitigation measure Transportation-3 would need to be modified in accordance with Tables 4.3.7-1 and 4.3.7-2.

**TABLE 4.3.7-1
ALTERNATIVE B CONSTRUCTION PARKING PROGRAM**

	Period	Parking Required	Parking Program
Step A	Roadway realignment: July 2005 to October 2005	195	
	Existing available capacity (259)		195
	MCH pediatric inpatient tower Phase I, central plant building, and utility trench: October 2005 to January 2008	155	
	Existing available capacity (259)		64
	On-site Parking Lot N (121)		91
	TCI Phase I: July 2006 to December 2007	306	
	On-site Parking Lot N (121)		30
	On-site Parking Lot P (68)		68
	On-site Parking Lot Q (71)		71
	On-site Parking Lot R (96)		96
On-site Parking Lot S (72)		41	
Step B	MCH pediatric outpatient building: October 2005 to May 2007	43	
	On-site Parking Lot S (72)		31
	On-site Parking Lot T (87)		12
Step C	TCI Phase II: July 2010 to June 2011	275	
	Parking structure at Lot K (1,404)		275
Step D	MCH link building: July 2010 June 2011	0	
	MCH pediatric inpatient tower Phase II: January 2012 to June 2013	20	
	Parking structure at Lot K (1,404)		20

**TABLE 4.3.7-2
ALTERNATIVE B OPERATION PARKING PROGRAM**

	Period	Parking Required	Parking Program
Step A	Roadway realignment: November 2005	195	
	Existing available capacity (259)		195
	MCH pediatric inpatient tower Phase I, central plant building, and utility trench: January 2008	234	
	Existing available capacity (259)		64
	On-site Parking Lot N (121)		121
	On-site Parking Lot P (68)		39
	Central plant building parking (10)		10
	TCI Phase I: January 2008	531	
	On-site Parking Lot P (68)		29
	On-site Parking Lot Q (71)		71
	On-site Parking Lot R (96)		96
	On-site Parking Lot S (72)		72
	On-site Parking Lot T (87)		87
Parking structure at Lot K (1,404)		176	
Step B	MCH pediatric outpatient building: June 2007	443	
	Parking structure at Lot K (1,404)		443
Step C	TCI Phase II: July 2011	338	
	Parking structure at Lot K (1,404)		338
	MCH link building: July 2011	50	
	Parking structure at Lot K (1,404)		50
Step D	MCH pediatric inpatient tower Phase II: July 2013	204	
	Parking structure at Lot K (1,404)		204

Utilities and Service Systems

As with the proposed project, Alternative B would generate solid waste during construction from the demolition of the WIC Building (4,500 SF) and parking structure (50,216 SF). Operation of the capital improvements recommended as elements of the proposed project would increase the generation of solid waste. As with the proposed project, impacts to utilities from solid waste generated during construction and operation of Alternative B would be reduced to below the threshold of significance with the implementation of mitigation measures Utilities-1 and Utilities-4.

SECTION 5.0

SIGNIFICANT ENVIRONMENTAL EFFECTS THAT CANNOT BE AVOIDED IF THE PROPOSED PROJECT IS IMPLEMENTED

This section of the Environmental Impact Report (EIR) summarizes an analysis of the potential for implementation of the Long Beach Memorial Medical Center Expansion (proposed project) to result in significant environmental effects that cannot be reduced to below the level of significance. The analysis of the potential for the proposed Master Plan of Land Uses and construction, operation, and maintenance of the capital improvements recommended as elements of the proposed project to result in direct, indirect, and cumulative significant impacts on the environment is presented in Section 3 of this EIR.

Consistent with the requirements of Section 15126.2(b) of the State of California Environmental Quality Act (CEQA) Guidelines, any significant impacts, including those that can be mitigated but not reduced to below the level of significance, are described in this section of the EIR. Where there are impacts that cannot be alleviated without imposing an alternative design, their implications and the reasons why the project is being proposed, notwithstanding their effect, are also described.

This EIR concludes that the proposed project has the potential to result in unavoidable significant environmental effects related to air quality and traffic and transportation during construction. Although mitigation measures have been identified to avoid and minimize operational impacts to traffic and circulation to intersections in the vicinity of the Long Beach Memorial Medical Center campus (Campus), impacts to some intersections would remain significant. The analysis contained in this EIR demonstrates that the proposed project would not be expected to result in unavoidable significant environmental effects related to aesthetics, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, land use and planning, National Pollution Discharge Elimination System (NPDES), public services, or utilities and service systems.

AESTHETICS

Implementation of the proposed project would have a potentially significant impact on daytime and nighttime views in the area due to the introduction of a new source of substantial light or glare from the construction of large, multistoried structures with reflective exterior surfaces. In addition, the security lighting around the facility would have the potential to create an aesthetic impact. The potential impacts from daytime and nighttime light and glare on aesthetics would be mitigated to below the level of significance through the incorporation of mitigation measures Aesthetics-1 and Aesthetics-2.

AIR QUALITY

Operation of the proposed project would not be expected to result in significant unavoidable environmental effects related to air quality. However, temporary impacts to air quality during construction, including airborne dust from grading, demolition, and dirt hauling; and gaseous emissions from heavy equipment, delivery and dirt-hauling trucks, employee vehicles, and paints and coatings would result in impacts to air quality from emissions of carbon monoxide (CO), nitrogen oxides (NO_x), and reactive organic gases (ROGs). Implementation of mitigation measures Air-1 through Air-13 would reduce impacts to air quality from construction and operation of the proposed project to the maximum extent feasible, in accordance with the guidance provided by the South Coast Air

Quality Management District. However, impacts to air quality from construction emissions of NO_x would remain significant.

CULTURAL RESOURCES

The proposed project has the potential to result in significant impacts to cultural resources related to ground-disturbing activities in a geologic unit known to have a moderate-to-high probability to contain unique paleontological resources and related directly or indirectly to the destruction of a unique archaeological resource, therefore requiring the consideration of mitigation measures. In addition, the proposed project may result in the unanticipated discovery of human remains buried outside of formal cemeteries or Native American sacred sites. These potential impacts related to cultural resources would be mitigated to below the level of significance through the incorporation of mitigation measures Cultural-1 through Cultural-3.

GEOLOGY AND SOILS

Operation and construction of the proposed project would result in the potential for significant environmental effects related to geology and soils from the exposures of people and property to risk in the event of seismic ground shaking. All new construction would be designed to the current life safety standard specified by the Uniform Building Code and the Office of Statewide Health Planning and Development; therefore, risks related to seismic hazards would be reduced to the maximum extent practicable.

The proposed project would be expected to result in less than significant impacts related to a substantial increase in soil erosion or loss of topsoil. Erosion potential during construction would be managed to the maximum extent practicable with best management practices (BMPs) as part of compliance with the required NPDES permit and associated Urban Storm Water Management Plan.

Impacts related to geology and soils would be reduced to below the level of significance through the incorporation of mitigation measures Geology-1 and Geology-6.

HAZARDS AND HAZARDOUS MATERIALS

Operation of the proposed project would not be expected to result in significant unavoidable environmental effects related to hazards and hazardous materials. The proposed project has the potential to release hazardous materials during the demolition and construction phase of the proposed project related to the routine transport, use, or disposal of hazardous materials or through reasonably foreseeable upset and accident conditions. In addition, elements of the proposed project are located over contaminated soils and a buried landfill. The potential impacts related to the potential to encounter hazards and hazardous materials during construction would be mitigated to below the level of significance through incorporation of mitigation measures Hazards-1 through Hazards-15.

PUBLIC SERVICES

Operation of the proposed project would not be expected to result in significant unavoidable environmental effects related to public services. The public services analysis undertaken for this proposed project determined that no significant public services impacts would arise from the proposed project. However, exposure of people or property to security-related issues and vandalism and of people to safety hazards from the operation of the Miller Children's Hospital pediatric inpatient tower Phases I and II, central plant building, outpatient building, and link building; the Todd Cancer Institute Phases I and II; and all new parking facilities within the Campus would be minimized through amendments of the existing security plan and the existing lighting plan prior to the operation of each proposed project element. These potential impacts would be mitigated to below the level of significance through the incorporation of mitigation measures Public Services-1 and Public Services-2.

TRAFFIC AND TRANSPORTATION

Construction of the proposed project would be expected to result in significant unavoidable environmental effects related to traffic and transportation. These impacts occur where no physical mitigation measure was feasible because the additional turn lanes needed would require widening and additional right-of-way. These impacts include 3 of the 28 intersections analyzed: Atlantic Avenue/Willow Street, Long Beach Boulevard/Willow Street, and Long Beach Boulevard/Wardlow Road. Operation of the structural elements of the proposed project would reduce the level of service at nine intersections by year 2008. The level of service at two additional intersections, Atlantic Avenue/Wardlow Road and I-405 SB Ramps/Crest Drive, would be further reduced by the proposed project in year 2014. The impacts to 3 of 10 intersections would not be mitigated to below the level of significance for the year 2008 planning horizon. The impacts to 5 of 10 intersections would not be mitigated to below the level of significance for the year 2014 planning horizon. In addition, the proposed project creates a total demand for 1,404 parking spaces. Potential operation impacts related to traffic and transportation for all other intersections would be expected to be mitigated to below the level of significance through the incorporation of project-specific improvements and mitigation measures Transportation-1 through Transportation-3.

UTILITIES AND SERVICE SYSTEMS

Construction and operation of the proposed project would not be expected to result in significant unavoidable environmental effects related to utilities and service systems. The proposed project has the potential to impact solid waste disposal due to solid waste generated from building debris during demolition and construction. Operation of the capital improvements recommended as elements of the proposed project would be expected to increase the solid waste generated on the Campus. These potential impacts related to solid waste would be mitigated to below the level of significance through the incorporation of mitigation measures Utilities-1 and Utilities-4.

SECTION 6.0

SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES RELATED TO IMPLEMENTATION OF THE PROPOSED PROJECT

This section of the Environmental Impact Report (EIR) summarizes an analysis of the potential for implementation of the Long Beach Memorial Medical Center Expansion (proposed project) to result in significant irreversible environmental changes. Such a change refers to an irretrievable commitment of nonrenewable resources, or other environmental changes that commit future generations to similar uses. Irreversible environmental changes can also result from potential accidents associated with the proposed project.

The proposed project consists of redevelopment of existing developed areas for medical uses within a medical campus that is currently dedicated to such uses. Although the Long Beach Memorial Medical Center (LBMMC) has requested a modification to the existing zoning boundaries in the northeastern area of the LBMMC campus, the anticipated uses are consistent with the existing land use designation in the City of Long Beach General Plan and the zoning designations. The analysis provided in Section 3, Existing Conditions, Impacts, Mitigation, and Level of Significance after Mitigation, demonstrates that the unavoidable significant impacts regarding air quality and traffic and transportation would not be reduced to below the level of significance. There would be anticipated significant irreversible environmental changes related to air quality and traffic and transportation as a result of implementation of the proposed project.

SECTION 7.0

GROWTH-INDUCING IMPACTS

This section of the Environmental Impact Report (EIR) analyzes the potential for the proposed Long Beach Memorial Medical Center Expansion (proposed project) to result in growth-inducing impacts. Such impacts normally occur when a proposed project fosters economic or population growth, or when there is construction of additional housing, either directly or indirectly, within the surrounding environment. The types of projects that are normally considered to result in growth-inducing impacts are those that provide infrastructure that would be suitable to support additional growth or remove an existing barrier to growth.

The proposed project would serve as a high-quality medical facility to meet the existing and anticipated needs of the Long Beach community for health care services through the year 2015. The goal of the proposed project is to improve the health and well-being of individuals, families, and communities of the City of Long Beach through innovation and the pursuit of excellence and to make the Long Beach Memorial Medical Center (LBMCC) into Southern California's preferred, operationally excellent, fiscally sound provider of comprehensive, high-quality health services.

There is a sufficient construction work force in the City of Long Beach area to provide the labor for the proposed project. Construction employment accounts for 137,900 jobs in the Los Angeles–Long Beach Metropolitan Statistical Area as of October 2004.¹ Construction employment increased 2.5 percent in year 2004 and would be expected to continue to increase.² Thus, construction employment required for the proposed project constitutes less than 1 percent of the available labor pool. For the Todd Cancer Institute (TCI) Phase I, approximately 90 workers would be expected to be on site during peak construction activity, and fewer than 90 workers would be expected on site during non-peak construction activity. For the TCI Phase II, approximately 55 workers would be expected to be on site during peak construction activity, and fewer than 55 workers would be expected on site during non-peak construction activity. For the Miller Children's Hospital (MCH) pediatric inpatient tower Phase I, approximately 144 workers would be expected to be on site during peak construction, and fewer than 140 workers would be expected on site during non-peak construction activity. For the MCH pediatric inpatient tower Phase II, approximately 85 workers would be expected to be on site during peak construction activity, and fewer than 85 workers would be expected on site during non-peak construction activity. For the MCH utility trench, approximately 20 workers would be expected to be on site during peak construction activity, and fewer than 20 workers would be expected on site during non-peak construction activity. For the MCH central plant building, approximately 50 workers would be expected to be on site during peak construction activity, and fewer than 50 workers would be expected on site during non-peak construction activity. For the MCH pediatric outpatient building, approximately 144 workers would be expected to be on site during peak construction activity, and fewer than 140 workers would be expected on site during non-peak construction activity. For the MCH link building, approximately 55 workers would be expected to be on site during peak construction activity, and fewer than 55 workers would be expected on site during non-peak construction activity. For the roadway realignment, approximately 50 workers would be expected to be on site during peak construction activity, and fewer than 50 workers would be expected on site during non-peak construction activity. For parking program, approximately 50 workers would be expected to be on site during peak construction activity, and fewer than 50 workers would be expected on site during non-

¹ State of California, Employment Development Department. 15 November 2004. Labor Market Information. Available at: <http://www.calmis.ca.gov>

² State of California, Employment Development Department. 15 November 2004. Labor Market Information. Available at: <http://www.calmis.ca.gov>

peak construction activity. Therefore, the temporary employment opportunities generated by the proposed project would not be considered to be growth-inducing.

The increase in medical staff and employees required to operate the proposed project would be consistent with the projected population growth. The Southern California Association of Governments³ and the Housing element of the City of Long Beach General Plan⁴ forecast a 6- to 9-percent growth rate to the year 2020, adding approximately 65,000 people to the City of Long Beach. The total number of existing jobs provided by LBMMC is 6,358. The proposed expansion of the LBMMC would generate approximately 500 to 630 potential permanent new jobs after the completion of construction for the maintenance and operation of both inpatient and outpatient health facilities, maintenance activities, security, childcare services, retail, and emergency activities. This employment number includes 122 existing employees of the TCI who work in dispersed locations throughout the LBMMC campus that would be consolidated into a single location as a result of the proposed project. Therefore, the net increase in employment would be 378 to 498, or a 6- to 8-percent increase, which is consistent with the growth rate specified by the General Plan. The operations labor force would be recruited from the existing population in the City of Long Beach area and, therefore, is not considered to be growth-inducing for the proposed project.

The proposed project would not include the construction of housing either directly or indirectly in the surrounding environment. The employment opportunities generated by the proposed project are minimal and do not exceed the projected growth stipulated in the Southern California Association of Governments 2004 Regional Transportation Plan.⁵ The existing utilities and service systems currently in operation, such as the wastewater treatment, storm drain system, and water supply and solid waste systems, have the capacity to meet the future growth anticipated in the area of the proposed project. The existing public services, such as fire protection, police protection, parks, and other public services (e.g., libraries), would not be significantly impacted by the proposed project and have the capacity to meet future anticipated growth in the area of the proposed project. Because the proposed project does not include constructing housing on the proposed project site, no impact to schools is anticipated; therefore, it is not considered to be subject to growth-inducing impacts from the proposed project.

³ Southern California Association of Governments. January 1995. *Regional Comprehensive Plan and Guide*. Contact: 818 West Seventh Street, 12th Floor, Los Angeles, CA 90017.

⁴ City of Long Beach, Department of Planning and Building. April 2001. *Housing Element (2000–2005) of the Long Beach General Plan*. Prepared by: Cotton/Bridges/Associates. Contact: City of Long Beach, Department of Planning and Building, City Hall, 333 West Ocean Boulevard, Long Beach, CA 90802.

⁵ Southern California Association of Governments. 2004. *2004 Regional Transportation Plan*. Contact: 818 West Seventh Street, 12th Floor, Los Angeles, CA 90017. Available at: <http://www.scag.ca.gov/rtp2001/2004draft/FinalPlan.htm>

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SECTION 11.0 DISTRIBUTION LIST

This section of the Environmental Impact Report (EIR) contains a list of those entities to which a copy of the Notice of Availability (NOA) of this EIR or a copy of the EIR has been distributed. Organizations or individuals listed below with a superscript^(EIR) received a hard copy of Volume I of the EIR. Organizations or individuals listed below with a superscript^(EIR+) received a hard copy of Volume I and Volume II, Technical Appendices, of the EIR. Organizations or individuals listed below with a superscript^(EIR/CD) received a hard copy of Volume I of the EIR and an electronic copy (CD) of Volume II, Technical Appendices. Organizations or individuals listed below with a superscript^(CD+) received an electronic copy (CD) of Volume I and Volume II, Technical Appendices, of the EIR. Organizations or individuals listed below without any superscripted notation received a copy of the NOA only.

Copies of the EIR are available during the 45-day public review period, from January 25, 2005, to March 10, 2005, at three libraries:

Long Beach Main Public Library^{EIR+}
101 Pacific Avenue, Long Beach, CA 90022
Telephone Number: (562) 570-7500

Burnett Public Library^{EIR+}
560 East Hill Street, Long Beach, CA 90806
Telephone Number: (562) 570-1041

Dana Public Library^{EIR+}
3680 Atlantic Avenue, Long Beach, CA 90807
Telephone Number: (562) 570-1042

The Draft EIR is also available for review at the City of Long Beach:

City of Long Beach Department of Planning and Building^{EIR+}
333 West Ocean Boulevard, Long Beach, CA 90802
Telephone Number: (562) 570-6193

11.1 PUBLIC AGENCIES

11.1.1 Federal Agencies

Federal Aviation Administration (FAA)^{EIR/CD}
William C. Withycombe
Regional Administrator
15000 Aviation Boulevard
Hawthorne, CA 90250
Tel: (310) 725-3550

11.1.2 State Agencies

Governor's Office of Planning and Research
State Clearinghouse ^{CD+ (15), EIR Executive Summaries only (15)}
Ms. Terry Roberts
P.O. Box 3044
Sacramento, CA 95812-3044
Tel: (916) 445-0613

California Department of Transportation ^{EIR/CD}
Division of Aeronautics
Mr. R. Austin Wiswell
Division Chief
P.O. Box 942874
Sacramento, CA 94274-001
Tel: (916) 654.4959

California Coastal Commission ^{CD+}
Chuck Damm, Sr.
Deputy Director
200 Ocean Gate, 10th Floor
Long Beach, CA 90802
Tel: (562) 590-5071
Fax: (562) 590-5084

California Environmental Protection Agency,
Department of Toxic Substances Control ^{EIR+}
Ms. Gloria Conti
5796 Corporate Avenue
Cypress, CA 90630-4732
Tel: (714) 484-5300
Fax: (714) 484-5302

California Department of Parks and Recreation
Office of Historic Preservation ^{CD+}
Mr. Wayne Donaldson
State Historic Preservation Officer
P.O. Box 94296
Sacramento, CA 94296
Tel: (916) 653-6624

California Native American
Heritage Commission ^{EIR+}
Mr. Robert Wood
915 Capitol Mall, Suite 364
Sacramento, CA 95814
Tel: (916) 653-4082

Caltrans (District 7) ^{EIR+}
Office of Advance Planning
Ms. Rose Casey
IGR Office 1-10C
120 South Spring Street, Suite 1-8A
Los Angeles, CA 90012
Tel: (213) 897-4429

California Regional Water Quality Control Board,
Los Angeles Region (Region 4) ^{EIR+}
Mr. David Bacharowski
320 West Fourth Street, Suite 200
Los Angeles, CA 90013
Tel: (213) 576-6600

California Integrated Waste
Management Board ^{EIR/CD}
Ms. Peggy Farrell
1001 I Street
Sacramento, CA 95814
Tel: (916) 341-6000

Office of Statewide Health, Planning, and
Development ^{EIR+}
Mr. Ted Teshima
Senior Architect
311 South Spring Street, 10th Floor
Los Angeles, CA 90013-4413
Tel: (213) 897-0177

11.1.3 Regional Agencies

South Coast Air Quality Management District^{EIR+}
Dr. Barry R. Wallerstein
21865 East Copley Drive
Diamond Bar, CA 91765-4182
Tel: (909) 396-2000

Southern California Association of
Governments^{EIR+}
Mr. Mark A. Pisano
818 West Seventh Street, 12th Floor
Los Angeles, CA 90017
Tel: (213) 236-1800

County of Los Angeles Department of
Public Works^{CD+}
Land Development Division
Ms. Suk Chong
P.O. Box 1460
Alhambra, CA 91802-1460
Tel: (626) 458-5100

Greater Los Angeles County Vector
Control District^{CD+}
Mr. Jack Hazelrigg
12545 Florence Avenue
Santa Fe Springs, CA 90670
Tel: (562) 944-9656

Los Angeles County Consolidated^{CD+}
Protection District
Mr. P. Michael Freeman
1320 North Eastern Avenue
Los Angeles, CA 90063
Tel: (323) 881-2401

Los Angeles County Tax Assessor^{CD+}
Mr. Rick Auerbach
1401 East Willow Street
Signal Hill, CA 90755
Tel: (562) 256-1701

Office of the County Clerk—
Environmental Filings^{EIR+}
Ms. Conny B. McCormack
12400 East Imperial Highway
Second Floor, Room 2001
Norwalk, CA 90650
Tel: (562) 462-2060

County of Los Angeles Fire Department^{CD+}
Ms. Lily Cusick
5823 Rickenbacher Road
Forestry Division, Room 123
Commerce, CA 90040
Tel: (323) 890-4330

County Sanitation Districts of
Los Angeles County^{CD+}
Mr. James Stahl
1955 Workman Mill Road
Whittier, CA 90607
Tel: (562) 699-7411

County Sanitation Districts of
Los Angeles County^{EIR/CD}
Ms. Suzanne Wienke
Supervising Civil Engineer
1955 Workman Mill Road
Whittier, CA 90607
Tel: (562) 699-7411

County of Los Angeles Metropolitan
Transportation Authority^{CD+}
Mr. Art Cuerto
1 Gateway Plaza
Mail Stop 99-22-29
Los Angeles, CA 90012-2952
Tel: (213) 922-2000

County of Los Angeles Department
of Health Services^{EIR+}
Mr. Pete Oda
1449 West Temple Street, Room 202
Los Angeles, CA 90026
Tel: (626) 430-5540

11.1.4 Local Agencies

Long Beach Transit ^{EIR/CD}
Mr. John Carlson
1300 Gardenia Avenue
Long Beach, CA 90813
Tel: (562) 591-2301

Long Beach Community College District
Dr. E. Jan Kehoe
President
4901 East Carson Street
Long Beach, CA 90808
Tel: (562) 938-4121

Long Beach Unified School District
Mr. Christopher Steinhauser
Superintendent
1515 Hughes Way
Long Beach, CA 90810
Tel: (562) 997-8000

Compton Community College
Mr. Ullis Williams
1111 East Artesia Boulevard
Compton, CA 90021
Tel: (310) 900-1600

Environmental & Project Planning
Services Division
Mr. George Britton
Manager
P.O. Box 4048
Santa Ana, CA 92702-4048
Tel: (714) 834-5312

Board of Directors Water Replenishment District
of Southern California
Mr. Norm Ryan
12621 East 166th Street
Cerritos, CA 90703
Tel: (562) 921-5521

Compton Creek Mosquito Abatement District
Mr. Mitchel R. Weinbaum
District Manager
1224 South Santa Fe Avenue
Compton, CA 90021-4339
Tel: (310) 639-7375

Paramount Unified School District
Mr. Jay Wilbur
Superintendent
15110 South California Avenue
Paramount, CA 90723
Tel: (562) 602-6011

Compton Unified School District
Dr. Jessie L. Gonzales
Superintendent
604 South Tamarind Avenue
Compton, CA 90020
Tel: (310) 639-4321

ABC Unified School District
Dr. Ron Barnes
16700 Norwalk Boulevard
Cerritos, CA 90701
Tel: (562) 926-5566

11.1.5 City of Long Beach

City of Long Beach Fire Department^{EIR/CD}
Chief Terry L. Harbour
925 Harbor Plaza Drive
Long Beach, CA 90802
Tel: (562) 570-2500

City of Long Beach^{CD+}
Redevelopment
Ms. Barbara Kaiser
333 West Ocean Boulevard, 3rd Floor
Long Beach, CA 90802
Tel: (562) 570-6615

City of Long Beach^{CD+}
Mr. Gerald Miller
City Manager
333 West Ocean Boulevard, 13th Floor
Long Beach, CA 90802
Tel: (562) 570-6861

Long Beach Water Department^{EIR/CD}
Mr. Kevin Wattier
1800 East Wardlow Road
Long Beach, CA 90807
Tel: (562) 570-2300

City of Long Beach Parks, Recreation and
Marine^{CD+}
Mr. Phil Hester
Director
2760 Studebaker Road
Long Beach, CA 90815
Tel: (562) 570-3170

City of Long Beach Zoning Division^{EIR+}
Ms.Carolyn Bihn
Zoning Administrator
333 West Ocean Boulevard, 7th Floor
Long Beach, CA 90802
Tel: (562) 570-6223

City of Long Beach Police Department^{EIR/CD}
Chief Anthony W. Batts
100 Long Beach Boulevard
Long Beach, CA 90802
Tel: (562) 570-7301

Long Beach Airport Bureau^{CD+}
Mr. Chris Kunze
Airport Manager
4100 Donald Douglas Drive
Long Beach, CA 90808-1798
Tel: (562) 570-2619

City of Long Beach^{EIR/CD}
Administration, Planning and Facilities Bureau
Ms. Christine F. Andersen
Director of Public Works
333 West Ocean Boulevard, 9th Floor
Long Beach, CA 90802
Tel: (562) 570-6383

Long Beach Department of Health and Human
Services^{EIR/CD}
Mr. Ronald Arias
2525 Grand Avenue
Long Beach, CA 90815
Tel: (562) 570-4499

Long Beach Department of Planning and
Building^{EIR+}
Ms. Angela Reynolds
333 West Ocean Boulevard, 7th Floor
Long Beach, CA 90802
Tel: (562) 570-3170

City of Long Beach Energy Department^{CD+}
Mr. Jerry Wolfe
2400 East Spring Street
Long Beach, CA 90807
Tel: 562-570-2000

City of Long Beach
City Attorney's Office
Mr. Michael Mais
333 West Ocean Boulevard, 11th Floor
Long Beach, CA 90802
Tel: (562) 570-2230

City of Long Beach^{EIR/CD}
Department of Public Works, Traffic
Mr. Edward Norris
Transportation Bureau
333 West Ocean Boulevard, 10th Floor
Long Beach, CA 90802
Tel: (562) 570-5209

City of Long Beach
Ms. Laura Richardson
Council Person, 6th District
333 West Ocean Boulevard, 14th Floor
Long Beach, CA 90802
Tel: (562) 570-6816

11.1.6 Adjacent Cities

City of Lakewood
Mr. Charles Ebner
5050 North Clark
Lakewood, CA 90712
Tel: (562) 866-9771

City of Carson
Ms. Sheri Repp
701 East Carson Street
Carson, CA 90745
Tel: (310) 830-7600

City of Signal Hill^{EIR/CD}
Mr. Gary Jones
2175 Cherry Avenue
Signal Hill, CA 90806
Tel: (562) 989-7300

City of Paramount
Mr. John Carver
16400 Colorado Avenue
Paramount, CA 90723
Tel: (562) 220-2225

City of Seal Beach
Ms. Kathleen McGlynn
211 Eighth Street
Seal Beach, CA 90746
Tel: (562) 431-2527

City of Bellflower
Mr. Brian Smith
16600 Civic Center Drive
Bellflower, CA 90706
Tel: (562) 804-1424

City of Cerritos
Mr. Ryan Carey
18125 South Bloomfield Avenue
Cerritos, CA 90703
Tel: (562) 860-0311

City of Hawaiian Gardens
Mr. Joe Colombo
21815 South Pioneer Boulevard
Hawaiian Gardens, CA 90716
Tel: (562) 420-2641

City of Los Alamitos
Mr. John Godoewski
3191 Katella Avenue
Los Alamitos, CA 90720
Tel: (562) 431-3538

City of Compton
Ms. Gloria Falls
205 South Willowbrook Avenue
Compton, CA 90220
Tel: (310) 605-5500

City of Los Angeles Planning & Building
Department
Mr. Michael Davies
City Hall—Environmental Review Section
200 North Spring Street, Suite 763
Los Angeles, CA 90012
Tel: (213) 978-1366

11.2 OTHER PARTIES

Ms. Diana Mann
P.O. Box 30165
Long Beach, CA 90853

California Earth Corporation
Mr. Don May
4927 Minturn Avenue
Lakewood, CA 90712

Ms. Ann Cantrell
3106 Claremont
Long Beach, CA 90808

Southern California Edison
Mr. Steven Bradford
1924 East Cashdan Street
Compton, CA 90220

El Dorado Audubon Society
Ms. Carolyn Vance
President
P.O. Box 90713
Long Beach, CA 90809

Long Beach Memorial Medical Center^{EIR+}
Mr. Pat Johner
2801 Atlantic Avenue
Long Beach, CA 90801
Tel: (213) 933-0567

Miller Children's Hospital^{EIR+}
Mr. Richard DeCarlo
2801 Atlantic Avenue
Long Beach, CA 90801
Tel: (562) 933-1126

Miller Children's Hospital^{EIR+}
Dr. Mel Marks
2801 Atlantic Avenue
Long Beach, CA 90801
Tel: (562) 933-8001

Todd Cancer Institute^{EIR+}
Ms. Cathy Kopy
2801 Atlantic Avenue
Long Beach, CA 90801
Tel: (562) 933-0970

ADAMS Project Management
Consulting, LLC^{EIR+}
Mr. Jerry Oksner
1601 Cloverfield Boulevard
Second Floor, South Tower
Santa Monica, CA 90404
Tel: (310) 460-3366

Taylor^{CD+}
Mr. Rick Savely, AIA
2220 North University Drive
Newport Beach, CA 92660-3319
Tel: (949) 574-1325

Turner Construction Company^{CD+}
Mr. Bruce Nelson
555 West Fifth Street
Suite 3700
Los Angeles, CA 90013
Tel: (213) 891-3044

Cannon Design^{CD+}
Mr. Marc Davidson
1901 Avenue of the Stars, Suite 175
Los Angeles, CA 90067
Tel: (310) 229-2700

SCS Engineers^{CD+}
Mr. Ray Huff
3711 Long Beach Boulevard, 9th Floor
Long Beach, CA 90807
Tel: (562) 426-9544

Linscott, Law & Greenspan Engineers^{CD+}
Mr. Richard Barretto
1580 Corporate, Suite 122
Costa Mesa, CA 92626
Tel: (714) 641-1587

Moffatt & Nichol^{CD+}
Mr. Jim Faul
250 West Wardlow Road
Long Beach, CA 90807
Tel: (562) 810-3389

VSA n Associates^{CD+}
Dr. Mahabir Atwal
12525 Lambert Road
Whittier, CA 90606
Tel: (562) 698-2648

Wrigley Association
Ms. Maria Norvell
P.O. Box 16192
Long Beach, CA 90806
Tel: (562) 427-5021

Memorial Heights
Ms. Maurice Knowles
3095 Elm Avenue
Long Beach, CA 90807
Tel: (562) 424-3678

Sunrise Boulevard Historic District
Ms. Polly Johnson
735 Sunrise Boulevard
Long Beach, CA 90806
Tel: (562) 427-6865

11.3 ADJACENT PROPERTY OWNERS

Patel Ishwarbhai & Maniben & Family Trust
2860 Long Beach Boulevard
Long Beach, CA 90806-1591

Elliott Steven Y. & Family Trust
2865 Atlantic Avenue
Long Beach, CA 90806-1740

Arthur & Eleanor R. Howard
2789 Long Beach Boulevard
Long Beach, CA 90806-1519

Ferraco Eric A. & Andrea V. & Family Trust
2933 Long Beach Boulevard
Long Beach, CA 90806-1517

Severance Stephen R. & Family Trust
1750 East Ocean Boulevard, Unit 1209
Long Beach, CA 90802-6020

Health Services Memorial
2801 Atlantic Avenue, #214
Long Beach, CA 90806-1737

Edward C. & Charmay B. Allred
3050 East Airport Way
Long Beach, CA 90806-2404

Atlantic Medical Center, LLC
3450 Wilshire Boulevard, Suite 400
Los Angeles, CA 90010-2212

Blinn George & Patricia & Trust
1647 West Richard Place
Anaheim, CA 92802-1507

David C. & D. & S. Barden
12535 Seal Beach Boulevard, Suite 100
Seal Beach, CA 90740-2746

American Stores Properties, Inc.
P.O. Box 20
Boise, ID 83726-0020

Joseph Grana
1657 Candlewood Drive
Upland, CA 91784-9176

Diane L. Horwood
P.O. Box 17656
Tucson, AZ 85731-7656

Phyllis L. Mckinney
1208 South Lemon Avenue
Walnut, CA 91789-4822

Gidden Family Trust
2808 Flangel Street
Lakewood, CA 90712-3733

L & B Real Estate
P.O. Box 1380
Los Angeles, CA 90078-1380

JCDS Properties, LLC
2690 Atlantic Avenue
Long Beach, CA 90806-2711

RMA Land, LLC
2750 Atlantic Avenue
Long Beach, CA 90806-2713

Schwartz D. N. & Family Trust
2650 Elm Avenue
Long Beach, CA 90806-1651

Patton James J. & Family Trust
2640 Colt Road
Rancho Palos Verdes, CA 90275-6505

Mitchwil Investments, LLC
2919 Gardena Avenue
Signal Hill, CA 90755-1914

Beachside Investments, LLC
4543 East Anaheim Street
Long Beach, CA 90804-3119

Brakin Family Trust
733 North Double Tree Lane
Long Beach, CA 90815-4712

Nancy N. Nguyen
500 East Willow Street
Long Beach, CA 90806-3115

Martha M. Arvey
1070 Parkview Avenue
Pasadena, CA 91103-2356

Two Willow Partners, LLC
P.O. Box 5034
Los Alamitos, CA 90721-5034

Desoto Natural Resources, Inc.
P.O. Box 2767
Long Beach, CA 90801-2767

Janich Properties, LLC
3939 Pacific Avenue
Long Beach, CA 90807-3229

S & P Investments
2650 Elm Avenue, Suite 205
Long Beach, CA 90806-1600

Salvation Army
30840 Hawthorne Boulevard
Rancho Palos Verdes, CA 90275-5301

CREE Oil Limited
3250 Cherry Avenue
Long Beach, CA 90807-5214

11.4 OCCUPANTS OF THE PROPERTIES TO BE DEMOLISHED

Resident
2617 Pasadena Avenue
Long Beach, CA 90806

Residents
2609 Pasadena Avenue, Apartments #1-10
Long Beach, CA 90806

Resident
2632 Pasadena Avenue
Long Beach, CA 90806

Residents
2630 Linden Avenue, Apartments #1-9
Long Beach, CA 90806

Residents
2620 Linden Avenue, Apartments #1-4
Long Beach, CA 90806

Property Owner^{EIR}
2641 Linden Avenue, Apartments #1-8
Long Beach, CA 90806

Resident
2633 Linden Avenue
Long Beach, CA 90806

Residents
2615 Pasadena Avenue, Apartments #1-4
Long Beach, CA 90806

Residents
2624 Pasadena Avenue
Long Beach, CA 90806

Residents
2638 Linden Avenue, Apartments #1-6
Long Beach, CA 90806

Residents
2622 Linden Avenue
Long Beach, CA 90806

Residents
2624 Linden Avenue
Long Beach, CA 90806

Residents
2641 Linden Avenue, Apartments #1-8
Long Beach, CA 90806

Residents
2613 Linden Avenue, Apartments #1-9
Long Beach, CA 90806

11.5 OWNERS OF THE PROPERTIES WITHIN A 300-FOOT RADIUS

27th Elm Equipment, LLC
320 East 27th Street
Long Beach, CA 90806

Property Owner
192 North Marina Drive
Long Beach, CA 90803

28th Street Leasing, LLC
2760 Atlantic Avenue
Long Beach, CA 90806

ACH
192 North Marina Drive
Long Beach, CA 90803

Edward and Charmay Allred
3050 East Airport Way
Long Beach, CA 90806

Glenn Almoite
214 East Columbia Street
Long Beach, CA 90806

American Stores Properties, Inc.
3146 Red Hill Avenue, #150
Costa Mesa, CA 92626

American Stores Properties, Inc.
P.O. Box 4349
Anaheim, CA 92803

Arnold and Pamela Anderson
3620 Claremore Avenue
Long Beach, CA 90808

Apro, LLC
17311 South Main Street
Gardena, CA 90248

Martha Arvey
1070 Parkview Avenue
Pasadena, CA 91103

Atlantic Medical Center, LLC
3450 Wilshire Boulevard, #400
Los Angeles, CA 90010

Bancap Medical Properties
192 North Marina Drive
Long Beach, CA 90803

David Barden
12535 Seal Beach Boulevard, Suite 100
Seal Beach, CA 90740

Donald and Bette Barden
12535 Seal Beach Boulevard, Suite 100
Seal Beach, CA 90740

Arturo and Juanita Barrera
P.O. Box 92228
City Industry, CA 91715

Justin and Louise Bartlow
1880 North College Circle
Long Beach, CA 90815

Clyde Bergendahl
2666 Elm Avenue
Long Beach, CA 90806

George and Paicia Blinn
1647 West Richard Place
Anaheim, CA 92802

Mario and Clara Brakin
733 North Double Tree Lane
Long Beach, CA 90815

Mario and Clara Brakin
2650 Elm Avenue, Suite 102
Long Beach, CA 90806

Burger King Corporation
P.O. Box 020783
Miami, FL 33102

John Cabe
1222 Central Avenue
Garden Grove, CA 92843

Virginia Campbell
1130 Batavia Avenue
Livermore, CA 94550

Mauriio Cappelletti
3120 San Francisco Avenue
Long Beach, CA 90806

Ernesto and Rosa Casillas
2558 Pasadena Avenue
Long Beach, CA 90806

Joe and Marilyn Chiu
114062 Montgomery Drive
Westminster, CA 92683

Mary Cloud
505 Cedar Avenue, Apt. #2-D
Long Beach, CA 90802

Cree Roseman Hillside Medical
3250 Cherry Avenue
Long Beach, CA 90807

DLC Enterprises
2650 Elm Avenue, Suite 215
Long Beach, CA 90806

Georges El Khoury
4543 East Anaheim Street
Long Beach, CA 90804

Steven Elliott
2865 Atlantic Avenue, #122
Long Beach, CA 90806

Eric and Andrea Ferraco
2933 Long Beach Boulevard
Long Beach, CA 90806

Elroy and Betty Fuller
P.O. Box 290
Dallas, TX 75221