LONG BEACH MEMORIAL MEDICAL CENTER EXPANSION VOLUME I, DRAFT ENVIRONMENTAL IMPACT REPORT SCH NO. 200408 I 142

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This Environmental Impact Report (EIR) analyzes the potential for significant environmental impacts in association with the Long Beach Memorial Medical Center Expansion (proposed project). The proposed project would occur within the City of Long Beach, County of Los Angeles, California.

The proposed project consists of a Master Plan of Land Uses that provides a conceptual framework for the reorganization of the six existing land uses: (1) inpatient medical facilities, (2) outpatient medical facilities, (3) mixed-use facilities, (4) utilities, (5) circulation, and (6) parking. Within this conceptual framework, six proposed project elements could be constructed within the next 5 to 10 years:

- 1. Todd Cancer Institute
- 2. Miller Children's Hospital—Pediatric Inpatient Tower, Utility Trench, and Central Plant Building
- 3. Miller Children's Hospital—Pediatric Outpatient Building
- 4. Miller Children's Hospital—Link Building
- 5. Roadway Realignment
- 6. Parking Program

ES.1 EXISTING FACILITIES

The 54-acre Long Beach Memorial Medical Center campus (Campus) is completely developed and characterized by six general land uses: (1) inpatient medical facilities, (2) outpatient medical facilities, (3) mixed-use facilities (includes 51 residential units), (4) utilities, (5) circulation, and (6) parking. There are approximately 1,213,945 gross square feet of structures located within the Campus. There are two licensed hospitals within the Campus: the Long Beach Memorial Medical Center (LBMMC) and Miller Children's Hospital (MCH). These facilities are centrally located in the center of 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 in the northern portion of the Campus.

ES.2 PROPOSED PROJECT

The proposed project consists of six distinct components:

- 1. Todd Cancer Institute
- 2. Miller Children's Hospital—Pediatric Inpatient Tower, Utility Trench, and Central Plant Building
- 3. Miller Children's Hospital—Pediatric Outpatient Building
- 4. Miller Children's Hospital—Link Building
- 5. Roadway Realignment
- 6. Parking Program

ES.2.1 Todd Cancer Institute

The Todd Cancer Institute (TCI) would be located on the northwestern corner of the Campus, southeast of the intersection of Long Beach Boulevard and Spring Street on the existing 872-stall surface parking lot. The TCI building would provide comprehensive outpatient cancer services in a single facility designed for the unique requirements of cancer patients and their families. These services are currently provided in approximately 24 distinct locations distributed throughout the Campus and in nearby, leased facilities. The TCI building would also be designed to reinforce a sense of arrival to the northern edge of the Campus. Visitors would access the TCI from entry driveways on Pasadena Avenue. Outpatient cancer services would ultimately encompass approximately 125,930 gross square feet of new space constructed in two phases.

Landscaping would be provided along Long Beach Boulevard and Spring Street frontages consistent with City of Long Beach requirements. Landscaping within the Campus would be consistent with existing Campus landscaping. A healing garden would be developed adjacent to the TCI building. Amenities and plant selections would be sensitive to the needs of cancer patients and would accentuate the healing and medicinal properties of certain plants.

Phase I of the TCI would provide 83,630 gross square feet in a 54-foot-high, three-story building and an atrium featuring a 70-foot-high skylight. The building would be identified by two building signs reading "Todd Cancer Institute" and by ground-level monument signage. The Phase I portion of the building would require 418 parking spaces. It is anticipated that there would be a maximum of approximately 120 employees working in the building at one time. Phase I of the TCI is proposed to initiate construction in July 2005. Upon completion of Phase I in September 2006, the undeveloped portions of the site would accommodate approximately 701 parking stalls.

Phase II would provide a 42,300-gross-square-foot expansion in a new 33-foot-high, two-story horizontal addition. The Phase II portion of the building would require 212 parking spaces. Upon completion of Phase II, the undeveloped portions of the site would accommodate approximately 633 parking stalls. It is anticipated that there would be a maximum of approximately 60 additional employees working in the building at one time. Construction of Phase II of the TCI is contingent on the growth of outpatient cancer services, the needs of the Long Beach community, and philanthropy. The likely dates to initiate and complete construction are July 2010 through June 2011.

ES.2.2 Miller Children's Hospital—Pediatric Inpatient Tower, Utility Trench, and Central Plant Building

The expansion of MCH, through the addition of a pediatric inpatient tower, would be located immediately adjacent to the existing MCH facility, northwest of the intersection of Atlantic Avenue and Memorial Drive. The existing land use at this location is an 86-stall, multilevel parking structure. The parking structure would be demolished to accommodate the proposed pediatric inpatient tower. Access to the pediatric inpatient tower would be provided on multiple floors of the existing MCH facility and by a new pedestrian entrance on the west facade of the building. At build-out, the MCH would provide approximately 205,250 gross square feet.

Phase I of the MCH pediatric inpatient tower would provide approximately 129,220 square feet of new space for pediatric surgical services, imaging, lobby, newborn intensive care services, and general pediatric inpatient care services. It is anticipated that there would be a maximum of approximately 310 employees working in the building at one time. Phase I would consist of a fourstory building with one story below grade and three stories above grade. The highest point of the Phase I structure would be approximately 84 feet above grade. The building would be identified by three building signs reading "Miller Children's Hospital" and by ground-level monument signs. The Phase I portion of the building would require 144 parking spaces. Phase I of the new pediatric inpatient tower is proposed to initiate construction in October 2005, with completion in January 2008. Phase II would provide approximately 86,030 square feet in a four-story vertical expansion of the Phase I structure. The highest point of the combined Phase I and Phase II structure would be approximately 148 feet above grade. The Phase II portion of the building would require 192 parking spaces. Construction of Phase II is contingent on the growth of inpatient pediatric cancer services, the needs of the Long Beach community, and philanthropy. The likely dates to initiate and complete construction of Phase II of the MCH pediatric inpatient tower are January 2012 and June 2013, respectively.

Landscaping would be provided along Atlantic Avenue and 27th Street frontages consistent with City of Long Beach requirements. Landscaping within the Campus would be consistent with existing Campus landscaping.

A central plant building designed to support Phases I and II of the new pediatric inpatient tower would be constructed northwest of the intersection of Atlantic Avenue and 27th Street. The existing land use at this location is a small, wood-framed building referred to as the "WIC Building" and "Ranch House" on the southeastern portion of the surface parking lot located north of 27th Street. The uses currently provided at the Ranch House include women's, children's, and infant food and nutrition programs, and would be relocated elsewhere on the Campus prior to the initiation of demolition activities. Development of the central plant building within a portion of the existing surface parking lot would displace 14 parking spaces. The central plant building would consist of a single-level structure of approximately 3,500 square feet and approximately 5,000 gross square feet of open yard, plus eight parking stalls. Construction of the central plant building is proposed to begin in June 2006 and finish in August 2007. The central plant building would contain equipment and storage for the provision of emergency power, chilled water, and bulk medical oxygen for the inpatient tower. The central plant building would be staffed by existing engineering staff; therefore, no additional parking would be required for the central plant building. Vehicular access to the central plant building would be from 27th Street.

The inpatient pediatric tower would be served by the central plant building via a 1,000-linear-foot underground utility trench along the eastern edge of the Campus, parallel to Atlantic Avenue. Utility piping between the central plant building and the inpatient tower would be direct buried within a protected, slurry back-filled trench. The utility trench would be a permanent, underground utility conveyance that would not generate any additional demand for parking; therefore, no additional parking would be required for the utility trench.

ES.2.3 Miller Children's Hospital—Pediatric Outpatient Building

A new pediatric outpatient building would be located south of the existing MCH facility, west of Atlantic Avenue, and approximately midway between Columbia Street and 28th Street. The existing land use at this location is a portion of the surface parking lot located north of 28th Street. Approximately 43 parking spaces would be demolished to accommodate the proposed pediatric

outpatient building. Pedestrian access to the outpatient building would be provided from an entrance on the northwest facade of the building. The MCH outpatient building would provide approximately 80,000 gross square feet. The pediatric outpatient building would consist of a five-story, B-occupancy, medical office building housing an array of pediatric care clinics and support services. It is anticipated that there would be a maximum of approximately 140 employees working in the building at one time. The structure's ground floor would be located below grade, with the upper seven floors rising above grade. The highest point of the building would be approximately 84 feet above grade. The MCH pediatric outpatient building is proposed to initiate construction in October 2005 and finish construction in May 2007. The building would be developed as a shell building, with internal tenant improvements for MCH-operated services and private physician practices. Four types of uses and clinics are under consideration for the outpatient pediatric building: (1) dental clinic, (2) pediatric rehabilitation, (3) children's and specialty care clinic, and (4) support space, including physician's offices.

Landscaping would be provided along the Atlantic Avenue frontage, consistent with City of Long Beach requirements. Landscaping within the Campus would be consistent with existing Campus landscaping.

The pediatric outpatient building would require approximately 400 parking spaces. Construction of the pediatric outpatient building is contingent on the identification of funding, philanthropy, and lease agreements with private physician groups.

ES.2.4 Miller Children's Hospital—Link Building

A new mixed-use building connecting the pediatric inpatient tower and the pediatric outpatient building would be located southwest of the intersection of Atlantic Avenue and 28th Street. The existing land use at this location is the existing Memorial Drive access road that would accommodate the proposed inpatient tower. Access to the mixed-use building would be provided on multiple floors from the inpatient hospital to the north and the outpatient building to the south. Grade-level pedestrian entrances would also be provided on the east and west facades. The MCH link building would provide approximately 20,000 gross square feet. The link building tower would consist of a 50-foot-high, three-story building that would contain retail spaces, offices, and retail food service for the users of the adjacent inpatient tower and outpatient building. Nonresidential space would be provided. The structure's ground floor would be located below grade, with the upper three floors rising above grade. The MCH link building is proposed to initiate construction in July 2010 and finish construction in June 2011.

Landscaping would be provided along the Atlantic Avenue frontage, consistent with City of Long Beach requirements. Landscaping within the Campus would be consistent with existing Campus landscaping.

The mixed-use building would require 50 parking spaces. Construction of the link building is contingent on the identification of a funding source.

ES.2.5 Roadway Realignment

Vehicular and pedestrian circulation patterns would be improved through the realignment of selected internal roadways and through a signage and wayfinding program. Specifically, a 520-linear-foot section of the alignment of Patterson Street/Memorial Medical Campus Drive as it extends through the Campus would be realigned southward by approximately 300 feet from its

current intersection, at Atlantic Avenue near 28th Street on the east side of the Campus, to make a closer connection with the existing alignment of Patterson Street at Atlantic Avenue. As a result, the intersection of Atlantic Avenue and 28th Street would become a T-intersection. The roadway would consist of three site entry lanes and three site exit lanes with an automated traffic control gate for each lane. The present roadway is approximately 85 feet wide at Atlantic Avenue. The roadway would narrow to 40 feet where it transitions to the existing alignment of Patterson Street near Pasadena Avenue. The road curvature has a radius of approximately 500 feet to transition from Patterson Street to the existing roadway alignment. The roadway realignment would result in the loss of 195 parking spaces from the surface parking lot located north of 27th Street. The existing T-intersection at Atlantic Avenue and Patterson Street would be replaced by a signalized through intersection. The grading and realignment would be undertaken such that the roadway and curbs are adjusted to provide access to adjacent buildings at the first-floor level. The roadway realignment is proposed to initiate construction in July 2005 and finish construction in October 2005.

ES.2.6 Parking Program

A phased parking program would be designed to offset the 577 parking spaces permanently misplaced by the proposed project and accommodate the additional demand for 1,153 parking stalls resulting from the expansion project components and the additional 189 parking spaces that would be lost from construction of a parking structure within Lot K. It is anticipated that the phased parking program would consider the use of surface parking areas on property owned by the LBMMC, nearby off-site surface parking areas that could be leased by the LBMMC, and possible future construction of one or more parking structures when justified by total demand. All on-site parking would be developed in areas designated for interim or permanent use of parking in the Master Plan of Land Uses. This would include demolition of the 51 existing residential units to create surface parking (Lots Q, R, S, and T). If determined to be necessary, a multilevel parking structure capable of accommodating approximately 100 spaces per level would be sited in an area designated for long-term parking. Surface parking areas and structures would be landscaped. However, the LBMMC would apply for a code exception to the City of Long Beach landscaping requirements. All parking facilities constructed by the LBMMC would incorporate best management practices consistent with the requirements of the Regional Water Quality Control Board.

ES.3 AREAS OF KNOWN CONTROVERSY

This EIR addresses the areas of controversy known to the City of Long Beach and those raised by agencies, organizations, and the public during the scoping process for the proposed project. There are four primary areas of controversy that have been raised in relation to the proposed project:

1. The City of Long Beach is aware that the construction of a project of this size often generates impacts to ambient air quality from construction and operation. Section 3.2, Air Quality, analyzes the impacts to air quality from construction and operation of the proposed project. There are no significant anticipated impacts from operation of the proposed project. Mitigation measures have been specified that are capable, with the exception of nitrogen oxides (NOx), of mitigating all construction impacts to air quality to below the level of significance.

- 2. There were numerous concerns with the traffic and transportation impacts associated with the implementation of the proposed project. The City of Long Beach is aware that the implementation of the proposed project would impact 10 of the surrounding intersections, 3 of which cannot be mitigated to below the level of significance for the year 2008 planning horizon. The impacts to 5 of the 10 intersections would not be mitigated to below the level of significance for the year 2014 planning horizon. Section 3.11, Traffic and Transportation, discusses the impacts associated with implementation of the proposed project and includes feasible mitigation measures for intersections anticipated to result in significant impacts.
- 3. There are concerns related to the impacts associated with the required removal of existing parking to accommodate the proposed project. Section 3.11, Traffic and Transportation, includes discussion of the construction and operation impacts to parking for each element of the proposed project and includes a mitigation measure through the implementation of a parking program or comparable measure that provides sufficient parking to meet City of Long Beach Code requirements. Implementation of the mitigation measure for parking impacts would reduce impacts to below the level of significance.
- 4. There are concerns with the potential for contaminated soils located on the proposed project site. The proposed project site is located on a closed landfill site, which is listed on the California Integrated Waste Management Board's Solid Waste Information System (SWIS), and is within the area of an oil field. There is a possibility that contaminated soils remain in the artificial fill. Section 3.5, Hazards and Hazardous Materials, includes a detailed discussion of the potential impacts and includes mitigation measures that would reduce the potential for exposure of people or property to petroleum hydrocarbon-contaminated soils and water to below the level of significance. The mitigation measure requires that petroleum hydrocarbon-contaminated soils and water be tested, treated, and/or disposed consistent with all applicable local and federal statues and regulations. The City of Long Beach shall review plans and specifications for those elements of the proposed project to be constructed over unclassified fill: MCH pediatric inpatient tower Phase I and central plant building, MCH pediatric outpatient building, MCH link building, and the TCI Phases I and II. Sapphos Environmental, Inc. met with the Department of Toxic Substances Control (DTSC) on January 11, 2005, to present the proposed project and Health Risk Assessment (Appendix F, Health Risk Assessment and Environmental Summary Report). As a result of the meeting, LBMMC agreed to enter into a Voluntary Clean-up Agreement (VCA) with DTSC, which would serve as the mechanism for DTSC to complete the site characterization study and Health Risk Assessment, LBMMC will work directly with DTSC to finalize the mitigation measures specified in the EIR to ensure their adequacy in remediating health risks to below the level of significance. The City of Long Beach and the Office of Statewide Health Planning and Development shall ensure that the proposed project plans and specifications disclose the potential to encounter petroleum hydrocarbon-contaminated soils and water, and require the construction contractor to remove petroleum hydrocarbon-contaminated soils and water, in accordance with all applicable federal, state, and local statutes and regulations. The implementation of the mitigation measure described above would reduce impacts to below the level of significance.

ES.4 ISSUES TO BE RESOLVED

The analysis undertaken in support of the Initial Study¹ determined that there are several environmental issue areas related to the California Environmental Quality Act (CEQA) that are not expected to have significant impacts resulting from implementation of the proposed project. These issue areas are agricultural resources, biological resources, mineral resources, population and housing, and recreation. These issue areas, therefore, were not carried forward for detailed analysis in the EIR. The environmental issues identified in the Initial Study that need to be resolved in this EIR include aesthetics, air quality, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, National Pollution Discharge Elimination System, land use and planning, noise, public services, traffic and transportation, and utilities and service systems.

ES.5 SUMMARY OF IMPACTS

The analysis undertaken in support of this EIR has determined that impacts to aesthetics, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, National Pollution Discharge Elimination System, land use and planning, noise, public services, and utilities and service systems can be mitigated to below the level of significance. However, there will be potential impacts related to air quality and traffic and transportation. Table ES.5-1, *Summary of Impacts*, presents potentially significant impacts related to each issue area analyzed that might result or can be reasonably expected to result from implementation of the proposed project. Table ES.5-1 also presents the measures that can mitigate the significant impacts and the level of significance after mitigation for each issue area analyzed in the EIR.

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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.

TABLE ES.5-1 SUMMARY OF IMPACTS

Impact	Mitigation Measure	Level of Significance After Mitigation
Aesthetics		
Implementation of the proposed project has the potential to increase the amount of glare reflected from the structural elements.	Aesthetics-1 The potential increase in the amount of light and glare produced due to implementation of the security lighting provided for each element of the proposed project shall be reduced to below the threshold of significance by mandating the design type of the light fixtures, light standard height, and light fixture and standard orientation. Prior to completion of final plans and specifications for each structural element of the project, lighting plans and specifications shall be submitted to the City of Long Beach Department of Public Works for review to ensure that all light fixtures shall use glare control visors, arc tube suppression caps, and a photometric design that maintains 70 percent of the light intensity in the lower half of the light beam, or comparable design or technology, to achieve those criteria. This requirement shall apply to all elements of the project: Todd Cancer Institute Phases I and II; Miller Children's Hospital (MCH) pediatric inpatient tower Phases I and II, and central plant building; MCH pediatric outpatient building; MCH link building; roadway realignment; and parking improvements. Completion of this mitigation measure shall be monitored and enforced by the City of Long Beach Department of Public Works.	Implementation of mitigation measure Aesthetics-1 would reduce significant impacts related to the potential increase in the amount of glare reflected from the structural elements to below the level of significance.
Implementation of the proposed project has the potential to increase the amount of light and glare due to increased security lighting.	Aesthetics-2 The potential increase in the amount of glare produced due to implementation of the structural elements of the proposed project shall be reduced to below the threshold of significance by mandating the design type of the reflective surface of the buildings, careful selection of exterior building materials, and window glass treatments. Prior to the completion of final plans and specifications for each structural element of the project, plans and specifications shall be submitted to the City of Long Beach Department of Public Works for review to ensure that the selection of exterior building materials and window glass treatments would not create uncomfortable levels of glare on public roadways or surrounding redirected areas for the structural elements of the project: Todd Cancer Institute Phases I and II, Miller Children's Hospital (MCH) pediatric inpatient tower Phases I and II, MCH pediatric outpatient building, and MCH link building. Completion of this mitigation measure shall be monitored and enforced by the City of Long Beach Department of Public Works.	Implementation of mitigation measure Aesthetics-2 would reduce significant impacts related to daytime and nighttime light and glare to below the level of significance.

Impact	Mitigation Measure	Level of Significance After Mitigation			
Air Quality	Air Quality				
Implementation of the proposed project has the potential to impact air quality during construction and operation.	Air-1 As part of the request for the demolition permit for the 86-car parking structure, the WIC Building, and existing structures located at the proposed location of surface parking areas Q, R, S, and T, the Long Beach Memorial Medical Center shall demonstrate that asbestos-containing materials in these structures have been identified and adequately abated, or that the contractor has been informed of the need to identify and abate asbestos-containing materials consistent with the requirements of South Coast Air Quality Management District (SCAQMD) Rule 1403. Specifically, all asbestos-containing material shall be removed and encapsulated prior to demolition, such that no asbestos fibers are released. Air-2 Prior to advertising for construction bids for each structural element of the proposed project, the plans and specifications shall be reviewed by the lead agency to ensure that the requirement to comply with South Coast Air Quality Management District (SCAQMD) regulations, including Rule 1403, Rule 402, and Rule 403, is included. The Office of Statewide Health Planning and Development shall be the lead agency for the Miller Children's Hospital (MCH) pediatric inpatient tower Phases I and II, central path building, and utility trench. The City of Long Beach shall be the lead agency for the Todd Cancer Institute Phases I and II, MCH pediatric outpatient building, MCH link building, roadway realignment, and parking facilities. The specifications shall require the construction contractor to present a Rule 402/Rule 403 compliance plan at the construction start-up meeting, prior to demolition, construction staging, or grading. The Rule 402/Rule 403 compliance plan shall include mitigation measures Air-2 through Air-12, or comparable measures to prevent nuisance dust and visible emissions. The construction activities related to the proposed project shall comply with SCAQMD regulations, including Rule 1403, Rule 402, and Rule 403. Rule 403 specifies that there shall be no dust impacts off site that would be suffic	Implementation of mitigation measures Air-1 through Air-13 would reduce inputs on air quality for construction and operation of the proposed project to the maximum extent feasible, in accordance with the guidance provided by the SCAQMD. However, impacts to air quality from construction emissions of NOx would remain significant.			

Impact	Mitigation Measure	Level of Significance After Mitigation
	that the requirement for the construction contractor to ensure that soil is moistened prior to grading and that soil moisture content is maintained at a minimum of 12 percent for all grading activities is included. The Office of Statewide Health Planning and Development shall be the lead agency for the Miller Children's Hospital (MCH) pediatric inpatient tower Phases I and II, central plant building, and utility trench. The City of Long Beach shall be the lead agency for the Todd Cancer Institute Phases I and II, MCH pediatric outpatient building, MCH link building, roadway realignment, and parking facilities. The construction contractor shall demonstrate compliance with this measure through the submission of weekly monitoring reports to the lead agency. At a minimum, active operations shall utilize one or more of the applicable best available control measures to minimize fugitive dust emissions from each fugitive dust source type that is part of the active operation.	
	Air-4	
	Soil moistening shall be required to treat grading areas during construction of each element of the proposed project to avoid fugitive dust emissions, ensure compliance with current air quality standards, and avoid contributions to cumulative increases in criteria pollutants. Prior to advertising for construction bids for each element of the proposed project, the lead agency shall ensure that the plans and specifications for each element of the proposed project include the requirement for the construction contractor to ensure that soil shall be moistened not more than 15 minutes prior to the daily commencement of soil-moving activities and three times a day, or four times a day under windy conditions, in order to maintain a soil moisture content of 12 percent. The Office of Statewide Health Planning and Development shall be the lead agency for the Miller Children's Hospital (MCH) pediatric inpatient tower Phases I and II, central plant building, and utility trench. The City of Long Beach shall be the lead agency for the Todd Cancer Institute Phases I and II, MCH pediatric outpatient building, MCH link building, roadway realignment, and parking facilities.	
	Air-5	
	Application of water or a chemical stabilizer shall be required to treat grading areas during construction of each element of the proposed project to avoid fugitive dust emissions, ensure compliance with current air quality standards, and avoid contributions to cumulative increases in criteria pollutants. Prior to advertising for construction bids for each element of the proposed project, the lead agency shall ensure that the plans and specifications for each element of the proposed project include the requirement for the construction contractor to apply water or a chemical stabilizer to maintain a stabilized surface on the last day of active operations prior to a weekend or holiday. The Office of Statewide Health Planning and Development shall be the lead agency for the Miller Children's Hospital (MCH) pediatric inpatient tower Phases I and II, central plant building, and utility trench. The City of Long Beach shall be the lead agency for the Todd Cancer	

Impact	Mitigation Measure	Level of Significance After Mitigation
	Institute Phases I and II, MCH pediatric outpatient building, MCH link building, roadway realignment, and parking facilities.	
	Air-6	
	Moistening or covering of excavated soil piles shall be required to treat grading areas during construction of each element of the proposed project to avoid fugitive dust emissions, ensure compliance with current air quality standards, and avoid contributions to cumulative increases in critical pollutants. Prior to advertising for construction bids for the proposed project, the lead agency shall ensure that the plans and specifications for each element of the proposed project include the requirement for the construction contractor to ensure that excavated soil piles are watered hourly for the duration of construction or covered with temporary coverings. The Office of Statewide Health Planning and Development shall be the lead agency for the Miller Children's Hospital (MCH) pediatric inpatient tower Phases I and II, central plant building, and utility trench. The City of Long Beach shall be the lead agency for the Todd Cancer Institute Phases I and II, MCH pediatric outpatient building, MCH link building, roadway realignment, and parking facilities.	
	Air-7	
	Discontinuing grading activities during windy conditions shall be required to treat grading areas during construction of each element of the proposed project to avoid fugitive dust emissions, ensure compliance with current air quality standards, and avoid contributions to cumulative increases in critical pollutants. Prior to advertising for construction bids for each element of the proposed project, the lead agency shall ensure that the plans and specifications for each element of the proposed project include the requirement for the construction contractor to cease grading during periods when winds exceed 25 miles per hour. The Office of Statewide Health Planning and Development shall be the lead agency for the Miller Children's Hospital (MCH) pediatric inpatient tower Phases I and II, central plant building, and utility trench. The City of Long Beach shall be the lead agency for the Todd Cancer Institute Phases I and II, MCH pediatric outpatient building, MCH link building, roadway realignment, and parking facilities.	
	Air-8	
	Moistening excavated soil prior to loading on trucks shall be required at all grading areas during construction of each element of the proposed project to avoid fugitive dust emissions, ensure compliance with current air quality standards, and avoid contributions to cumulative increases in critical pollutants. Prior to advertising for construction bids for the proposed project, the lead agency shall ensure that the plans and specifications for each element of the proposed project include the requirement for the construction contractor to moisten	

Impact	Mitigation Measure	Level of Significance After Mitigation
	excavated soil prior to loading on trucks. The Office of Statewide Health Planning and Development shall be the lead agency for the Miller Children's Hospital (MCH) pediatric inpatient tower Phases I and II, central plant building, and utility trench. The City of Long Beach shall be the lead agency for the Todd Cancer Institute Phases I and II, MCH pediatric outpatient building, MCH link building, roadway realignment, and parking facilities.	
	Air-9	
	Transport of soils to and from the proposed project site for each element of the proposed project shall be conducted in a manner that avoids fugitive dust emissions, ensures compliance with current air quality standards, and avoids contributions to cumulative increases in criteria pollutants. Prior to advertising for construction bids for each element of the proposed project, the lead agency shall ensure that the plans and specifications for each element of the proposed project include the requirement for the construction contractor to cover all loads of dirt leaving the site or to leave sufficient freeboard capacity in the truck to prevent fugitive dust emissions en route to the disposal site. The Office of Statewide Health Planning and Development shall be the lead agency for the Miller Children's Hospital (MCH) pediatric inpatient tower Phases I and II, central plant building, and utility trench. The City of Long Beach shall be the lead agency for the Todd Cancer Institute Phases I and II, MCH pediatric outpatient building, MCH link building, roadway realignment, and parking facilities.	
	Air-10	
	Washing of wheels leaving the construction site during construction of each element of the proposed project shall be required to avoid fugitive dust emissions, ensure compliance with current air quality standards, and avoid contributions to cumulative increases in criteria pollutants. The lead agency shall ensure that the plans and specifications for each element of the proposed project include the requirement for the construction contractor to clean adjacent streets of tracked dirt at the end of each workday or install on-site wheel-washing facilities. The Office of Statewide Health Planning and Development shall be the lead agency for the Miller Children's Hospital (MCH) pediatric inpatient tower Phases I and II, central plant building, and utility trench. The City of Long Beach shall be the lead agency for the Todd Cancer Institute Phases I and II, MCH pediatric outpatient building, MCH link building, roadway realignment, and parking facilities.	

Impact	Mitigation Measure	Level of Significance After Mitigation
	Turning off engines and equipment when not in use shall be required to reduce vehicular emissions during construction of each element of the proposed project. Prior to advertising for construction bids for the proposed project, the lead agency shall ensure that the plans and specifications for each element of the proposed project include the requirement for the construction contractor to reduce idling emissions by turning off equipment and truck engines when not in use for five minutes or more. The Office of Statewide Health Planning and Development shall be the lead agency for the Miller Children's Hospital (MCH) pediatric inpatient tower Phases I and II, central plant building, and utility trench. The City of Long Beach shall be the lead agency for the Todd Cancer Institute Phases I and II, MCH pediatric outpatient building, MCH link building, roadway realignment, and parking facilities.	
	Air-12 Concurrent use of multiple pieces of heavy equipment beyond the levels described in the construction scenarios shall be prohibited to the maximum extent feasible to reduce vehicular emissions. Prior to advertising for construction bids for each element of the proposed project, the lead agency shall ensure that the plans and specifications include the requirement to minimize to the maximum extent practicable the concurrent use of multiple pieces of heavy equipment for each element of the proposed project during construction activities. The Office of Statewide Health Planning and Development shall be the lead agency for the Miller Children's Hospital (MCH) pediatric inpatient tower Phases I and II, central plant building, and utility trench. The City of Long Beach shall be the lead agency for the Todd Cancer Institute Phases I and II, MCH pediatric outpatient building, MCH link building, roadway realignment, and parking facilities.	
	Air-13 Carpooling and use of public transportation shall be encouraged to reduce vehicular emissions. The lead agency shall ensure that the plans and specifications include the requirement for the construction contractor to encourage construction workers to use public transit and carpools. The Office of Statewide Health Planning and Development shall be the lead agency for the Miller Children's Hospital (MCH) pediatric inpatient tower Phases I and II, central plant building, and utility trench. The City of Long Beach shall be the lead agency for the Todd Cancer Institute Phases I and II, MCH pediatric outpatient building, MCH link building, roadway realignment, and parking facilities.	

Impact	Mitigation Measure	Level of
		Significance After Mitigation
Cultural Resources		
Implementation of the proposed project has the potential to significantly impact paleontological resources.	Cultural-1 The potential impact to cultural resources related directly or indirectly to the destruction of a unique paleontological resource or unique geologic feature from the proposed project shall be reduced to below the level of significance by the presence of a qualified paleontological monitor during all ground-disturbing activities. Any paleontological discoveries shall be removed in accordance with standards for such recovery established by the Society of Vertebrate Paleontology: Where the qualified vertebrate paleontologist identifies the potential for the grading plan to result in impacts to sites recorded to contain unique paleontological resources or sediments with a medium or high potential to contain significant paleontological resources, a program for recovery of the resources shall be required. This program must include, but not be limited to, the following: Monitoring of excavation in areas likely to contain paleontologic resources by a qualified vertebrate paleontologic monitor. The monitor shall be equipped to salvage fossils as they are unearthed to avoid construction delays and to remove samples of sediments that are likely to contain the remains of small fossil vertebrates. Preparation of recovered specimens to a point of identification, including washing of sediments to recover small fossil vertebrates. Identification and curation of specimens into a museum repository with retrievable storage. Preparation of a report of findings with an appended, itemized inventory of the specimens.	Implementation of mitigation measure Cultural-1 would be expected to reduce potential significant impacts related to paleontological resources to below the level of significance.
Implementation of the proposed project has the potential to significantly impact archaeological resources.	The report and inventory, when submitted to the appropriate lead agency, signifies the completion of the program to mitigate impacts to paleontologic resources. Cultural-2 The impact to cultural resources related directly or indirectly to the destruction of a unique archaeological resource from the proposed project shall be reduced to below the level of significance by the presence of a qualified archaeological monitor during all ground-disturbing activities within native soils identified as Qal. The City of Long Beach shall ensure that impacts to cultural resources as a result of the potential for earthmoving activity to uncover previously unrecorded archeological resources is below the level of significance through monitoring by a qualified archaeologist of all subsurface operations undertaken in native soils identified as Qal, including but not limited to grading, excavation, trenching, and recording of any previously unrecorded archeological resources encountered during construction. The plans and specifications for all ground-disturbing activities shall identify the need for archeological monitoring and data recovery. The archaeologist shall be on site during any activity when soil is to be moved or exported. The archaeologist shall be authorized to halt the proposed project in the area of a finding, and mark, collect, and	Implementation of mitigation measure Cultural-2 would be expected to reduce potential significant impacts related to archaeological resources to below the level of significance.

Impact	Mitigation Measure	Level of Significance After Mitigation
Implementation of the proposed project has the potential to impact human remains.	evaluate any archaeological materials discovered during construction. In addition, an exploratory archaeological excavation shall be made (i.e., a sample test pit) to assess the presence of cultural resources. In the event that archaeological resources are encountered by the monitoring archaeologist, the archaeologist shall contact the Gabrielino/Tongva Tribal Council and arrange for a Native American monitor to be present on site during the remainder of excavation activities related to the proposed project. Copies of any archaeological surveys, studies, or reports of field observation during grading and land modification shall be prepared and certified by the attendant archaeologist and submitted to the South Central Coastal Information Center at California State University Fullerton. Any artifacts recovered during mitigation shall be deposited in an accredited and permanent scientific or educational institution for the benefit of current and future generations. Cultural-3 The City of Long Beach shall ensure that impacts to cultural resources related to the unanticipated discovery of human remains be reduced to below the level of significance by ensuring that, in the event human remains are encountered, construction in the area of finding shall cease and the remains shall stay in-situ pending definition of an appropriate plan. The Los Angeles County Coroner (Coroner) shall be contacted to determine whether investigation of the cause of death is required. In the event that the remains are of Native American origin, the Native American Heritage Commission shall be contacted to determine necessary procedures for protection and preservation of remains, including reburial, as provided in the State CEQA Guidelines, Section 15064.5(e), "CEQA and Archaeological Resources," CEQA Technical Advisory Series. In the event of accidental discovery or recognition of any human remains in any location other than a dedicated cemetery, the following steps shall be taken: (A) The Coroner must be contacted to determine that n	Implementation of mitigation measure Cultural-3 would be expected to reduce potential significant impacts related to the unanticipated discovery of human remains to below the level of significance.

Impact	Mitigation Measure		Level of
			Significance After Mitigation
	2.	The Native American Heritage Commission shall identify the person or persons it believes to be the most likely descended from the deceased Native American.	
	3.	The most likely descendent may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98.	
	4.	Where the following conditions occur, the landowner of his/her authorized representative shall rebury the Native American human remains and associated grave goods, with appropriate dignity, in the property in a location not subject to further subsurface disturbance:	
		(a) The Native American Heritage Commission is unable to identify a most likely descendent or the most likely descendent failed to make a recommendation within 24 hours after being notified by the commission.	
		(b) The descendant in identified fails to make a recommendation.	
		(c) The landowner or his/her authorized representative rejects the recommendation of the descendent, and the mediation by the Native American Heritage Commission fails to provide measures acceptable to the landowner.	

Impact	Mitigation Measure	Level of Significance After Mitigation
Geology and Soils		
Implementation of the proposed project has potential to result in impacts associated with substantial ground shaking, and thus a degree of seismic hazard risk.	Geology-1 Exposure of people or property to potentially adverse effects, including the risk of loss or injury, involving seismic ground shaking from the operation of the Miller Children's Hospital (MCH) pediatric inpatient tower, Phases I and II, and the central plant building, shall be minimized through conformance with California Geological Survey's Guidelines for Evaluating and Mitigating Seismic Hazards in California and all applicable City of Long Beach codes and regulations related to seismic activity. MCH shall ensure that the site-specific geotechnical investigations for the MCH pediatric inpatient tower, Phases I and II, and the central plant building are incorporated into proposed project plans and specifications. Prior to approval of final plans and specifications for the MCH pediatric inpatient tower, Phases I and II, and the central plant building, the Office of Statewide Health Planning and Development shall review and ensure that all recommendations of the site-specific geotechnical recommendations are incorporated into the final plans and specifications.	Implementation of mitigation measures Geology-1 and Geology-2 would be expected to reduce potential significant impacts related to the seismic hazard risk to the least extent possible.
	Geology-2 Exposure of people or property to potentially adverse effects, including the risk of loss or injury, involving seismic ground shaking from the operation of the Miller Children's Hospital (MCH) pediatric outpatient building, MCH link building, Todd Cancer Institute (TCI) Phases I and II, and the parking structure, shall be minimized through conformance with California Geological Survey's Guidelines for Evaluating and Mitigating Seismic Hazards in California and all applicable City of Long Beach codes and regulations related to seismic activity. The Long Beach Memorial Medical Center (LBMMC) and MCH shall ensure that the site-specific geotechnical investigations for the MCH pediatric outpatient building, MCH link building, TCI Phases I and II, and the parking structure are incorporated into proposed project plans and specifications. Prior to approval of final plans and specifications for the MCH pediatric outpatient building, MCH link building, TCI Phases I and II, and the parking structure, the City of Long Beach Department of Public Works shall review and ensure that all recommendations of the site-specific geotechnical recommendations are incorporated into the final plans and specifications.	

Impact	Mitigation Measure	Level of Significance After Mitigation
Implementation of the proposed project has potential to result in impacts associated with geologic hazards related to liquefaction.	Geology-3 Exposure of people or property to potentially adverse effects, including the risk of loss or injury, involving geologic hazards related to liquefaction from seismic ground shaking from the operation of the Miller Children's Hospital (MCH) pediatric inpatient tower, Phases I and II, and the central plant building, shall be minimized through conformance with all applicable State of California and City of Long Beach codes and regulations. MCH shall ensure that the site-specific geotechnical investigations for the MCH pediatric inpatient tower, Phases I and II, and the central plant building are incorporated into proposed project plans and specifications. Prior to approval of final plans and specifications for the MCH pediatric inpatient tower, Phases I and II, and the central plant building, the Office of Statewide Health Planning and Development shall review and ensure that all recommendations of the site-specific geotechnical recommendations are incorporated into the final plans and specifications.	Implementation of mitigation measures Geology-3 and Geology-4 would be expected to reduce potential significant impacts related to liquefaction to below the level of significance.
	Geology-4 Exposure of people or property to potentially adverse effects, including the risk of loss or injury, involving geologic hazards related to liquefaction from seismic ground shaking from the operation of the Miller Children's Hospital (MCH) pediatric outpatient building, MCH link building, Todd Cancer Institute (TCI) Phases I and II, and the parking structure, shall be minimized through conformance with all applicable State of California and City of Long Beach codes and regulations. The Long Beach Memorial Medical Center (LBMMC) and MCH shall ensure that the site-specific geotechnical investigations for the MCH pediatric outpatient building, MCH link building, TCI Phases I and II, and the parking structure are incorporated into proposed project plans and specifications. Prior to approval of final plans and specifications for the MCH pediatric outpatient building, MCH link building, TCI Phases I and II, and the parking structure, the City of Long Beach Department of Public Works shall review and ensure that all recommendations of the site-specific geotechnical recommendations are incorporated into the final plans and specifications.	
Implementation of the proposed project has potential to result in impacts related to a substantial increase in soil erosion.	Geology-5 The City of Long Beach Department of Planning and Building shall require the construction contractor to implement best management practices that are consistent with the National Pollution Discharge Elimination System (NPDES) Permit No. CAS 004003 to avoid soil erosion during construction of the Miller Children's Hospital (MCH) pediatric inpatient tower Phases I and II, and central plant building. Prior to approval of final plans and specifications, the Office of Statewide Health Planning and Development (OSHPD) shall ensure that the requirement to comply with NPDES Permit No. CAS 004003 is included in the specifications. The OSHPD Inspector of Record shall monitor construction to ensure compliance with NPDES Permit No. CAS 004003.	Implementation of mitigation measures Geology-5 and Geology-6 would manage the erosion potential during construction to the maximum extent practicable.

Impact	Mitigation Measure	Level of Significance After Mitigation
	Geology-6 The City of Long Beach Department of Planning and Building shall require the construction contractor to implement best management practices that are consistent with the National Pollution Discharge Elimination System (NPDES) Permit No. CAS 004003 to avoid soil erosion during construction of the Todd Cancer Institute (TCI) Phases I and II, Miller Children's Hospital (MCH) pediatric outpatient building and utility trench, MCH link building, roadway realignment, on-site parking areas (Lots N, P, Q, R, S, and T), and parking structure. Prior to approval of final plans and specifications, the City of Long Beach Department of Planning and Building shall ensure that the requirement to comply with NPDES Permit No. CAS 004003 is included in the specifications. The City of Long Beach Department of Planning and Building shall monitor construction to ensure compliance with NPDES Permit No. CAS 004003.	
Hazards and Hazardo		
Implementation of the proposed project has the potential to result in significant impacts related to the accidental release of hazardous materials during construction.	Hazards-1 To avoid exposure to asbestos-containing materials (ACMs) and lead-based paints (LBPs) during demolition, construction, and remediation activities, the City of Long Beach and the Office of Statewide Health Planning and Development shall require that all such materials and wastes be identified and an Operations and Maintenance (O&M) Plan developed prior to the issuance of demolition permits for each structure constructed prior to 1979. The O&M Plan shall ensure compliance with all applicable federal, state, and local requirements and specify all work to be done, including lead and asbestos surveys of structures to be demolished, proper handling and storage of lubricants and fuels for construction equipment, and methods for remediation of ACMs and LBPs, if necessary. The O&M Plan must be submitted to the City of Long Beach Department of Health for review and approval prior to initiation of construction and demolition activities for the Miller Children's Hospital pediatric inpatient tower and central plant building, and the construction of parking lots requiring the demolition of pre-1979 constructed buildings. The O&M Plan shall, as appropriate and necessary, conform to the requirements of the Los Angeles County Department of Health Services (Local Enforcement Agency for landfills), South Coast Air Quality Management District, the Los Angeles Regional Water Quality Control Board, and the Department of Toxic Substances Control. Compliance with the O&M Plan shall be monitored by the City of Long Beach Department of Planning and Building throughout construction and demolition.	Implementation of mitigation measures Hazards-1 through Hazards-3 would be expected to reduce potentially significant impacts related to the accidental release of hazardous materials during construction to below the level of significance.
	Hazards-2 To reduce the potential for exposure of people or property to petroleum hydrocarbon–contaminated soils and water, the Office of Statewide Health Planning and Development (OSHPD) shall require that petroleum hydrocarbon–contaminated soils and water be tested, treated, and disposed of as necessary under the oversight of the Department of Toxic Substances Control (DTSC). The OSHPD shall review plans and specifications for those elements of the proposed project to be constructed over unclassified fill: Miller Children's Hospital (MCH) pediatric inpatient tower Phase I, central plant building, and utility trench. The	

Impact	Mitigation Measure	Level of Significance After Mitigation
	OSHPD shall ensure that the proposed project plans and specifications disclose the potential to encounter petroleum hydrocarbon-contaminated soils and water, and require the construction contractor to remove petroleum hydrocarbon-contaminated soils and water within the construction zone, in accordance with all applicable federal, state, and local statutes and regulations and consistent with specifications of the Voluntary Clean-up Agreement between the Long Beach Memorial Medical Center and DTSC.	
	Hazards-3 To reduce the potential for exposure of people or property to petroleum hydrocarbon–contaminated soils and water, the City of Long Beach shall require that petroleum hydrocarbon–contaminated soils and water be tested, treated, and disposed of as necessary under the oversight of the Department of Toxic Substances Control (DTSC). The City of Long Beach shall review plans and specifications for those elements of the proposed project to be constructed over unclassified fill: Miller Children's Hospital (MCH) pediatric outpatient building, MCH link building, and the Todd Cancer Institute Phases I and II. The City of Long Beach shall ensure that the proposed project plans and specifications disclose the potential to encounter petroleum hydrocarbon–contaminated soils and water, and require the construction contractor to remove petroleum hydrocarbon–contaminated soils and water within the construction zone, in accordance with all applicable federal, state, and local statutes and regulations and consistent with specifications of the Voluntary Clean-up Agreement between the Long Beach Memorial Medical Center and DTSC.	
Implementation of the proposed project has the potential to result in significant impacts related to the presence of undocumented abandoned wells.	Hazards-4 Oil wells underlying the Miller Children's Hospital (MCH) pediatric inpatient tower Phase I, central plant building, and utility trench shall be identified by the remediation contractor and properly abandoned to the current standards of the California Department of Conservation, Division of Oil, Gas, and Geothermal Resources (DOGGR). The project applicant shall ensure that coordination with DOGGR and proper remediation be incorporated into the construction plans, prior to final approval of plans for the MCH pediatric inpatient building Phase I, central plant building, and utility trench. If the oil wells cannot be identified through site survey by a licensed surveyor, excavation shall be undertaken to locate the wells under the oversight of the DOGGR and/or the Office of Statewide Health Planning and Development. If the abandoned oil wells are determined to be leaking, remediation shall be conducted to seal all leaks or venting systems shall be required to transmit gas safely away from the proposed project site, in accordance with specifications of the Voluntary Clean-up Agreement between the Long Beach Memorial Medical Center and the Department of Toxic Substances Control.	Implementation of mitigation measures Hazards-4 and Hazards-5 would be expected to reduce potentially significant impacts related to the discovery of undocumented abandoned wells to below the level of significance.

Impact	Mitigation Measure	Level of Significance After Mitigation
	Hazards-5 Oil wells underlying the Miller Children's Hospital (MCH) pediatric outpatient building, MCH link building, and Todd Cancer Institute Phases I and II shall be identified by the remediation contractor and properly abandoned to the current standards of the California Department of Conservation, Division of Oil, Gas, and Geothermal Resources (DOGGR). The project applicant shall ensure that coordination with DOGGR and proper remediation be incorporated into the construction plans, prior to final approval of plans for the MCH pediatric outpatient building, MCH link building, and Todd Cancer Institute Phases I and II. If the oil wells cannot be identified through site survey by a licensed surveyor, excavation shall be undertaken to locate the wells under the oversight of DOGGR and/or the City of Long Beach. If the abandoned oil wells are determined to be leaking, remediation shall be conducted to seal all leaks or venting systems shall be required to transmit gas safely away from the proposed project site, in accordance with specifications of the Voluntary Clean-up Agreement between the Long Beach Memorial Medical Center and the Department of Toxic Substances Control.	
Implementation of the proposed project has the potential to result in significant impacts related to the release of hazardous subsurface gases.	Hazards-6 To mitigate potential accumulation of methane, hydrogen sulfide, or other petroleum-related gases into underground areas (i.e., basements) or inside buildings, the Office of Statewide Health Planning and Development (OSHPD) shall require the installation of vapor barriers (i.e., high-density polyethylene membrane liners) and passive venting systems in the foundations of the Miller Children's Hospital pediatric inpatient tower and central plant building, if determined to be required by the Health Risk Assessment. Prior to the issuance of building permits for the specified buildings, the OSHPD shall review the plans and specifications to ensure that the appropriate vapor barriers or passive venting systems have been incorporated into the design and are consistent with specifications of the Voluntary Clean-up Agreement between the Long Beach Memorial Medical Center and the Department of Toxic Substances Control.	Implementation of mitigation measures Hazards-6 and Hazards-7 would be expected to reduce potentially significant impacts related to the release of hazardous subsurface gases.
	Hazards-7 To mitigate potential accumulation of methane, hydrogen sulfide, or other petroleum-related gases into underground areas (i.e., basements) or inside buildings, the City of Long Beach shall require the installation of vapor barriers (i.e., high-density polyethylene membrane liners) and passive venting systems in the foundations of the Miller Children's Hospital (MCH) pediatric outpatient building and the Todd Cancer Institute Phases I and II, if determined to be required by the Health Risk Assessment. Prior to the issuance of building permits for the specified buildings, the City of Long Beach shall review the plans and specifications to ensure that the appropriate vapor barriers or passive venting systems have been incorporated into the design and are consistent with specifications of the Voluntary Clean-up Agreement between the Long Beach Memorial Medical Center and the Department of Toxic Substances Control.	

Impact	Mitigation Measure	Level of Significance After Mitigation
Implementation of the proposed project has the potential to result in significant impacts related to the encounter of USTs during grading activities.	Prior to the issuance of grading permits for the Miller Children's Hospital pediatric inpatient tower, central plant building, and utility trench, the Office of Statewide Health Planning and Development shall review the grading plans to ensure that there is a note requiring the construction contractor to stop work and notify the Certified Unified Program Agency of the unanticipated encounter of underground storage tanks (USTs) during grading activities. The UST shall be remediated in accordance with County of Los Angeles guidelines and consistent with specifications of the Voluntary Clean-up Agreement between the Long Beach Memorial Medical Center and the Department of Toxic Substances Control. **Hazards-9** Prior to the issuance of grading permits for the Miller Children's Hospital (MCH) pediatric outpatient building, MCH link building, and Todd Cancer Institute Phases I and II, the City of Long Beach shall review the grading plans to ensure that there is a note requiring the construction contractor to stop work and notify the Certified Unified Program Agency of the unanticipated encounter of underground storage tanks (USTs) during grading activities. The UST shall be remediated in accordance with County of Los Angeles guidelines and consistent with specifications of the Voluntary Clean-up Agreement between the Long Beach Memorial Medical Center and the Department of Toxic Substances Control.	Implementation of mitigation measures Hazards-8 and Hazards-9 would be expected to reduce potentially significant impacts related to the encounter of USTs during grading activities.
Implementation of the proposed project has the potential to result in significant impacts related to exposure to hazardous materials during routine transport and disposal.	Hazards-10 To avoid exposure to asbestos-containing materials, lead-based paints, petroleum hydrocarbon—contaminated soils, biomedical waste, and radiological waste during routine transport and disposal for both the construction phase and operational phase of the proposed project, the City of Long Beach shall require that the construction contractor and the Long Beach Memorial Medical Center (LBMMC) store, use, and transport all hazardous materials in compliance with all relevant regulations and guidelines. The routine transport of hazardous materials to and from the LBMMC campus during construction and operation of the elements of the proposed project shall be accomplished via Atlantic Avenue, Spring Street, Columbia Street, Patterson Street, 27th Street, and Willow Street. Compliance shall be determined by monitoring by regulatory agencies. Transport, storage, and handling of construction-related hazardous materials shall be consistent with the guidelines provided by the California Department of Transportation, Los Angeles Regional Water Quality Control Board, the South Coast Air Quality Management District, and the Certified Unified Program Agency. Each agency shall regulate and enforce, through permitting and record keeping, the monitoring and enforcement of this mitigation measure.	Implementation of mitigation measure Hazards-10 would be expected to reduce potentially significant impacts related to exposure to hazardous materials during routine transport and disposal.

Impact	Mitigation Measure	Level of Significance After Mitigation
Implementation of the proposed project has the potential to result in significant impacts related to the emergency response and evacuation plan.	Hazards-11 To avoid impacts on the existing emergency response and evacuation plan, the City of Long Beach shall require the identification of an alternative emergency water supply source, evacuation routes, and emergency response vehicle routes during roadway realignment and upon expansion of the Miller Children's Hospital facility. The revised emergency response and evacuation plan shall be updated by the construction contractor prior to initiation of construction activities.	Implementation of mitigation measure Hazards-11 would be expected to reduce potentially significant impacts related to the emergency response and evacuation plan.
Implementation of the proposed project has the potential to result in significant impacts related to exposure to COPCs.	Hazards-12 To avoid exposure to chemicals of potential concern (COPCs) in the soil, the Office of Statewide Health Planning and Development shall require that volatile organic compounds (VOCs) be monitored during excavation requested for the Miller Children's Hospital pediatric inpatient tower, central plant building, and utility trench, in compliance with the South Coast Air Quality Management District Rule 1166 or Rule 1150, which sets requirements to control the emission of VOCs from excavating, grading, handling, and treating VOC-contaminated soil. The procedures for removing, handling, and disposing of petroleum hydrocarbon-contaminated soil and water shall include and require adherence to health and safety protocols (e.g., no eating in the construction zone, use of personal protective equipment) as provided in a site health and safety plan, as well as monitoring and control of emissions of COPCs that may occur during the construction work. Hazards-13 To avoid exposure to chemicals of potential concern (COPCs) in the soil, the City of Long Beach shall require that volatile organic compounds (VOCs) be monitored during excavation requested for the Miller Children's Hospital (MCH) pediatric outpatient building, MCH link building, and Todd Cancer Institute Phases I and II, in compliance with the South Coast Air Quality Management District Rule 1166 or Rule 1150, which sets requirements to control the emission of VOCs from excavating, grading, handling, and treating VOC-contaminated soil. The procedures for removing, handling, and disposing of petroleum hydrocarbon-contaminated soil and water shall include and require adherence to health and safety protocols (e.g., no eating in the construction zone, use of personal protective equipment) as provided in a site health and safety plan, as well as monitoring and control of emissions of COPCs that may occur during the construction work.	Implementation of mitigation measures Hazards-12 through Hazards-15 would be expected to reduce potentially significant impacts related to exposure to COPCs.

Impact	Mitigation Measure	Level of Significance After Mitigation
	Hazards-14 At least 30 days prior to approval of final plans and specifications for the Miller Children's Hospital pediatric inpatient tower, central plant building, and utility trench, the Office of Statewide Health Planning and Development shall review and provide comments on the plans and specifications to ensure compliance with all requirements resulting from the Voluntary Clean-up Agreement between the Long Beach Memorial Medical Center and the Department of Toxic Substances Control.	
	Hazards-15 Prior to approval of final plans and specifications for the Miller Children's Hospital link building and Todd Cancer Institute Phases I and II, the City of Long Beach shall review the plans and specifications to ensure compliance with all requirements resulting from the Voluntary Clean-up Agreement between the Long Beach Memorial Medical Center and the Department of Toxic Substances Control.	
Hydrology and Water	Quality	
Implementation of the proposed project has the potential to increase the amount of erosion, transport of pollutants, and siltation during construction of all elements of the proposed project.	Hydro-1 The Office of Statewide Health Planning and Development (OSHPD) shall require the construction contractor to avoid erosion, transport of pollutants, and siltation during construction of the Miller Children's Hospital pediatric inpatient tower Phases I and II, utility trench, and central plant building. Prior to final grading plans, the OSHPD shall ensure that the plans and specifications require the construction contractor to comply with the revised General Construction Activity Storm Water Permit. Such compliance measures would, at a minimum, include the preparation of a Notice of Intent and the implementation of a Local Storm Water Pollution Prevention Plan (SWPPP) and a Wet Season Erosion Control Plan (for work between October 15 and April 15). These plans shall incorporate all applicable best management practices (BMPs), as described in the California Storm Water Best Management Practice Handbook, Construction Activity, into the construction phase of the proposed project. Prior to construction, temporary measures must be implemented to prevent transport of Pollutants of Concern from the construction site to the storm drainage system. The BMPs shall apply to both the actual work areas and contractor staging areas. Selection of construction-related BMPs would be in accordance with the requirements of the City of Long Beach Storm Water Program, Development Best Management Practices Handbook.	Implementation of mitigation measure Hydro-1 would be expected to reduce impacts to hydrology and water quality from the increased amount of erosion, transport of pollutants, and siltation during construction of all elements of the proposed project.

Impact	Mitigation Measure	Level of Significance After Mitigation
Implementation of the proposed project has the potential to increase the amount of erosion, transport of pollutants, and siltation during construction of all elements of the proposed project.	The City of Long Beach Department of Public Works shall require the construction contractor to avoid erosion, transport of pollutants, and siltation during construction of the Miller Children's Hospital (MCH) pediatric outpatient building, MCH link building, Todd Cancer Institute Phases I and II, roadway realignment, and parking areas. Prior to final grading plans, the City of Long Beach Department of Public Works shall ensure that the plans and specifications require the construction contractor to comply with the revised General Construction Activity Storm Water Permit. Such compliance measures would, at a minimum, include the preparation of a Notice of Intent and the implementation of a Local Storm Water Pollution Prevention Plan (SWPPP) and a Wet Season Erosion Control Plan (for work between October 15 and April 15). These plans shall incorporate all applicable best management practices (BMPs), as described in the California Storm Water Best Management Practice Handbook, Construction Activity, into the construction phase of the proposed project. Prior to construction, temporary measures must be implemented to prevent transport of Pollutants of Concern from the construction site to the storm drainage system. The BMPs shall apply to both the actual work areas and contractor staging areas. Selection of construction-related BMPs would be in accordance with the requirements of the City of Long Beach Storm Water Program, Development Best Management Practices Handbook.	Implementation of mitigation measure Hydro-2 would be expected to reduce impacts to hydrology and water quality from the increased amount of erosion, transport of pollutants, and siltation during construction of all elements of the proposed project.
Implementation of the proposed project has the potential to increase the amount of erosion, transport of pollutants, and siltation during construction of all elements of the project, but specifically during the final grading plans.	Prior to final grading plans for the Miller Children's Hospital pediatric inpatient tower Phases I and II, utility trench, and central plant building, the Office of Statewide Health Planning and Development shall review the final grading plans to ensure that the plans and specifications require the construction contractor to prepare a Standard Urban Storm Water Management Plan (SUSMP) for construction activities and to implement best management practices (BMPs) for construction, materials, and waste-handling activities, which include the following: Schedule excavation, grading, and paving activities for dry weather periods. Control the amount of runoff crossing the construction site by means of berms and drainage ditches to divert water flow around the site. Identify potential pollution sources from materials and wastes that will be used, stored, or disposed of on the job site. Inform contractors and subcontractors about the clean storm water requirements and enforce their responsibilities in pollution prevention.	Implementation of mitigation measure Hydro-3 would be expected to reduce impacts to hydrology and water quality due to final grading to below the level of significance.

Impact	Mitigation Measure	Level of Significance After Mitigation
	The construction contractor shall incorporate SUSMP requirements and BMPs to mitigate storm water runoff that include, but are not limited to, the following:	
	The incorporation of bioretention facilities located within the proposed project area	
	The incorporation of catch basin filtration systems	
	The use of porous pavements to reduce runoff volume	
Implementation of the proposed project has the potential to increase the amount of erosion, transport of pollutants, and siltation during construction of all elements of the project, but specifically during the final grading plans.	 Hydro-4 Prior to final grading plans for the Miller Children's Hospital (MCH) pediatric outpatient building, MCH link building, Todd Cancer Institute Phases I and II, roadway realignment, and parking areas, the City of Long Beach Department of Public Works shall review the final grading plans to ensure that the plans and specifications require the construction contractor to prepare a Standard Urban Storm Water Management Plan (SUSMP) for construction activities and to implement best management practices (BMPs) for construction, materials, and waste-handling activities, which include the following: Schedule excavation, grading, and paving activities for dry weather periods. Control the amount of runoff crossing the construction site by means of berms and drainage ditches to divert water flow around the site. Identify potential pollution sources from materials and wastes that will be used, stored, or disposed of on the job site. Inform contractors and subcontractors about the clean storm water requirements and enforce their responsibilities in pollution prevention. 	Implementation of mitigation measure Hydro-4 would be expected to reduce impacts to hydrology and water quality due to final grading to below the level of significance.
	The construction contractor shall incorporate SUSMP requirements and BMPs to mitigate storm water runoff that include, but are not limited to, the following:	
	 The incorporation of bioretention facilities located within the proposed project area The incorporation of catch basin filtration systems The use of porous pavements to reduce runoff volume 	

Impact	Mitigation Measure	Level of Significance After Mitigation
Implementation of the proposed project has the potential to increase the amount of degradation of water quality during construction.	Hydro-5 The Office of Statewide Health Planning and Development (OSHPD) shall require the construction contractor to undertake daily street sweeping and trash removal throughout the construction of the Miller Children's Hospital pediatric inpatient tower Phases I and II, utility trench, and central plant building. The purpose of the street sweeping and trash removal shall be to avoid degradation of water quality. Prior to the completion of final plans and specifications, the OSHPD shall review the plans and specifications to ensure that the construction documents include a requirement that the construction contractor provide daily street sweeping and trash removal to prevent degradation of water quality.	Implementation of mitigation measure Hydro-5 would be expected to reduce impacts to hydrology and water quality to below the level of significance.
Implementation of the proposed project has the potential to increase the amount of degradation of water quality during construction.	Hydro-6 The City of Long Beach Department of Public Works shall require the construction contractor to undertake daily street sweeping and trash removal throughout the construction of the Miller Children's Hospital (MCH) pediatric outpatient building, MCH link building, Todd Cancer Institute Phases I and II, roadway realignment, and parking areas. The purpose of the street sweeping and trash removal shall be to avoid degradation of water quality. Prior to the completion of final plans and specifications, the City of Long Beach Department of Public Works shall review the plans and specifications for the proposed project to ensure that the construction documents include a requirement that the construction contractor provide daily street sweeping and trash removal to prevent degradation of water quality.	Implementation of mitigation measure Hydro-6 would be expected to reduce impacts to hydrology and water quality to below the level of significance.
Implementation of the proposed project has the potential to increase the amount of degradation of water quality during construction.	Hydro-7 Potential impacts to hydrology and water quality related to the degradation of water quality during construction of the proposed project shall be reduced to below the level of significance through the requirement to conduct a detailed hydrology study based on the final site plans and to implement the recommendations, or comparable measures, into the plans and specifications for each proposed project element prior to final approval by the City of Long Beach Department of Public Works. The hydrology study shall be prepared by a certified civil engineer, and a draft report, including recommendations, shall be submitted to the City of Long Beach Department of Public Works for review. The City of Long Beach Department of Public Works shall provide comments, if any, within 14 days of receiving the draft hydrology study. Monitoring and enforcement shall be the responsibility of the City of Long Beach Department of Public Works.	Implementation of mitigation measure Hydro-7 would be expected to reduce impacts to hydrology and water quality to below the level of significance.

The analysis undertaken for this EIR determined that no significant impacts related to Land Use and Planning would arise from implementation of the proposed project. Therefore, no mitigation measures are required.

Impact	Mitigation Measure	Level of Significance After
National Balletian Dia	sahanga Flinsingtian Contain	Mitigation
	scharge Elimination System	Implementation of
Implementation of the proposed project has the potential to result in impacts to NPDES.	NPDES-1 The City of Long Beach Planning and Building Department shall require the construction contractor to implement best management practices (BMPs) consistent with National Pollution Discharge Elimination System (NPDES) Permit No. CAS 004003 to reduce transport of Pollutants of Concern from the construction site to the storm drainage and waterway system for each construction element of the proposed project: Miller Children's Hospital (MCH) pediatric inpatient tower Phases I and II, central plant building, and utility trench; MCH pediatric outpatient building; MCH link building; Todd Cancer Institute Phases I and II; roadway alignment; and parking area. Prior to completion of final plans and specifications for each construction element of the proposed project, the City of Long Beach Planning and Building Department shall ensure that the plans and specifications require compliance with NPDES Permit No. CAS 004003. The construction contractor for each element of the proposed project shall be required to submit a Standard Urban Storm Water Management Plan to the City of Long Beach for review and approval at least 30 days prior to the anticipated need for a grading permit. The City of Long Beach Planning and Building Department shall monitor construction to ensure compliance with NPDES Permit No. CAS 004003. The Office of Statewide Health Planning and Development has jurisdiction over inpatient facilities, and the City of Long Beach would have jurisdiction over outpatient facilities.	Implementation of mitigation measure NPDES-1 would be expected to reduce impacts to NPDES to below the level of significance.
Noise		
Implementation of the proposed project has the potential to result in impacts related to construction noise.	Noise-1 The City of Long Beach shall minimize the potential for construction noise levels to exceed the City of Long Beach Noise Ordinance by requiring the construction contractor to properly maintain all heavy equipment used for construction of each element of the proposed project: Todd Cancer Institute Phases I and II; Miller Children's Hospital (MCH) pediatric inpatient tower Phases I and II, central plant building, and utility trench; MCH pediatric outpatient building; MCH link building; road realignment; and parking. Prior to the completion of final plans and specifications, the City of Long Beach shall ensure that the plans and specifications include a requirement that all construction equipment shall be properly maintained. All vehicles and compressors shall utilize exhaust mufflers. Engine enclosure covers as designed by the manufacturer shall be in place at all times. The City of Long Beach shall monitor the use of heavy equipment during construction to ensure conformance with the requirements of properly maintained heavy equipment.	Implementation of mitigation measures Noise-1 through Noise-3 would be expected to reduce impacts related to construction noise to below the level of significance.
	Noise-2 The City of Long Beach shall minimize the potential for construction noise levels to conflict with the City of Long Beach Noise Ordinance by requiring the plans and specifications to specify restricted periods for grading and construction for each element of the proposed project: Todd Cancer Institute Phases I and II; Miller Children's Hospital (MCH) pediatric inpatient tower Phases I and II, central plant building, and utility trench; MCH pediatric outpatient building; MCH link building; road realignment; and parking. Prior to the	

Impact	Mitigation Measure	Level of Significance After Mitigation
	completion of final plans and specifications, the City of Long Beach shall ensure that the plans and specifications include a provision that restricts grading and construction activities to daily operation from 7:00 a.m. to 7:00 p.m., Monday through Friday, and from 8:00 a.m. to 5:00 p.m. on Saturdays. There should be no work on Sundays or federal holidays.	
	Noise-3 The City of Long Beach shall require that the plans and specifications for the Miller Children's Hospital pediatric inpatient tower and the central plant building require that construction equipment shall be equipped with state-of-the-art noise-muffling devices. Barriers or curtains shall be required to be installed close to equipment to shield the equipment from the receiver. The height and length of the barriers or curtains shall be determined based on location of construction activity and receiver.	
	Because of the close proximity of the source and receiver, the impact would be dependent on the location of the noise sources. Prior to the start of construction, the contractor shall develop a noise control plan based on actual equipment to be used and location of various activities. If actual equipment noise levels are not available, equipment noise levels shall be measured in the field. The plan should predict the noise levels with the actual equipment and with the barriers or curtains in place. The plan shall take into consideration the order of construction and equipment mix. Equipment mix and/or the number of equipment operating shall be considered in reducing the noise levels.	
Public Services		
Implementation of the proposed project has the potential to result in impacts related to exposure of persons or property to security-related issues, vandalism, and safety hazards during operation of these facilities.	Public Services-1 Exposure of people or property to security-related issues from the operation of the Miller Children's Hospital pediatric inpatient tower Phases I and II, central plant building, pediatric outpatient building, and link building; the Todd Cancer Institute (TCI) Phases I and II; and all new parking facilities within the Long Beach Memorial Medical Center (LBMMC) campus shall be minimized through an amendment of the existing security plan prior to the operation of each proposed project element. The LBMMC shall submit to the City of Long Beach an amendment to the security plan that identifies the existing measures that shall be applied to each element of the proposed project at least 30 days prior to the anticipated need for an occupancy permit. Public Services-2 Exposure of property to 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, pediatric outpatient building, and link building; the Todd Cancer Institute (TCI) Phases I and II; and all new parking facilities within the Long Beach Memorial Medical Center (LBMMC) campus shall be minimized through an amendment to the existing lighting plan prior to the operation of each proposed project element. The LBMMC shall submit to the City of Long Beach an amendment to the lighting plan that documents the location of all exterior lighting	Implementation of mitigation measures Public Services-1 and Public Services-2 would be expected to reduce impacts related to public services to below the level of significance.

Impact	Mitigation Measure	Level of Significance After Mitigation
	on structures, within parking areas, and along pedestrian and vehicular routes of travel. The amended lighting plan shall be submitted to the City of Long Beach at least 30 days prior to the anticipated need for an occupancy permit.	
Traffic and Transporta		
Implementation of the proposed project has the potential to result in significant impact to traffic and transportation.	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	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 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 the interim year 2008 and 2014 are accomplished. 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
		year 2008 planning horizon. The

Impact	Mitigation Measure	Level of Significance After Mitigation
	 Long Beach Boulevard/I-405 NB Ramps Install a traffic signal. 23) I-405 SB Ramps/Crest Drive 	not be mitigated to below the level of significance for the year 2014 planning horizon.
	 Restripe to provide an exclusive WB right-turn lane. 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. 	HOHZOH.
	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.	
	 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. 	
	 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. 	
	 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. 	

Impact	Mitigation Measure	Level of Significance After Mitigation
	 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.	
Implementation of the proposed project has the potential to result in significant impact to traffic and transportation, specifically the amount of available parking spaces.	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.	Implementation of mitigation measure Transportation-3 would reduce construction and operation impacts on parking to below the level of significance.
	Roadway Realignment	
	<u>Construction</u> 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 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 shall be offset through the use of 70 exilable parking spaces, to 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 Cente	Impact	Mitigation Measure	Level of Significance After Mitigation
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.		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 provi	

Impact	Mitigation Measure	Level of Significance After Mitigation
	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	
	<u>Construction</u> 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.	

Impact	Mitigation Measure	Level of Significance After Mitigation
	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	
	<u>Construction</u> 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.	

Impact	Mitigation Measure	Level of Significance After Mitigation
Utilities and Service S	ystems	
Implementation of the proposed project has the potential to result in significant impacts related to the increased solid waste generation.	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 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.	Implementation of mitigation measure Utilities-1 would reduce significant impacts related to solid waste from the construction of the MCH pediatric inpatient tower Phases I and II, central plant building, and utility trench to below the level of significance.
Implementation of the proposed project has the potential to result in significant impacts related to the increased solid waste generation.	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.	Implementation of mitigation measure Utilities-2 would reduce significant impacts related to solid waste from the construction of the TCI Phases I and II, MCH pediatric outpatient building, MCH link building, roadway realignment, and parking facilities to below the level of significance.

Impact	Mitigation Measure	Level of Significance After Mitigation
Implementation of the proposed project has the potential to increase the amount of trash produced at the site.	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.	Implementation of mitigation measure Utilities-3 would reduce significant impacts related to solid waste generated by the operation of the MCH pediatric inpatient tower Phases I and II and central plant building to below the level of significance.
Implementation of the proposed project has the potential to increase the amount of trash produced at the site.	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.	Implementation of mitigation measure Utilities-4 would reduce significant impacts related to solid waste generated by the operation of the TCI Phases I and II, MCH pediatric outpatient building, MCH link building, and parking facilities to below the level of significance.

This Environmental Impact Report (EIR) has been prepared by the City of Long Beach (City) to assess the environmental consequences of the proposed Long Beach Memorial Medical Center Expansion (proposed project). The proposed project consists of a proposed Master Plan of Land Uses and the development of six specific proposed project elements within the approximately 54-acre Long Beach Memorial Medical Center campus (Campus) in the City of Long Beach, County of Los Angeles, California. The 2005 Master Plan (Appendix A, *Master Plan*) replaces the 1999 Master Plan currently on file with the City of Long Beach with a Master Plan that addresses future land uses and identifies capital improvement projects, which the Long Beach Memorial Medical Center (LBMMC) wishes to accomplish by year 2012 to meet the anticipated needs of the community through year 2020. Among these capital improvements are six specific improvements, which would be constructed within a five- to eight-year planning horizon, contingent on the availability of funding. This EIR analyzes the six proposed improvements and the Master Plan of Land Uses at a project level of detail. The City of Long Beach is the Lead Agency for the proposed project, pursuant to the California Environmental Quality Act (CEQA).

1.1 PURPOSE AND SCOPE OF THE EIR

The City has prepared this EIR to support the fulfillment of the six major goals of CEQA:

- To disclose to the decision makers and to the public significant environmental effects of the proposed activities
- To identify ways to avoid or reduce environmental damage
- To prevent environmental damage by requiring implementation of feasible alternatives or mitigation measures
- To disclose to the public the reasons for agency approvals of projects with significant environmental effects
- To foster interagency coordination in the review of projects
- To enhance public participation in the planning process

Although the EIR neither controls nor anticipates the ultimate decision on the proposed project, the City (and other public agencies that will render discretionary decisions related to the proposed project) must consider the information in the EIR and make findings concerning each potentially significant impact identified.

1.1.1 Intent of CEQA

As provided in the State CEQA Guidelines (California Code of Regulations, Section 15000 et seq.), public agencies are charged with the duty to avoid or minimize environmental damage where feasible. In discharging this duty, the City has an obligation to balance a variety of public objectives, including economic, environmental, and social issues (Section 15021 of the State CEQA Guidelines). The findings and conclusions of the EIR regarding environmental impacts do

not control the City's discretion to approve, deny, or modify the proposed project, but instead are presented as information intended to aid the decision-making process. Sections 15122 through 15132 of the State CEQA Guidelines describe the required content of an EIR: a description of the proposed project and the environmental setting (existing conditions), an environmental impact analysis, mitigation measures, alternatives, significant irreversible environmental changes, growth-inducing impacts, and cumulative impacts.

As a program-level EIR for the Master Plan, this EIR addresses the logical parts in the chain of contemplated actions (Section 15168 of the State CEQA Guidelines). A program-level EIR provides an occasion for a more exhaustive consideration of effects and alternatives than would be practical in an EIR on an individual action, ensures consideration of cumulative impacts that might be slighted in a case-by-case analysis, avoids duplicative reconsideration of basic policy considerations, allows the Lead Agency to consider broad policy alternatives and program-wide mitigation measures at an early time when the Lead Agency has greater flexibility to deal with the basic problems or cumulative impacts, and allows reduction in paperwork (Section 15168 (a)(4)(b) of the State CEQA Guidelines). As a project-level EIR, this portion of the document primarily focuses on the changes in the environment that would result from the construction, operation, and maintenance of the six identified project components. The City is required to consider the information in the EIR with any other relevant information in making final decisions on the proposed project (Section 15121 of the State CEQA Guidelines).

1.1.2 Environmental Review Process

A Notice of Preparation (NOP) concerning the EIR for the proposed project was circulated for a 30-day review period that began on August 23, 2004, and closed on September 23, 2004. An Initial Study was prepared to focus the environmental resources to be analyzed in the EIR. A total of eight comment letters were received in response to the NOP and Initial Study. Copies of the NOP and the comment letters submitted in response to the Initial Study are included in this document (Appendix B, *Initial Study, NOP, and Comment Letters*). The Initial Study prepared for the proposed project identified the environmental resources potentially subject to significant impacts.

The Initial Study and NOP were sent to the State Clearinghouse and distributed to various federal, state, regional, and local government agencies. A public Notice of Availability (NOA) of the NOP was provided in the Press Telegram. The NOP was sent to 48 private individuals and to the appropriate federal, state, and local regulatory agencies. The NOP and Initial Study were posted at the Long Beach Main Public Library, Burnett Public Library, and Dana Public Library. The NOP advertised a public scoping meeting for interested parties to receive information on the proposed project and the CEQA process and provided an opportunity for the submission of comments. The scoping meeting facilitated early consultation with interested parties in compliance with Section 15082 of the State CEQA Guidelines. The meeting was held on September 8, 2004, from 6:00 p.m. to 8:30 p.m. at the Houssels Forum of the Long Beach Memorial Medical Center, 2801 Atlantic Avenue, City of Long Beach, CA 90806-1737. A total of 40 individuals attended the scoping meeting. The City requested information from the public related to the range of actions under consideration, alternatives, mitigation measures, and significant effects to be carried forward for detailed analysis in the EIR. All verbal and written comments related to environmental issues that were provided during public review of the NOP and at the scoping meeting have been taken into consideration in the preparation of this EIR. The comment period on the NOP and Initial Study closed on September 23, 2004. A total of six comment letters were received in response to the NOP and Initial Study (Appendix B).

Based on the analysis undertaken in the Initial Study, the City determined that the proposed project may have a significant effect on the environment and that the preparation of an EIR is required. As a result of the analysis undertaken in the Initial Study, it was determined that the proposed project would not be expected to result in impacts to agricultural resources, biological resources, mineral resources, recreation resources, and population and housing; thus, no additional analysis of those environmental resources is undertaken in this EIR. However, the analysis in the Initial Study concluded that the proposed project had the potential to result in significant impacts related to 11 environmental resources, which are the subject of the detailed evaluation undertaken in this EIR:

- Aesthetics
- Air Quality
- Cultural Resources
- Geology and Soils
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- National Pollution Discharge Elimination System
- Noise
- Public Services
- Traffic and Transportation
- Utilities and Service Systems

The Draft EIR will be distributed to various federal, state, regional, and local government agencies and interested organizations and individuals for a 45-day public review period. The Draft EIR will be provided to the State Clearinghouse on January 20, 2005, for additional distribution to agencies. In addition, a public NOA of the Draft EIR will appear in the *Press Telegram* and will be mailed directly to interested parties requesting the document. The dates of the public review period are specified on the transmittal memorandum for the record accompanying this Draft EIR. In addition, copies of this Draft EIR are published on the City of Long Beach Web site at http://www.longbeach.gov/plan/pb/epd/er.asp and are available during the public review period at the following libraries:

Long Beach Main Public Library

101 Pacific Avenue Long Beach, CA 90822

Telephone Number: (562) 570-7500

Hours of Operation: Monday and Thursday (10:00 a.m. to 8:00 p.m.)

Tuesday, Wednesday, Friday, and Saturday (10:00 a.m. to 5:30

p.m.)

Sunday (closed)

Burnett Public Library 560 East Hill Street Long Beach, CA 90806

Telephone Number: (562) 570-1041

Hours of Operation: Monday and Thursday (closed)

Tuesday and Wednesday (12:00 p.m. to 7:00 p.m.) Friday and Saturday (10:00 a.m. to 5:00 p.m.)

Sunday (closed)

Dana Public Library 3680 Atlantic Avenue Long Beach, CA 90807

Telephone Number: (562) 570-1042

Hours of Operation: Monday and Wednesday (closed)

Tuesday and Thursday (12:00 p.m. to 8:00 p.m.) Friday and Saturday (10:00 a.m. to 5:00 p.m.)

Sunday (closed)

The Draft EIR will also be available for review at the City:

Department of Planning and Building, Reception Desk City of Long Beach City Hall, 7th Floor 333 West Ocean Boulevard Long Beach, CA 90802

Telephone Number: (562) 570-6193

Hours of Operation: Monday through Friday (7:30 a.m. to 4:30 p.m.)

Saturday and Sunday (Closed)

Written comments on this Draft EIR should be transmitted during the public review period to the City:

City of Long Beach Attn: Ms. Anita Garcia Project Manager Department of Planning and Building City Hall, 5th Floor 333 West Ocean Boulevard Long Beach, CA 90802

Written comments provided by the public and public agencies will be evaluated, and written responses will be prepared for all comments received during the designated comment period. Upon completion of the evaluation, a Final EIR will be prepared and provided to the City of Long Beach Planning Commission for certification of compliance with CEQA and for review and consideration as part of the decision-making process for the proposed project. Copies of the Draft EIR are available for purchase through the City of Long Beach.

1.2 ORGANIZATION AND CONTENT

Volume I of the EIR consists of a Draft EIR that describes the proposed project, environmental setting, impacts, mitigation, and alternatives considered.

Section ES, Executive Summary, provides a summary of the existing setting, proposed project, identified significant impacts of the proposed project, and mitigation measures. Those alternatives that were considered to avoid significant effects of the proposed project are identified in the Executive Summary. In addition, the Executive Summary identifies areas of controversy known to the City, including issues raised by agencies and the public. The Executive Summary includes a list of the issues to be resolved, including the choice among alternatives, and whether or how to mitigate significant effects of the proposed project.

Section 1, Introduction, provides information related to the purpose and scope of the EIR, environmental review process, and the organization and content of the EIR.

Section 2, Project Description, provides the location and boundaries of the proposed project; statement of objectives; and a description of the programming, economic, engineering, and environmental characteristics of the proposed project. The project description identifies the intended uses of the EIR, including the list of agencies that are expected to use the EIR in their respective decision-making processes; identifies the related discretionary actions (permits and approvals) required to implement the proposed project; and identifies any related environmental review and consultation requirements required by federal, state, or local laws, regulations, or policies. The project description identifies the related projects that were considered in the evaluation of cumulative impacts.

Section 3, Existing Conditions, Significance Thresholds, Impacts, Mitigation Measures, and Level of Significance after Mitigation, describes existing conditions found at the proposed project site and the surrounding area; identifies the thresholds used to assess the potential for the proposed project to result in significant impacts; evaluates the potential impacts to environmental resources that may be generated by the proposed project, including the cumulative impacts of the proposed project in conjunction with other related projects in the area; identifies available mitigation measures to reduce significant impacts; and assesses the effectiveness of proposed mitigation measures to reduce identified impacts to below the level of significance. This portion of the EIR is organized by the applicable environmental areas that result from the analysis undertaken in the Initial Study.

Section 4, Alternatives to the Proposed Project, describes a range of reasonable alternatives to the proposed project or to the location of the proposed project. CEQA requires that the EIR explore feasible alternatives that would avoid or substantially lessen any of the significant effects of the proposed project. To be feasible, an alternative must be capable of attaining most of the basic objectives of the proposed project. CEQA requires an evaluation of the comparative impacts of the proposed project, alternatives to the proposed project, and the no-project alternative.

Section 5, Significant Environmental Effects that Cannot Be Avoided if the Proposed Project Is Implemented, summarizes the significant effects of the proposed project that cannot be mitigated to below the level of significance.

Section 6, Significant Irreversible Environmental Changes Related to Implementation of the Proposed Project, evaluates potential uses of nonrenewable resources and potential irreversible changes that may occur during the course of the proposed project.

Section 7, Growth-Inducing Impacts, evaluates the potential for the proposed project to foster economic growth or population growth, either directly or indirectly, in the surrounding environment.

Section 8, Organizations and Persons Consulted, provides a list of all governmental agencies, community groups, and other organizations consulted during the preparation of this EIR.

Section 9, Report Preparation Personnel, provides a list of all personnel who provided technical input or review in the preparation of this EIR.

Section 10, References, lists all sources, communications, and correspondence used in the preparation of this EIR.

Section 11, Draft EIR Distribution List, provides a distribution list of agencies and libraries receiving this Draft EIR that was made available during the 45-day public review period.

Volume II, Technical Appendices

Volume II provides technical appendices to support the environmental analysis contained in the EIR.

Volume III, Letters of Comment and Clarifications and Revisions

Following public review and comment on the Draft EIR (Volumes I and II), the City shall prepare Volume III of the EIR, which will consist of responses to letters of comments and any necessary clarifications and revisions that the City believes are appropriate, in light of public comments.

Section 12, Clarifications and Revisions to the Draft EIR, will include the clarifications and revisions to the EIR provided in light of public comments received on the Draft EIR.

Section 13, Response to Comments on Draft EIR, will provide a record of all comments received on the EIR with responses to substantive comment.

The Final EIR consists of Volumes I, II, and III.