

FINAL
CERTIFIED FEBRUARY 7, 2011

Los Alamitos Medical Center Specific Plan ENVIRONMENTAL IMPACT REPORT



Lead Agency:



Prepared by:



**FINAL
PROGRAM ENVIRONMENTAL IMPACT REPORT**

**LOS ALAMITOS MEDICAL CENTER
SPECIFIC PLAN**

SCH NO. 2010041095

Lead Agency:



CITY OF LOS ALAMITOS

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TABLE OF CONTENTS

Section 1.0:	Executive Summary	1-1
1.1	Project Location	1-1
1.2	Project Summary	1-1
1.3	Project Goals and Objectives	1-3
1.4	Summary of Project Alternatives	1-4
1.5	Summary of Environmental Impacts and Mitigation Measures	1-9
Section 2.0:	Introduction and Purpose	2-1
2.1	Purpose	2-1
2.2	Compliance with CEQA	2-3
2.3	EIR Scoping Process	2-4
2.4	Format of the EIR	2-7
2.5	Responsible and Trustee Agencies	2-9
2.6	Incorporation by Reference	2-11
Section 3.0:	Project Description	3-1
3.1	Project Location	3-1
3.2	Background	3-1
3.3	Environmental Setting	3-1
3.4	Existing General Plan and Zoning Designations	3-6
3.5	Project Goals and Objectives	3-6
3.6	Project Characteristics	3-7
3.7	Project Phasing	3-20
3.8	Agreements, Permits, and Approvals	3-21
Section 4.0:	Basis of Cumulative Analysis	4-1
4.1	Introduction	4-1
4.2	Cumulative Analysis in this EIR	4-2
Section 5.0:	Environmental Analysis	5-1
5.1	Land Use	5.1-1
5.1.1	Regulatory Setting	5.1-1
5.1.2	Environmental Setting	5.1-10
5.1.3	Significance Threshold Criteria	5.1-11
5.1.4	Project Impacts and Mitigation Measures	5.1-12
5.1.5	Cumulative Impacts and Mitigation Measures	5.1-33
5.1.6	Significant Unavoidable Impacts	5.1-34
5.1.7	Sources Cited	5.1-34



TABLE OF CONTENTS (Continued)

5.2	Aesthetics	5.2-1
5.2.1	Regulatory Setting.....	5.2-1
5.2.2	Environmental Setting.....	5.2-3
5.2.3	Significance Threshold Criteria	5.2-9
5.2.4	Project Impacts and Mitigation Measures	5.2-9
5.2.5	Cumulative Impacts and Mitigation Measures	5.2-19
5.2.6	Significant Unavoidable Impacts.....	5.2-19
5.2.7	Sources Cited	5.2-20
5.3	Traffic	5.3.1
5.3.1	Regulatory Setting.....	5.3-1
5.3.2	Environmental Setting.....	5.3-3
5.3.3	Significance Threshold Criteria	5.3-24
5.3.4	Project Impacts and Mitigation Measures	5.3-28
5.3.5	Cumulative Impacts and Mitigation Measures	5.3-88
5.3.6	Significant Unavoidable Impacts.....	5.3-88
5.3.7	Sources Cited	5.3-88
5.4	Air Quality/Greenhouse Gas Emissions	5.4-1
5.4.1	Regulatory Setting.....	5.4-1
5.4.2	Environmental Setting.....	5.4-6
5.4.3	Significance Threshold Criteria	5.4-13
5.4.4	Project Impacts and Mitigation Measures	5.4-16
5.4.5	Cumulative Impacts and Mitigation Measures	5.4-42
5.4.6	Significant Unavoidable Impacts.....	5.4-44
5.4.7	Sources Cited	5.4-44
5.5	Noise	5.5-1
5.5.1	Regulatory Setting.....	5.5-1
5.5.2	Environmental Setting.....	5.5-7
5.5.3	Significance Threshold Criteria	5.5-14
5.5.4	Project Impacts and Mitigation Measures	5.5-16
5.5.5	Cumulative Impacts and Mitigation Measures	5.5-31
5.5.6	Significant Unavoidable Impacts.....	5.5-36
5.5.7	Sources Cited	5.5-36
5.6	Geology and Seismic Hazards.....	5.6-1
5.6.1	Regulatory Setting.....	5.6-1
5.6.2	Environmental Setting.....	5.6-3
5.6.3	Significance Threshold Criteria	5.6-8
5.6.4	Project Impacts and Mitigation Measures	5.6-9
5.6.5	Cumulative Impacts and Mitigation Measures	5.6-13
5.6.6	Significant Unavoidable Impacts.....	5.6-13
5.6.7	Sources Cited	5.6-14



TABLE OF CONTENTS (Continued)

5.7	Hazards and Hazardous Materials	5.7-1
5.7.1	Regulatory Setting.....	5.7-1
5.7.2	Environmental Setting.....	5.7-9
5.7.3	Significance Threshold Criteria	5.7-18
5.7.4	Project Impacts and Mitigation Measures	5.7-19
5.7.5	Cumulative Impacts and Mitigation Measures	5.7-25
5.7.6	Significant Unavoidable Impacts.....	5.7-27
5.7.7	Sources Cited	5.7-27
5.8	Hydrology, Drainage, and Water Quality	5.8-1
5.8.1	Regulatory Setting.....	5.8-1
5.8.2	Environmental Setting.....	5.8-5
5.8.3	Significance Threshold Criteria	5.8-14
5.8.4	Project Impacts and Mitigation Measures	5.8-15
5.8.5	Cumulative Impacts and Mitigation Measures	5.8-30
5.8.6	Significant Unavoidable Impacts.....	5.8-32
5.8.7	Sources Cited	5.8-32
5.9	Fire Protection.....	5.9-1
5.9.1	Regulatory Setting.....	5.9-1
5.9.2	Environmental Setting.....	5.9-1
5.9.3	Significance Threshold Criteria	5.9-2
5.9.4	Project Impacts and Mitigation Measures	5.9-2
5.9.5	Cumulative Impacts and Mitigation Measures	5.9-5
5.9.6	Significant Unavoidable Impacts.....	5.9-6
5.9.7	Sources Cited	5.9-6
5.10	Police Protection.....	5.10-1
5.10.1	Regulatory Setting.....	5.10-1
5.10.2	Environmental Setting.....	5.10-2
5.10.3	Significance Threshold Criteria	5.10-2
5.10.4	Project Impacts and Mitigation Measures	5.10-3
5.10.5	Cumulative Impacts and Mitigation Measures	5.10-5
5.10.6	Significant Unavoidable Impacts.....	5.10-6
5.10.7	Sources Cited	5.10-6
5.11	Water	5.11-1
5.11.1	Regulatory Setting.....	5.11-1
5.11.2	Environmental Setting.....	5.11-4
5.11.3	Significance Threshold Criteria	5.11-7
5.11.4	Project Impacts and Mitigation Measures	5.11-8
5.11.5	Cumulative Impacts and Mitigation Measures	5.11-10
5.11.6	Significant Unavoidable Impacts.....	5.11-11
5.11.7	Sources Cited	5.11-11



TABLE OF CONTENTS (Continued)

5.12	Wastewater	5.12-1
5.12.1	Regulatory Setting.....	5.12-1
5.12.2	Environmental Setting.....	5.12-1
5.12.3	Significance Threshold Criteria	5.12-3
5.12.4	Project Impacts and Mitigation Measures	5.12-5
5.12.5	Cumulative Impacts and Mitigation Measures	5.12-7
5.12.6	Significant Unavoidable Impacts.....	5.12-9
5.12.7	Sources Cited	5.12-9
5.13	Solid Waste.....	5.13-1
5.13.1	Regulatory Setting.....	5.13-1
5.13.2	Environmental Setting.....	5.13-2
5.13.3	Significance Threshold Criteria	5.13-4
5.13.4	Project Impacts and Mitigation Measures	5.13-4
5.13.5	Cumulative Impacts and Mitigation Measures	5.13-7
5.13.6	Significant Unavoidable Impacts.....	5.13-9
5.13.7	Sources Cited	5.13-9
5.14	Electricity and Natural Gas	5.14-1
5.14.1	Regulatory Setting.....	5.14-1
5.14.2	Environmental Setting.....	5.14-3
5.14.3	Significance Threshold Criteria	5.14-4
5.14.4	Project Impacts and Mitigation Measures	5.14-5
5.14.5	Cumulative Impacts and Mitigation Measures	5.14-7
5.14.6	Significant Unavoidable Impacts.....	5.14-10
5.14.7	Sources Cited	5.14-10
Section 6.0:	Alternatives to the Proposed Project.....	6-1
6.1	Alternatives Considered But Rejected From Analysis.....	6-2
6.2	No Project/No Development Alternative.....	6-3
6.3	Alternative One – Relocation of Parking Structure 1 and MOB A.....	6-7
6.4	Alternative Two – Phases 1 and 2 Only.....	6-12
6.5	Environmentally Superior Alternative	6-17
Section 7.0:	Growth Inducing Impacts of the Proposed Action	7-1
Section 8.0:	Effects Found Not To Be Significant.....	8-1
8.1	Initial Study Conclusions	8-1
8.2	EIR Conclusions	8-5



TABLE OF CONTENTS (Continued)

Section 9.0:	Significant Environmental Effects Which Cannot Be Avoided if the Proposed Action Is Implemented.....	9-1
Section 10.0:	Significant Irreversible Environmental Changes Which Would Be Involved if the Proposed Project Were Implemented	10-1
Section 11.0:	References	11-1
	11.1 Lead Agency and EIR Preparer	11-1
	11.2 Organizations and Individuals Contacted	11-2
Section 12.0:	Mitigation Monitoring Program	12-1
Section 13.0:	Comments and Responses.....	13-1
Section 14.0:	City Council Resolution - EIR Certification	



APPENDICES

- A: Initial Study Checklist/Notice of Preparation
- B: Notice of Preparation Comments
- C: Public Service and Utility Correspondence
- D: Traffic Impact Analysis
- E: Air Quality Data
- F: Noise Data
- G: Preliminary Hydrology Report
- H: Preliminary Water Quality Management Plan
- I1: Work Plan for Environmental Monitoring, Former Safety Kleen Systems Service Center, October 2007
- I2: Department of Toxic Substances Control Approval Letter, December 2007
- J: Environmental Monitoring Report, May 2009
- K1: Safety-Kleen, Submittal of a Work Plan for Additional Discrete-Depth Groundwater Investigation Activities, Former Safety-Kleen Systems, Inc. Service Center, 3876 Florista Street, Los Alamitos, California, April 9, 2009
- K2: Department of Toxic Substances Control, Approval of Work Plan for Additional Discrete-Depth Groundwater Investigation Activities, Former Safety-Kleen Systems, Inc. Service Center, 3876 Florista Street, Los Alamitos, California, December 2, 2009
- K3: Quarterly Progress Report, April through June 2009, Former Safety-Kleen Systems, Inc. Service Center, 3876 Florista Street, Los Alamitos, California, July 15, 2009
- K4: Quarterly Progress Report, July through September 2009, Former Safety-Kleen Systems, Inc. Service Center, 3876 Florista Street, Los Alamitos, California, July 15, 2009
- K5: Quarterly Progress Report, January through March 2010, Former Safety-Kleen Systems, Inc. Service Center, 3876 Florista Street, Los Alamitos, California, July 15, 2009

The following documents are on file at the City of Los Alamitos Community Development Department.

- L: Los Alamitos Medical Center Environment of Code Care Management Plans
 - L1: Management Plan for Hazardous Materials and Waste Management, 2010
 - L2: Emergency Operations Plan, 2010
 - L3: Management Plan for Medical Equipment, 2010
 - L4: Management Plan for Security, 2010



Los Alamitos Medical Center Specific Plan Program Environmental Impact Report

- L5: Management Plan for Utility Equipment, 2010
- L6: Management Plan for Safety, 2010
- L7: Management Plan for Fire Prevention, 2010
- M: Los Alamitos Medical Center Administrative/Infection Control Policy and Procedure, Aerosol Transmissible Disease Exposure Control Plan, January 2010
- N: Los Alamitos Medical Center Clinical Safety Policy, Surveillance Prevention & Control Program Plan, Revised April 2010
- O: Los Alamitos Medical Center Administration Policy and Procedure, Employee Health, Revised July 2005, Reviewed January 2009



LIST OF EXHIBITS

3-1	Regional Location.....	3-2
3-2	Local Vicinity	3-3
3-3	Existing Land Use	3-4
3-4	Land Use Plan - Phase 1.....	3-11
3-5	Land Use Plan - Phase 2.....	3-12
3-6	Land Use Plan - Phase 3/Buildout	3-14
3-7	Circulation Plan – Phase 1	3-16
3-8	Circulation Plan – Phase 2	3-17
3-9	Circulation Plan – Phase 3	3-18
4-1	Cumulative Projects Locations.....	4-4
5.1-1	AELUP Height Restriction Zone for JFTB.....	5.1-5
5.1-2	Los Alamitos Impact Zones Joint Forces Training Base	5.1-6
5.1-3	General Plan Land Use.....	5.1-13
5.1-4	Zoning Map.....	5.1-15
5.2-1a	Existing On-Site Photographs.....	5.2-5
5.2-1b	Existing On-Site Photographs.....	5.2-6
5.2-1c	Existing On-Site Photographs.....	5.2-7
5.3-1	Study Intersection Locations	5.3-5
5.3-2	CMP Study Intersection Locations.....	5.3-11
5.3-3	Area 1 – Existing AM/PM Peak Hour Intersection Volumes	5.3-14
5.3-4	Area 2 – Existing AM/PM Peak Hour Intersection Volumes	5.3-15
5.3-5	Area 3 – Existing AM/PM Peak Hour Intersection Volumes	5.3-16
5.3-6	Area 1 – Existing Study Intersection/Roadway Geometry.....	5.3-17
5.3-7	Area 2 – Existing Study Intersection/Roadway Geometry.....	5.3-18
5.3-8	Area 3 – Existing Study Intersection/Roadway Geometry.....	5.3-19
5.3-9	Proposed Project Phase 1 Parking and Site Access Locations	5.3-31
5.3-10	Proposed Project Phase 2 Parking and Site Access Locations	5.3-32
5.3-11	Proposed Project Phase 3 Parking and Site Access Locations	5.3-33
5.3-12	Forecast Trip Percent Distribution of Proposed Project.....	5.3-37
5.3-13	Area 1 – Forecast AM & PM Peak Hour Trip Assignment of Proposed Project Phase 1	5.3-39
5.3-14	Area 2 – Forecast AM & PM Peak Hour Trip Assignment of Proposed Project Phase 1	5.3-40
5.3-15	Area 3 – Forecast AM & PM Peak Hour Trip Assignment of Proposed Project Phase 1	5.3-41
5.3-16	Area 1 – Forecast AM & PM Peak Hour Trip Assignment of Proposed Project Phases 1-3	5.3-42
5.3-17	Area 2 – Forecast AM & PM Peak Hour Trip Assignment of Proposed Project Phases 1-3	5.3-43
5.3-18	Area 3 – Forecast AM & PM Peak Hour Trip Assignment of Proposed Project Phases 1-3	5.3-44
5.3-19	Area 1 – Forecast Year 2013 Without Project Conditions AM & PM Peak Hour Volumes	5.3-48



LIST OF EXHIBITS (Continued)

5.3-20	Area 2 – Forecast Year 2013 Without Project Conditions AM & PM Peak Hour Volumes	5.3-49
5.3-21	Area 3 – Forecast Year 2013 Without Project Conditions AM & PM Peak Hour Volumes	5.3-50
5.3-22	Area 1 – Forecast Year 2013 With Project Conditions AM & PM Peak Hour Volumes	5.3-54
5.3-23	Area 2 – Forecast Year 2013 With Project Conditions AM & PM Peak Hour Volumes	5.3-55
5.3-24	Area 3 – Forecast Year 2013 With Project Conditions AM & PM Peak Hour Volumes	5.3-56
5.3-25	Mitigated Katella Avenue Corridor.....	5.3-58
5.3-26	Area 1 – Forecast Year 2035 Without Project Conditions AM & PM Peak Hour Volumes	5.3-63
5.3-27	Area 2 – Forecast Year 2035 Without Project Conditions AM & PM Peak Hour Volumes	5.3-64
5.3-28	Area 3 – Forecast Year 2035 Without Project Conditions AM & PM Peak Hour Volumes	5.3-65
5.3-29	Area 1 – Forecast Year 2035 With Project Conditions AM & PM Peak Hour Volumes	5.3-68
5.3-30	Area 2 – Forecast Year 2035 With Project Conditions AM & PM Peak Hour Volumes	5.3-69
5.3-31	Area 3 – Forecast Year 2035 With Project Conditions AM & PM Peak Hour Volumes	5.3-70
5.3-32	Mitigated Forecast Year 2035 With Project Conditions Study Intersection Geometry – Los Alamitos Boulevard/Cerritos Avenue.....	5.3-75
5.5-1	Sound Levels and Human Response	5.5-2
5.5-2	Noise Measurement Locations	5.5-11
5.5-3	On-Site Noise Sensitive Receptors	5.5-29
5.6-1	Regional Fault Map	5.6-5
5.8-1	Pervious Areas by Subbasin – Existing Conditions	5.8-13
5.8-2	Pervious Areas by Subbasin – Phase 1 Conditions	5.8-17
5.8-3	Pervious Areas by Subbasin – Phase 2 Conditions	5.8-18
5.8-4	Pervious Areas by Subbasin – Phase 3 Conditions	5.8-19
5.12-1	Sewer Facilities Map.....	5.12-4



LIST OF TABLES

1-1	Proposed Medical Center Campus Facilities (New Buildings)	1-2
1-2	Specific Plan Development Program.....	1-2
1-3	Specific Plan Development Program By Use Type.....	1-3
3-1	Los Alamitos Medical Center Existing Medical Center Campus Facilities and Uses	3-5
3-2	Proposed Medical Center Campus Facilities (New Buildings)	3-7
3-3	Specific Plan Development Program	3-8
3-4	Specific Plan Development Program By Use Type.....	3-9
3-5	On-Site Parking.....	3-20
4-1	Cumulative Projects List.....	4-2
5.1-1	Consistency with Applicable General Plan Goals and Policies	5.1-19
5.3-1	Summary of Intersections by Jurisdiction.....	5.3-6
5.3-2	V/C & LOS Ranges	5.3-12
5.3-3	LOS & Delay Ranges	5.3-12
5.3-4	Existing Conditions AM & PM Peak Hour Level of Service	5.3-20
5.3-5	LOS & Density Ranges for State Highway Facilities	5.3-22
5.3-6	Existing Conditions AM & PM Peak Hour State Highway Study Segment Level of Service.....	5.3-23
5.3-7	Performance Criteria by Study Intersection	5.3-24
5.3-8	Parking Requirements	5.3-34
5.3-9	On-Site Parking.....	5.3-35
5.3-10	ITE Trip Rates for Proposed Project.....	5.3-35
5.3-11	Forecast Trip Generation of Proposed Project	5.3-36
5.3-12	Forecast Trip Generation of the Approved/Pending Projects	5.3-45
5.3-13	Forecast Year 2013 Without Project Conditions AM & PM Peak Hour Level of Service.....	5.3-46
5.3-14	Forecast Year 2013 With Project Phase 1 Conditions AM & PM Peak Hour Level of Service	5.3-51
5.3-15	Mitigated Forecast Year 2013 With Project Phase 1 Conditions AM & PM Peak Hour Level of Service.....	5.3-59
5.3-16	Forecast Year 2035 Without Project Conditions AM & PM Peak Hour Level of Service.....	5.3-66
5.3-17	Forecast Year 2035 With Project Conditions AM & PM Peak Hour Level of Service.....	5.3-71
5.3-18	Mitigated Forecast Year 2035 With Project Conditions AM & PM Peak Hour Level of Service	5.3-74
5.3-19	Mitigated Forecast Year 2035 With Project Conditions Katella Avenue Left-Turn Queue Analysis Summary.....	5.3-76
5.3-20	Forecast Year 2013 Without Project Conditions AM & PM Peak Hour State Highway Study Segment Level of Service.....	5.3-77
5.3-21	Forecast Year 2013 With Project Conditions AM & PM Peak Hour State Highway Study Segment Level of Service.....	5.3-79
5.3-22	Forecast Year 2035 Without Project Conditions AM & PM Peak Hour State Highway Study Segment Level of Service.....	5.3-81



LIST OF TABLES (Continued)

5.3-23	Forecast Year 2035 With Project Conditions AM & PM Peak Hour State Highway Study Segment Level of Service.....	5.3-82
5.3-24	Forecast Year 2013 With Project Conditions CMP Peak Hour Level of Service.....	5.3-83
5.3-25	Forecast Year 2035 With Project Conditions CMP Peak Hour Level of Service.....	5.3-84
5.4-1	National and California Ambient Air Quality Standards.....	5.4-3
5.4-2	Local Air Quality Levels	5.4-9
5.4-3	SCAQMD Emissions Thresholds.....	5.4-14
5.4-4	Construction Air Emissions.....	5.4-18
5.4-5	Summary of Localized Construction Emissions.....	5.4-21
5.4-6	Operational Emissions	5.4-24
5.4-7	Summary of Localized Significance of Operational Emissions.....	5.4-26
5.4-8	Project Buildout Carbon Monoxide Concentrations	5.4-27
5.4-9	Estimated Greenhouse Gas Emissions	5.4-33
5.4-10	Proposed Project Consistency With the Attorney General's Recommendations.....	5.4-35
5.4-11	Recommended Actions for Climate Change Proposed Scoping Plan.....	5.4-37
5.5-1	Noise Descriptors.....	5.5-3
5.5-2	Noise and Land Use Compatibility Matrix	5.5-4
5.5-3	City of Los Alamitos Exterior Noise Standards	5.5-6
5.5-4	City of Los Alamitos Interior Noise Standards.....	5.5-7
5.5-5	Sensitive Receptors.....	5.5-10
5.5-6	Noise Measurements.....	5.5-10
5.5-7	Existing Traffic Noise Levels	5.5-12
5.5-8	Maximum Noise Levels Generated by Construction Equipment.....	5.5-18
5.5-9	Typical Vibration Levels for Construction Equipment.....	5.5-22
5.5-10	Near-Term Noise Scenarios.....	5.5-24
5.5-11	Long-Term Noise Scenarios	5.5-26
5.5-12	On-Site Noise Levels	5.5-30
5.5-13	Cumulative Noise Scenario	5.5-33
5.8-1	Summary of Pervious Area for Existing Conditions.....	5.8-11
5.8-2	Anticipated Building Footprint by Phase.....	5.8-16
5.8-3	Summary of Impervious Area by Phase.....	5.8-20
5.8-4	Summary of Pervious Area for Existing and Phased Conditions	5.8-20
5.8-5	Summary of Runoff for Existing and Phased Conditions.....	5.8-21
5.8-6	Preliminary Water Quality Design Flows.....	5.8-24
5.8-7	Preliminary Water Quality Design Volumes.....	5.8-24
5.8-8	Site Design BMPs.....	5.8-26
5.8-9	Routine Source Control Non-Structural BMPs	5.8-26
5.8-10	Routine Source Control Structural BMPs.....	5.8-27
5.8-11	Treatment Control BMPs.....	5.8-27
5.12-1	Existing Wastewater Flows	5.12-2
5.12-2	Proposed Project Anticipated Wastewater Flows.....	5.12-6
5.12-3	Cumulative Projects Wastewater Generation.....	5.12-8



LIST OF TABLES (Continued)

5.13-1	Landfill Capacity	5.13-3
5.13-2	Cumulative Projects Solid Waste Generation	5.13-7
5.14-1	Cumulative Projects Electricity Consumption	5.14-7
5.14-2	Cumulative Projects Natural Gas Consumption.....	5.14-9
6-1	Comparison of Alternatives	6-19



LIST OF ACRONYMS

<u>Acronym</u>	<u>Meaning</u>
10NRC	Nuclear Regulatory Commission Regulations
ADT	Average Daily Trips
ADT	Average Daily Traffic
AELUP	Airport Environs Land Use Plan
AF/Y	Acre-Feet per Year
AFRC	Air Force Reserve Command
AFRC	Air Force Reserve Command
ALUC	Airport Land Use Commission
AMSL	Above Mean Sea Level
AOC	Area of Concern
AQMP	2007 South Coast Air Quality Management Plan
ASBS	Areas of Biological Significance
ATD	Aerosol Transmissible Diseases (ATD)
ATP	Aerosol Transmissible Pathogens
B.C.F.	Billion Cubic Feet
BACT	Best Available Control Technology (for toxics)
BMPs	Best Management Practices
BOD	Biochemical Oxygen Demand
BPP	Basin Production Percentage
BTR	City of Los Alamitos 2010 General Plan Background Technical Reports
C&D	Construction and Demolition
CAAQS	California Ambient Air Quality Standards
CA-ARNG	California Army National Guard
CA-ARNG	California Army National Guard
Cal/OSHA	California Division of Occupational Safety and Health
CalEPA	California Environmental Protection Agency
Caltrans	California Department of Transportation
CAP	Civil Air Patrol



LIST OF ACRONYMS (Continued)

<u>Acronym</u>	<u>Meaning</u>
CARB	California Air Resources Board
CASQA	California Stormwater Quality Association
CBC	California Building Code
CDEA	California Department of Food and Agriculture
CDHSRHB	California Department of Health Services Radiologic Health Branch and Medical Waste Program
CDPH	California Department of Public Health
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CERT	Community Emergency Response Team
CFC	Chlorofluorocarbons
CFCC	Capital Facility Capacity Charges
CFCCs	Capital Facility Capacity Charges
CFS	Cubic Feet per Second
CH ₄	Methane
CIWMP	County Integrated Waste Management Plan
CMP	Construction Management Plan
CMP	Orange County Congestion Management Program
CNEL	Community Noise Level Equivalent
CO	Carbon Monoxide
CO ₂	Carbon Dioxide
COD	Chemical Oxygen Demand
CPUC	California Public Utilities Commission
CWA	Clean Water Act
CWA	Clean Water Act
DAMP	Orange County Drainage Area Management Plan
dB	Decibel
dBA	A-weighted decibel scale
DCIA	Directly Connected Impervious Areas



LIST OF ACRONYMS (Continued)

<u>Acronym</u>	<u>Meaning</u>
DEIR	Draft Environmental Impact Report
DHCS	California Department of Health Care Services
DHS	California Department of Health Services
DHS	Department of Homeland Security
DO	Dissolved Oxygen
DSA	Division of the State Architect
DTSC	California Department of Toxic Substance Control
EERP	Employee Commute Reduction Program
EIR	Environmental Impact Report
EMS	Emergency Medical Services
EOC	Emergency Operations Center
EOP	Los Alamitos' Emergency Operations Plan
EPA	Environmental Protection Agency
ERS	Emissions Reduction Strategy
ESA	Environmentally Sensitive Areas
FAR	Floor Area Ratio
FAR	Federal Aviation Regulation
FDD	Facilities Development Division of OSHPD
FEMA	Federal Emergency Management Agency
FEMA	Federal Emergency Management Agency
FERC	Federal Energy Regulatory Commission
FHWATNM	Federal Highway Administration Traffic Noise Model
GHG	Green House Gas
GSF	Gross Square Feet
GSWC	Golden State Water Company
GVR	SCAG's Growth Vision Report
GWh	Gigawatt Hours
H ₂ O	Water



LIST OF ACRONYMS (Continued)

<u>Acronym</u>	<u>Meaning</u>
HAI	Hospital-Associated Infections
HASP	Health and Safety Plan
HAZUS	Hazards United States
HCFC	Hydrochlorofluorocarbons
HCM	Highway Capacity Manual
HCM	Highway Capacity Manual
HFC	Hydrofluorocarbon
HHWE	Household Hazardous Waste Element
HPLV	High Pressure Low Volume
HSSA	Hospital Facilities Seismic Act
IC	Infection Control
ICC	International Code Council
ICS	FIRESCOPE Incident Command System
ICU	Intersection Capacity Utilization
IPCC	Intergovernmental Panel on Climate Change
IRP	MWD Integrated Resource Plan
IS/ND	City of Los Alamitos 2010 General Plan Initial Study/Negative Declaration
ISO	Insurance Service Organization
ITE	Institute of Transportation Engineers
JFTB	Joint Forces Training Base
KM	Kilometers
KSLI	Military Airfield
KSLI	Military Airfield
KVA	Kilovolt-Amperes
LAAAF	Los Alamitos Army Airfield
LAAAF	Los Alamitos Army Airfield
LAMC	Los Alamitos Municipal Code
LAMC	Los Alamitos Medical Center



LIST OF ACRONYMS (Continued)

<u>Acronym</u>	<u>Meaning</u>
LARWQCB	Los Angeles
LAZC	Los Alamitos Zoning Code
Ldn	Composite Noise Descriptor
Ldn	Day/Night Average
Leq	Equivalent Sound Level
LIP	Local Implementation Plan
Lmax	Maximum Sound Level
Lmin	Minimum Sound Level
Ln	Exceedance Level
LOS	Level of Service
LST	Localized Significance Thresholds
MATES III	Multiple Air Toxics Exposure Study III
MCL	Maximum Containment Level
mg/l	Milligrams Per Liter
μm^3	Micrograms Per Cubic Meter
MOB	Medical Office Building
MT	Metric Tons
MWD	Metropolitan Water District of Southern California
MWDOC	Municipal Water District of Orange County
MWh	Megawatt Hours
N	Nitrogen
N/A	Not Applicable
N ₂ O	Nitrous Oxide
NAAQS	National Ambient Air Quality Standards
NAVD88	North American Vertical Datum 1988
NGVD29	National Geodetic Vertical Datum of 1929
NIMS	National Incident Management System
NO ₂	Nitrogen Dioxide



LIST OF ACRONYMS (Continued)

<u>Acronym</u>	<u>Meaning</u>
NOA	Notice of Availability
NOC	Notice of Completion
NOP	Notice of Preparation
NO _x	Nitrogen Dioxide
NPDES	National Pollutant Discharge Elimination System
NRC	Nuclear Regulatory Commission
O ₃	Ozone Gas
OCCOG	Orange County Council of Governments
OCFA	Orange County Fire Authority
OCSD	Orange County Sanitation District
OCSD	Orange County Sanitation District
OCTA	Orange County Transportation Authority
OCWD	Orange County Water District
OCWD	Orange County Water District
OES	California Office of Emergency Services
OPR	California Office of Planning and Research
OSHPD	Office of State Planning and Development Services
P	Phosphorus
PAU	Paramedic Assessment Unit
PB	Lead
PCB	Polychlorinated Biphenyls
PFC	Perfluorocarbon
PG&E	Pacific Gas and Electric
PID	Photoionization Detector
PM ₁₀	Particulate Matter
PM _{2.5}	Fine Particulate Matter
PO	Provider Offices
PPE	Personal Protective Equipment



LIST OF ACRONYMS (Continued)

<u>Acronym</u>	<u>Meaning</u>
PPM	Parts Per Million
PST	Pacific Standard Time
PUC	Public Utilities Commission
RCP	SCAG's Regional Comprehensive Plan
RCRA	Resource Conservation and Recovery Act
RFI	RCRA Facility Investigation
RH	Relative Humidity
RL	Reporting Levels
RLASD	Rossmoor Los Alamitos Sewer District
RLASD	Rossmoor/Los Alamitos Sewer District
ROG	Reactive Organic Gas
ROG	Reactive Organic Gasses
RTP	SCAG's Regional Transportation Plan
RWQCB	Regional Water Quality Control Board
SARWQCB	Santa Ana Regional Water Quality Control Board
SB	Senate Bill
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCGC	Southern California Gas Company
SCS	Sustainable Community Strategy
SDGE	San Diego Gas and Electric Company
SDWA	Safe Water Drinking Act
SEMS	Standard Emergency Management System
SEMS	Standardized Emergency Management System
SF ₆	Sulfur Hexafluoride
S-H Act	Seismic Hazards Mapping Act of 1990
S-K	Safety-Kleen Systems
SO ₂	Sulfur Dioxide



LIST OF ACRONYMS (Continued)

<u>Acronym</u>	<u>Meaning</u>
SO _x	Sulfur Oxides
Sq Ft	Square Feet
SRA	Source Receptor Area
SRRE	Source Reduction and Recycling Element
SWMU	Solid Waste Management Units
SWP	State Water Project
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TDML	Total Maximum Daily Load
TDS	Total Dissolved Solids
TJC	The Joint Commission
TKN	Total Kjeldahl Nitrogen
TOC	Total Organic Carbon
TPH _m	Total Petroleum Hydrocarbons (as mineral spirits)
UBC	Uniform Building Code
USACE	United States Army Corps of Engineers
USDA	United States Department of Agriculture
USDA	United States Department of Agriculture
USDOT	United States Department of Transportation
USEPA	United States Environmental Protection Agency
USMCR	United States Marine Corps Reserve
USPS	United States Postal Service
UST	Underground Storage Tank
UWMP	Urban Water Management Plan
V/C	Volume to Capacity Ratio
VCP	Vitrified Clay Pipe (pertaining to sewer trunk pipes)
VOC	Volatile Organic Compound
WMP	Waste Management Plan



Final EIR, Technical Appendices, and Final Specific Plan on CD



1.0 Executive Summary



1.0 EXECUTIVE SUMMARY

1.1 PROJECT LOCATION

Regionally, the project site is located in the northwestern portion of the City of Los Alamitos in northwest Orange County. Cities that border Los Alamitos include Long Beach to the west, Cypress to the north, Garden Grove to the east, and Seal Beach to the south. The City is also bordered by the Rossmoor community, which is an unincorporated portion of Orange County. Primary access to the project site is provided by the San Diego Freeway (I-405) and San Gabriel River Freeway (I-605), which are located approximately 4.5 miles south and 1.5 miles west, respectively. Refer to Exhibit 3-1, Regional Location, in Section 3.0, Project Description.

Locally, the 18.3 gross-acre project site is on Katella Avenue. The project site is bordered by Katella Avenue on the south, Cherry Street on the west, Catalina and Florista Streets on the north, and Bloomfield Street on the east. Kaylor Street traverses the western portion of the Los Alamitos Medical Center campus, connecting with Catalina Street on the north and Katella Avenue on the south. Refer to Exhibit 3-2, Local Vicinity, in Section 3.0, Project Description.

1.2 PROJECT SUMMARY

The project applicant is proposing a Specific Plan for the Los Alamitos Medical Center campus. The Los Alamitos Medical Center is envisioned to be a safe, attractive, well-designed medical center where surrounding residents of all ages can obtain valuable medical treatment and care. The proposed Specific Plan for the Medical Center campus includes a three-phase master planned expansion estimated to be constructed over a period of approximately 25 years.

The Specific Plan will include the provision of an additional 164 hospital beds, two new hospital buildings, one new medical office building (75,100 gross square feet) to be used for additional outpatient and associated medical uses, and an additional 849 parking spaces than what currently exists on the Medical Center campus. It is anticipated that four new structures will be constructed on the existing 18.3 gross-acre Medical Center campus built over a 25-year period, as outlined below in the Development Program.

DEVELOPMENT PROGRAM

Table 1-1, Proposed Medical Center Campus Facilities (New Buildings), summarizes the new facilities proposed under the Specific Plan.



Table 1-1
Proposed Medical Center Campus Facilities (New Buildings)

New Buildings	Square Feet	Building Height ¹ (Feet) / Story
New Medical Office Building A	75,100	50' 6" / 3
New Hospital Building 1	88,100	68' / 4
New Hospital Building 2	88,100	68' / 4
New Central Plant	14,100	43' 6" / 1 to 2
	265,400	
1. Building heights are to top of parapet. Height of elevator shaft not included.		
' = Feet " = Inches		

Table 1-2, Specific Plan Development Program By Phase, and Table 1-3, Specific Plan Development Program By Use Type, illustrate the ultimate building square footage of the Los Alamitos Medical Center campus as it relates to the existing campus. Once complete, the Medical Center campus will include 582,824 square feet of hospital and hospital-related uses, medical office space, support facilities, and parking. The floor area ratio (FAR) will increase from an existing 0.45 FAR to 0.73 FAR once the Medical Center campus is built out.

Table 1-2
Specific Plan Development Program

Use	Square Feet	Beds
Phase 1		
Existing Main Hospital	121,748	167
Existing MOB 1 (interim pending demolition in Phase 2)	24,000	--
Existing MOB 2	64,000	--
Existing MOB 3	60,000	--
Existing TotalCare Pavilion	71,676	--
Existing Administration/Warehouse Building (3776 & 3797 Catalina) (interim pending demolition in Phase 2)	15,099	
New Medical Office Building A	75,100	--
Subtotal Phase 1	431,623	167
Phase 2		
Hospital Building 1	88,100	92
Existing Main Hospital (internal reconfiguration only)	No change	113 ¹
Subtotal Phase 2	88,100	205
Cumulative Total, Phase 2	480,624¹	205
Phase 3		
Hospital Building 2	88,100	126
New Central Plant	14,100	--
Subtotal Phase 3	102,200	--
BUILDOUT TOTAL	582,824	331
Net Increase Over Existing	226,301	164
1. In Phase 2 the bed count in the existing hospital is reduced from 167 beds to 113 beds due to consolidation of rooms and interior renovation. No change in square footage is proposed. Existing MOB 1 will be demolished as part of phase 2 as will the existing Administration/Warehouse building.		
Notes:		
1. Net increase is in comparison to the 356,523 sq ft of existing uses shown on Table 3-1 and accounts for demolition.		
2. MOB = Medical Office Building		



Table 1-3
Specific Plan Development Program By Use Type

Use	Existing Facilities	Phase	New Construction	Demolition	Net Change	Buildout Square Feet	Beds
Hospital & Related Uses							
Existing Main Hospital	121,748				0	121,748	167 Existing
Internal Reconfiguration		2					-54 Existing ¹
Hospital Building 2		2	88,100		+88,100	88,100	92 New
Hospital Building 3		3	88,100		+88,100	88,100	126 New
Subtotal Hospital & Related Uses	121,748		176,200	0	+176,200	297,948	331
Support Facilities							
Existing Administration/ Warehouse Building (3776 & 3797 Catalina)	15,099	2		-15,099	-15,099	0	
New Central Plant		3	14,100		+14,100	14,100	--
Subtotal Support Facilities	15,099		14,100	-15,099	-999	14,100	
Medical Office Buildings							
Existing MOB 1	24,000	2		-24,000	-24,000	0	--
Existing MOB 2	64,000				0	64,000	--
Existing MOB 3	60,000				0	60,000	--
Existing TotalCare Pavilion	71,676				0	71,676	--
Medical Office Building A		1	75,100		+75,100	75,100	--
Subtotal Medical Office Buildings	219,676		75,100	-24,000	+51,100	270,776	
TOTAL	356,523		265,400	-39,099	+226,301	582,824	331
Net Increase Over Existing						226,301	164
1. In Phase 2 the bed count in the existing hospital is reduced from 167 beds to 113 beds due to consolidation of rooms and interior renovation. No change in square footage is proposed. Existing MOB 1 will be demolished as part of phase 2 as will the existing Administration/Warehouse building. Notes: 1. Net increase is in comparison to the 356,523 sq ft of existing uses shown on Table 3-1 and accounts for demolition. 2. MOB = Medical Office Building							

1.3 PROJECT GOALS AND OBJECTIVES

The following project objectives identified in [Section 3.5, Project Goals and Objectives](#), in [Section 3.0, Project Description](#), are restated below. The Goals are intended to serve as a benchmark for the Los Alamitos Medical Center Specific Plan. During project review and analysis, these goals can be used to determine if future development proposals are supportive of the spirit and intent of the Specific Plan.



SPECIFIC PLAN GOALS

- Comply with the City of Los Alamitos General Plan Goals and Policies.
- Design the project with consideration of the site's circulation, environmental, and physical opportunities and constraints.
- Create project identity through thematically coherent and aesthetically pleasing architecture, landscaped areas, colors, signage, and entry statements.
- Size and phase the medical center development plan to satisfy, and be consistent with, current and anticipated future market demand.
- Encourage a streamlined and predictable discretionary review process for subsequent reviews.
- Provide for coordinated land use, urban design, landscape, transportation, and infrastructure planning.
- Create a sustainable development that minimizes short-term and long-term adverse environmental impacts to the fullest extent feasible and adequately addresses consumer needs.
- Improve the local job market by providing a substantial number of permanent new jobs within and available to the local community.

1.4 SUMMARY OF PROJECT ALTERNATIVES

1.4.1 ALTERNATIVES REJECTED FROM FURTHER CONSIDERATION

In accordance with *CEQA Guidelines* Section 15126.6, an EIR should identify any alternatives that were considered by the Lead Agency but were rejected as infeasible during the scoping process and briefly explain the Lead Agency's determination. Among the factors that may be used to eliminate alternatives from detailed consideration in an EIR are: (i) failure to meet most of the basic project objectives; (ii) infeasibility; or (iii) inability to avoid significant environmental effects. The following are alternatives the Agency has rejected, and will not be analyzed further in this EIR.

Alternatives to the proposed project that were considered but rejected included 1) relocation of the existing hospital campus to a new location elsewhere in Orange County, plus construction of the proposed Specific Plan; and 2) constructing a second hospital campus with medical office buildings at another location within the City of Los Alamitos or in Orange County. Relocation of the existing hospital facility and development of the proposed Specific Plan and construction of a new hospital and medical office buildings elsewhere in Orange County were determined not to be feasible because the Los Alamitos Medical Center's fundamental purpose is to expand its existing hospital campus to provide expanded services to the growing population of the region. Although it is recognized that healthcare service needs exist elsewhere in the County, the Los Alamitos Medical



Center has significant investment in its current location and therefore seeks to fully utilize the capacity of its existing site and infrastructure systems. The site is well suited to serve area residents within the hospital's service area and is accessible from a major freeway and arterial streets that access various points throughout the community. This would not preclude another hospital from being constructed elsewhere in Orange County.

The hospital has been at its current location since 1968. As such, the relocation of the hospital to a new location would require the abandonment of 40 years of investment in the existing hospital campus, and would require a substantial new investment in land and infrastructure for a new site. Given the prohibitive costs associated with relocating the hospital or purchasing land and constructing a second hospital campus in another location, these options were not considered feasible alternatives.

1.4.2 ALTERNATIVES ANALYZED

The analysis focuses on alternatives capable of eliminating significant adverse environmental effects or reducing them to less than significant levels, even if these alternatives would impede, to some degree, the attainment of the project objectives. The following alternatives have been identified:

- No Project/No Development Alternative. The No Project/No Development Alternative assumes the Los Alamitos Medical Center Specific Plan would not be implemented and the proposed land uses and other improvements would not be constructed. The project site would be unaltered and it is anticipated that the existing hospital and medical office facilities would continue to operate within its current capacity. It should be noted that the hospital currently is licensed for 167 beds.
- Alternative One (Relocation of Parking Structure 1 and MOB A). Under this Alternative, all of the project components as proposed would be constructed:
 - New Medical Office Building A
 - New Hospital Building 1
 - New Hospital Building 2
 - New Central Plant
 - Parking Structure 1
 - Parking Structure

The square footage, number of hospital beds, structure height, and design characteristics, and would be the same as the proposed project. However, the site layout would be modified:

MOB A would be relocated from its proposed location along Katella Avenue between MOB A and the TotalCare Pavilion. MOB A could be relocated elsewhere on the project site. Possible relocation areas include adjacent to Hospital Building 1 off Florista Street or adjacent to MOB 3.



Parking Structure 1 would be relocated to provide access directly off Katella Avenue and would be located between MOB 2 and the TotalCare Pavilion and the structure would be reoriented in a north-south direction.

Once complete, the Medical Center campus would include 582,824 square feet of hospital and hospital-related uses, medical office space, support facilities, and parking. At buildout, the Los Alamitos Medical Center campus would include 297,948 square feet of hospital and hospital-related uses; 260,776 square feet of medical office space; and 14,100 square feet of vital support facilities. The floor area ratio (FAR) would increase from an existing 0.45 FAR to 0.73 FAR once the Medical Center campus is built out.

- Alternative Two (Phases 1 and 2 Only). Alternative Two (Phases 1 and 2 Only) would include only MOB A, Hospital Building 1, and Parking Structure 1 along with supporting infrastructure (i.e., utilities). Hospital Building 2, Parking Structure 2, and the Central Plant would not be implemented.

The square footage, number of hospital beds, structure height, design characteristics, and site layout of MOB A and Hospital Building 1 would be the same as the proposed project. Consequently, this Alternative would result in a net increase over existing conditions of 88,100 square feet of hospital uses (yielding a net increase of 38 new beds), and 51,100 square feet of medical office building uses. This Alternative would result in a total of 480,624 square feet of hospital and medical office building uses and a total of 205 hospital beds, and a Floor Area Ratio of 0.60 on-site. This Alternative would reduce hospital building and central plant uses by 88,100 and 14,100 square feet, respectively, relative to the proposed project, which is a 17 percent reduction in project development.

Parking associated with this Alternative would also be reduced, due to a reduction in demand from the reduced site density. Under this Alternative, Parking Structure 1 would be constructed, while Parking Structure 2 would be eliminated from the Specific Plan. The need for parking structures would be further reduced by the additional availability for surface parking where Hospital Building 2 was proposed.

1.4.3 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA Guidelines Section 15126.6 indicates that if the No Project Alternative is the Environmentally Superior Alternative, then the EIR shall also identify an environmentally superior alternative among the other alternatives.

The context of an environmentally superior alternative for this EIR is based on the consideration of several factors including the project's objectives, as described in Section 3.5, Project Objectives, and the alternative's ability to fulfill the objectives with minimal impacts to the surrounding environment.



NO PROJECT/NO DEVELOPMENT ALTERNATIVE

The No Project/No Development Alternative results in fewer impacts to aesthetics, light, and glare; traffic; air quality/greenhouse gas emissions; noise; geology and seismic hazards; hazards and hazardous materials; hydrology, drainage, and water quality, and public services and utilities. Greater impacts would be anticipated for land use. No significant unavoidable impacts would occur under this Alternative.

The No Project/No Development Alternative would not implement the overall objective of the proposed project, which is to provide adequate hospital and medical office facilities to meet projected future demands in the service area. Under this Alternative, the proposed hospital and medical office uses would not be developed. Therefore, none of the project objectives identified Section 3.5, Project Objectives, would be met under the No Project/No Development Alternative.

The No Project/No Development Alternative would result in fewer project-related environmental impacts and eliminates significant unavoidable impacts; however, this Alternative does not meet any of the objectives of the project; in particular it would not help meet the healthcare needs of the community.

ALTERNATIVE ONE – RELOCATION OF PARKING STRUCTURE 1 AND MOB A

In comparison to the proposed project, Alternative One would result in similar impacts relative to: land use; traffic, air quality/greenhouse gas emissions; noise, geology and seismic hazards; hazards and hazardous materials; hydrology, drainage, and water quality; and public services and utilities. Significant and unavoidable impacts would still occur with respect to cumulative greenhouse gas emissions.

Alternative One provides for the construction of the same buildings as the proposed project with the same square footage, number of hospital beds, structure height, and design characteristics. However, the site layout would be modified. MOB A would be relocated from its proposed location along Katella Avenue between MOB A and the TotalCare Pavilion. MOB A could be relocated elsewhere on the project site. Possible relocation areas include adjacent to Hospital Building 1 off Florista Street or adjacent to MOB 3. Parking Structure 1 would be relocated to provide access directly off Katella Avenue and would be located between MOB 2 and the TotalCare Pavilion and the structure would be reoriented in a north-south direction. As detailed above, Alternative One meets all eight objectives.

ALTERNATIVE TWO – PHASES 1 AND 2 ONLY

In comparison to the proposed project, Alternative Two would result in similar impacts in regard to land use; and hydrology, drainage, and water quality. This Alternative would result in a reduction of impacts in regard to aesthetics, light, and glare; traffic; air quality/greenhouse gas emission; noise; geology and seismic hazards; hazards and hazardous materials; and public services and utilities.



Significant and unavoidable impacts would still occur with respect to cumulative greenhouse gas emissions.

Alternative Two provides for the construction of Hospital Building 1, MOB A, and supporting facilities, which would expand both medical services and facilities on the existing Los Alamitos Medical Center campus that would link inpatient and outpatient services. As detailed above, Alternative Two meets objectives 1, 2, 3, 5, and 6; and partially meets objectives 4, 7, and 8. Alternative Two would attain most of the basic objectives of the project; in particular, it would help meet future health care needs and help maintain the viability of the hospital.

CONCLUSION

As noted above, the determination of an environmentally superior alternative is based on the consideration of how the alternative fulfills the project objectives and how the alternative either reduces significant, unavoidable impacts or substantially reduces the impacts to the surrounding environment. In consideration of these factors, Alternative Two is selected as the Environmentally Superior Alternative to the proposed project.

Although the No Project/No Development Alternative would result in the fewest environmental impacts and would not contribute to cumulative significant environmental impacts associated with the project, it does not meet any of the objectives of the project and is therefore not considered feasible.

Alternative Two would result in the fewest environmental impacts in comparison to the proposed project, eliminates the significant traffic impacts, and would meet most of the basic objectives of the project. Therefore, Alternative Two is the environmentally superior alternative.



1.5 SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Potential Impact	Level of Significance Before Analysis and Mitigation	Mitigation Measures	Level of Significance After Analysis and Mitigation
LAND USE			
City of Los Alamitos General Plan			
The proposed project could conflict with the City of Los Alamitos General Plan.	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
Los Alamitos Zoning Code			
The proposed project could conflict with the standards and requirements of the City of Los Alamitos Zoning Code.	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
Airport Environs Land Use Plan			
The proposed project could conflict with the standards and requirements of the Airport Environs Land Use Plan.	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
Cumulative Impacts			
Implementation of the proposed project and other related cumulative projects could result in cumulatively considerable impacts involving conflicts with applicable land use plans, policies, or regulations.	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
AESTHETICS			
Short-Term Construction Aesthetic, Light, and Glare Impacts			
Construction activities associated with all phases of the proposed project could result in grading and construction activities that could temporarily alter the existing visual character of the project site and the surrounding area and introduce new sources of light/glare.	Potentially Significant Impact	AES-1 Construction equipment staging areas shall use appropriate screening (i.e., temporary fencing with opaque material) to buffer views of construction equipment and material, when feasible. Staging locations shall be indicated in the Construction Management Plan (CMP). AES-2 All construction-related lighting shall be located and focused away from adjacent residential areas and consist of the minimal wattage necessary to provide safety at the construction site. A construction safety lighting plan shall be submitted to the City for review concurrent with Grading Permit applications and the Construction Management Plan (CMP).	Less Than Significant Impact



Los Alamitos Medical Center Specific Plan Program Environmental Impact Report

Potential Impact	Level of Significance Before Analysis and Mitigation	Mitigation Measures	Level of Significance After Analysis and Mitigation
Long-Term Aesthetic Impacts/Visual Character			
Development associated with implementation of the proposed project could alter the existing visual character and viewshed from surrounding locations.	Potentially Significant Impact	AES-3 Prior to issuance of building permits, each structure shall undergo Site Plan Review approval in conformance with the adopted Specific Plan and conditions of approval for overall site design and architectural conformity.	Less Than Significant Impact
Long-Term Light and Glare Impacts			
Development associated with implementation of the proposed project could affect daytime and/or nighttime views in the area.	Potentially Significant Impact	AES-4 Prior to site plan approval, the City of Los Alamitos Community Development Department shall ensure that the following elements are included in the project plans, as appropriate: - The project plans shall comply with all lighting standards contained in the <i>Los Alamitos Medical Center Specific Plan</i>. - The project plans shall comply with all lighting standards contained in the City's <i>Municipal Code</i>, including, but not limited to Chapter 8.48, Lighting Performance Standards, Section 17.14.040, Light and Glare, and Section 17.16.050, Exterior Lighting, as applicable. - All exterior lighting shall be designed and located as to avoid intrusive effects on adjacent residential properties and undeveloped areas adjacent to the project site. Low-intensity street lighting and low-intensity exterior lighting shall be used throughout the development to the extent feasible. Lighting fixtures shall use shielding, if necessary, to prevent spill lighting on adjacent off-site uses. - Design and placement of site lighting shall minimize glare affecting adjacent properties, buildings, and roadways. - Fixtures and standards shall conform to state and local safety and illumination requirements.	Less Than Significant Impact



Los Alamitos Medical Center Specific Plan Program Environmental Impact Report

Potential Impact	Level of Significance Before Analysis and Mitigation	Mitigation Measures	Level of Significance After Analysis and Mitigation
		- Development projects shall use minimally reflective glass, and all other materials used on exterior building and structures shall be selected with attention to minimizing reflective glare. - Automatic timers on lighting shall be designed to maximize personal safety during nighttime use while saving energy.	
Cumulative Impacts			
Implementation of the proposed project and other related cumulative projects could result in cumulatively considerable aesthetics, light, and glare impacts.	Potentially Significant Impact	Refer to Mitigation Measure AES-1 through AES-4. No additional mitigation measures are required.	Less Than Significant Impact
TRAFFIC			
Forecast Year 2013 Proposed Project Traffic Impacts			
Development associated with implementation of the proposed project could result in adverse impacts to the function of intersections in the project area under forecast year 2013 traffic conditions.	Potentially Significant Impact	TRF-1a Kaylor Street/Katella Avenue. Prior to issuance of certificate of occupancy for MOB A, the project applicant shall install the following improvements: - Signalize the Kaylor Street/Katella Avenue intersection and lengthen the eastbound Katella Avenue left-turn pocket at Kaylor Street from 125 feet to 200 feet. - To accommodate eastbound left-turn queuing of vehicles accessing the medical center, modify the raised median on Katella Avenue to include an eastbound left-turn pocket approximately 100 feet in length at the Driveway 3/Katella Avenue intersection (refer to Exhibit 5.3-25). - Provide traffic signal interconnect and synchronization between the Kaylor Street/Katella Avenue intersection and the Cherry Street/Katella Avenue intersection. TRF-1b Kaylor Street/Katella Avenue. Prior to issuance of certificate of occupancy for MOB A, the project	Less Than Significant Impact



Los Alamitos Medical Center Specific Plan Program Environmental Impact Report

Potential Impact	Level of Significance Before Analysis and Mitigation	Mitigation Measures	Level of Significance After Analysis and Mitigation
		applicant shall install the following improvements: - Defer construction of a median restricting the Maple Street/Katella Avenue intersection to right-in/right-out movements as recommended in TRF-1c2 below, and provide a pilot project to restrict only the northbound left-turns and maintain the westbound left-turn access from Katella Avenue to Maple Street via roadway striping modifications. TRF-1c Kaylor Street/Katella Avenue. Within 12 months following installation of TRF-1b, the following are required: - The City of Los Alamitos shall collect data on the operation of the access measures noted in TRF-1b1 above. The project applicant shall reimburse the City for these costs. - Based on review and analysis of the data collected in TRF-1c1 by City of Los Alamitos, the project applicant, at the direction of the City of Los Alamitos, shall permanently implement TRF-1b1, or modify the Katella Avenue median to restrict the Maple Street/Katella Avenue intersection to right-in/right-out movements, or implement other similar improvements to address vehicular movements at the Maple Street/Katella Avenue intersection. TRF-2 Katella Avenue. Prior to issuance of certificate of occupancy for MOB A, the project applicant shall install the following improvements: - Further implement the OCTA Smart Street Program by coordinating with the City to prohibit on-street parking on	



Los Alamitos Medical Center Specific Plan Program Environmental Impact Report

Potential Impact	Level of Significance Before Analysis and Mitigation	Mitigation Measures	Level of Significance After Analysis and Mitigation
		Katella Avenue adjacent to the project site between Kaylor Street and Bloomfield Street. - Provide a dedicated right-turn lane at the westbound approach to the Kaylor Street/Katella Avenue and Driveway 3/Katella Avenue intersections (refer to Exhibit 5.3-25). - Continue to prohibit on-street parking on the north side of Katella Avenue between Cherry Street and Kaylor Street.	
Forecast Year 2035 Proposed Project Traffic Impacts			
Development associated with implementation of the proposed project could result in adverse impacts to the function of intersections in the project area under buildout forecast year 2035 traffic conditions.	Potentially Significant Impact	Refer to Mitigation Measures TRF-1 and TRF-2. In addition, the following mitigation measure is recommended. TRF-3 Los Alamitos Boulevard/Cerritos Avenue. Prior to issuance of certificate of occupancy for Hospital Building 2, the project applicant shall pay a proportionate share contribution to the City of Los Alamitos to widen the westbound Cerritos Avenue approach from one left-turn lane, two through lanes, and one right-turn lane to consist of two left-turn lanes, two through lanes, and one right-turn lane.	Less Than Significant Impact
Forecast Year 2013 Proposed Project Traffic Impacts on State Highway Facilities			
Development associated with implementation of the proposed project could result in adverse impacts to the function of state highway facilities in the project area under forecast year 2013 traffic conditions.	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
Forecast Year 2035 Proposed Project Traffic Impacts on State Highway Facilities			
Development associated with implementation of the proposed project could result in adverse impacts to the function of state highway facilities in the project area under buildout forecast year 2035 traffic conditions.	Less Than Significant Impact	No mitigation measures are required.	Not Applicable



Los Alamitos Medical Center Specific Plan Program Environmental Impact Report

Potential Impact	Level of Significance Before Analysis and Mitigation	Mitigation Measures	Level of Significance After Analysis and Mitigation
Forecast Year 2013 Proposed Project Traffic Impacts on CMP Highway Facilities			
Development associated with implementation of the proposed project could result in adverse impacts to the function of CMP in the project area under forecast year 2013 traffic conditions.	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
Forecast Year 2035 Proposed Project Traffic Impacts on CMP Highway Facilities			
Development associated with the implementation of the proposed project could result in adverse impacts to the function of CMP in the project area under buildout forecast year 2035 traffic conditions.	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
Traffic Hazards/Emergency Access			
Development associated with the implementation of the proposed project could result in hazardous conditions due to a design feature or incompatible use or could result in inadequate emergency access.	Potentially Significant Impact	TRF-4 Kaylor Street/Katella Avenue. Prior to issuance of certificate of occupancy for MOB A, the project applicant shall install the following improvements: - A dedicated left-turn lane at the southbound approach on Katella Avenue to the Kaylor Street/Katella Avenue intersection. - A dedicated right-turn lane at the southbound approach on Katella Avenue to the Kaylor Street/Katella Avenue intersection. TRF-5 Cherry Street/Katella Avenue. Prior to issuance of certificate of occupancy for MOB A, the project applicant shall install the following improvement: - A dedicated right-turn lane at the westbound approach to the Cherry Street/Katella Avenue intersection. Due to the restricted on-street parking, a de facto right-turn lane currently exists, and can be striped to better facilitate right-turns. TRF-6 Ambulance Service. The project applicant shall continue to coordinate with the applicable ambulance service and applicable agency staff on the site access for EMS deliveries. The applicant	Less Than Significant Impact.



Los Alamitos Medical Center Specific Plan Program Environmental Impact Report

Potential Impact	Level of Significance Before Analysis and Mitigation	Mitigation Measures	Level of Significance After Analysis and Mitigation
		shall provide a wayfinding system for public understanding of the location of the Emergency Room when arriving at the Medical Center.	
Short-Term Construction-Related Parking			
Implementation of the proposed project could result in adverse impacts related to the function of parking systems during construction activities.	Potentially Significant Impact	TRF-7 The project applicant shall prepare as part of the site plan submittal and implement during the construction phases of the project a Construction Management Plan. The Construction Management Plan shall include, but is not limited to, details on construction staging hours and construction equipment and supply staging locations, construction truck routes, and provisions for employee parking and parking management during construction. With respect to parking provisions during construction, the Construction Management Plan may include provisions for: 1) no construction worker parking on-site, and 2) off-site parking at an existing facility or facilities with a parking surplus, with a shuttle system, or other similar transportation method to and from the hospital campus. The Construction Management Plan shall be prepared as part of the site plan submittal and be approved by the Community Development Director prior to the issuance of any building permit.	Less Than Significant Impact
Cumulative Impacts			
Implementation of the proposed project and other related cumulative projects could result in cumulatively considerable traffic impacts.	Potentially Significant Impact	Refer to Mitigation Measure TRF-1 through TRF-6. No additional mitigation measures are required.	Less Than Significant Impact
AIR QUALITY/GREENHOUSE GAS EMISSIONS			
Short-Term Construction Emissions			
Development associated with implementation of the proposed project could generate dust and equipment emissions during construction.	Potentially Significant Impact	AQ-1 Prior to issuance of any Grading Permit, the Director of Public Works and the Building Official shall confirm that the Grading Plan specifications stipulate that, in compliance with SCAQMD Rule 403, excessive fugitive dust emissions shall be controlled by regular watering or other dust prevention measures, as specified	Less Than Significant Impact



Los Alamitos Medical Center Specific Plan Program Environmental Impact Report

Potential Impact	Level of Significance Before Analysis and Mitigation	Mitigation Measures	Level of Significance After Analysis and Mitigation
		in the SCAQMD's Rules and Regulations. In addition, SCAQMD Rule 402 requires implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off-site. Implementation of the following measures would reduce short-term fugitive dust impacts on nearby sensitive receptors: • All active portions of the construction site shall be watered twice daily to prevent excessive amounts of dust; • On-site vehicle speed shall be limited to 15 miles per hour; • All on-site roads shall be paved as soon as feasible, watered twice daily, or chemically stabilized; • Visible dust beyond the property line which emanates from the project shall be prevented to the maximum extent feasible; • All material transported off-site shall be either sufficiently watered or securely covered to prevent excessive amounts of dust prior to departing the job site; • Track-out devices shall be used at all construction site access points; and • All delivery truck tires shall be watered down and/or scraped down prior to departing the job site. AQ-2 All trucks that are to haul excavated or graded material on-site shall comply with State Vehicle Code Section 23114 (Spilling Loads on Highways), with special attention to Sections 23114(b)(F), (e)(4) as amended, regarding the prevention of such material spilling onto public streets and roads. Prior to the issuance of grading permits, the project applicant shall demonstrate to the City of Los Alamitos how the project operations subject to that specification during hauling	



Los Alamitos Medical Center Specific Plan Program Environmental Impact Report

Potential Impact	Level of Significance Before Analysis and Mitigation	Mitigation Measures	Level of Significance After Analysis and Mitigation
		activities shall comply with the provisions set forth in Sections 23114(b)(F), (e)(4). AQ-3 The following measures shall be implemented to reduce ROG emissions resulting from application of architectural coatings: - Contractors shall use high-pressure-low-volume (HPLV) paint applicators with a minimum transfer efficiency of at least 50 percent; - Use required coatings and solvents with a ROG content lower than required under Rule 1113; - Construct/build with materials that do not require painting; and - Use pre-painted construction materials. AQ-4 Prior to issuance of any Grading Permit, the Director of Public Works and the Building Official shall confirm that the Grading Plan stipulates that, in compliance with SCAQMD Rule 403, ozone precursor emissions from construction equipment vehicles shall be controlled by maintaining equipment engines in good condition and in proper tune per manufacturer's specifications, to the satisfaction of the City Engineer. Maintenance records shall be provided to the City. The City Inspector shall be responsible for ensuring that contractors comply with this measure during construction. AQ-5 The project applicant shall comply with South Coast Air Quality Management District Rule 1403, Asbestos Emissions From Demolition/Renovation Activities, as applicable, which specifies work practice requirements to limit asbestos emissions from building demolition and renovation activities, including the removal and associated disturbance of asbestos containing materials.	



Los Alamitos Medical Center Specific Plan Program Environmental Impact Report

Potential Impact	Level of Significance Before Analysis and Mitigation	Mitigation Measures	Level of Significance After Analysis and Mitigation
		The requirements for demolition and renovation activities include asbestos surveying, notification, asbestos-containing materials removal procedures and time schedules, asbestos-containing materials handling and clean-up procedures, and storage, disposal, and landfilling requirements for asbestos-containing waste materials. All operators are required to maintain records, including waste shipment records, and are required to use appropriate warning labels, signs, and markings.	
Long-Term Mobile and Stationary Source Emissions			
Development associated with implementation of the proposed project could result in an overall increase in mobile and stationary source emissions.	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
Carbon Monoxide Hotspots			
Development associated with implementation of the proposed project could result in an overall increase in carbon monoxide hotspot emissions within the City.	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
Consistency with Air Quality Management Plan			
Implementation of the proposed project could conflict with the Air Quality Management Plan.	Potentially Significant Impact	Refer to Mitigation Measures AQ-1 through AQ-4. No additional mitigation measures are required.	Less Than Significant Impact
Greenhouse Gas Emissions			
Development associated with implementation of the proposed project could generate greenhouse gas emissions that could have a significant impact on the environment.	Potentially Significant Impact	AQ-6 The Specific Plan shall include, but not be limited to, the following list of potential design features, as determined feasible by the project applicant in consultation with the Community Development Director. These features shall be incorporated into the Specific Plan and future buildings to ensure consistency with adopted statewide plans and programs. The project applicant shall demonstrate the incorporation of project design features prior to the issuance of building permits. <i>Energy Efficiency</i> Design buildings to be energy efficient, above Title 24 requirements.	Less Than Significant Impact



Los Alamitos Medical Center Specific Plan Program Environmental Impact Report

Potential Impact	Level of Significance Before Analysis and Mitigation	Mitigation Measures	Level of Significance After Analysis and Mitigation
		• Install light colored "cool" roofs and cool pavements, and strategically placed shade trees. • Provide information on energy management services for large energy users. • Install energy efficient heating and cooling systems, appliances and equipment, and control systems. • Provide education on energy efficiency. <i>Water Conservation and Efficiency</i> • Create water-efficient landscapes. • Use reclaimed water for landscape irrigation in new developments if available. Install the infrastructure to deliver and use reclaimed water. • Restrict watering methods (e.g., prohibit systems that apply water to nonvegetated surfaces) and control runoff. • Restrict the use of water for cleaning outdoor surfaces and vehicles. • Implement low-impact development practices that maintain the existing hydrologic character of the site to manage storm water and protect the environment. (Retaining storm water runoff on-site can drastically reduce the need for energy-intensive imported water at the site). <i>Solid Waste Measures</i> • Reuse and recycle construction and demolition waste (including, but not limited to, soil, vegetation, concrete, lumber, metal, and cardboard). • Provide interior and exterior storage areas for recyclables and green waste and adequate recycling containers located in public areas.	



Los Alamitos Medical Center Specific Plan Program Environmental Impact Report

Potential Impact	Level of Significance Before Analysis and Mitigation	Mitigation Measures	Level of Significance After Analysis and Mitigation
		<i>Transportation and Motor Vehicles</i> • Limit idling time for commercial vehicles, including delivery and construction vehicles. • Promote ride sharing programs (e.g., by designating a certain percentage of parking spaces for ride sharing vehicles, designating adequate passenger loading and unloading and waiting areas for ride sharing vehicles, and providing a web site or message board for coordinating rides). • Increase the cost of driving and parking private vehicles (e.g., imposing parking fees). • Provide adequate bicycle parking near building entrances to promote cyclist safety, security, and convenience. Provide facilities that encourage bicycle commuting (e.g., locked bicycle storage or covered or indoor bicycle parking). • Create bicycle lanes and walking paths directed to the location of schools, parks and other destination points. • Provide information on all options for individuals and businesses to reduce transportation-related emissions. Provide education and information about public transportation.	
Cumulative Impacts			
Air quality emissions resulting from implementation of the proposed project and other related cumulative projects could impact regional air quality levels on a cumulatively considerable basis.	Potentially Significant Impact	Refer to Mitigation Measures AQ-1 through AQ-6. No additional mitigation measures are required.	Significant Unavoidable Impact



Los Alamitos Medical Center Specific Plan Program Environmental Impact Report

Potential Impact	Level of Significance Before Analysis and Mitigation	Mitigation Measures	Level of Significance After Analysis and Mitigation
NOISE			
Construction Noise Impacts			
Development associated with implementation of the proposed project could result in potentially significant adverse noise impacts on surrounding sensitive receptors during construction.	Potentially Significant Impact	NOI-1 To reduce noise impacts due to construction, the project applicant shall require construction contractors to implement the following measures which shall be ongoing through demolition, grading, and/or construction: - Equipment and trucks used for project construction shall utilize the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures, and acoustically-attenuating shields or shrouds, wherever feasible). - Impact tools (e.g., jack hammers, pavement breakers, and rock drills) used for project construction shall be hydraulically or electronically powered wherever possible to avoid noise associated with compressed air exhaust from pneumatically powered tools. However, where use of pneumatic tools is unavoidable, an exhaust muffler shall be used; this muffler can lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves shall be used where feasible, and this could achieve a reduction of 5 dBA. Quieter procedures shall be used, such as drills rather than impact equipment, whenever feasible. - Stationary noise sources shall be located as far from adjacent receptors as possible, and they shall be muffled and enclosed within temporary sheds, incorporated insulation barriers, or other measures to the extent feasible. NOI-2 Prior to the issuance of each grading permit, the project	Less Than Significant Impact



Los Alamitos Medical Center Specific Plan Program Environmental Impact Report

Potential Impact	Level of Significance Before Analysis and Mitigation	Mitigation Measures	Level of Significance After Analysis and Mitigation
		applicant shall submit to the City Building and Safety Department a list of measures to respond to and track complaints pertaining to construction noise, ongoing throughout demolition, grading, and/or construction. These measures shall include the following: • A procedure and phone numbers for notifying the City Building and Safety Department staff and Los Alamitos Police Department (during regular construction hours and off-hours); • A sign large enough to be visible by moving traffic posted on-site pertaining to the permitted construction days and hours and complaint procedures and who to notify in the event of a problem. The sign shall also include a listing of both the City and construction contractor's telephone numbers (during regular construction hours and off-hours); • The designation of an on-site construction complaint and enforcement manager for the project. The manager shall act as a liaison between the project and its neighbors. The manager's responsibilities and authority shall include the following: - o An active role in monitoring project compliance with respect to noise; - o Ability to reschedule noisy construction activities to reduce effects on surrounding noise sensitive receivers; - o Site supervision of all potential sources of noise (e.g., material delivery, shouting, debris box pick-up and delivery) for all trades; and	



Los Alamitos Medical Center Specific Plan Program Environmental Impact Report

Potential Impact	Level of Significance Before Analysis and Mitigation	Mitigation Measures	Level of Significance After Analysis and Mitigation
		- o Intervening or discussing mitigation options with contractors. • Notification of adjacent property owners and occupants at least 30 days in advance of construction activities about the estimated duration of the activity; and • A preconstruction meeting shall be held with the job inspectors and the general contractor/on-site project manager to confirm that noise measures and practices (including construction hours, neighborhood notification, posted signs, etc.) are completed.	
Construction-Related Vibration Impacts			
Development associated with implementation of the proposed project could result in temporary vibration impacts to nearby sensitive receptors during grading and construction activities.	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
Mobile Noise Impacts			
Traffic generated by the proposed project could contribute to existing traffic noise in the area or exceed the City's established standards.	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
Operational Stationary Source Noise Impacts			
Development associated with implementation of the proposed project could result in stationary-source noise impacts on nearby sensitive receptors.	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
Cumulative Impacts			
Implementation of the proposed project and other related cumulative projects could result in cumulatively considerable construction noise impacts.	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
GEOLOGY AND SEISMIC HAZARDS			
Seismic Groundshaking			
Development associated with implementation of the proposed project could be subject to high levels of groundshaking during a	Potentially Significant Impact	GEO-1 The project applicant shall have a geologist registered by the State of California prepare a HAZUS Analysis prior to issuance of grading permits for the Hospital	Less Than Significant Impact



Los Alamitos Medical Center Specific Plan Program Environmental Impact Report

Potential Impact	Level of Significance Before Analysis and Mitigation	Mitigation Measures	Level of Significance After Analysis and Mitigation
seismic event, which could result in substantial damage to on-site buildings.		Buildings. Any recommendations in the study are applicable to the Hospital Buildings, if required by OSHPD, and shall be implemented during site grading and construction. GEO-2 Prior to issuance of a grading permit for each building, a registered geologist or soils engineer shall prepare an area-specific Geologic Study, which shall be submitted to the Community Development Department (Building and Safety) for approval. The Geologic Study shall specify the measures necessary to mitigate impacts related to liquefaction, expansion, and other geologic and seismic hazards, if any. All recommendations in the Geologic Study shall be implemented during area preparation, grading, and construction. GEO-3 Prior to issuance of any grading permit for each building, the project applicant shall comply with each of the recommendations detailed in the Geotechnical Study, and other such measure(s) as the City deems necessary to adequately mitigate potential seismic and geotechnical hazards.	
Liquefaction			
Development associated with implementation of the proposed project could be subject to liquefaction impacts resulting from groundshaking.	Potentially Significant Impact	Refer to Mitigation Measures GEO-1 and GEO-2. No additional mitigation measures are required.	Less Than Significant Impact
Expansive Soils			
Development associated with implementation of the proposed project could be located on expansive soils creating potential risk to life or property.	Potentially Significant Impact	Refer to Mitigation Measures GEO-1 through GEO-3. In addition, the following mitigation measure is required. GEO-4 If potentially expansive units (i.e., clay soils) are encountered during construction, they shall be evaluated by the Project Geotechnical Engineer. Special foundation designs and reinforcement shall be utilized to mitigate expansive material as specified by the Project Geotechnical Engineer and to the	Less Than Significant Impact



Los Alamitos Medical Center Specific Plan Program Environmental Impact Report

Potential Impact	Level of Significance Before Analysis and Mitigation	Mitigation Measures	Level of Significance After Analysis and Mitigation
		satisfaction of the City. Specifically, if clay soils are exposed at the deeper subgrade level, the Construction Contractor shall employ dewatering techniques, as the clay soils shall not be allowed to dry out.	
Cumulative Impacts			
Implementation of the proposed project and other related cumulative projects could result in cumulatively considerable impacts related to geologic soils, and seismic hazards.	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
HAZARDS AND HAZARDOUS MATERIALS			
Construction-Related Hazardous Materials Impacts			
Accidental release of hazardous materials during construction could result in a risk to workers, the public, or environment.	Potentially Significant Impact	HAZ-1 Prior to site plan approval for each phase, the project applicant shall retain a qualified environmental specialist (e.g., a Registered Environmental Assessor or similarly qualified individual) to perform pre-construction hazardous materials surveys to inspect existing building areas subject to demolition or renovation for the presence of any unidentified asbestos, PCBs, mercury, lead, or other hazardous materials. If found at levels that require special handling, the project applicant shall manage these materials as required by law and according to federal and state regulations and guidelines, including those of the DTSC, SCAQMD, Cal/OSHA, and any other agency with jurisdiction over these hazardous materials. HAZ-2 Following the final Safety-Kleen facility monitoring event as determined by DTSC, a Risk Assessment shall be prepared and implemented by the Safety-Kleen in accordance with all applicable DTSC standards and regulations. HAZ-3 The project applicant shall prepare a Work Plan for Environmental Monitoring the Former Safety-Kleen Systems Service Center (3862-3878 Florista Street) for the proposed Parking Structure 1. The Work Plan shall properly analyze potential health hazards associated with the location of a	Less Than Significant Impact



Los Alamitos Medical Center Specific Plan Program Environmental Impact Report

Potential Impact	Level of Significance Before Analysis and Mitigation	Mitigation Measures	Level of Significance After Analysis and Mitigation
		new parking structure over the former Safety-Kleen facility, and shall be reviewed and approved by DTSC prior to demolition or asphalt cap/parking lot removal.	
Hazardous Materials Use, Storage and Handling			
Development associated with implementation of the proposed project could result in an increased risk of upset associated with the routine use, generation, and transport of hazardous materials, hazardous waste, or accidental emission of hazardous materials or gases, which may potentially pose a health or safety hazard.	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
Hazardous Waste Generation			
Development associated with implementation of the proposed project could increase hazardous waste generation by the hospital and medical offices uses, which could substantially increase risks of environmental exposure.	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
Hazardous Materials Exposure			
Implementation of the proposed project could increase the number of individuals exposed to, but not the nature of, physical safety hazards at the Los Alamitos Medical Center.	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
Cumulative Impacts			
Implementation of the proposed project and other related cumulative projects could result in cumulatively considerable hazards and hazardous materials impacts.	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
HYDROLOGY, DRAINAGE, WATER QUALITY			
Drainage System Capacity			
Development associated with implementation of the proposed project could create or contribute to runoff water which could exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff.	Potentially Significant Impact	HYD-1 Concurrent with Site Plan Review or issuance of a grading permit, whichever comes first, a hydrology review shall be conducted by a Registered Civil Engineer for each development phase to ensure that runoff values for each phase remain at or below the runoff values shown in Table 5.8-5.	Less Than Significant Impact



Los Alamitos Medical Center Specific Plan Program Environmental Impact Report

Potential Impact	Level of Significance Before Analysis and Mitigation	Mitigation Measures	Level of Significance After Analysis and Mitigation
Water Quality			
Construction and operation of the proposed project could result in adverse water quality impacts.	Potentially Significant Impact	HYD-2 Prior to issuance of any Grading Permit, a Final Water Quality Management Plan, which includes both Structural and Non-Structural BMPs in order to comply with the requirements of the current DAMP and NPDES, shall be prepared for each development phase and/or building, as appropriate, to the satisfaction of the Los Alamitos Director of Public Works and the City Engineer. HYD-3 The project applicant shall implement the Best Management Practices identified in the Final Water Quality Management Plan. HYD-4 Prior to issuance of any Grading or Building Permit, and as part of the future development's compliance with the NPDES requirements, the project applicant shall file a Notice of Intent to the Santa Ana RWQCB providing notification and intent to comply with the State of California General Construction Permit. A copy of the Notice of Intent acknowledgement from the State of California Regional Water Quality Control Board must be submitted to the City of Los Alamitos before issuance of grading or building permits. Also, a Stormwater Pollution Prevention Plan (SWPPP) shall be reviewed and approved by the Director of Public Works and the City Engineer for water quality construction activities on-site. A copy of the SWPPP shall be available and implemented at the construction site at all times. The SWPPP shall outline the source control and/or treatment control BMPs to avoid or mitigate runoff pollutants at the construction site to the "maximum extent practicable."	Less Than Significant Impact
Erosion and Siltation			
Development associated with implementation of the proposed project could substantially alter the existing drainage pattern of the site or area, including through the	Potentially Significant Impact	Refer to Mitigation Measures HYD-2 and HYD-4. No additional mitigation measures are required.	Less Than Significant Impact



Los Alamitos Medical Center Specific Plan Program Environmental Impact Report

Potential Impact	Level of Significance Before Analysis and Mitigation	Mitigation Measures	Level of Significance After Analysis and Mitigation
alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site.			
Dam Inundation			
Development associated with implementation of the proposed project could result in urban uses being located on-site, which are in dam inundation areas of the City.	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
Cumulative Impacts			
Implementation of the proposed project and other related cumulative projects could contribute to cumulative hydrology and water quality impacts.	Potentially Significant Impact	Refer to Mitigation Measures HYD-2 and HYD-4. No additional mitigation measures are required.	Less Than Significant Impact
FIRE PROTECTION			
Construction-Related Fire Impacts			
Construction of the proposed project could result in the need for additional fire flows and protection services.	Potentially Significant Impact	FP-1 Adequate access to all buildings on the project site shall be provided and properly maintained for emergency vehicles during the building construction process to the satisfaction of the Orange County Fire Authority. FP-2 Prior to construction, a will-serve letter from Golden State Water Company shall be obtained by the project applicant, which states that the Water Company can adequately meet water flow requirements. FP-3 Prior to the issuance of building permits, the project applicant may be required to enter into a Secured Fire Protection Agreement with the Orange County Fire Authority. The agreement shall specify the project applicant's pro-rata fair share funding of capital improvements necessary to establish adequate fire protection facilities and equipment, and/or personnel. Said agreement shall be reached as early as possible in the planning process, preferably for each phase of the project, rather than on a parcel-by-parcel basis.	Less Than Significant Impact



Los Alamitos Medical Center Specific Plan Program Environmental Impact Report

Potential Impact	Level of Significance Before Analysis and Mitigation	Mitigation Measures	Level of Significance After Analysis and Mitigation
Operational-Related Fire Impacts			
Operation of the proposed project could result in the need for additional fire protection services.	Potentially Significant Impact	FP-4 All new structures shall have automatic fire sprinkler systems. FP-5 A supervised fire alarm system that meets requirements of the California Fire Code shall be placed in an accessible location with an annunciator. FP-6 Access to and around structures shall meet Orange County Fire Authority and California Fire Code requirements. FP-7 A water supply system shall be in place to supply fire hydrants and automatic fire sprinkler systems. FP-8 Roadway medians shall not exceed 1,000 feet without a turnaround. If medians are greater than 1,000 feet, emergency turnaround access for heavy fire equipment shall be provided. FP-9 All traffic signals on public access ways shall include the installation of optical preemption devices. FP-10 All electric gates within the project shall install emergency opening devices approved by the Orange County Fire Authority.	Less Than Significant Impact
Cumulative Impacts			
Implementation of the proposed project and other related cumulative projects could result in cumulatively considerable impacts to fire protection services.	Potentially Significant Impact	Refer to Mitigation Measures FS-1 through FS-10. No additional mitigation measures are required.	Less Than Significant Impact
POLICE PROTECTION			
Construction-Related Police Impacts			
Construction of the proposed project could result in the need for additional police protection facilities and personnel.	Potentially Significant Impact	PS-1 During construction, private security patrols shall be utilized to protect the construction site during non-construction hours.	Less Than Significant Impact
Operational-Related Police Impacts			
Operation of the proposed project could result in the need for additional police protection facilities and personnel.	Potentially Significant Impact	PS-2 As final site and building plans are submitted to the City for approval in the future, design requirements which reduce demands for service and ensure adequate public safety (such as those pertaining to site access, site security and lighting) shall be incorporated into building designs.	Less Than Significant Impact



Los Alamitos Medical Center Specific Plan Program Environmental Impact Report

Potential Impact	Level of Significance Before Analysis and Mitigation	Mitigation Measures	Level of Significance After Analysis and Mitigation
		PS-3 Project design shall landscape the project site with low-growing groundcover and shade trees, rather than a predominance of shrubs that could conceal potential criminal activity around buildings and parking areas. PS-4 Project design shall provide lighting around and throughout the development to enhance crime prevention and enforcement efforts. PS-5 Project design shall provide clearly visible (during the day and night) address signs and/or building numbers for easy identification during emergencies. PS-6 Project design shall provide visibility of doors and windows from the street and between buildings.	
Cumulative Impacts			
Implementation of the proposed project and other related cumulative projects could result in cumulatively considerable impacts to police protection facilities and personnel.	Potentially Significant Impact	Refer to Mitigation Measures PS-1 through PS-6. No additional mitigation measures are required.	Less Than Significant Impact
WATER			
Development associated with implementation of the proposed project could result in an increased demand for water supplies and infrastructure within the City.	Potentially Significant Impact	WAT-1 Prior to the issuance of building permits, the project applicant shall submit construction drawings to the Golden State Water Company, and, as necessary, shall pay all applicable connection fees and comply with Golden State Water Company permitting and fee requirements.	Less Than Significant Impact
Cumulative Impacts			
Implementation of the proposed project and other related cumulative projects could result in cumulatively considerable impacts to water systems, including increased demand and infrastructure facilities within the City.	Potentially Significant Impact	Refer to Mitigation Measure WAT-1. No additional mitigation measures are required.	Less Than Significant Impact



Los Alamitos Medical Center Specific Plan Program Environmental Impact Report

Potential Impact	Level of Significance Before Analysis and Mitigation	Mitigation Measures	Level of Significance After Analysis and Mitigation
WASTEWATER			
Wastewater Conveyance and Treatment			
Development associated with implementation of the proposed project could result in increased demand for wastewater services and infrastructure in the City.	Potentially Significant Impact	WW-1 New sewer lateral sizes and connections shall be per the RLSD standards and all appropriate connection and inspection fees shall be paid. Plan check processing and permitting shall also be required from the RLSD. WW-2 An inspection fee shall be collected if a connection directly to an OCSD facility is necessary. The amount of the fee shall be based on the design of the connection. When prepared, a plan of the proposed connection should be submitted for review. WW-3 Capital Facility Capacity Charges (CFCCs) shall be collected to pay for additional capacity in the collection and treatment plant in accordance with the latest OCSD Fee Schedule, which is updated every first of July. Fees are based on the use and the square footage of the proposed facilities. A credit for existing uses at current rates shall be calculated and deducted from the total. WW-4 After construction has been completed, an annual regional user fee will be collected via the property tax roll for OCSD maintenance of the facilities; this fee shall be paid in accordance with the latest version of the OCSD Fee Schedule.	Less Than Significant Impact
Cumulative Impacts			
Implementation of the proposed project and other related cumulative projects could result in cumulatively considerable impacts to wastewater systems, including increased demand and infrastructure facilities within the City.	Potentially Significant Impact	Refer to Mitigation Measures WW-1 through WW-4. No additional mitigation measures are required.	Less Than Significant Impact



Los Alamitos Medical Center Specific Plan Program Environmental Impact Report

Potential Impact	Level of Significance Before Analysis and Mitigation	Mitigation Measures	Level of Significance After Analysis and Mitigation
SOLID WASTE			
Solid Waste Generated During Project Construction			
Development associated with implementation of the proposed project could potentially result in increased solid waste generation in exceedance of landfill capacity during construction.	Potentially Significant Impact	SW-1 All demolition and construction shall be done in accordance with Los Alamitos Municipal Code Demolition Chapter 8.13. SW-2 Future development projects within the Los Alamitos Medical Center Specific Plan area shall comply with all applicable City, County, State, and Federal regulations and procedures for the use, collection, and disposal of solid and hazardous wastes.	Less Than Significant Impact
Solid Waste Generated During Project Operation			
Development associated with implementation of the proposed project could potentially result in increased solid waste generation in exceedance of landfill capacity during operation.	Potentially Significant Impact	Refer to Mitigation Measure SW-2. No additional mitigation measures are required.	Less Than Significant Impact
Cumulative Impacts			
Implementation of the proposed project and other related cumulative projects could result in cumulatively considerable impacts related to solid waste disposal services and landfill disposal capacity.	Potentially Significant Impact	Refer to Mitigation Measures SW-1 and SW-2. No additional mitigation measures are required.	Less Than Significant Impact
ELECTRICITY AND NATURAL GAS			
Electricity Supplies and Distribution Infrastructure			
Development associated with implementation of the proposed project could increase the demand for electricity services and facilities.	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
Natural Gas Supplies and Distribution Infrastructure			
Development associated with implementation of the proposed project could increase the demand for natural gas services and facilities.	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
Cumulative Impacts			
Implementation of the proposed project and other related cumulative projects could result in cumulatively considerable electricity and natural gas impacts.	Less Than Significant Impact	No mitigation measures are required.	Not Applicable



2.0 Introduction and Purpose



2.0 INTRODUCTION AND PURPOSE

2.1 PURPOSE

The City of Los Alamitos (City) is the Lead Agency under the *California Environmental Quality Act* (CEQA), and has determined that an Environmental Impact Report (EIR) is required for the Los Alamitos Medical Center Specific Plan (State Clearinghouse No. 2010041095). This EIR has been prepared in conformance with CEQA (*California Public Resources Code* [PRC] Section 21000 et seq.); CEQA Guidelines (*California Code of Regulations* [CCR], Title 14, Section 15000 et seq.); and the rules, regulations, and procedures for implementation of CEQA, as adopted by the City of Los Alamitos. The principal CEQA Guidelines sections governing content of this document are Sections 15120 through 15132 (Contents of Environmental Impact Reports) and Section 15168 (Program EIR).

The purpose of this EIR is to review the existing conditions, analyze potential environmental impacts, and identify feasible mitigation measures to avoid or lessen potentially significant effects of the Los Alamitos Medical Center Specific Plan (proposed project). The proposed project encompasses approximately 18.3 gross-acres on Katella Avenue bordered by Katella Avenue on the south, Cherry Street on the west, Catalina and Florista Streets on the north, and Bloomfield Street on the east. Kaylor Street traverses the western portion of the Los Alamitos Medical Center campus, connecting with Catalina Street on the north and Katella Avenue on the south. For more detailed information regarding the proposed project, refer to Section 3.0, Project Description.

This EIR has been prepared as a Program EIR in accordance with CEQA Guidelines Section 15168, which states the following:

- (a) *General. A Program EIR is an EIR, which may be prepared on a series of actions that can be characterized as one large project and are related either:*
 - (1) *Geographically,*
 - (2) *As logical parts in the chain of contemplated actions,*
 - (3) *In connection with issuance of rules, regulations, plans, or other general criteria to govern the conduct of a continuing program, or*
 - (4) *As individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects which can be mitigated in similar ways.*
- (b) *Advantages. Use of a Program EIR can provide the following advantages. The Program EIR can:*
 - (1) *Provide an occasion for a more exhaustive consideration of effects and alternatives than would be practical in an EIR on an individual action,*
 - (2) *Ensure consideration of cumulative impacts that might be slighted in a case-by-case analysis,*
 - (3) *Avoid duplicative reconsideration of basic policy considerations,*



- (4) *Allow the Lead Agency to consider broad policy alternatives and program-wide mitigation measures at an early time when the agency has greater flexibility to deal with basic problems or cumulative impacts, and*
 - (5) *Allow reduction in paperwork.*
- (c) *Use with Later Activities. Subsequent activities in the program must be examined in the light of the Program EIR to determine whether an additional environmental document must be prepared.*
- (1) *If a later activity would have effects that were not examined in the program EIR, a new Initial Study would need to be prepared leading to either an EIR or a Negative Declaration.*
 - (2) *If the agency finds that pursuant to Section 15162, no new effects could occur or no new mitigation measures would be required, the agency can approve the activity as being within the scope of the project covered by the program EIR, and no new environmental document would be required.*
 - (3) *An agency shall incorporate feasible mitigation measures and alternatives developed in the program EIR into subsequent actions in the program.*
 - (4) *Where the subsequent activities involve site-specific operations, the agency should use a written checklist or similar device to document the evaluation of the site and the activity to determine whether the environmental effects of the operation were covered in the program EIR.*
 - (5) *A program EIR will be most helpful in dealing with subsequent activities if it deals with the effects of the program as specifically and comprehensively as possible. With a good and detailed analysis of the program, many subsequent activities could be found to be within the scope of the project described in the program EIR, and no further environmental documents would be required.*

CEQA Guidelines Section 15168 describes the proper process for Program EIRs, as follows (emphasis added):

Use of the Program EIR also enables the Lead Agency to characterize the overall program as the project being approved at that time. Following this approach when individual activities within the program are proposed, the agency would be required to examine the individual activities within the program to determine whether their effects were fully analyzed in the Program EIR. If the activities would have no effects beyond those analyzed in the Program EIR, the agency could assert that the activities are merely part of the program, which had been approved earlier, and no further CEQA compliance would be required. This approach offers many possibilities for agencies to reduce their costs of CEQA compliance and still achieve high levels of environmental protection.

In accordance with *CEQA Guidelines* Section 15121, the main purposes of this EIR are to:

- Provide decision-makers and the public with specific information regarding the environmental effects associated with the proposed project;
- Identify ways to minimize the significant effects of the project; and
- Describe reasonable alternatives to the project.



Mitigation measures are provided that may be adopted as conditions of approval to avoid or minimize the significance of impacts resulting from the project. In addition, this EIR is the primary reference document in the formulation and implementation of a mitigation monitoring program for the proposed project.

The City of Los Alamitos (which has the principal responsibility of processing and approving the project) and other public (i.e., responsible and trustee) agencies that may use this EIR in the decision-making or permit process will consider the information in this EIR, along with other information that may be presented during the *CEQA* process. Environmental impacts are not always able to be mitigated to a level considered less than significant; in those cases, impacts are considered significant unavoidable impacts. In accordance with *CEQA Guidelines* Section 15093(b), if a public agency approves a project that has significant impacts that are not substantially mitigated (i.e., significant unavoidable impacts), the agency shall state in writing the specific reasons for approving the project, based on the Final EIR and any other information in the public record for the project. Per *CEQA Guidelines* Section 15093, this is termed a “statement of overriding considerations.”

This document analyzes the environmental effects of the project to the degree of specificity appropriate to the current proposed actions, as required by *CEQA Guidelines* Section 15146. The analysis considers the activities associated with the project to determine the short-term and long-term effects associated with their implementation. This EIR discusses both the direct and indirect impacts of this project, as well as the cumulative impacts associated with other past, present, and reasonably foreseeable future projects.

2.2 COMPLIANCE WITH CEQA

PUBLIC REVIEW OF DRAFT EIR

The Draft EIR is subject to a 45-day review period by responsible and trustee agencies, the public and any interested parties. In accordance with the provisions of *CEQA Guidelines* Sections 15085(a) and 15087(a)(1), as amended, the City of Los Alamitos, serving as the Lead Agency shall (1) publish a Notice of Availability (NOA) of a Draft EIR; and (2) prepare and transmit a Notice of Completion (NOC) to the California State Clearinghouse.

Any public agency or members of the public desiring to comment on the Draft EIR must submit their comments in writing to the lead agency indicated on the document’s NOA/NOC prior to the end of the public review period. Written comments can be mailed or faxed to the following address or fax number:

City of Los Alamitos
3191 Katella Avenue
Los Alamitos, California 90720-5600
Attention: Mr. Steven A. Mendoza
Fax: (562) 493-0678



Additionally, written comments can be sent via email to the following email address:

smendoza@ci.los-alamitos.ca.us

The Lead Agency will evaluate and prepare responses to all relevant written comments received from both citizens and public agencies during the public review period.

FINAL EIR

The Final EIR will consist of the Draft EIR, revisions to the Draft EIR (if any), mitigation monitoring program, responses to all written comments, and errata for the Final EIR. At least ten days prior to the certification hearing, responses to the comments made by public agencies on the Draft EIR will be provided to the commenting agencies.

2.3 EIR SCOPING PROCESS

In compliance with the *CEQA Guidelines*, the City of Los Alamitos has maximized opportunities for the public to participate in the environmental review process. During preparation of the Draft EIR, efforts were made to contact various Federal, State, regional and local government agencies and other interested parties to solicit comments on the proposed project. This included the distribution of an Initial Study and Notice of Preparation (NOP) on April 28, 2010.

INITIAL STUDY

In accordance with *CEQA Guidelines* Section 15063(a), the City undertook the preparation of an Initial Study. The Initial Study determined that a number of environmental issue areas may be impacted by implementation of the proposed Los Alamitos Medical Center Specific Plan Project. As a result, the Initial Study determined that this EIR should address the project's potentially significant impacts on the following environmental issue areas:

- Aesthetics;
- Air Quality;
- Geology and Soils;
- Greenhouse Gas Emissions;
- Hazards and Hazardous Materials;
- Hydrology and Water Quality;
- Land Use and Planning;
- Noise;
- Population and Housing;
- Public Services;
- Transportation/Traffic; and
- Utilities and Service Systems.



Based on the Initial Study, no impact or a less than significant impact upon agriculture and forest resources, biological resources, cultural resources, mineral resources, and recreation are anticipated as a result of implementation of the proposed project. Accordingly, these issues are addressed in Section 8.0, Effects Found Not To Be Significant, in this EIR.

NOTICE OF PREPARATION

Pursuant to the provision of *CEQA Guidelines* Section 15082, as amended, the City of Los Alamitos circulated a Notice of Preparation (NOP) to public agencies, special districts and members of the public, including property owners, who had requested such notice for a 30-day period, beginning April 28, 2010 and ending May 28, 2010. The purpose of the NOP was to formally announce that the City is preparing a Draft EIR for the Los Alamitos Medical Center Specific Plan, and to solicit input regarding the scope and content of the environmental information to be included in the EIR. The Initial Study was circulated with the NOP. The NOP and Initial Study are provided in Appendix A, and NOP responses are provided in Appendix B.

NOP AND SCOPING RESULTS

The specific environmental concerns outlined below were raised by responses to the NOP for the proposed project.

California Department of Transportation (Caltrans)

- Any project work proposed in the vicinity of the Department's right-of-way would require an encroachment permit and all environmental concerns must be adequately addressed.
- The Department's Traffic Operations Branch requests all applicants to use the method outlined in the latest version of the Highway Capacity Manual (HCM) when analyzing traffic impacts on State Transportation Facilities.

Airport Land Use Commission

- Draft Environmental Impact Report (DEIR) should discuss whether the proposed project penetrates the Federal Aviation Regulation (FAR) Part 77 Notification Area Surface for Joint Forces Training Base (JFTB) Los Alamitos.
- DEIR should discuss whether the proposed project penetrates the FAR Part 77 Horizontal Imaginary Surface for the JFTB.
- DEIR should discuss the FAR Part 77 surfaces for JFTB Los Alamitos and provide the proposed building elevations above mean sea level (AMSL) using National Geodetic Vertical Datum of 1929 (NGVD29) and/or North American Vertical Datum 1988 (NAVD88).
- DEIR should discuss as to whether heliports are part of the proposed project.
- A referral by the City to the Airport Land Use Commission's (ALUC) may be required for the project due to the location of the proposal within an AELUP Planning Area and due to the nature of the required City approvals under PUC Section 21676(b).



South Coast Air Quality Management District

- Lead Agency should identify any potential adverse air quality impacts that could occur from all phases of the project and all air pollutant sources related to the project.
- Air quality impacts from both construction (including demolition, if any) and operations should be calculated.
- Air quality impacts from indirect sources, that is, sources that generate or attract vehicular trips should be included in the analysis.
- Lead Agency to quantify PM_{2.5} emissions and compare the results to the recommended PM_{2.5} significance thresholds.
- Calculate localized air quality impacts and compare the results to localized significance thresholds (LSTs).

Orange County Fire Authority

- No comments.

City of Cypress

- The Draft EIR should address project-related hydrology/storm water runoff issues on the site, on Katella Avenue, and in the region. The City of Cypress had indicated there is an undersized existing storm water drainage facility in Katella Avenue. The City of Cypress wants to ensure that storm water drainage directed into that pipe from the proposed project will not impact the flow at a rate or in a volume at any time, or cause other impacts.
- A hydrology study should be conducted and included in the Draft EIR, and should review any impacts associated with discharge of water from the proposed project into the existing or improved facility.
- The City of Cypress suggests full abandonment of Kaylor Street.

City of Garden Grove

- The City of Garden Grove Fire Department requests notification that identifies the available access route(s) to the Medical Center emergency room during construction and after the project is completed.

Art Debolt

- How will the traffic mitigations of the proposed project affect future retail development on the land located at the Northwest corner of Katella and Lexington?
- Same question as before, as it would pertain to the land on the south side of Katella, from Lexington to Noel Street. This land is currently zoned CO.

David Emerson

- Impact on traffic.
- Impact on future development.



- Too much in the wrong location.
- Closure of Kaylor just north of Los Alamitos.

Scoping Meeting Public Comments

- Traffic
 - What are the impacts associated with the project?
 - Project car trips/average daily trips on Katella Avenue
 - Impacts at Katella Avenue/Bloomfield
 - Traffic Impact from projects in Cypress, Seal Beach, and other neighboring cities
 - Need to review OCTA for volumes on Katella Avenue and Los Alamitos Boulevard
- Parking
 - The two proposed parking structures are wonderful. Parking is limited and is much needed.
- Pedestrian connections to hospital and on campus

Scoping Meeting Planning Commission Comments

- Traffic impacts are of major concern. Katella and Bloomfield are not widening and enlarging.
- Please have the consultant review and incorporate previous studies, such as Compass Blueprint Survey
- Are their aesthetic impacts? Height concerns?
- What is the proximity to the nearby elementary school?
- How many sensitive receptors are nearby?
- How many sensitive receptors will be affected?

2.4 FORMAT OF THE EIR

The Draft EIR is organized into 13 sections, plus Appendices, as follows.

- Section 1.0, Executive Summary, provides a brief project description and summary of the environmental impacts and mitigation measures.
- Section 2.0, Introduction and Purpose, provides CEQA compliance information.
- Section 3.0, Project Description, describes the project in detail indicating project location, background and history, and project characteristics, phasing and objectives, as well as associated discretionary actions required.
- Section 4.0, Basis of Cumulative Analysis, describes the approach and methodology for the cumulative analysis.
- Section 5.0, Environmental Analysis, contains a detailed environmental analysis of the existing conditions, project impacts (including direct and indirect, short-term and long-term, and cumulative), recommended mitigation measures, and significant unavoidable impacts.



- Section 6.0, Alternatives, describes a reasonable range of alternatives to the project or to the location of the project that could feasibly attain the basic project objectives.
- Section 7.0, Growth Inducing Impacts of the Proposed Action, discusses growth-inducing impacts associated with the proposed project.
- Section 8.0, Effects Found Not To Be Significant, explains potential impacts that have been determined not to be significant.
- Section 9.0, Significant Environmental Effects Which Cannot Be Avoided If The Proposed Project Were Implemented, discusses significant environmental changes that would be involved with the proposed project, should it be implemented.
- Section 10.0, Significant Irreversible Environmental Changes Which Would Be Involved If The Proposed Project Were Implemented, discusses significant irreversible environmental changes that would be involved with the proposed project, should it be implemented.
- Section 11.0, References, identifies all Federal, State or local agencies, other organizations, and individuals consulted in the preparation of the EIR.
- Section 12.0, Mitigation Monitoring Program, (in Final EIR), identifies those mitigation measures, milestones, and responsibility for monitoring each measure that may be included as conditions of approval for the proposed project.
- Section 13.0, Comments and Responses, (in Final EIR), includes comments and recommendations received on the Draft EIR either verbatim or in summary; a list of persons, organizations, and public agencies commenting on the Draft EIR; the responses of the Lead Agency to significant environmental points raised in the review and consultation process; and any other information added by the Lead Agency.

The following Appendices contain the technical documentation for the project:

- A: Initial Study Checklist/Notice of Preparation
- B: Notice of Preparation Comments
- C: Public Service and Utility Correspondence
- D: Traffic Impact Analysis
- E: Air Quality Data
- F: Noise Data
- G: Preliminary Hydrology Report
- H: Preliminary Water Quality Management Plan
- I1: Work Plan for Environmental Monitoring, Former Safety Kleen Systems Service Center, October 2007
- I2: Department of Toxic Substances Control Approval Letter, December 2007
- J: Environmental Monitoring Report, May 2009



- K1: Safety-Kleen, Submittal of a Work Plan for Additional Discrete-Depth Groundwater Investigation Activities, Former Safety-Kleen Systems, Inc. Service Center, 3876 Florista Street, Los Alamitos, California, April 9, 2009
- K2: Department of Toxic Substances Control, Approval of Work Plan for Additional Discrete-Depth Groundwater Investigation Activities, Former Safety-Kleen Systems, Inc. Service Center, 3876 Florista Street, Los Alamitos, California, December 2, 2009
- K3: Quarterly Progress Report, April through June 2009, Former Safety-Kleen Systems, Inc. Service Center, 3876 Florista Street, Los Alamitos, California, July 15, 2009
- K4: Quarterly Progress Report, July through September 2009, Former Safety-Kleen Systems, Inc. Service Center, 3876 Florista Street, Los Alamitos, California, July 15, 2009
- K5: Quarterly Progress Report, January through March 2010, Former Safety-Kleen Systems, Inc. Service Center, 3876 Florista Street, Los Alamitos, California, July 15, 2009
- L: Los Alamitos Medical Center Environment of Code Care Management Plans
 - L1: Management Plan for Hazardous Materials and Waste Management, 2010
 - L2: Emergency Operations Plan, 2010
 - L3: Management Plan for Medical Equipment, 2010
 - L4: Management Plan for Security, 2010
 - L5: Management Plan for Utility Equipment, 2010
 - L6: Management Plan for Safety, 2010
 - L7: Management Plan for Fire Prevention, 2010
- M: Los Alamitos Medical Center Administrative/Infection Control Policy and Procedure, Aerosol Transmissible Disease Exposure Control Plan, January 2010
- N: Los Alamitos Medical Center Clinical Safety Policy, Surveillance Prevention & Control Program Plan, Revised April 2010
- O: Los Alamitos Medical Center Administration Policy and Procedure, Employee Health, Revised July 2005, Reviewed January 2009

2.5 RESPONSIBLE AND TRUSTEE AGENCIES

Certain projects or actions undertaken by a Lead Agency require subsequent oversight, approvals, or permits from other public agencies in order to be implemented. Such other agencies are referred to as Responsible Agencies and Trustee Agencies. Pursuant to *CEQA Guidelines* Sections 15381 and 15386, Responsible Agencies and Trustee Agencies are respectively defined as follows:

“Responsible Agency” means a public agency that proposes to carry out or approve a project, for which a Lead Agency is preparing or has prepared an EIR or Negative Declaration. For the purposes of CEQA, the term “Responsible Agency” includes all public agencies other than the Lead Agency which have discretionary approval power over the project (*CEQA Guidelines* Section 15381).

“Trustee Agency” means a State agency having jurisdiction by law over natural resources affected by a project which are held in trust for the people of the State of California. Trustee Agencies include (*CEQA Guidelines* Section 15386):



- (a) *The California Department of Fish and Game with regard to the fish and wildlife of the State, to designated rare or endangered native plants, and to game refuges, ecological reserves, and other areas administered by the Department;*
- (b) *The State Lands Commission with regard to state-owned “sovereign” lands such as the beds of navigable waters and State school lands;*
- (c) *The State Department of Parks and Recreation with regard to units of the State Park System;*
- (d) *The University of California with regard to sites within the Natural Land and Water Reserves System (Section 15386).*

Responsible and Trustee Agencies and other entities that may use this EIR in their decision-making process or for informational purposes include, but may not be limited to, the following:

- Office of State Health Planning and Development (OSHPD)
- California Department of Health Services (DHS)
- California Department of Transportation (Caltrans)
- South Coast Air Quality Management District
- Southern California Association of Governments
- County of Orange
- Orange County Airport Land Use Commission
- Orange County Fire Authority
- Orange County Flood Control District
- Orange County Health Care Agency
- Orange County Integrated Waste Management
- Orange County Sanitation District
- Orange County Water District
- Orange County Transportation Authority
- Golden State Water Company
- Los Alamitos Police Department
- City of Cypress
- City of Garden Grove
- City of Hawaiian Gardens
- City of Long Beach
- City of Seal Beach
- City of Stanton
- Los Alamitos/Rossmoor Area Sewer District
- Los Alamitos Unified School District
- Southern California Gas
- Southern California Edison



2.6 INCORPORATION BY REFERENCE

Pertinent documents relating to this EIR have been cited in accordance with *CEQA Guidelines* Section 15148, which encourages “incorporation by reference” as a means of reducing redundancy and length of environmental reports. The following documents, which are available for public review at the City of Los Alamitos, Community Development Department, Planning Division, located at 3191 Katella Avenue, Los Alamitos, California, are hereby incorporated by reference into this EIR. Information contained within these documents has been utilized for each section of this EIR. A brief synopsis of the scope and content of these documents are provided below.

City of Los Alamitos 2010 General Plan, August 1999. The Los Alamitos General Plan (*General Plan*) is a comprehensive long-range plan for the City’s physical development, which is used to guide future land use decisions. In essence, the City’s *General Plan* serves as the blueprint for future growth and development. The *General Plan* is comprised of seven State-mandated elements (Land Use, Circulation and Transportation, Housing, Conservation, Open Space and Recreation, Noise, and Safety) and two optional elements (Economic Development and Growth Management). The *General Plan* was utilized throughout this Initial Study as a fundamental planning document governing the proposed project. Background information and policy information from the *General Plan* are cited in throughout this Initial Study.

City of Los Alamitos Housing Element, December 2009. The Housing Element addresses housing opportunities for current and future Los Alamitos residents through June 2014 and provides the policy guidance for local decision making related to housing in the City. This Housing Element update covers the Planning Period from January 2006 through June 2014. The Element also evaluates the City’s progress in implementation the 1998-2005 housing policy program.

City of Los Alamitos 2010 General Plan Initial Study/Negative Declaration (IS/ND), August 1999. The *General Plan IS/ND* is intended to provide decision-makers and the public with information concerning the environmental effects of implementation of the General Plan Update. The *IS/ND* evaluates the potential individual and cumulative environmental effects associated with implementation of the policies and programs of the *General Plan*. The *IS/ND* concluded that the 2010 General Plan Update would not result in any significant unavoidable impacts.

City of Los Alamitos Municipal Code (Municipal Code). The *Municipal Code* consists of all the regulatory, penal, and administrative ordinances of the City of Los Alamitos. It is the method the City uses to implement control of land uses, in accordance with General Plan goals and policies.

City of Los Alamitos Zoning Code, as amended. Title 17 of the City of Los Alamitos Municipal Code (LAMC) is referred to as the “*Los Alamitos Zoning Code*” (LAZC). The purpose of the LAZC is “to promote and protect the public health, safety, and general welfare of residents while preserving and enhancing the aesthetic quality of the City.” The LAZC implements the policies of the *Los Alamitos General Plan* by classifying and regulating the uses of land and structures within the City. Title 17 determines how the zoning districts are applied on the zoning map and provides general permit requirements for development and new land uses.



City of Los Alamitos Zoning Map, 2010. The Zoning Map was used to identify the zoning of properties within the City.

Draft Los Alamitos Medical Center Specific Plan. The Draft Los Alamitos Medical Center Specific Plan outlines the planned, phased expansion of the Medical Center campus over a 25-year period. A three-phase expansion is proposed. The purpose and intent of the Los Alamitos Medical Center Specific Plan is to create a policy and zoning document that will establish a planning and regulatory framework designed for the future development and buildout of the property located within the Los Alamitos Medical Center Specific Plan Area. The document is organized into the following chapters:

- Section 1 – Introduction
- Section 2 – Land Use Plan
- Section 3 – Circulation and Infrastructure Plan
- Section 4 – Site Development Regulations
- Section 5 – Site Design Guidelines
- Section 6 – Implementation and Administration
- Section 7 – Appendices



3.0 Project Description



3.0 PROJECT DESCRIPTION

3.1 PROJECT LOCATION

Regionally, the project site is located in the northwestern portion of the City of Los Alamitos in northwest Orange County. Cities that border Los Alamitos include Long Beach to the west, Cypress to the north, Garden Grove to the east, and Seal Beach to the south. The City is also bordered by the Rossmoor community, which is an unincorporated portion of Orange County. Primary access to the project site is provided by the San Diego Freeway (I-405) and San Gabriel River Freeway (I-605), which are located approximately 4.5 miles south and 1.5 miles west, respectively. Refer to *Exhibit 3-1, Regional Location*.

Locally, the 18.3 gross-acre project site is on Katella Avenue. The project site is bordered by Katella Avenue on the south, Cherry Street on the west, Catalina and Florista Streets on the north, and Bloomfield Street on the east. Kaylor Street traverses the western portion of the Los Alamitos Medical Center campus, connecting with Catalina Street on the north and Katella Avenue on the south. Refer to *Exhibit 3-2, Local Vicinity*.

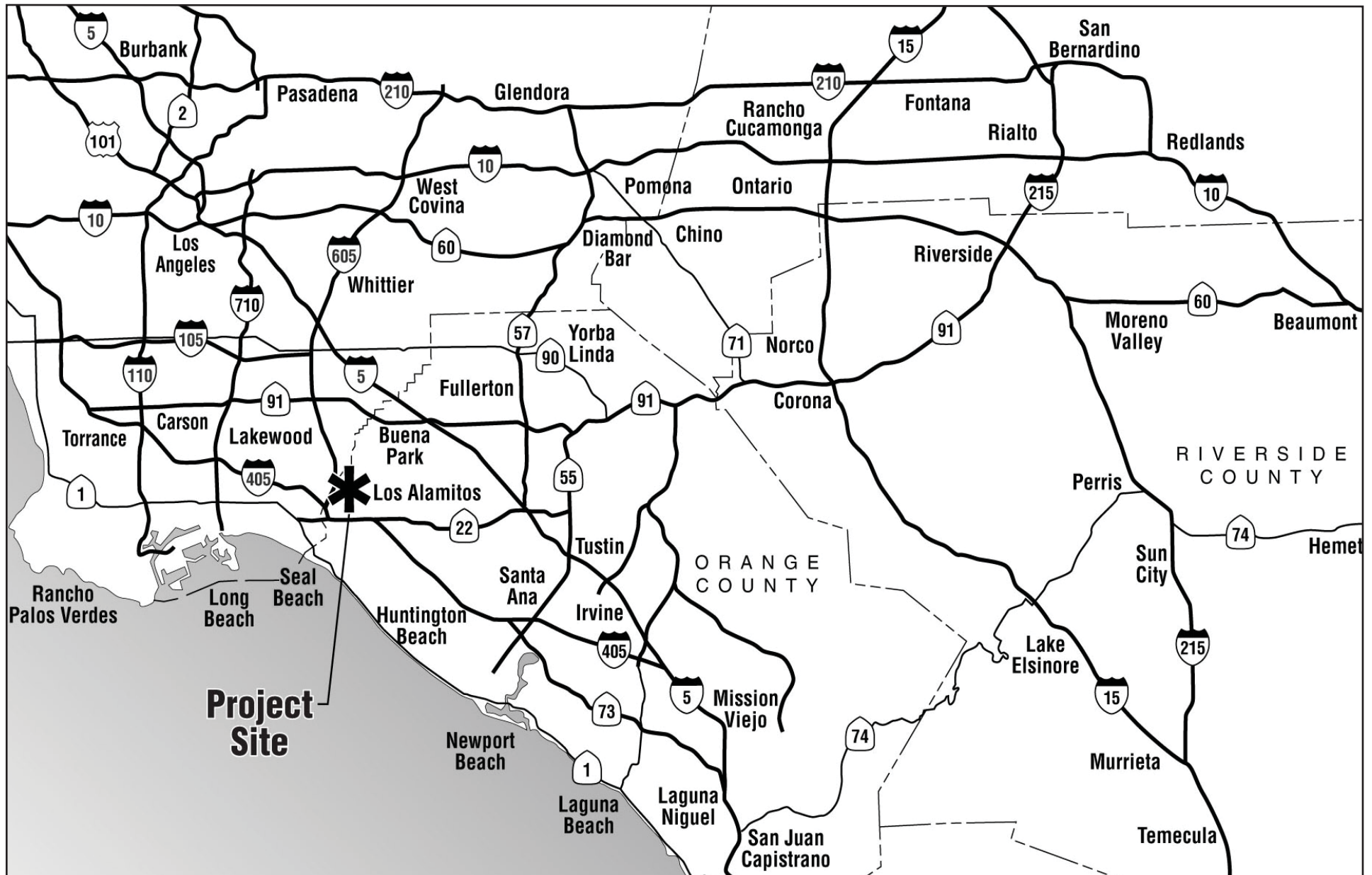
3.2 BACKGROUND

The Los Alamitos Medical Center hospital structure was constructed in 1968 and has been modified several times since that time. Three medical office buildings and a TotalCare Pavilion have been constructed incrementally as the Medical Center campus has expanded. The existing Medical Center provides medical care to over 100,000 patients per year, with over 88 percent of admissions from within an eight-mile radius.

3.3 ENVIRONMENTAL SETTING

EXISTING LAND USES

Presently, the 18.3 gross-acre project site is occupied with the Los Alamitos Medical Center (Medical Center) campus, which consists of a two-story hospital with 167 beds, three medical office buildings ranging from 2 to 4 stories in height, a TotalCare Pavilion (ambulatory/skilled nursing care), and surface parking. A small administration/warehouse structure is also part of the Medical Center campus on Catalina Street at the extreme north end. All on-site buildings total 356,523 square feet (refer to *Table 3-1, Existing Medical Center Campus Facilities and Uses*, and *Exhibit 3-3, Existing Land Use*). The project site is comprised of eight parcels that, through a lot-tie covenant in 2002, link the eight parcels together to function as one parcel for the entire campus. The Assessor Parcel Numbers for the project site include: 242-151-20, 242-152-20 and -21; 242-162-13 and -14; and 242-163-11, -12, -13, and -14.





— - Project Boundary

NOT TO SCALE

RBF
CONSULTING

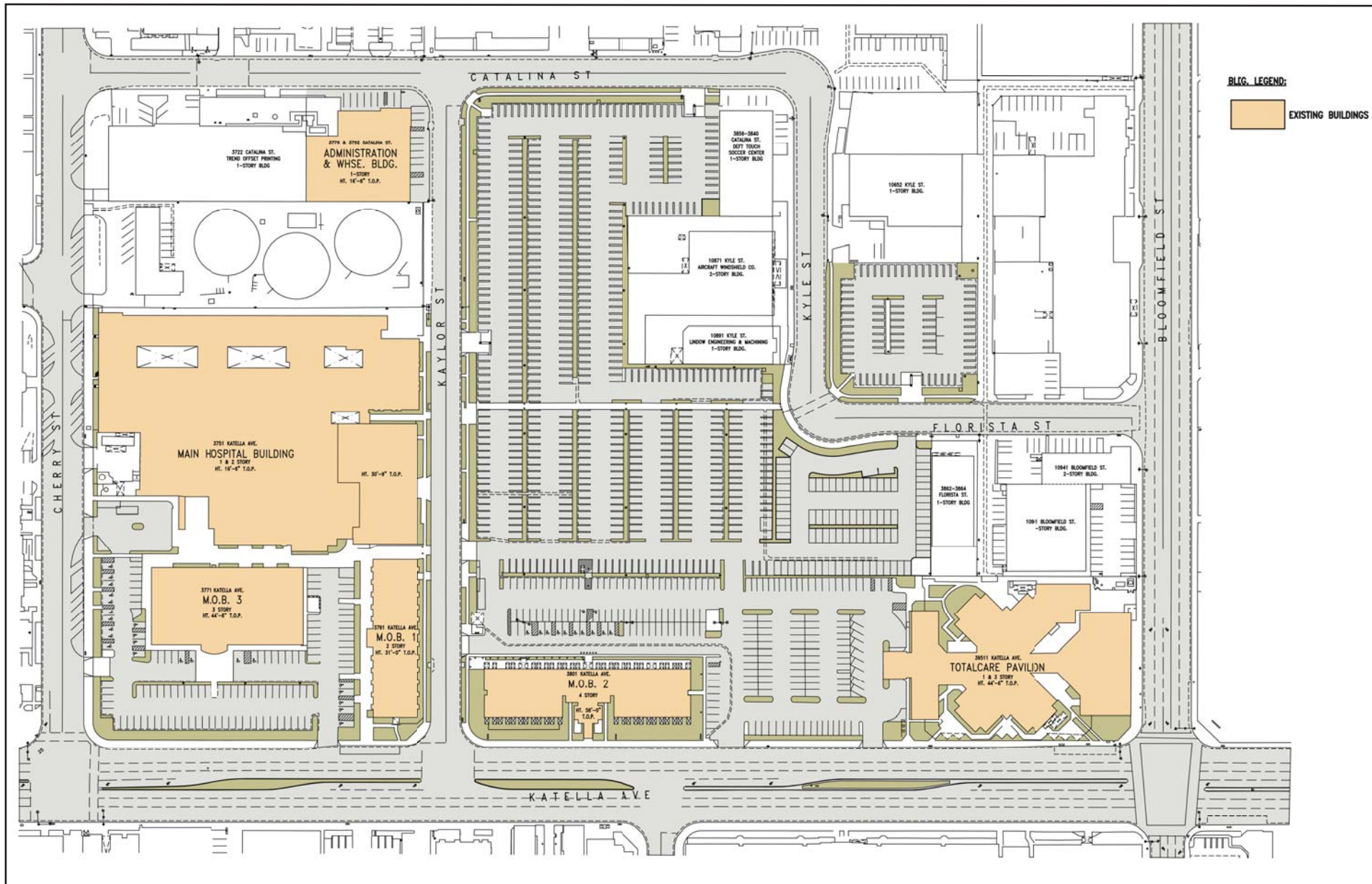


09/10 • JN 10-107031

ENVIRONMENTAL IMPACT REPORT
LOS ALAMITOS MEDICAL CENTER SPECIFIC PLAN

Local Vicinity

Exhibit 3-2



Source: Nu Architecture.

NOT TO SCALE



09/10 • JN 10-107031

ENVIRONMENTAL IMPACT REPORT
 LOS ALAMITOS MEDICAL CENTER SPECIFIC PLAN
Existing Land Use

Exhibit 3-3



A small surface parking area presently used for employee parking is located north of Florista Street. A total of 1,094 surface parking spaces are present, located within seven parking lots throughout the Medical Center campus.

**Table 3-1
Los Alamitos Medical Center
Existing Medical Center Campus Facilities and Uses**

Use	Existing Facilities (square feet)	Hospital Beds	Building Height ¹ (Feet) / Stories
HOSPITAL & RELATED USES			
Main Hospital (3751 Katella Avenue)	121,748	167	30' 9" / 1 to 2
MEDICAL OFFICE BUILDINGS (MOB)			
MOB 1 (3791 Katella Avenue)	24,000	--	31' / 2
MOB 2 (3801 Katella Avenue)	64,000	--	58' / 4
MOB 3 (3771 Katella Avenue)	60,000	--	44' 6" / 3
TotalCare Pavilion (3951 Katella Avenue)	71,676	--	44' 6" / 1 to 3
Subtotal Medical Office Buildings	219,676	--	
OTHER NON HOSPITAL BUILDINGS			
Existing Administration/Warehouse Building (3776 & 3797 Catalina Street)	15,099	--	16' 6" / 1
TOTAL (GROSS)	356,523	167	
1. Building heights are to top of parapet.			
' = Feet " = Inches			

SURROUNDING LAND USES

Land uses surrounding the project site include:

- primarily commercial and office/industrial land uses to the west;
- an area of residential to the northwest;
- commercial and industrial land uses to the north;
- commercial and office land uses to the east (with existing Laurel Park on the east side of Bloomfield Avenue); and
- commercial and residential land uses to the south on the south side of Katella Avenue.

A water facility is located on Cherry Street north of the existing hospital building but is not a part of the proposed project.



3.4 EXISTING GENERAL PLAN AND ZONING DESIGNATIONS

The Medical Center campus is located within three General Plan Land Use Designations:

- Community and Institutional
- Planned Industrial
- Professional Office Designation

Zoning for the Medical Center campus is:

- Community Facilities (CF)
- Commercial Office (CO)
- Planned Light Industrial (PM)

3.5 PROJECT GOALS AND OBJECTIVES

SPECIFIC PLAN GOALS

- Comply with the City of Los Alamitos General Plan Goals and Policies.
- Design the project with consideration of the site's circulation, environmental, and physical opportunities and constraints.
- Create project identity through thematically coherent and aesthetically pleasing architecture, landscaped areas, colors, signage, and entry statements.
- Size and phase the medical center development plan to satisfy, and be consistent with, current and anticipated future market demand.
- Encourage a streamlined and predictable discretionary review process for subsequent reviews.
- Provide for coordinated land use, urban design, landscape, transportation, and infrastructure planning.
- Create a sustainable development that minimizes short-term and long-term adverse environmental impacts to the fullest extent feasible and adequately addresses consumer needs.
- Improve the local job market by providing a substantial number of permanent new jobs within and available to the local community.



3.6 PROJECT CHARACTERISTICS

The project applicant is proposing a Specific Plan for the Los Alamitos Medical Center campus. The Los Alamitos Medical Center is envisioned to be a safe, attractive, well-designed medical center where surrounding residents of all ages can obtain valuable medical treatment and care. The proposed Specific Plan for the Medical Center campus includes a three-phase master planned expansion estimated to be constructed over a period of approximately 25 years.

The Specific Plan will include the provision of an additional 164 hospital beds, two new hospital buildings, one new medical office building (75,100 gross square feet) to be used for additional outpatient and associated medical uses, and an additional 849 parking spaces than what currently exists on the Medical Center campus. It is anticipated that four new structures will be constructed on the existing 18.3 gross-acre Medical Center campus and built over a 25-year period, as outlined below in the Development Program.

DEVELOPMENT PROGRAM

Table 3-2, Proposed Medical Center Campus Facilities (New Buildings), summarizes the new facilities proposed under the Specific Plan.

Table 3-2
Proposed Medical Center Campus Facilities (New Buildings)

New Buildings	Square Feet	Building Height ¹ (Feet) / Story
New Medical Office Building A	75,100	50' 6" / 3
New Hospital Building 1	88,100	68' / 4
New Hospital Building 2	88,100	68' / 4
New Central Plant	14,100	43' 6" / 1 to 2
	265,400	
1. Building heights are to top of parapet. Height of elevator shaft not included.		
' = Feet " = Inches		

Table 3-3, Specific Plan Development Program By Phase, and *Table 3-4, Specific Plan Development Program By Use Type*, illustrate the ultimate building square footage of the Los Alamitos Medical Center campus as it relates to the existing campus. Once complete, the Medical Center campus will include 582,824 square feet of hospital and hospital-related uses, medical office space, support facilities, and parking. The floor area ratio (FAR) will increase from an existing 0.45 FAR to 0.73 FAR once the Medical Center campus is built out. The specifics regarding Floor Area Ratio are described later in this section under the subheading, Intensity, under Site Development Standards.



Table 3-3
Specific Plan Development Program

Use	Square Feet	Beds
Phase 1		
Existing Main Hospital	121,748	167
Existing MOB 1 (interim pending demolition in Phase 2)	24,000	--
Existing MOB 2	64,000	--
Existing MOB 3	60,000	--
Existing TotalCare Pavilion	71,676	--
Existing Administration/Warehouse Building (3776 & 3797 Catalina) (interim pending demolition in Phase 2)	15,099	
New Medical Office Building A	75,100	--
<i>Subtotal Phase 1</i>	<i>431,623</i>	<i>167</i>
Phase 2		
Hospital Building 1	88,100	92
Existing Main Hospital (internal reconfiguration only)	No change	113 ¹
<i>Subtotal Phase 2</i>	<i>88,100</i>	<i>205</i>
<i>Cumulative Total, Phase 2</i>	<i>480,624¹</i>	<i>205</i>
Phase 3		
Hospital Building 2	88,100	126
New Central Plant	14,100	--
<i>Subtotal Phase 3</i>	<i>102,200</i>	<i>--</i>
BUILDOUT TOTAL	582,824	331
Net Increase Over Existing	226,301	164
1. In Phase 2 the bed count in the existing hospital is reduced from 167 beds to 113 beds due to consolidation of rooms and interior renovation. No change in square footage is proposed. Existing MOB 1 will be demolished as part of Phase 2 as will the existing Administration/Warehouse building. Notes: 1. Net increase is in comparison to the 356,523 sq ft of existing uses shown on Table 3-1 and accounts for demolition. 2. MOB = Medical Office Building		



**Los Alamitos Medical Center Specific Plan
Program Environmental Impact Report**

**Table 3-4
Specific Plan Development Program By Use Type**

Use	Existing Facilities	Phase	New Construction	Demolition	Net Change	Buildout Square Feet	Beds
Hospital & Related Uses							
Existing Main Hospital	121,748				0	121,748	167 Existing
Internal Reconfiguration		2					-54 Existing ¹
Hospital Building 2		2	88,100		+88,100	88,100	92 New
Hospital Building 3		3	88,100		+88,100	88,100	126 New
Subtotal Hospital & Related Uses	121,748		176,200	0	+176,200	297,948	331
Support Facilities							
Existing Administration/ Warehouse Building (3776 & 3797 Catalina)	15,099	2		-15,099	-15,099	0	
New Central Plant		3	14,100		+14,100	14,100	--
Subtotal Support Facilities	15,099		14,100	-15,099	-999	14,100	
Medical Office Buildings							
Existing MOB 1	24,000	2		-24,000	-24,000	0	--
Existing MOB 2	64,000				0	64,000	--
Existing MOB 3	60,000				0	60,000	--
Existing TotalCare Pavilion	71,676				0	71,676	--
Medical Office Building A		1	75,100		+75,100	75,100	--
Subtotal Medical Office Buildings	219,676		75,100	-24,000	+51,100	270,776	
TOTAL	356,523		265,400	-39,099	+226,301	582,824	331
Net Increase Over Existing						226,301	164
1. In Phase 2 the bed count in the existing hospital is reduced from 167 beds to 113 beds due to consolidation of rooms and interior renovation. No change in square footage is proposed. Existing MOB 1 will be demolished as part of phase 2 as will the existing Administration/Warehouse building. Notes: 1. Net increase is in comparison to the 356,523 sq ft of existing uses shown on Table 3-1 and accounts for demolition. 2. MOB = Medical Office Building							



LAND USE SUMMARY BY PHASE

The development activity anticipated for the three phases are discussed below. At buildout, the Los Alamitos Medical Center campus will include 297,948 square feet of hospital and hospital-related uses; 260,776 square feet of medical office space; and 14,100 square feet of vital support facilities.

PHASE 1

Three medical office buildings, the TotalCare Pavilion, and the main hospital will remain unaltered during Phase 1. Phase 1 consists of the following elements:

- Vacation of the entire right-of-way for Kaylor Street. Parking will be provided in a district setting, with parking spaces provided throughout the site and not specifically allocated by building. Kaylor Street will function as a private street during Phase 1, but will not be reconfigured once it has been vacated.
- Construction of a new 3-story medical office building (MOB A) on the Katella Avenue project frontage, totaling 75,100 gross square feet.
- Construction of a new parking structure north of the new Medical Office Building (MOB A).

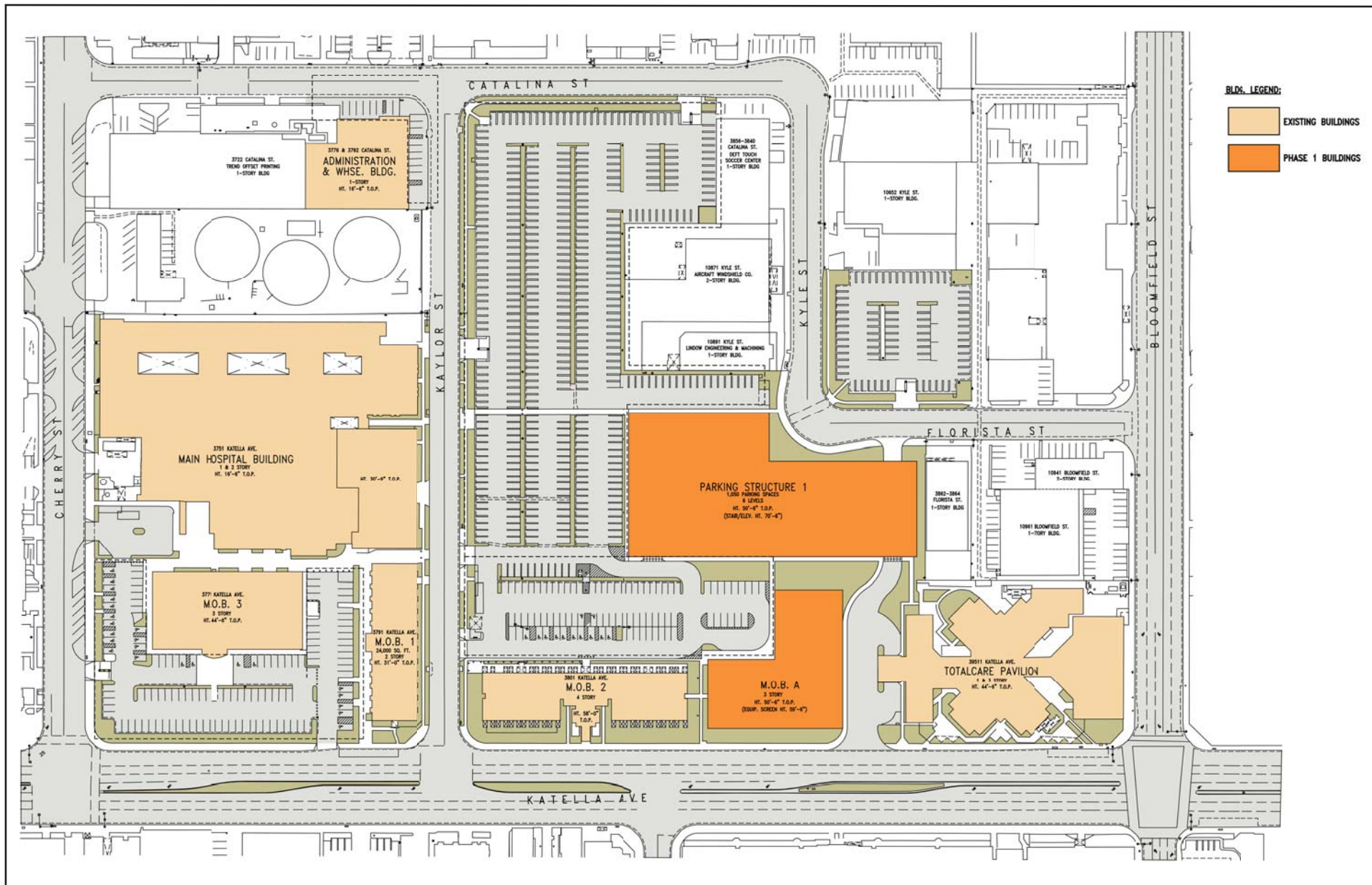
Exhibit 3-4, Land Use Plan - Phase 1, illustrates the first phase land uses.

PHASE 2

Phase 2 consists of the following elements:

- Demolition of an existing 24,000-square-foot medical office building (MOB 1) located at the northwest corner of Kaylor Street and Katella Avenue to allow for reconfiguration of surface parking areas; as part of Phase 2, Kaylor Street south of the existing hospital will be reconfigured as a driveway and parking area.
- Demolition of an existing 15,099-square-foot administration/warehouse building along Catalina/Kaylor Street and construction of surface parking.
- Construction of a new four-story Hospital Building (Hospital Building 1) totaling 92 beds, resulting in a 38-bed net increase as a portion of the existing hospital will be renovated resulting in a reduced bed count. The existing hospital bed count will be reduced to 113 beds from the present total of 167 to allow for modernization of hospital room configurations. The emergency room will be relocated to the ground floor of the new Hospital Building 1 and the vacated emergency room space will be reconfigured for outpatient services for special procedures. A ground level, enclosed corridor will be constructed to link the existing hospital with the new Hospital Building 1.

Exhibit 3-5, Land Use Plan - Phase 2, illustrates the second phase land uses.



Source: Nu Architecture.

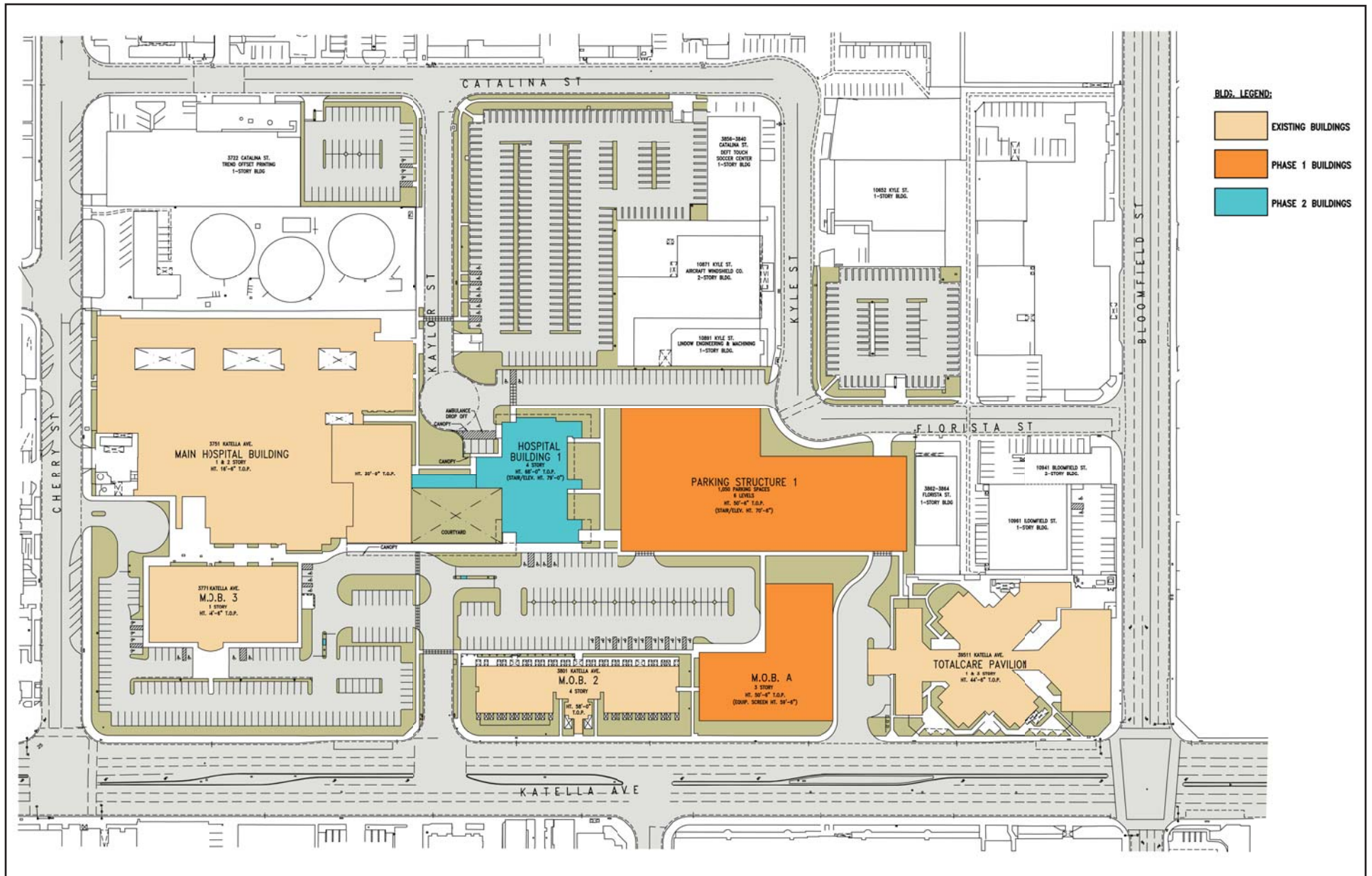
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ENVIRONMENTAL IMPACT REPORT
LOS ALAMITOS MEDICAL CENTER SPECIFIC PLAN
Land Use Plan - Phase 1

Exhibit 3-4



Source: Nu Architecture.

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09/10 • JN 10-107031

ENVIRONMENTAL IMPACT REPORT
LOS ALAMITOS MEDICAL CENTER SPECIFIC PLAN
Land Use Plan - Phase 2

Exhibit 3-5



PHASE 3

Phase 3 consists of the following elements:

- Construction of a second four-story bed Hospital Building (Hospital Building 2) totaling 126 beds to the north of the Hospital Building 1. An elevated corridor will connect the two Hospital Buildings.
- Construction of a Central Plant to service the new and existing hospital buildings.
- Construction of a second parking structure to meet parking standards.

Exhibit 3-6, Land Use Plan - Phase 3/Buildout, illustrates the third phase land uses.

HOSPITAL BUILDINGS AND EMERGENCY ROOM RE-LOCATION

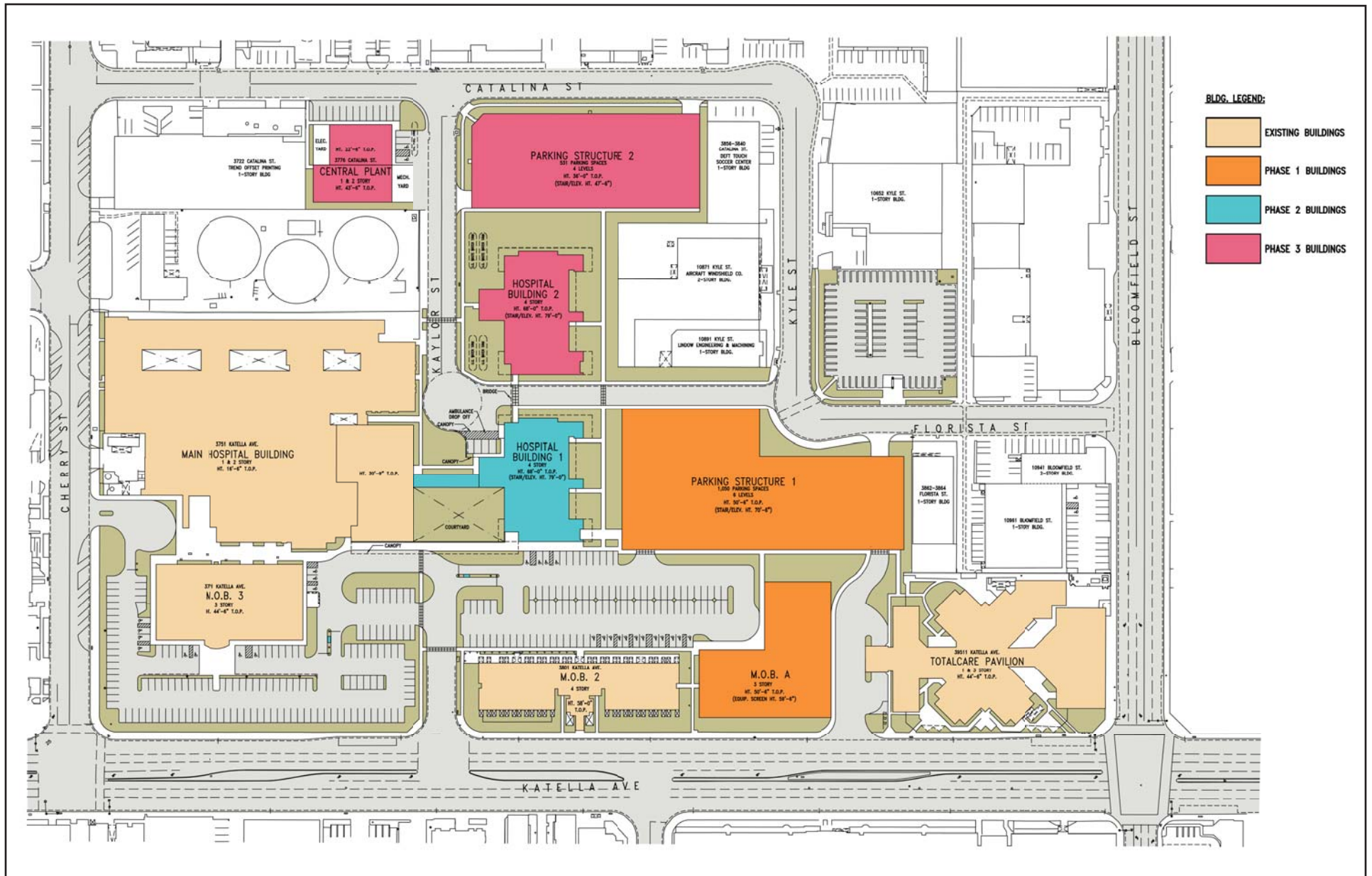
Hospital Building 1 is anticipated to be four stories (approximately 68 feet to top of parapet) in height, total approximately 88,100 square feet, and will be located on the east side of vacated Kaylor Street. Hospital Building 1 will include 92 beds, and will also include a new emergency room on the ground floor; the existing emergency room presently located in the main hospital will be re-located to the ground floor of Hospital Building 1 once it is constructed in Phase 2 of the expansion program. A ground level corridor will be constructed to link Hospital Building 1 with the existing hospital.

The existing emergency room space in the main hospital will be turned into a space for specialized medical procedures and laboratory uses. In addition, patient rooms in the existing hospital will be re-configured to reduce room occupancy in accordance with modern standards. Rooms that presently have three or four beds will be reduced to two beds and rooms that presently have two beds will be reduced to one bed.

As shown in *Table 3-3*, a total net gain of 38 beds is proposed for the Medical Center campus in Phase 2, with a total of 205 beds in the reconfigured main hospital and new Hospital Building 1. Hospital Building 2 is to be constructed in Phase 3 and will include 126 new beds, and will also be located along Kaylor Street. Hospital Building 2 is anticipated to be 88,100 square feet and will be 4 stories in height. An elevated corridor will connect Hospital Buildings 1 and 2.

CENTRAL PLANT

The purpose of the Central Plant is to provide power, hot water, and heating/air conditioning to the existing hospital and new Hospital Buildings 1 and 2. During Phase 2, the Central Plant facilities will be located on top of Hospital Building 1 in a mechanical penthouse. With the buildout of Phase 3, the Central Plant will be re-located to the corner of Kaylor Street and Catalina Street, where it will remain permanently. The proposed structure will consist of a one- and two-story structure and associated cooling tower.



Source: Nu Architecture.

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09/10 • JN 10-107031

ENVIRONMENTAL IMPACT REPORT
LOS ALAMITOS MEDICAL CENTER SPECIFIC PLAN
Land Use Plan - Phase 3/Buildout

Exhibit 3-6



SITE DEVELOPMENT STANDARDS

INTENSITY

The floor area ratio within the Specific Plan Area, including the medical center, existing and new medical office uses, and the central plant, based on gross acreage, shall not exceed 0.75.

BUILDING HEIGHTS

The Specific Plan proposes the following for new buildings:

- Maximum of four stories or 70 feet, whichever is greater, measured to the top of parapet.

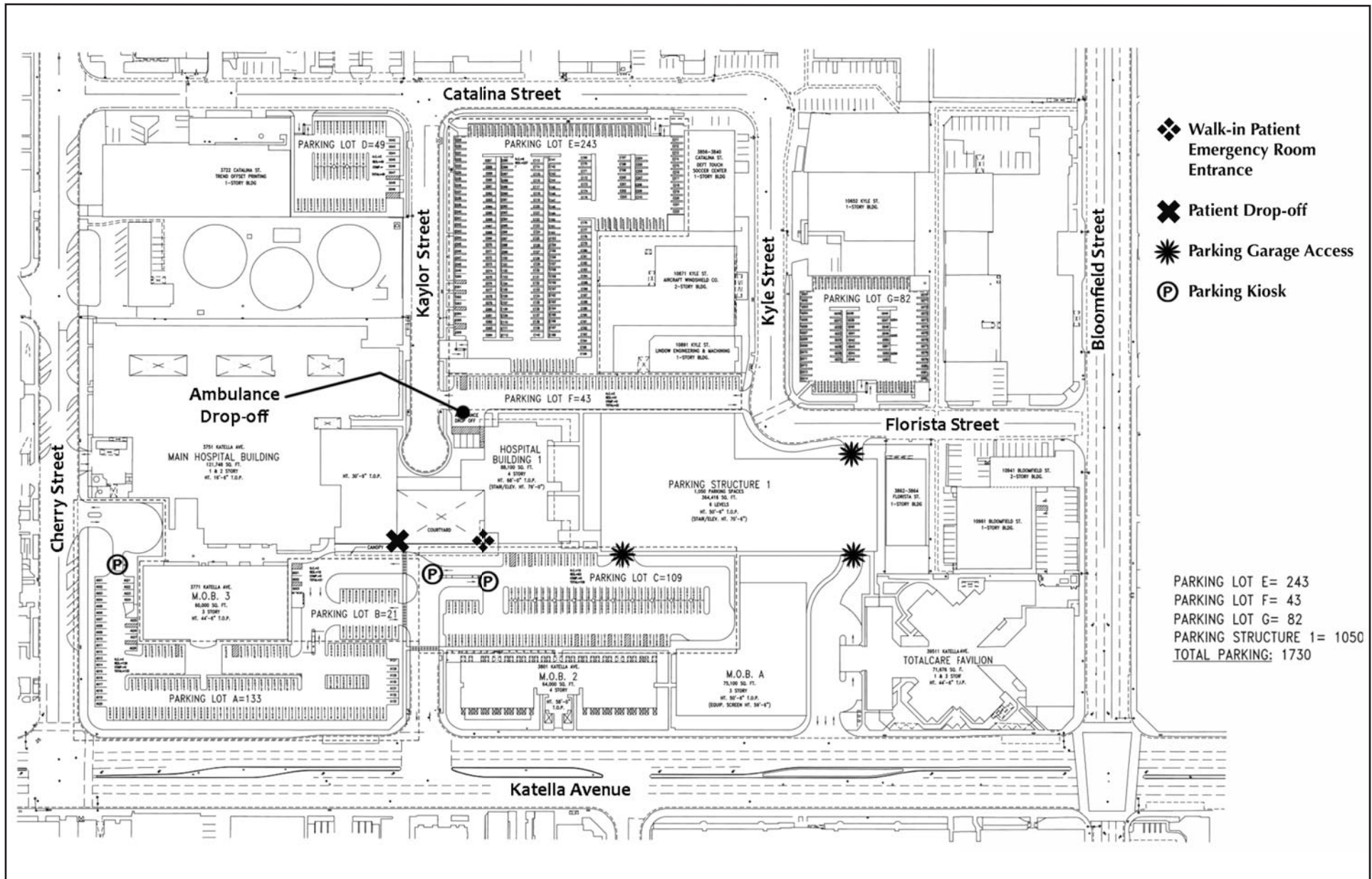
The following structures may exceed the allowed height:

- a. Plumbing vents, chimneys, etc.
- b. Fire walls.
- c. Mechanical features such as air conditioners, tanks, fans and similar equipment located on rooftops must be screened, but the architectural features used to provide that screening are not considered as part of the building for purposes of determining building height, so long as features do not exceed the minimum amount required to achieve screening.
- d. Skylights.
- e. Stair/Elevator structures.
- f. Solar panels.
- g. Architectural theme elements.

CIRCULATION AND ACCESS

Presently, there are four points of access into the site from Katella Avenue, including Kaylor Street and three driveways.

Access into the site will vary by phase as shown in Exhibit 3-7 through Exhibit 3-9. During Phase 1, primary access will continue to be via Kaylor Street, with a second driveway located between the TotalCare Pavilion and the new medical office building (MOB A). This driveway will provide direct access to the parking structure. One driveway will be eliminated as part of Phase 1. Access into the site from Katella for Phases 2 and 3 will be via two driveways, as Kaylor Street will be reconfigured as a driveway access into the site. In addition, one entrance along Cherry Street is anticipated to allow access to the Specific Plan area.



Source: Nu Architecture.

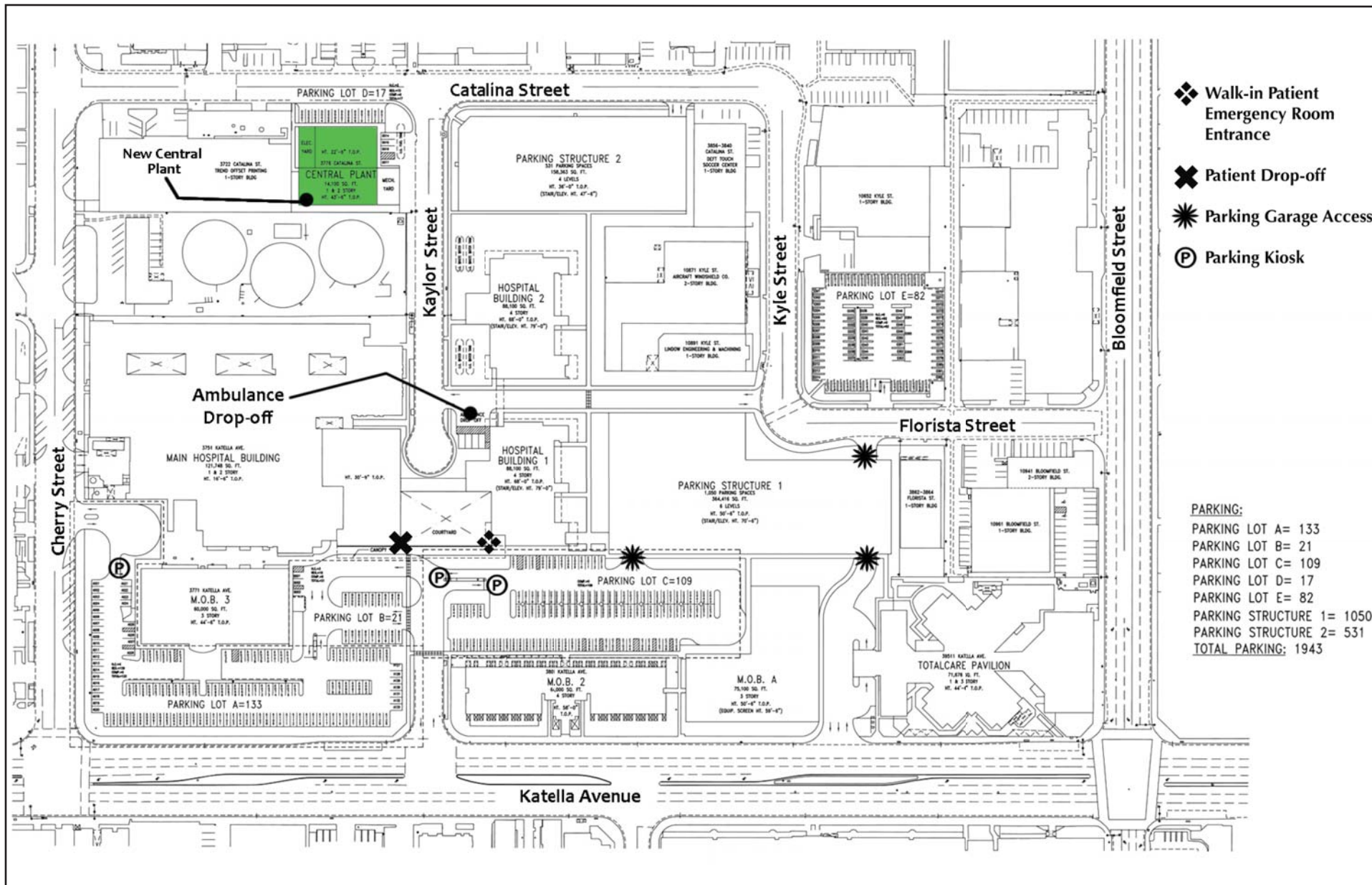
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09/10 • JN 10-107031

ENVIRONMENTAL IMPACT REPORT
LOS ALAMITOS MEDICAL CENTER SPECIFIC PLAN
Circulation Plan - Phase 2

Exhibit 3-8



Source: Nu Architecture.

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09/10 • JN 10-107031

ENVIRONMENTAL IMPACT REPORT LOS ALAMITOS MEDICAL CENTER SPECIFIC PLAN **Circulation Plan - Phase 3/Buildout**

Exhibit 3-9



INTERNAL CIRCULATION

As part of the proposed Specific Plan, Kaylor Street will be modified as described below.

PHASE 1

Kaylor Street will be vacated during Phase 1 of Specific Plan implementation but will remain unaltered in configuration, providing full access into the site as a private street. A public access easement will be placed on the private driveway.

PHASES 2 AND 3

As part of Phase 2, Kaylor Street will be reconfigured from Katella Avenue north to function solely as a private driveway, providing access into the site from Katella Avenue and to the new parking structure and surface parking lots. On the north, Kaylor Street will continue as a private street that extends south from Catalina Street and terminates in a cul-de-sac constructed to City standards. Kaylor Street will serve as an access point for ambulances to the new emergency room and access for employees and visitors.

EMERGENCY ROOM ACCESS

The ambulance route for the medical center will vary by phase. In Phase 1, there will be no change to the existing ambulance route to the emergency room in the existing hospital, which is via Kaylor Street. Upon construction of Hospital Building 1 in Phase 2, the emergency room will be relocated to the ground floor of that building. Ambulance access to the emergency room will be via Kaylor Street from the north and a driveway off of Florista Street. Office of State Health Planning and Development (OSHPD) and design practice dictate that walk-in patient access would be via a separate entrance with access provided from Katella Avenue.

PARKING

A total of 1,943 on-site parking spaces will be provided within the Specific Plan area at buildout, configured in surface and structured parking areas. Parking will be on a paid basis, with employee parking provided at no charge. Employees will take access to the parking areas and/or structure(s) via separate controlled entry points.

During Phase 1, parking will be re-configured. A portion of the surface parking will be demolished, and concurrent with re-configuration of the surface parking spaces, a parking structure will be constructed. Parking in the two existing lots in the northern portion of the site will be employee/staff parking. *Table 3-5, On-Site Parking*, outlines the provided on-site parking by type. A second parking structure is proposed for construction in Phase 3, as Specific Plan buildout nears completion.



On-street parking is also present on the adjacent public streets. This on-street parking does not count towards meeting the parking needs for the site. As shown in *Table 3-5*, the proposed parking exceeds requirements.

**Table 3-5
On-Site Parking**

Phase	Parking Spaces Provided	Parking Required	Levels
Phase I			
Surface Parking	751		Surface
Parking Structure 1	1,050		6 levels, above ground
<i>Subtotal Phase 1</i>	<i>1,801</i>	<i>1,792</i>	
Phase 2			
Surface Parking	680		Surface
Parking Structure 1	1,050		6 levels, above ground
<i>Subtotal Phase 2</i>	<i>1,730</i>	<i>1,713</i>	
Phase 3/Buildout			
Surface Parking	362		Surface
Parking Structure 1	1,050		6 levels, above ground
Parking Structure 2	531		4 levels, above ground
Total at Buildout	1,943	1,934	

3.7 PROJECT PHASING

Development within the Los Alamitos Medical Center Specific Plan area is expected to occur in three general phases over a 25-year period, as outlined below. Within each phase there may be sub-phases related to construction sequencing.

Three existing medical office buildings and the existing hospital will remain. Phasing for the Los Alamitos Medical Center expansion consists of the following elements (refer to *Exhibit 3-3* through *Exhibit 3-5*), broken down by subphase/construction sequence.

A construction management plan will be prepared as part of the site plan submittal to outline construction staging as well as provisions for employee parking and parking management during construction.

PHASE 1

- Construction of a new medical office building (MOB A) on the Katella Avenue project frontage, totaling 75,100 gross square feet.
- Extension of infrastructure to serve the new medical office building (MOB A).
- Construction of a new parking structure on the eastern side of the new Hospital Building 1.
- Vacation of the existing right-of-way for Kaylor Street (no reconfiguration) to act as a private street.



PHASE 2

- Demolition of an existing 24,000-square-foot medical office building (MOB 1) located at the northwest corner of Kaylor Street and Katella Avenue to allow for reconfiguration of surface parking areas.
- Demolition of an existing 15,099-square-foot warehouse building along Catalina/Kaylor Street.
- Reconfiguration of surface parking and reconfiguration of Kaylor Street north of the hospital building.
- Construction of a new four-story Hospital Building (Hospital Building 1) totaling 92 beds, resulting in a 38 bed net increase as a portion of the existing hospital will be renovated resulting in a reduced bed count.
- Reconfiguration of the existing hospital's bed count and relocation of the existing emergency room to the new Hospital Building.
- The existing hospital bed count will be reduced to 113 beds from the present total of 167.
- Extension/Construction of infrastructure to serve the new Hospital Building 1.

PHASE 3

- Construction of a Central Plant to service the new and existing hospital buildings.
- Construction of a second Hospital Building (Hospital Building 2) totaling 126 beds to the north of the Phase 1 Hospital Building.
- Construction of an additional parking structure and surface parking to meet Specific Plan parking standards.

3.8 AGREEMENTS, PERMITS, AND APPROVALS

CITY OF LOS ALAMITOS

As the public agency with the principal responsibility of approving the project, the City of Los Alamitos will serve as the lead agency for the purposes of *CEQA*. A certified Environmental Impact Report (EIR), as described in Section 2.0, Introduction and Purpose, is required pursuant to *CEQA*. Implementation of the project is contingent upon approval of the following entitlements, which have been reviewed in this EIR:

General Plan Amendment

Approval of the Los Alamitos Medical Center Specific Plan will be preceded by a General Plan Amendment, which will create a new Specific Plan Land Use Designation over the entire Medical Center campus ("Specific Plan").



Zone Change to Specific Plan

Upon approval of the Specific Plan, the Medical Center campus will be zoned “Specific Plan” with development standards and development parameters governed by this Specific Plan document.

Street Vacation

Kaylor Street will be vacated during Phase 1 of Specific Plan implementation but will remain unaltered in configuration, providing full access into the site as a private street. A public access easement will be placed on the private street.

STATE OF CALIFORNIA AND OTHER REGIONAL AGENCIES

In addition to the lead agency, there are also local, state and federal responsible agencies that may have discretionary authority over specific aspects of the project. The responsible agencies will rely on this EIR when acting on those aspects that require their approval. The following agencies are currently anticipated to use this document in their reviews, although this list is not necessarily exhaustive.

- **California Office of Statewide Health Planning and Development (OSHPD).** The new Hospital Buildings and those portions of the facilities that connect to the hospital (e.g., pedestrian bridge connections) will require a review application and issuance of a permit from the California Office of Statewide Health Planning and Development. Project plans will also need to be reviewed for compliance with fire safety codes by the State Fire Marshal.
- **California Water Resources Control Board, Los Angeles Region.** Compliance with Municipal Storm Water (MS4), National Pollutant Discharge Elimination System (NPDES) permitting requirements, and Section 401, Water Quality Certification is required.
- **South Coast Air Quality Management District (SCAQMD).** Operation permits for stationary air pollution sources, and operating permits, as required, for any sterilizers and abaters.

In addition, coordination with the following jurisdictions, agencies, and utility companies may be required:

- Orange County Transportation Authority
- Orange County Fire Authority
- Orange County Sanitation District
- Southern California Edison
- Southern California Gas Company
- Golden State Water Company
- Industrial Waste providers

Each of the foregoing entities is expected to use the EIR in their respective decision-making.



4.0 Basis of Cumulative Analysis



4.0 BASIS OF CUMULATIVE ANALYSIS

4.1 INTRODUCTION

CEQA Guidelines Section 15355 provides the following definition of cumulative impacts: “Cumulative impacts refers to two or more individual effects which, when considered together, are considerable, or which compound or increase other environmental impacts.” Pursuant to Section 15130(a) of the aforementioned Guidelines, cumulative impacts of a project shall be discussed in an EIR when the project’s effect is cumulatively considerable, as defined in *CEQA Guidelines* Section 15065(a). The Initial Study Checklist provided as part of Appendix A indicates that the proposed project may yield potentially significant cumulative effects. As a result, this EIR provides a cumulative impact assessment for each applicable environmental issue in each respective section, and does so to a degree that reflects each impact’s severity and likelihood of occurrence.

As indicated above, a cumulative impact involves two or more individual effects. Per *CEQA Guidelines* Section 15130, the discussion of cumulative impacts shall be guided by the standards of practicality and reasonableness. Per *CEQA Guidelines* Section 15130(b), the following elements are necessary in an adequate discussion of significant cumulative impacts:

1. *Either:*
 - (A) *A list of past, present and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the Agency, or*
 - (B) *A summary of projections contained in an adopted local, regional or statewide plan, or related planning, that describes or evaluates conditions contributing to the cumulative effect. Such plans may include: a general plan, regional transportation plan, or plans for the reduction of greenhouse gas emissions. A summary of projections may also be contained in an adopted or certified prior environmental document for such a plan. Such projections may be supplemented with additional information such as a regional modeling program. Any such document shall be referenced and made available to the public at a location specified by the lead agency.*
2. *When utilizing a list, as suggested in paragraph (1) of subdivision (b), factors to consider when determining whether to include a related project should include the nature of each environmental resource being examined, the location of the project and its type. [Note – there is additional text for this subsection that has not been cited, as it provides illustrative examples of how to apply this subsection]*
3. *Lead agencies should define the geographic scope of the area affected by those projects with specific reference and provide a reasonable explanation for the geographic limitation used.*



4.2 CUMULATIVE ANALYSIS IN THIS EIR

Cumulative impacts may be discussed in terms of buildout of the Los Alamitos Medical Center Specific Plan, in combination with impacts anticipated for future development (including approved and planned development within the City of Los Alamitos and the surrounding affected area), and impacts associated with growth within the region. The geographic area for each impact varies, depending on the nature of the impact, whether it is regional, such as air quality, or local, such as noise.

Quantification can be difficult for cumulative impacts, as it requires speculative estimates of impacts including, but not limited to the following: the geographic diversity of impacts (impacts of future development may affect different areas); variations in time of impacts; and changes in data for buildout projections following subsequent approvals. However, every attempt has been made herein to make sound qualitative judgments of the combined effects of, and relationship between, land uses and potential impacts.

This section of the EIR has utilized *CEQA Guidelines* Section 15130(b)(1)(B) to define cumulative projects. The geographic area utilized to define related cumulative projects corresponds to the study area defined for the project Traffic Impact Analysis (refer to *Exhibit 5.3-1, Study Area Intersections*). Information integral to the identification process was obtained from the Cities of Los Alamitos, Cypress, and Seal Beach. The resulting related projects include primarily only those determined to be at least indirectly capable of interacting with the proposed project.

Table 4-1, Cumulative Projects List, identifies related projects and other possible development in the area determined as having the potential to interact with the proposed project to the extent that a significant cumulative effect may occur; refer to *Exhibit 4-1, Cumulative Projects Locations*, for a map illustrating the locations of related projects.

**Table 4-1
Cumulative Projects List**

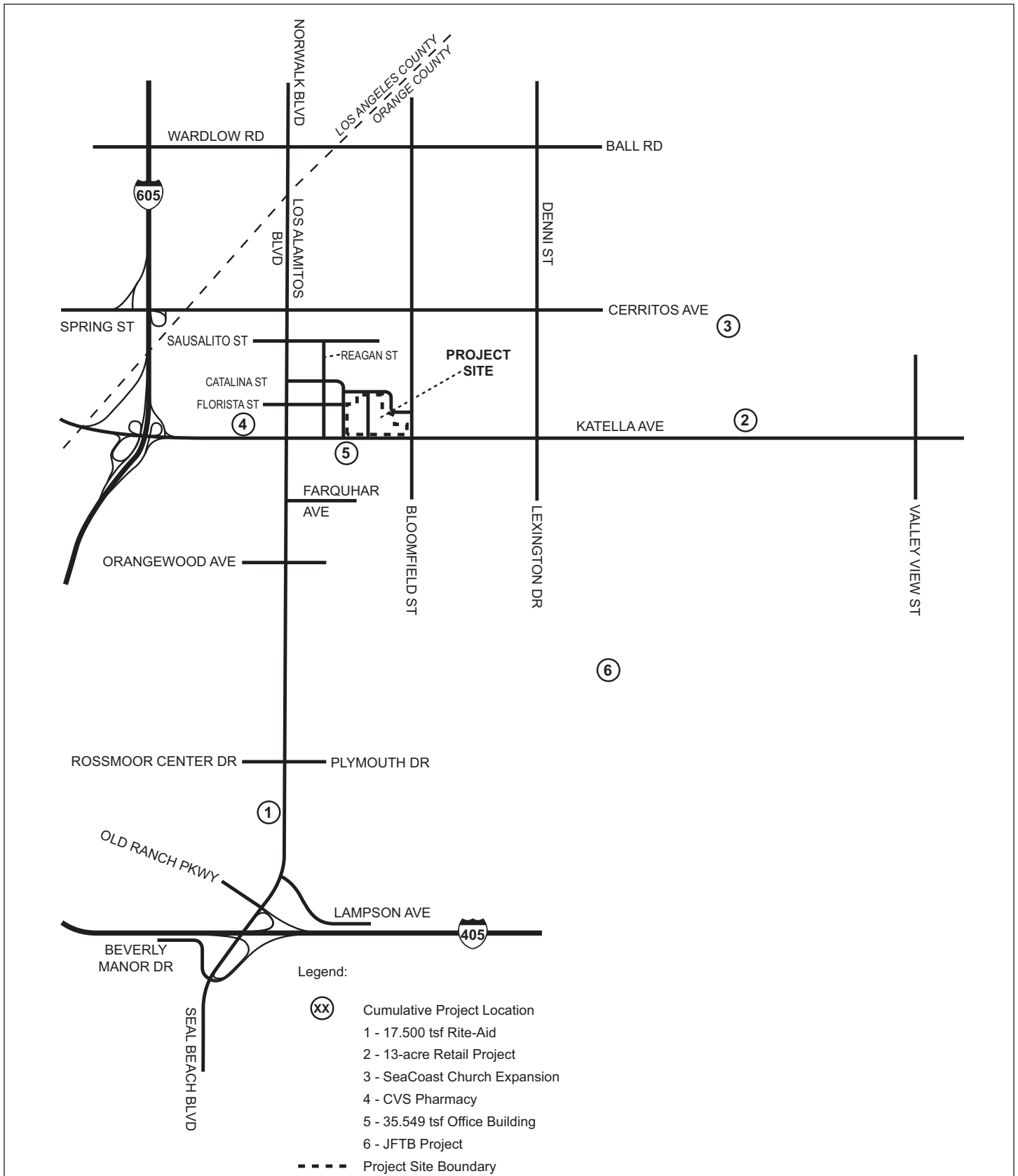
PROJECT	USE	SQUARE FEET	LOCATION
Seal Beach			
Rite-Aid	Drug Store	17,500	NW Corner of Seal Beach Boulevard & St. Cloud Drive
Cypress			
13-Acre Retail Project	Retail (Major)	122,556	NW Corner of Katella Avenue & Winners Circle
	Retail (Other)/Restaurant (Quick Serve)	21,000	
	Restaurant (Sit Down)	9,353	
	Total	152,909	
SeaCoast Grace Church Expansion	Auditorium #2	38,031 (2,022 Seats)	5100 Cerritos Avenue (west of Cerritos Avenue & Walker Street intersection)
City of Los Alamitos			
CVS Pharmacy	New Drugstore	11,000	3401 Katella Avenue (just west of Los Alamitos Boulevard)
	Conversion/Renovation of existing Office Building	<u>-15,000</u>	
	Total	-4,000	



Table 4-1 (continued)
Cumulative Projects List

PROJECT	USE	SQUARE FEET	LOCATION
Office Building	Office	35,549	3742 Katella Avenue
Joint Forces Training Base (JFTB) Los Alamitos			
California Army National Guard & U.S. Army Reserve Construction Of New Headquarters Facilities at JFTB Los Alamitos, California	<u>Four New Buildings</u>		Various locations on JFTB
	• CAARNG Headquarters	Phase 1 – 76,350	
		Phase 2 – 93,000	
	• USAR Headquarters & Facilities	76,412	
	• One unheated storage building (USAR)	6,225	
	• One OMS (USAR)	12,516	
	Subtotal	<u>258,803</u>	
	<u>Demolition of three Existing Buildings</u>		
	Medical Dispensary	-26,000	
	Base Chapel	-2,946	
	Parking Kiosk	-25	
	Subtotal	-28,970	
	Total	229,833	
TOTAL		469,822	

This section of the EIR articulates the framework for the cumulative analysis that is provided in Section 5.0, Environmental Analysis. Cumulative impact analysis is specifically examined in Sections 5.1.5, 5.2.5, 5.3.5, 5.4.5, 5.5.5, 5.6.5, 5.7.5, 5.8.5, 5.9.5, 5.10.5, 5.11.5, 5.12.5, 5.13.5, and 5.14.5.



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09/10 • JN 10-107031

ENVIRONMENTAL IMPACT REPORT
LOS ALAMITOS MEDICAL CENTER SPECIFIC PLAN

Cumulative Project Locations

Exhibit 4-1



5.0 Environmental Analysis



5.0 ENVIRONMENTAL ANALYSIS

The next subsections of the EIR contain a detailed environmental analysis of the existing conditions, project impacts (including direct and indirect, short-term and long-term, and cumulative), recommended mitigation measures, and unavoidable adverse impacts. This EIR analyzes those environmental issue areas as stated in the Notice of Preparation and Initial Study Checklist (Appendix A, Initial Study Checklist/Notice of Preparation) where potentially significant impacts have the potential to occur.

The EIR will examine the following environmental factors outlined in the *CEQA Guidelines* Appendix G, Environmental Checklist:

- 5.1 Land Use
- 5.2 Aesthetics
- 5.3 Traffic
- 5.4 Air Quality/Greenhouse Gas Emissions
- 5.5 Noise
- 5.6 Geology and Seismic Hazards
- 5.7 Hazards and Hazardous Materials
- 5.8 Hydrology, Drainage, and Water Quality
- 5.9 Fire Protection
- 5.10 Police Protection
- 5.11 Water
- 5.12 Wastewater
- 5.13 Solid Waste
- 5.14 Electricity and Natural Gas

Each environmental issue is addressed in a separate section of the EIR, and is organized into seven sections, as follows:

“Regulatory Setting” describes the federal, state, regional, or local regulations and plans that are applicable.

“Environmental Setting” describes the physical conditions that exist at this time and that may influence or affect the issue under investigation.

“Significance Threshold Criteria” provides the thresholds that are the basis of conclusions of significance, which are primarily the criteria in the *CEQA Guidelines* Appendix G, Environmental Checklist.

Major sources used in crafting criteria include the *CEQA Guidelines*; local, state, federal, or other standards applicable to an impact category; and officially established significance thresholds. “. . . *An ironclad definition of significant effect is not possible because the significance of any activity may vary with the setting.*” (*CEQA Guidelines* Section 15064[b]). Principally, “. . . *a substantial, or potentially substantial*



adverse change in any of the physical conditions within an area affected by the project, including land, air, water, flora, fauna, ambient noise, and objects of historic and aesthetic significance” constitutes a significant impact (CEQA Guidelines Section 15382).

“Impacts and Mitigation Measures” evaluates the project’s environmental impacts in consideration of all phases, including planning, acquisition, development, and operation. This subsection also discusses the potential changes to the existing physical environmental conditions, which may occur if the proposed project is implemented. Evidence, based on factual and scientific data, is presented to show the cause and effect relationship between the proposed project and the potential changes in the environment. All of the potential direct and reasonably foreseeable indirect effects are considered. The exact magnitude, duration, extent, frequency, range, or other parameters are ascertained, to the extent possible, to determine their significance.

The proposed project’s environmental effects are categorized as either “effects found not to be significant” or “potentially significant impact”. The effects found not to be significant category provides a brief discussion of the reasons that various possible significant effects of the project were found not to be significant. The potentially significant category identifies and focuses on the significant environmental effects of the proposed project. Direct and indirect significant effects of the project on the environment are clearly identified and described, giving due consideration to both the short-term and long-term effects.

“Mitigation Measures” are project-specific measures that would be required of the project to avoid a significant adverse impact; to minimize a significant adverse impact; to rectify a significant adverse impact by restoration; to reduce or eliminate a significant adverse impact over time by preservation and maintenance operations; or to compensate for the impact by replacing or providing substitute resources or environment.

The “Level of Significance” presents the significance determination. This statement identifies which impacts would remain after the application of mitigation measures and whether the remaining impacts are or are not considered significant. When impacts, even with the inclusion of mitigation measures, cannot be mitigated to a level considered less than significant, they are identified as “significant unavoidable impacts.”

“Cumulative Impacts and Mitigation Measures” describes potential environmental changes to the existing physical conditions that may occur as a result of the proposed project together with all other reasonably foreseeable, planned and approved future projects producing related or cumulative impacts, as set forth in Section 4.0. A cumulative impact analysis is provided only for those thresholds that result in a less than significant, potentially significant, or significant unavoidable impact. A cumulative impact analysis is not provided for Effects Found Not to be Significant, which result in no project-related impacts.

“Significant Unavoidable Impacts” summarizes those impacts described in “Project Impacts and Mitigation Measures” and “Cumulative Impacts and Mitigation Measures” that would be significant and cannot be feasibly mitigated to less than significant, so would therefore be unavoidable. To approve a project with significant unavoidable impacts, the lead agency must adopt a Statement of Overriding Considerations. In adopting such a statement, the lead agency is required to balance the benefits of a project against its unavoidable environmental impacts in determining whether to



approve the project. If the benefits of a project are found to outweigh the unavoidable adverse environmental effects, the adverse effects may be considered “acceptable” (*CEQA Guidelines* Section 15093[a]).

“Sources Cited” lists all documents, reference materials, or other information utilized, such as websites, in the section.



Los Alamitos Medical Center Specific Plan Program Environmental Impact Report

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5.1 Land Use



5.1 LAND USE

This section identifies existing on-site land use conditions within the immediate project area, and analyzes proposed project compatibility with existing land uses and consistency with relevant planning policies. Information presented in this section is based upon the *City of Los Alamitos 2010 General Plan (General Plan)*; *City of Los Alamitos 2010 General Plan Background Technical Reports (GP BTR)*; *City of Los Alamitos 2010 General Plan Initial Study/Negative Declaration (IS/ND)*; *Los Alamitos Municipal Code (LAMC)*; *Los Alamitos Zoning Code (LAZC)*; *Los Alamitos Zoning Map (Zoning Map)*; *Draft Los Alamitos Medical Center Specific Plan (Specific Plan or proposed project)*; policies of the Southern California Association of Governments (SCAG) *Regional Comprehensive Plan and Guide*; and principles and strategies of SCAG's *Southern California Compass Growth Vision's Program*.

5.1.1 REGULATORY SETTING

OFFICE OF STATE HEALTH PLANNING AND DEVELOPMENT

Prior to the construction and operation of a hospital facility, review and approval is required at the State level from the Office of State Health Planning and Development (OSHPD). OSHPD is one of 13 departments within the California Health and Human Services Agency. OSHPD administers programs that endeavor to implement the vision of "Equitable Healthcare Accessibility for California." OSHPD's goal is to promote healthcare accessibility through leadership in analyzing California's healthcare infrastructure, promoting a diverse and competent healthcare workforce, providing information about healthcare outcomes, assuring the safety of buildings used in providing healthcare, insuring loans to encourage the development of healthcare facilities, and facilitating development of sustained capacity for communities to address local healthcare issues.

DEPARTMENT OF HEALTH SERVICES

Prior to the construction and operation of a hospital facility, review and approval is required at the State level from the Department of Health Services (DHS). Current day-to-day operations continue under the new Department of Health Care Services (DHCS) or the California Department of Public Health (CDPH). DHCS's goal is to protect and promote the health status of Californians through the financing and delivery of individual health care services. DHCS finances and administers a number of individual health care service delivery programs, including the California Medical Assistance Program (Medi-Cal). The CDPH will provide more focused state leadership in public health and health care financing and create a more effective public health infrastructure in California, and will increase accountability and improve the effectiveness of both public health and health care purchasing activities.

SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS

The Southern California Association of Governments (SCAG) is the largest of nearly 700 councils of government in the United States. It functions as the Metropolitan Planning Organization for six counties: Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial. The region encompasses a population exceeding 19 million persons in an area of more than 38,000 square miles.



As the designated Metropolitan Planning Organization, SCAG is mandated by the Federal government to research and draw up plans for transportation, growth management, hazardous waste management, and air quality. Additional mandates exist at the State level.

SCAG is responsible for the maintenance of a continuous, comprehensive, and coordinated planning process. SCAG is also responsible for the development of demographic projections, as well as the development of the integrated land use, housing, employment, transportation programs, measures, and strategies for portions of the South Coast Air Quality Management Plan (AQMP).

The City of Los Alamitos is a member city of the Orange County Council of Governments (OCCOG), one of 13 Subregional Organizations that make up SCAG.

Regional Comprehensive Plan

SCAG's 2008 Regional Comprehensive Plan (RCP) addresses regional issues such as housing, traffic/transportation, water, and air quality. The RCP serves as an advisory document to local agencies in the Southern California region for their information and voluntary use for preparing local plans and handling local issues of regional significance. The RCP presents a vision of how Southern California can balance resource conservation, economic vitality, and quality of life. The RCP identifies voluntary best practices to approach growth and infrastructure challenges in an integrated and comprehensive way. It also includes goals and outcomes to measure progress toward a more sustainable region.

Regional Transportation Plan (2008 RTP)

On May 8, 2008, SCAG adopted its 2008 RTP. The 2008 RTP presents the transportation vision for the SCAG region through the year 2035 and provides a long-term investment framework for addressing the region's transportation and related challenges. The RTP focuses on maintaining and improving the transportation system through a balanced approach and considers system preservation, operation, and management, improved coordination between land-use decisions and transportation investments, and strategic expansion of the system to accommodate future growth.

Compass Growth Vision Program

In an effort to maintain the region's prosperity, continue to expand its economy, house its residents affordably, and protect its environmental setting as a whole, SCAG has brought together the goals and ideas of interdependent subregions, counties, cities, communities, and neighborhoods. This process is called Southern California Compass, and the result is a shared "Growth Vision" for Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura Counties. SCAG began Compass in 2002, spearheaded by the Growth Visioning Subcommittee, which consisted of civic leaders from throughout the region. Creating a shared regional vision is an effective way to begin addressing issues such as congestion and housing availability that may threaten the region's livability.

In the short-term, SCAG's growth visioning process has found common ground in a preferred vision for growth and has incorporated it into immediate housing allocation and transportation planning decisions. In the long-term, the Growth Vision is a framework that will help local



jurisdictions address growth management cooperatively and will help coordinate regional land use and transportation planning. The result of this growth visioning effort is SCAG's *Growth Vision Report (GVR)*.

The *Growth Vision Report* presents the comprehensive Growth Vision for the six-county SCAG region as well as the achievements of the Compass process. It details the evolution of the draft vision, from the study of emerging growth trends to the effects of different growth patterns on transportation systems, land consumption, and other factors. The *Growth Vision Report* concludes with a series of implementation steps – including tools for each guiding principle and overarching implementation strategies – that will guide Southern California toward its envisioned future.

The Notice of Preparation (NOP) for this Draft EIR was distributed by the City to responsible and trustee agencies, including SCAG, on April 28, 2010. The City requested the agencies' views and specific concerns related to the potential environmental effects of the project. SCAG concluded the proposed project is not regionally significant per *CEQA Guidelines* Section 15206, and no further analysis is warranted.

SOUTH COAST AIR QUALITY MANAGEMENT PLAN (2007 AQMP)

The South Coast Air Quality Management District is one of 35 air quality management districts that have prepared Air Quality Management Plans to accomplish a five-percent annual reduction in emissions. The 2007 Air Quality Management Plan for the South Coast Air Basin (2007 Air Quality Management Plan) relies on a multi-level partnership of governmental agencies at the Federal, State, regional, and local level. The 2007 Air Quality Management Plan proposes policies and measures to achieve Federal and State standards for improved air quality in the South Coast Air Basin and those portions of the Salton Sea Air Basin (formerly named the Southeast Desert Air Basin) that are under the South Coast Air Quality Management District jurisdiction.

The 2007 Air Quality Management Plan also addresses several State and Federal planning requirements and incorporates significant new scientific data, primarily in the form of updated emissions inventories, ambient measurements, new meteorological episodes, and new air quality modeling tools. The 2007 Air Quality Management Plan is consistent with and builds upon the approaches taken in the 2003 Air Quality Management Plan, the 1997 Air Quality Management Plan, and the 1999 Amendments to the Ozone State Implementation Plan for the South Coast Air Basin for the attainment of the Federal ozone air quality standard. Refer to Section 5.4, Air Quality/Greenhouse Gas Emissions.

AIRPORT ENVIRONS LAND USE PLAN

The Airport Land Use Commission (ALUC) for Orange County has adopted an *Airport Environs Land Use Plan (AELUP)* that seeks to protect the public from the adverse effects of aircraft noise to ensure that people and facilities are not concentrated in areas susceptible to aircraft accidents and that no structures or activities adversely affect navigable airspace. Land uses within the *AELUP* include residential, vacant, agricultural, and business park uses.



Joint Forces Training Base/Los Alamitos Army Airfield (JFTB/LAAAF)

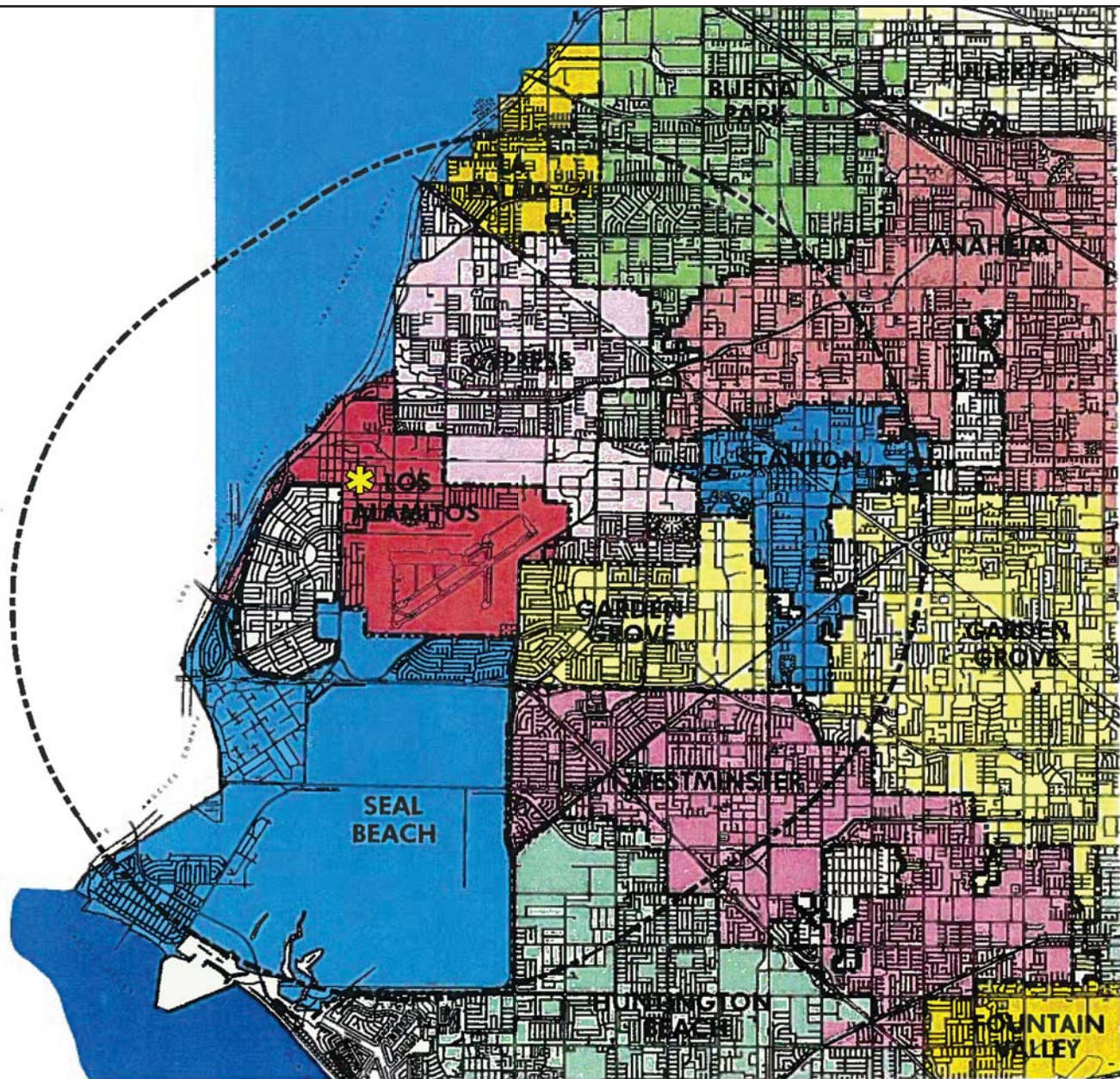
The JFTB/LAAAF is located one mile southeast of central Los Alamitos and approximately 3/4-mile from the project site. The project site is within the ALUC *Airport Environs Land Use Plan for JFTB Los Alamitos* and located within the Federal Aviation Regulation (FAR) Part 77 Notification Area for JFTB; refer to *Exhibit 5.1-1, AELUP Height Restriction Zone for JFTB*. However, the proposed project is located outside of the Los Alamitos Impact Zones JFTB and located outside of the 60 dBA and 65 dBA CNEL noise contours; refer to *Exhibit 5.1-2, Los Alamitos Impact Zones Joint Forces Training Base*.

The Los Alamitos Army Airfield (LAAAF) is an instrumented, military airfield (KSLI) operated by the California Army National Guard (CA-ARNG) on the 1,400-acre Joint Forces Training Base (JFTB) in the City of Los Alamitos. The LAAAF is a former Naval Air Station located in North Western Coastal Orange County across the San Diego freeway from Seal Beach Naval Weapons Stations surrounded by extensive road networks. Presently, some 30 helicopters of the 40th Aviation Brigade are assigned to the Los Alamitos Army Aviation Support Facility. Several United States Army Reserve C-12 airplanes are also assigned and the United States Department of Agriculture (USDA)/California Department of Food and Agriculture (CDFA) operates about one-half dozen aircraft that support the Medfly/Mexfly Mediterranean Fruit Fly eradication program. The airfield includes a full staffed Army Air Traffic Control Tower, crash rescue/fire department, 200,000 gallon aviation refueling system, and a Weather Office. Additionally, the airfield operates a full motion UH-1 Flight Simulator (2B24SFTS). The JFTB is home to the headquarters of the 63rd Regional Support Command (RSC) and home to the California Army National Guards 40th Infantry Division. Various other National Guard and Army Reserve units are also stationed at Los Alamitos. Additionally, the JFTB supports the Marine Corps Reserve (USMCR), Civil Air Patrol (CAP), the U.S. Army, and hosts the State of California's Office of Emergency Services (OES) complete with satellite communications to commend the emergency operations in Southern California. Over 700 military, civilian and contract personnel are assigned at Los Alamitos on a full-time basis to support training, services, and operations. Approximately 3,000 traditional guardsmen and reservists conduct training at the Air Force Reserve Command (AFRC) as well.¹

CITY OF LOS ALAMITOS 2010 GENERAL PLAN

The *General Plan* is a comprehensive long-range plan for the City's physical development, which is used to guide future land use decisions. In essence, the *General Plan* serves as the blueprint for future growth and development. The *General Plan* is comprised of seven State-mandated elements (Land Use, Circulation and Transportation, Housing, Conservation, Open Space and Recreation, Noise and Safety) and two optional elements (Economic Development and Growth Management), and was adopted in August 1999. The Housing Element was more recently updated and adopted on December 21, 2009.

¹ The California National Guard website, <http://www.calguard.ca.gov/sli/Pages/History.aspx>, accessed June 28, 2010.



Note: County Unincorporated areas are shown in white.

FAR PART 77

Notification Area for JFTB Los Alamitos: 20,000' Radius at 100:1 Slope

LEGEND

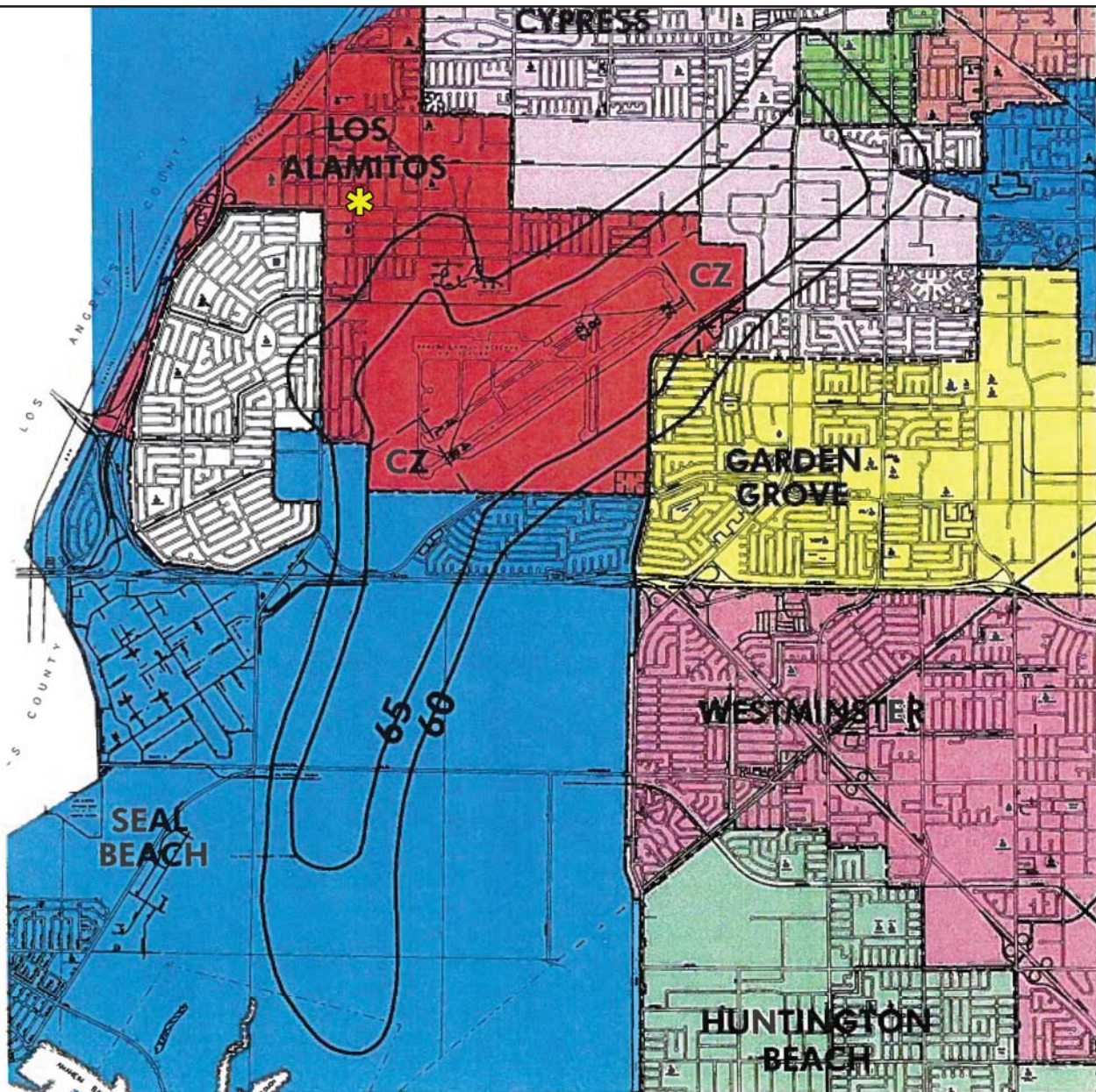
- 20,000' RADIUS
- CITY BOUNDARIES
- ★ PROJECT LOCATION

Scale in Feet
0 1000 2000 3000 4000 5000 6000 7000

CERTIFICATION

Adopted by the Airport Land Use Commission for Orange County

Joan S. Golding December 19, 2002
Joan S. Golding, Executive Officer Date

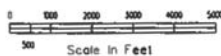


Note: County Unincorporated areas are shown in white.

Los Alamitos Impact Zones Joint Forces Training Base

LEGEND

- 60- CNEL CONTOUR
- RUNWAY PROTECTION ZONE
- CITY BOUNDARIES
- ★ PROJECT LOCATION



CERTIFICATION

Adopted by the Airport Land Use Commission for Orange County

Joan S. Golding December 19, 2002
Joan S. Golding, Executive Officer Date



The elements of the *General Plan* are comprised of two documents: the Background Technical Report (BTR) and the policy document. The BTR contains the baseline data and information necessary to support the goals, policies, and implementation programs contained in the policy document. These goals, policies, and implementation programs are incorporated in this EIR by reference. The *General Plan* Elements and their general contents are described below.

Land Use Element²

The Land Use Element has the broadest scope of the seven state-mandated general plan elements. It plays the important role of coordinating citywide land use in the context of the plan's other elements. In almost every circumstance, land use affects or is affected by every general plan element. Among the many state-mandated requirements, *Government Code* Section 65302(a) requires a general plan's land use element to "*designate the proposed general distribution and location and extent of uses of the land for housing, business, industry, open space, including agriculture, natural resources, recreation, enjoyment of scenic beauty, education, public buildings and grounds, solid and liquid waste disposal facilities...it shall include a statement of population density and building intensity recommended for various districts . . .*".

Conservation Element³

The Conservation Element addresses the conservation of natural resources located within the City. Its intent is to protect and maintain the City's natural and cultural resources and to prevent their wasteful exploitation and destruction. *Government Code* Section 65302(d) mandates that, to the extent applicable, issues regarding natural resources must be addressed in the general plan. Resources considered in this element include air, soils, biotic, water, cultural, and energy.

Safety Element⁴

The basic purpose of the Safety Element is to comprehensively inventory hazards that impact persons and property in the City. It is the primary document for identifying hazards that must be considered in the City's physical development and guides local government decision-making in safety-related matters. *Government Code* Section 65302(i) requires general plans to include a safety element for a community's protection from natural and man-made safety risks. Natural hazards include earthquakes, ground rupture, landslides, and flooding. Man-made hazards include crime, wildland and urban fires, exposure to hazardous materials, and aircraft overflight.

Open Space and Recreation Element⁵

The Open Space and Recreation Element addresses the City's open space resources and the preservation and enhancement of recreational opportunities. The element combines the State-mandated Open Space Element and an optional Recreation Element. *Government Code* Section 65302(e) requires cities to prepare and adopt an open space element of their general plan that addresses areas required for open space for outdoor recreation and areas that serve as links between

² *City of Los Alamitos 2010 General Plan – Land Use Element*, Page 1-1, dated August 1999.

³ *City of Los Alamitos 2010 General Plan – Conservation Element*, Page 2-1, dated August 1999.

⁴ *City of Los Alamitos 2010 General Plan – Safety Element*, Page 3-1, dated August 1999.

⁵ *City of Los Alamitos 2010 General Plan – Open Space & Recreation Element*, Page 4-1, dated August 1999.



major recreation and open-space reservations, including utility easements, banks of rivers and streams, trails, and scenic highway corridors. The City's open space resources include parks and recreational facilities (park centers, public school facilities, public tennis courts, ball fields, and picnic areas); the Coyote Creek riverbed area; open areas occupied by utilities (flood control channels, railroad lines, utility easements); landscaped medians; and private recreational facilities such as church and private school sites.

Circulation and Transportation Element⁶

The Circulation and Transportation Element is intended to guide the development of the City's circulation system in a manner that is compatible with the Land Use Element. The element is also intended to guide decision-making in providing a safe, sensible, and efficient circulation system for the City. The current State mandate for a circulation element states that the general plan shall include “. . . a circulation element consisting of the general location for proposed major thoroughfares, transportation routes, terminals and other local public utilities and facilities, all correlated with the land use element of the plan.” Government Code Section 65302, the “General Plan Guidelines,” published by the State of California, Office of Planning and Research, suggests that the policies and plan proposals of the circulation element should coordinate the transportation and circulation system with planned land uses; promote the efficient transport of goods and the safe and effective movement of all segments of the population; make efficient use of existing transportation facilities; and protect environmental quality and promote the wise and equitable use of economic and natural resources.

The Circulation Element portrays the roadway system needed to serve traffic generated by uses permitted in the Land Use Element, as well as increased development in the surrounding areas. The element is closely linked with the Noise Element since traffic forecasts are used in conjunction with other data to determine noise contours for general plan uses. The Element is also related to the Seismic/Public Safety Element and the Open Space/Parks/Conservation Element. The Public Safety Element addresses evacuation routes and minimum roadway widths to accommodate City residents in the event of a catastrophe, and the Open Space/Parks Conservation Element identified landscaping standards for scenic highways, roadways, and multi-use recreation trails. Due to its transportation-related issues, the Growth Management Element also has a relationship with the Circulation Element. The Growth Management Element mandates that growth and development be based upon the City's ability to provide an adequate circulation system.

Noise Element⁷

The Noise Element presents the technical analysis of the noise environment for the *General Plan*. The purpose of the Noise Element is to: (1) review the existing noise documents and analysis procedures; (2) identify potential noise sources; (3) model existing noise impacts; (4) model future noise impacts based on the general plan daily traffic volumes contained in the Circulation Element Traffic Study; (5) provide additional discussion of noise standards, traffic noise and other impacts; and (6) produce the City noise contour maps for both the existing and future noise environments. The Noise Element is directly related to the Land Use and Circulation Elements. The location of

⁶ City of Los Alamitos 2010 General Plan – Circulation Element, Page 5-1, dated August 1999.

⁷ City of Los Alamitos 2010 General Plan – Noise Element, Page 6-1, dated August 1999.



sensitive uses including housing, medical facilities, and schools are also affected by issues addressed in the Noise Element.

Economic Development Element⁸

The Economic Development Element has four goals: (1) enhance the fiscal viability of Los Alamitos by promoting retention and expansion of existing revenue bases, and development of new City revenue sources; (2) identify economic strengths and incentives unique to Los Alamitos; (3) promote revitalization of existing commercial centers; and (4) promote a healthy economic mix among retail, office, and industrial uses. Keyser-Marston Associates, on behalf of the City, studied retail opportunities in the local market area which created the BTR within this Element.

Housing Element

The Housing Element contains the official policies for the construction, rehabilitation and preservation/conservation of housing in the City. The Element is built upon identification and analysis of existing and projected housing needs, resources, opportunities and past performance. The Housing Element contains detailed analysis of the City's economic, demographic and housing characteristics.

The Housing Element addresses housing opportunities for current and future Los Alamitos residents through June 2014 and provides the policy guidance for local decision making related to housing in the City. This Housing Element update covers the Planning Period from January 2006 through June 2014. The Element also evaluates the City's progress in implementation the 1998-2005 housing policy program. The Housing Element is the only element of the General Plan that requires review and certification by the State of California. As noted earlier, the Housing Element was adopted on December 21, 2009.

Growth Management Element

The purpose and intent of the Growth Management Element is to mandate that growth and development be based upon the City's ability to provide an adequate circulation system and public facilities pursuant to the Orange County Division, League of California Cities *Countywide Traffic Improvement and Growth Management Plan Component*.

On November 6, 1990, Orange County voters approved Measure M, the Revised Traffic Improvement and Growth Management Ordinance, which provides funding to Orange County for needed transportation improvements over a 20-year period through the imposition of a one-half cent retail transaction and use tax. Portions of the monies received from the new sales tax revenue will be returned to Orange County jurisdictions for use of local and regional transportation improvements, subject to jurisdiction's acquisition and retention of an eligible status for Measure M revenues.

In order to qualify for Measure M funds, the City of Los Alamitos must comply with the Countywide Growth Management Program component requirements and have an established policy

⁸ City of Los Alamitos 2010 General Plan – Economic Development Element, Page 7-1, dated August 1999.



framework for the required Growth Management Program through the adoption of a Growth Management Element.

The Growth Management Element must: 1) establish policy statements that identify traffic levels of service (LOS); 2) commit the City to implement a development mitigation program; and 3) commit the City to implement a development phasing and monitoring program. The Element follows guidelines in the *Government Code* Section 65303.

CITY OF LOS ALAMITOS 2010 GENERAL PLAN INITIAL STUDY/NEGATIVE DECLARATION (IS/ND)

The *Los Alamitos 2010 General Plan Initial Study/Negative Declaration* is intended to provide decision-makers and the public with information concerning the environmental effects of implementation of the General Plan Update. The *IS/ND* evaluates the potential individual and cumulative environmental effects associated with implementation of the policies and programs of the *General Plan*. The *IS/ND* concluded that the 2010 General Plan Update would not result in any significant unavoidable impacts, and was certified in August 1999.

CITY OF LOS ALAMITOS MUNICIPAL CODE

The *Los Alamitos Municipal Code (LAMC)* consists of all the regulatory, penal, and administrative ordinances of the City of Los Alamitos. It is the method the City uses to implement control of land uses, in accordance with *General Plan* goals and policies.

CITY OF LOS ALAMITOS ZONING CODE

Title 17 of the City of Los Alamitos *Municipal Code (LAMC)* is referred to as the “*Los Alamitos Zoning Code*” (*LAZC*). The *LAZC* was adopted to promote the growth of the City in an orderly manner and to promote and protect the public health, safety, and general welfare of residents while preserving and enhancing the aesthetic quality of the City. The *LAZC* establishes zoning districts that includes the territory within the City’s boundaries. Within the established zoning districts it is unlawful to erect, construct, alter, or maintain buildings or uses of land that are not in conformance with the requirements and standards established in the *LAZC*. The purpose of the *LAZC* is to implement the policies of the *General Plan* by classifying and regulating the uses of land and structures within the City of Los Alamitos.

5.1.2 ENVIRONMENTAL SETTING

ON-SITE LAND USES

Presently, the 18.3 gross-acre project site is occupied with the Los Alamitos Medical Center campus, which consists of a two-story hospital with 167 beds, three medical office buildings ranging from two to four stories in height, a TotalCare Pavilion, and 1,094 surface parking spaces located within seven parking lots. A small administrative/warehouse structure is also part of the Medical Center campus. All on-site buildings total 356,523 square feet. The project site is comprised of eight



parcels that through a lot-tie covenant in 2002 link the eight parcels together to function as one parcel for the entire campus. The Assessor Parcel Numbers for the project site include: 242-151-20, 242-152-20 and -21; 242-162-13 and -14; and 242-163-11, -12, -13, and -14.

The Medical Center campus is located within three *General Plan* Land Use Designations: Community and Institutional, Planned Industrial, and Professional Office Designation; refer to Exhibit 5.1-3, General Plan Land Use.

The zones established in the *LAZC* are illustrated on the Zoning Map; refer to Exhibit 5.1-4, Zoning Map. Zoning for the property is Community Facilities (CF), Commercial Office (CO), and Planned Light Industrial (PM).

SURROUNDING LAND USES

The project site is bordered by Katella Avenue on the south, Cherry Street on the west, Catalina and Florista Streets on the north, and Bloomfield Street on the east. Kaylor Street traverses the western portion of the Los Alamitos Medical Center campus, connecting with Catalina Street on the north and Katella Avenue on the south. Land uses surrounding the project site include:

- primarily commercial and office/industrial land uses to the west,
- an area of residential to the northwest; commercial and industrial land uses to the north;
- commercial and office land uses to the east (with existing Laurel Park on the east of Bloomfield Avenue); and
- commercial and residential land uses to the south on the south side of Katella Avenue.

A water facility is located on Cherry Street north of the existing hospital building but is not a part of the proposed project.

5.1.3 SIGNIFICANCE THRESHOLD CRITERIA

The environmental analysis in this section is patterned after the Initial Study Checklist recommended by the *CEQA Guidelines*, as amended, and used by the City of Los Alamitos in its environmental review process, and is contained in Appendix A of the EIR. The Initial Study includes questions relating to land use. The issues presented in the Initial Study Checklist have been utilized as thresholds of significance in this section. Accordingly, a project may create a significant environmental impact if it causes one or more of the following to occur:

- Physically divide an established community, or otherwise result in an incompatible land use (refer to Section 8.0, Effects Found Not To Be Significant).
- Conflict with an applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, a general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.



- Conflict with any applicable habitat conservation plan or natural community conservation plan (refer to Section 8.0, Effects Found Not To Be Significant).

For the purposes of this impact analysis, a significant impact would occur if implementation of the proposed project would result in inconsistencies or conflicts with the adopted goals and policies of the *City of Los Alamitos General Plan*, applicable rules and regulations of the LAZC, and *Draft Los Alamitos Medical Center Specific Plan*. Based on these standards, the effects of the proposed project have been categorized as either a “less than significant impact” or a “potentially significant impact.” Mitigation measures are recommended for potentially significant impacts. If a potentially significant impact cannot be reduced to a less than significant level through the application of mitigation, it is categorized as a significant unavoidable impact.

5.1.4 PROJECT IMPACTS AND MITIGATION MEASURES

OVERVIEW OF THE LOS ALAMITOS MEDICAL CENTER SPECIFIC PLAN (PROPOSED PROJECT)

The *Los Alamitos Medical Center Specific Plan* has been prepared to establish the planning concept, regulations, and administrative procedures necessary to achieve compatible, orderly, and efficient development of the 18.3-acre project site.

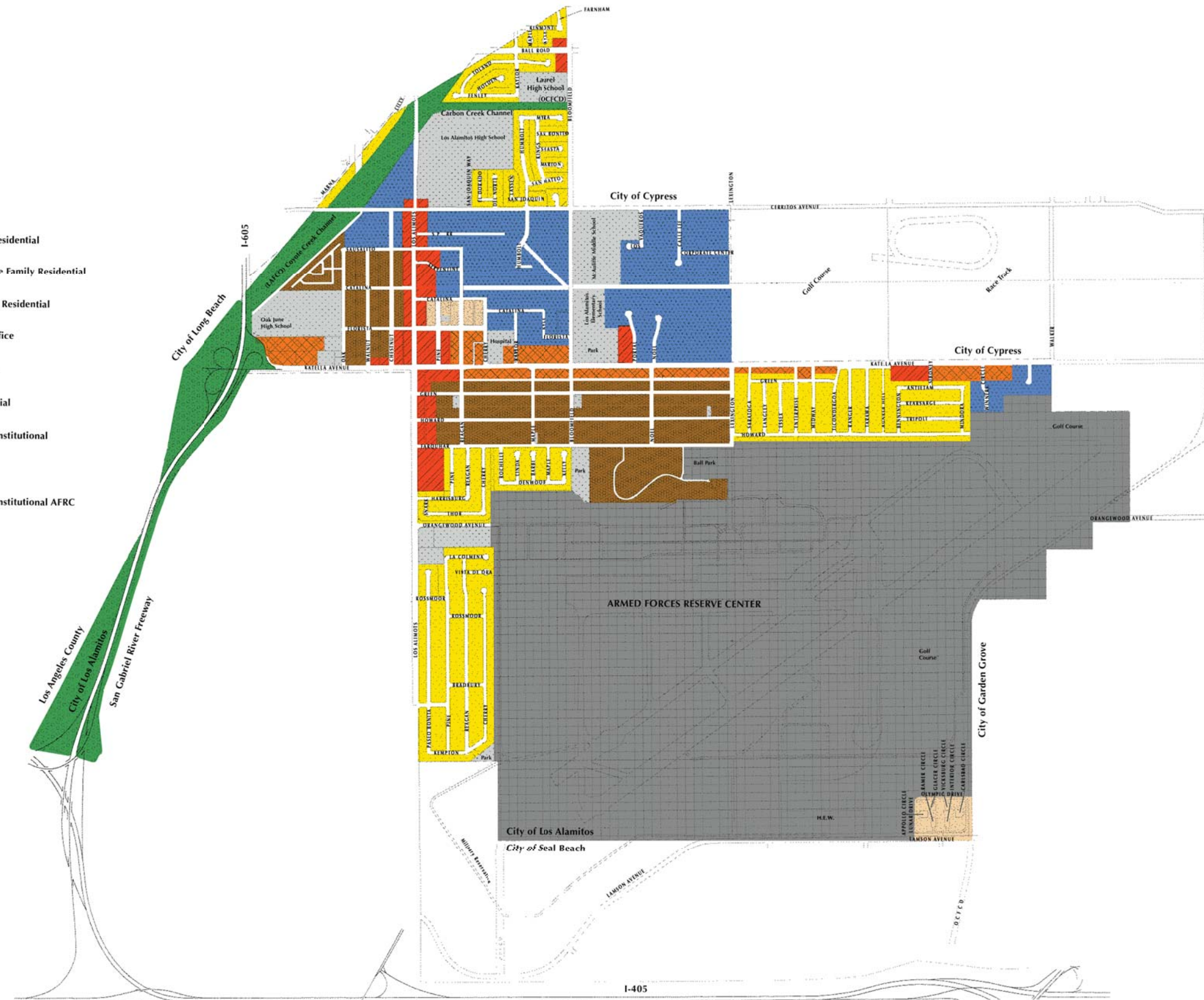
Per *Government Code* Section 65451, Specific Plans are permitted to regulate development including permitted uses, density, design, building size, and placement. Specific Plans also govern the type and extent of open space, landscaping, roadways, and the provision of infrastructure and utilities. Since the development guidelines established in a Specific Plan focus on the unique needs of a specific area, Specific Plans allow for greater flexibility than is possible with conventional zoning.

The proposed Specific Plan outlines the planned, phased expansion of the Medical Center campus over a 25-year period. A three-phase expansion is proposed. The overall purpose and intent of the Specific Plan is to create a policy and zoning document that will establish a planning and regulatory framework designed for the future development and buildout of the property located within the Specific Plan Area. Proposed land uses consist primarily of hospital buildings and medical office facilities, as well as parking facilities for staff, patients, and visitors. Commercial uses are also permitted as outlined in the development regulations within the Specific Plan.

Key components of the Specific Plan are the land use plan, circulation and infrastructure plan, site development regulations, site design guidelines, and implementation and administration.

Land Use Plan

The development plan discusses the concepts behind the creation of the Specific Plan and details the land use program for the site; refer to *Exhibit 3-4, Land Use Plan – Phase 1*; *Exhibit 3-5, Land Use Plan – Phase 2*; and *Exhibit 3-6, Land Use Plan – Phase 3/Buildout*.



Source: Los Alamitos 2010 General Plan.

NOT TO SCALE



09/10 • JN 10-107031



Los Alamitos Medical Center Specific Plan Program Environmental Impact Report

Back of 11 x 17 Exhibit

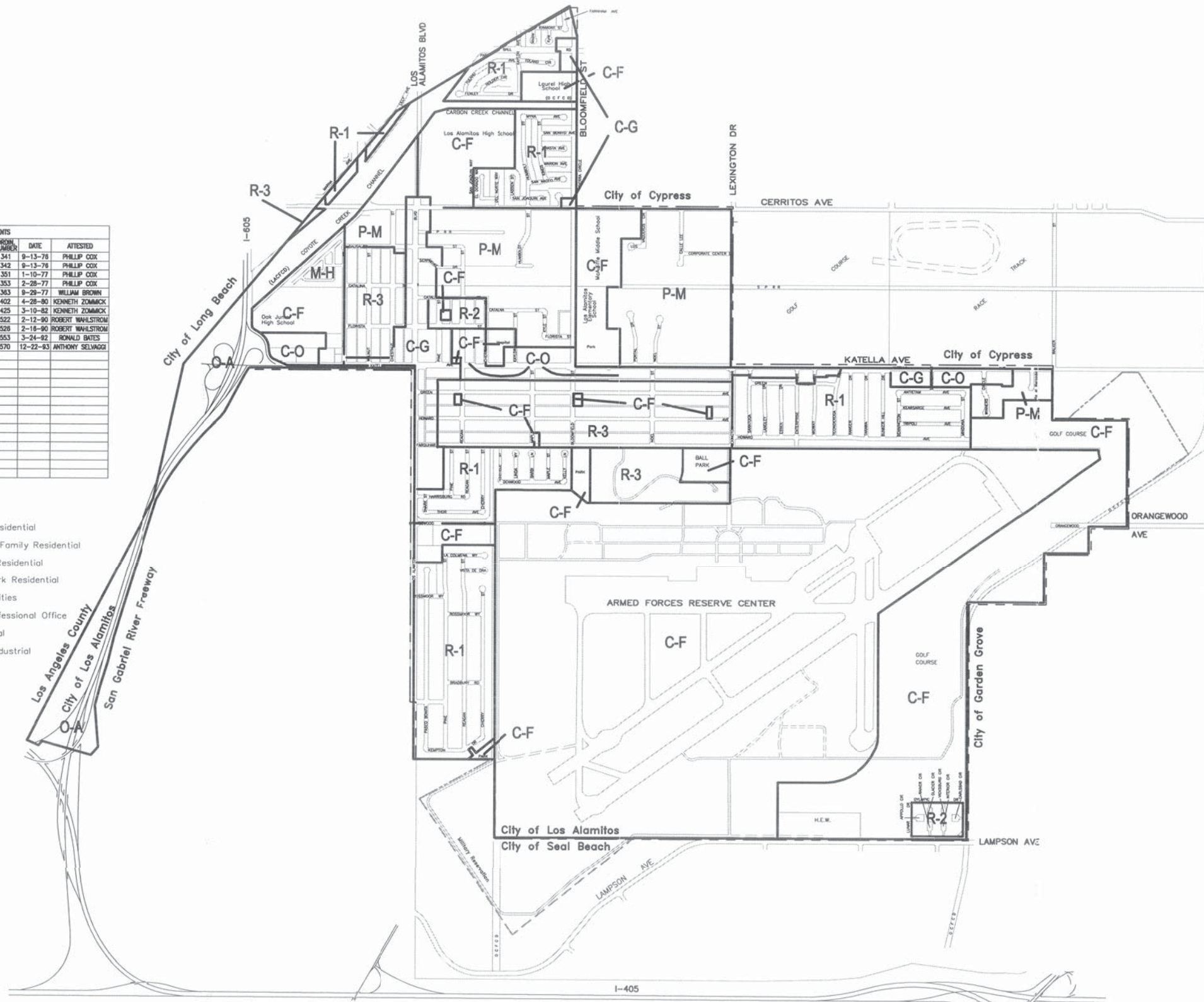
LEGEND

----- City Boundary

AMENDMENTS					
ORDINANCE NUMBER	DATE	ATTESTED	ORDINANCE NUMBER	DATE	ATTESTED
169	2-17-69	DALE KROESCH	341	9-13-76	PHILLIP COX
172	9-9-69	DALE KROESCH	342	9-13-76	PHILLIP COX
183	10-20-69	DALE KROESCH	351	1-10-77	PHILLIP COX
191	3-10-70	DALE KROESCH	353	2-28-77	PHILLIP COX
196	5-12-70	WILLIAM BROWN	363	9-29-77	WILLIAM BROWN
209	11-9-70	WILLIAM BROWN	402	4-28-80	KENNETH ZOMMICK
213	1-25-71	WILLIAM BROWN	425	3-10-82	KENNETH ZOMMICK
215	1-22-71	WILLIAM BROWN	522	2-12-80	ROBERT WAHLSTROM
221	8-28-71	WILLIAM BROWN	528	2-18-80	ROBERT WAHLSTROM
227	10-28-71	WILLIAM BROWN	553	3-24-82	RONALD BATES
234	2-28-72	WILLIAM BROWN	570	12-22-83	ANTHONY SELVAGGI
237	3-13-72	WILLIAM BROWN			
245	6-28-72	CHARLES LONG			
251	8-11-72	CHARLES LONG			
253	10-24-72	CHARLES LONG			
258	4-2-73	CHARLES LONG			
264	7-23-73	WILLIAM BROWN			
265	7-23-73	WILLIAM BROWN			
283	6-10-74	PHILLIP COX			
294	1-27-75	PHILLIP COX			
308	8-11-75	TOM HOMRIGHAUSEN			
323	1-12-76	PHILLIP COX			
324	1-12-76	PHILLIP COX			
327	2-9-76	PHILLIP COX			
340	6-28-76	PHILLIP COX			

----- Zone Boundary

- R-1 Single Family Residential
- R-2 Limited Multiple Family Residential
- R-3 Multiple Family Residential
- M-H Mobile Home Park Residential
- C-F Community Facilities
- C-O Commercial-Professional Office
- C-G General Commercial
- P-M Planned Light Industrial
- O-A Open Area



Source: Los Alamitos 2010 General Plan.

NOT TO SCALE



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ENVIRONMENTAL IMPACT REPORT
LOS ALAMITOS MEDICAL CENTER SPECIFIC PLAN

Zoning Map

Exhibit 5.1-4



Los Alamitos Medical Center Specific Plan Program Environmental Impact Report

Back of 11 x 17 Exhibit



Circulation and Infrastructure Plan

The Circulation Plan discusses the improvements that will be made to accommodate the proposed land uses on-site. The section includes circulation and parking plans and infrastructure improvements including any necessary domestic water, sanitary sewer, and storm drain improvements; refer to Exhibit 3-7, Circulation Plan – Phase 1; Exhibit 3-8, Circulation Plan – Phase 2, and Exhibit 3-9, Circulation Plan – Phase 3.

Site Development Regulations

The section includes development regulations for all uses included within the Specific Plan. They are precise specifications for such things as allowable uses, temporary uses and special events, conditional uses, intensity, general development standards, height, setbacks, building separation, landscaping requirements, fencing, parking requirements, signage, and development standards modifications. Application of these regulations is specifically intended to provide for the orderly development of the site and effective fulfillment of the project objectives, while protecting the health, safety, and welfare of the employees and users, as well as those of the surrounding community.

Site Design Guidelines

This section identifies design guidelines, which provides an overall vision for the redevelopment of the Los Alamitos Medical Center. The guidelines offer design guidance in the areas of architecture, landscape, and public spaces to ensure a certain level of aesthetic quality and functional efficiency, as well as compatibility between the project's components and surrounding community. The intent of the design guidelines is to encourage the highest level of design quality and creativity to ensure an atmosphere of wellness.

Implementation and Administration

The section identifies administrative, review, approval, and amendment procedures for projects located within the Specific Plan boundary. The section identifies who may review the projects, and what steps project proponents will have to complete to develop their project within the Specific Plan Area.

California Government Code (Title 7, Division 1, Chapter 3, Article 8, Sections 65450 through 65457) provides the authority to adopt a Specific Plan by ordinance (as a regulatory plan) or resolution (a policy driven plan). The Specific Plan will be both a regulatory and policy document adopted by the Ordinance.

As a regulatory plan, the Specific Plan will establish the zoning for the land within the Specific Plan Area. Development plans, site plans, tentative tract maps, and/or parcel maps must be consistent with the Specific Plan and the *General Plan*. The Specific Plan, once completed, will include a description of future land uses, infrastructure and other improvements as well as development standards, design guidelines, and implementation measures, as specified below:



- The distribution, location, and extend of the uses of land, including potential open space, within the Specific Plan Area.
- The proposed distribution, location, extent, and intensity of major components of public and private transportation, sewage, water, drainage, solid waste disposal, energy, and other essential facilities to be located within the Specific Plan Area and which are needed to support the land uses described in the Specific Plan.
- Standards and criteria by which development will proceed, and standards for the conservation, development, and utilization of natural resources, where applicable.
- A program of implementation measures including regulations, public works projects, and financing measures necessary to carry out the project.
- A statement of the relationship of the Specific Plan to the *General Plan*.

Upon approval of the Specific Plan, the campus will be zoned Specific Plan with development standards and development parameters governed by the *Los Alamitos Medical Center Specific Plan*. In the event the *Los Alamitos Medical Center Specific Plan* is silent as to a development standard or procedure, the provisions of the *LAZC* shall control.

CONSISTENCY WITH CITY LAND USE PLANS, POLICIES, AND ORDINANCES

City of Los Alamitos General Plan

◆ THE PROPOSED PROJECT COULD CONFLICT WITH THE CITY OF LOS ALAMITOS GENERAL PLAN.

Level of Significance Before Mitigation: Less Than Significant Impact.

Impact Analysis: The *General Plan* is the primary policy planning document that guides land uses in the City. Proposed development projects must be consistent with the *General Plan* in order to be approved, and therefore must serve to directly comply with the goals, issues, policies, and implementation measures of the *General Plan*. The project site is currently developed and occupied by the Los Alamitos Medical Center campus. The Medical Center campus is located within three *General Plan* Land Use Designations: Community and Institutional, Planned Industrial, and Professional Office. Approval of the *Los Alamitos Medical Center Specific Plan* requires a General Plan Amendment, which will create a new Specific Plan land use designation over the entire Medical Center campus (“Specific Plan”).

The overall purpose of the intent of the *Los Alamitos Medical Center Specific Plan* is to create a policy and zoning document that establishes a planning and regulatory framework designed for the future development and buildout of the property located within the Specific Plan Area. The project site currently consists of a two-story hospital with 167 beds, three medical office buildings ranging from two to four stories in height, a TotalCare Pavilion, a small administrative/warehouse structure and surface parking. The proposed project would include the provision of an additional 164 hospital



Los Alamitos Medical Center Specific Plan Program Environmental Impact Report

beds, two new hospital buildings, one new medical office building, a new central plant, and an additional 849 parking spaces; refer to [Section 3.0, Project Description](#).

The *General Plan* contains numerous goals, issues, policies, and implementation measures to guide development and uses planned within the City. [Table 5.1-1, Consistency with Applicable General Plan Goals and Policies](#), provides a detailed analysis of the proposed project's consistency with goals, issues, and policies of the *General Plan*. For the purposes of this consistency analysis, only those goals and policies that are applicable to the proposed project are included in the matrix, to simplify the discussion.

**Table 5.1-1
Consistency with Applicable General Plan Goals and Policies**

Applicable <i>General Plan</i> Implementing Goals and Policies	Consistency of Proposed Project
LAND USE ELEMENT	
Goal 1: Preserve and promote land uses which reflect Los Alamitos' small-town character with due regard for economic development and future growth potential.	<u>Consistent.</u> The proposed project includes the expansion of the existing Los Alamitos Medical Center campus. The proposed development would be located within an established site in an urbanized area, consistent with the existing on-site and surrounding established land use patterns. No expansion beyond the existing property boundaries would occur with the proposed project.
Goal 2: Preserve and enhance the quality of the City's residential neighborhoods.	<u>Consistent.</u> The proposed project would result in the expansion of the existing Los Alamitos Medical Center campus. No expansion beyond the existing property boundaries would occur with the proposed project. Thus, the proposed project would not adversely affect the quality of existing residential neighborhoods.
Goal 3: Promote and upgrade the quality of the City's commercial, industrial, and open space areas.	<u>Consistent.</u> The proposed project includes the expansion of the existing Los Alamitos Medical Center campus which would balance the growing population and availability of local medical services. The project proposes an additional 164 hospital beds, two new hospital buildings, one new medical office building, a new central plant, and an additional 849 parking spaces. The proposed project would upgrade the quality of the project site.
Policy 1-1.1: Employ accepted planning and engineering standards and practices as the basis for determining the compatibility of new land uses with existing uses.	<u>Consistent.</u> The proposed project includes the expansion of the existing Los Alamitos Medical Center campus and adoption of a Specific Plan to guide future development. The proposed development would be located on an established site in an urbanized area, consistent with the existing on-site and surrounding established land use patterns. No expansion beyond the existing property boundaries would occur with the proposed project.
Policy 1-1.2: Adopt feasible mitigation measures throughout the land use decision-making process to reduce impacts of new or expanded uses on existing residential neighborhoods.	<u>Consistent.</u> The proposed project includes the expansion of the existing Los Alamitos Medical Center campus and would not adversely impact existing residential neighborhoods and would be consistent with such existing development, subject to review and approval by the City. This EIR has identified a number of mitigation measures to reduce project-related impacts.



**Los Alamitos Medical Center Specific Plan
Program Environmental Impact Report**

**Table 5.1-1 (continued)
Consistency with Applicable General Plan Goals and Policies**

Applicable <i>General Plan</i> Implementing Goals and Policies	Consistency of Proposed Project
Policy 1-1.3: Maintain consistency among General Plan Policies and Programs, the Zoning Ordinance, and related development regulations.	<u>Consistent.</u> The proposed project includes the expansion of the existing Los Alamitos Medical Center campus. Approval of the <i>Los Alamitos Medical Center Specific Plan</i> would be preceded by a General Plan Amendment that would create a new Specific Plan Land Use Designation over the entire Medical Center campus ("Specific Plan"). Furthermore, upon approval of the Specific Plan the Medical Center campus would be zoned "Specific Plan" with development standards and development parameters governed by this Specific Plan document. Project design standards and regulations would be subject to review and approval by the City.
Policy 1-1.4: Encourage commercial, office, and industrial uses which are compatible with surrounding residential neighborhoods.	<u>Consistent.</u> The proposed project includes the expansion of the existing Los Alamitos Medical Center campus. The proposed development would be located on an established site in an urbanized area, consistent with the existing on-site and surrounding established land use patterns. No expansion beyond the existing property boundaries would occur with the proposed project.
Policy 1-3.1: Apply appropriate and consistent standards in land use and site plan approvals to achieve continuity and cohesion in the physical development of the City.	<u>Consistent.</u> The project site is currently developed and occupied by the Los Alamitos Medical Center campus. The project site and its surroundings are primarily urbanized and contain a mix of land uses with structures of various age and conditions. The proposed project would be visually consistent with on-site and adjoining uses, consistent with the City's Early California theme, and consist of similar mass, heights, and landscaping. Refer to <u>Section 5.2, Aesthetics</u> , for a discussion of aesthetic impacts and mitigation measures.
Policy 1-4.1: Consider the fiscal impacts to the City as an integral part of land use decision-making.	<u>Consistent.</u> The proposed project includes medical service uses that would provide tax revenue to the City, while increased demands on public services and utilities from future on-site uses may require additional expenditures.
Policy 1-4.2: Base land use decisions on reasoned analysis incorporating technical standards for review included in the respective Elements of the General Plan.	<u>Consistent.</u> The proposed project includes the expansion of the existing Los Alamitos Medical Center campus. Approval of the <i>Los Alamitos Medical Center Specific Plan</i> would be preceded by a General Plan Amendment that would create a new Specific Plan Land Use Designations over the entire Medical Center campus ("Specific Plan"). Furthermore, upon approval of the Specific Plan the Medical Center campus would be zoned "Specific Plan" with development standards and development parameters governed by this Specific Plan document. Project design standards and regulations would be subject to review and approval by the City.
Policy 1-4.3: Consider General Plan Policies and Programs in making land use decisions.	<u>Consistent.</u> This table provides a review of applicable <i>General Plan</i> policies and programs. The policies and programs have also been reviewed in the <i>Los Alamitos Medical Center Specific Plan</i> .
Policy 1-6.1: Develop and implement land use programs which address and promote the architectural and site design characteristics associated with small town character.	<u>Consistent.</u> The proposed project includes the expansion of the existing Los Alamitos Medical Center campus. The proposed development would be located on an established site in an urbanized area, consistent with the existing on-site and surrounding established land use patterns. No expansion beyond the existing property boundaries would occur with the proposed project. The project site and its surroundings are primarily urbanized and contain a mix of land uses



**Los Alamitos Medical Center Specific Plan
Program Environmental Impact Report**

**Table 5.1-1 (continued)
Consistency with Applicable General Plan Goals and Policies**

Applicable <i>General Plan</i> Implementing Goals and Policies	Consistency of Proposed Project
	with structures of various age and conditions. The proposed project would be visually consistent with on-site and adjoining uses, consistent with the City's Early California theme, and consist of similar mass, heights, and landscaping. Refer to Section 5.2, Aesthetics , for a discussion of aesthetic impacts and mitigation measures. Furthermore, the proposed project would be subject to design review and approval by the City to ensure consistency with the small town community character.
CONSERVATION ELEMENT	
Goal One: Protect Los Alamitos' ground water resources from depletion and pollution.	<u>Consistent.</u> Domestic water is provided to the existing Los Alamitos Medical Center campus by the Golden State Water Company. Existing water lines ranging from six to eight inches are located in Catalina Street, Kaylor Street, Florista Street, Bloomfield Avenue, and Katella Avenue. Existing easements would be retained and new easements dedicated to meet Golden State Water Company requirements. It is anticipated that the proposed buildings within the Specific Plan Area would tie into existing pipes in adjacent streets. Proposed new buildings would be served by the existing water lines through a series of laterals. Additionally, subsurface water storage would be located within the campus (located adjacent to Kaylor Street near Hospital Building 1) to provide for emergency water supply in the case of temporary water service interruption per State requirements for hospitals. Future development within the project site would increase the demand for water resources. Refer to Section 5.11, Water, for a discussion of impacts and mitigation measures related to water supply and demand. Stormwater drainage in the City is mostly provided by a network of local drainage facilities. Site-specific drainage patterns could change due to project-related grading. According to Appendix F, <i>Final Hydrology Report</i>, the proposed project would not increase impervious surfaces. Refer to Section 5.8, Hydrology, Drainage, and Water Quality, for a discussion of impacts and mitigation measures related to ground water resources.
Goal Two: Improve air quality.	<u>Consistent.</u> Although the proposed project would not exceed the growth projections used as the basis for the SCAQMD's most recent AQMP, the proposed project would implement all feasible mitigation measures to reduce air pollutant emissions, which would serve to minimize conflicts with applicable policies, plans, and programs resulting from project implementation. Refer to Section 5.4, Air Quality/Greenhouse Gas Emissions , for a discussion of impacts and mitigation measures related to air quality policies, plans, and programs.
Goal Three: Reduce Los Alamitos' solid waste stream.	<u>Consistent.</u> Solid waste disposal service for the Medical Center campus would be provided by Consolidated Waste Disposal. Refer to Section 5.13, Solid Waste , for a discussion of impacts and mitigation measures related to solid waste federal, state, and local statutes and regulations.



**Los Alamitos Medical Center Specific Plan
Program Environmental Impact Report**

**Table 5.1-1 (continued)
Consistency with Applicable General Plan Goals and Policies**

Applicable <i>General Plan</i> Implementing Goals and Policies	Consistency of Proposed Project
Goal Five: Encourage the conservation of energy.	<u>Consistent.</u> The proposed project would incorporate all applicable conservation measures and technologies into project design, and would meet all the State's standards for building energy efficiency. Refer to Section 5.14, Electricity and Natural Gas , for a discussion on impacts and mitigation measures related to energy.
Goal Six: Preserve and enhance the quality of the City's landscaped environment.	<u>Consistent.</u> All landscaping and irrigation systems and plans shall conform to the requirements of the <i>LAMC</i> and the <i>Los Alamitos Medical Center Specific Plan</i> . A California licensed landscape architect shall prepare all landscape drawings and plans, and oversee the installation of all plantings and landscape materials within the Specific Plan Area. Furthermore, a landscape plan for the campus shall be provided at the time of site plan review for review and approval by the Planning Director. The landscape area requirement may include setback areas and other unused areas of the site that are not intended for future use.
Policy 2-1.1: Encourage the use of drought tolerant landscapes in new developments and encourage the replacement of existing water consumptive landscapes.	<u>Consistent.</u> To the extent possible, the Los Alamitos Medical Center would continue to promote water conservation and reclamation (i.e., landscaping with drought-tolerant plants and recycled water) to reduce water consumption. All landscaping and irrigation systems and plans shall conform to the requirements of the <i>LAMC</i> and the <i>Los Alamitos Medical Center Specific Plan</i> .
Policy 2-1.2: Encourage the conservation of water used for irrigation in parks, golf courses, recreation areas, commercial and industrial uses, and schools through the use of low-flow drip systems and water-efficient irrigation systems.	<u>Consistent.</u> Future development within the project site would increase the demand for water resources. All landscaping and irrigation systems and plans shall conform to the requirements of the <i>LAMC</i> and incorporate drought tolerant plants. The proposed project would incorporate all recommendations and requirements of the Golden State Water Company and Orange County Fire Authority. Refer to Section 5.11, Water , for a discussion of impacts and mitigation measures related to water supply and demand, and fire flow.
Policy 2-1.3: Comply with the policies and programs contained in the City's Water Conservation Ordinance.	<u>Consistent.</u> To the extent possible, the Los Alamitos Medical Center would continue to promote water conservation and reclamation (i.e., landscaping with drought-tolerant plants and recycled water) to reduce water consumption. The hospital would also comply with the policies and programs contained in the City's Water Conservation Ordinance. Refer to Section 5.11, Water , for a discussion on impacts and mitigation measures related to water.
Policy 2-1.4: Regulate commercial and industrial land uses to guard against the pollution of Los Alamitos' ground water resources.	<u>Consistent.</u> The proposed project shall maintain safe and adequate infrastructure services for domestic water service, sanitary sewer service, and storm drain service. Refer to Section 5.8, Hydrology, Drainage, and Water Quality ; Section 5.11, Water ; and Section 5.12, Wastewater , for discussion of impacts and mitigation measures related to infrastructure services.
Policy 2.1-7: Promote the use of reclaimed water for groundskeeping in parks, golf courses, recreation areas, commercial and industrial uses, and schools.	<u>Consistent.</u> The provision of reclaimed water and associated programs is the responsibility of the Sanitation Districts of Orange County. As available, the proposed project would incorporate reclaimed water distribution infrastructure for irrigation of on-site landscaping with drought-tolerant plants preferred.



Table 5.1-1 (continued)
Consistency with Applicable General Plan Goals and Policies

Applicable <i>General Plan</i> Implementing Goals and Policies	Consistency of Proposed Project
Policy 2-2.1: Continue to provide and/or support alternative modes of transportation such as mass transit, dial-a-ride, rail systems, dedicated roadways, and conventional buses.	According to the <i>General Plan</i> , transit service is provided by the Orange County Transportation Authority (OCTA). Existing transit routes include Katella Avenue, Los Alamitos Boulevard, Bloomfield Avenue, and Cerritos Avenue. Buses are scheduled in 20 minute intervals during peak hours of the day. Fixed bus route 50 (Katella Avenue) services the immediate vicinity of the Medical Center campus with a bus stop located on Katella Avenue in front of MOB 3. Bus route 50 is available for visitors, patients, and employees. Other OCTA fixed routes in the vicinity of the project area include Route 42, which travels along Los Alamitos Boulevard just west of the project area, Route 46, which travels along Bloomfield Street and Cerritos Avenue just north of the project area, and Route 701, which travels along Katella Avenue and Los Alamitos Boulevard just west of the project area.
Policy 2-2.2: Encourage increased vehicle occupancy and car-pooling.	<u>Consistent.</u> As deemed necessary by the City, the project's proposed parking areas would provide facilities for high-occupancy vehicles. In addition, the Medical Center is currently in strong compliance with SCAQMD's Rule 2202, which requires that companies or agencies who employ 250 or more people provide a menu of options to reduce mobile source air emissions generated from employee commutes. Options include implementing or continuing with an Employee Commute Reduction Program (ECRP), Purchasing Emission Credits which is an Emission Reductions Strategy (ERS), and investing of one of the SCAQMD Air Quality Investment (AQIP) Programs. The Medical Center files under an ERS program, and also provides bike racks at each building, as well as \$25 monthly gift certificate drawings. 2010 numbers show exceedence of required Average Vehicle Reductions requirements.
Policy 2-2.3: Provide safe and efficient facilities for pedestrians and bicyclists, integrating these with the County-wide system.	<u>Consistent.</u> The proposed project would not alter existing pedestrian and bicycle access via sidewalks and bike lanes along adjacent roadways that allow pedestrian and cyclist mobility and access to the project site.
Policy 2-2.4: Improve traffic monitoring and metering systems.	<u>Consistent.</u> Kaylor Street would be reconfigured as a driveway access into the site, providing access to the new parking structure and surface parking lots. On the north, Kaylor Street would extend south from Catalina Street and serve as a private road for ambulances to the new emergency room and access for employees and visitors. Kaylor Street would terminate in a cul-de-sac constructed to City and OCFA standards. Refer to <u>Section 5.3, Traffic</u> , for a discussion of impacts and mitigation measures related to traffic.
Policy 2-2.5: Actively participate in regional and local governmental efforts to improve air quality.	<u>Consistent.</u> Although the proposed project would not exceed the growth projections used as the basis for the SCAQMD's most recent AQMP, the proposed project would implement all feasible mitigation measures to reduce air pollutant emissions, which would serve to minimize conflicts with applicable policies, plans, and programs resulting from project implementation. Refer to <u>Section 5.4, Air Quality/Greenhouse Gas Emissions</u> , for a discussion of impacts and mitigation measures related to air quality policies, plans, and programs.



**Los Alamitos Medical Center Specific Plan
Program Environmental Impact Report**

**Table 5.1-1 (continued)
Consistency with Applicable General Plan Goals and Policies**

Applicable <i>General Plan</i> Implementing Goals and Policies	Consistency of Proposed Project
Policy 2-2.6: Maintain and improve traffic signal synchronization and provisions for constant traffic flow on all major arteries throughout the City and as extensions of other programs of neighboring cities.	<u>Consistent.</u> Mitigation measures are identified to eliminate the potentially significant traffic impacts at the Kaylor Street/Katella Avenue study intersection for forecast year 2013 and 2035 with project conditions as well as the Los Alamitos Boulevard/Cerritos Avenue study intersection for forecast year 2035 and to achieve acceptable corridor operations along Katella Avenue. Assuming implementation of the identified mitigation measures, adequate left-turn storage capacity on Katella Avenue is available at the study intersections for mitigated forecast year 2035 with project conditions. Refer to Section 5.3, Traffic , for a discussion of impacts and mitigation measures related to traffic and refer to the <i>Los Alamitos Medical Center Specific Plan Traffic Impact Analysis</i> , Appendix D.
Policy 2-3.1: Encourage recycling and waste reduction in accordance with the Source Reduction and Recycling Nondisposal Facility, and Household Hazardous Waste Elements of the adopted Integrated Waste Management Plan.	<u>Consistent.</u> Solid waste disposal service for the Medical Center campus would be provided by Consolidated Waste Disposal. Future development within the project site would increase solid waste generation, placing greater demands on existing solid waste collection services and diminishing landfill capacities. Refer to Section 5.13, Solid Waste , for a discussion of impacts and mitigation measures related to Federal, State, and local statutes and regulations. The transport, use, storage, and disposal of hazardous wastes would be subject to all local, state, and federal regulations. Refer to Section 5.7, Hazards and Hazardous Materials , for a discussion of impacts and mitigation measures related to hazardous materials.
Policy 2-5.1: Promote State energy conservation guidelines, which require the incorporation of energy-savings designs and features into new and refurbished buildings.	<u>Consistent.</u> The proposed project would incorporate all applicable conservation measures and technologies into project design, and would meet all the State's standards for building energy efficiency. Refer to Section 5.14, Electricity and Natural Gas , for a discussion on impacts and mitigation measures related to energy.
Policy 2-5.2: Encourage residents, businesses, and public employees to follow energy conservation practices designed to reduce energy consumption.	<u>Consistent.</u> The proposed project would incorporate all applicable conservation measures and technologies into project design, and would meet all the State's standards for building energy efficiency. Refer to Section 5.14, Electricity and Natural Gas , for a discussion on impacts and mitigation measures related to energy.
Policy 2-5.3: Consider purchasing energy-efficient and environmentally safe vehicles and machinery.	<u>Consistent.</u> The proposed project would incorporate all applicable conservation measures and technologies into project design, and would meet all the State's standards for building energy efficiency. Refer to Section 5.14, Electricity and Natural Gas , for a discussion on impacts and mitigation measures related to energy.
Policy 2-6.1: Retain and maintain the quality and health of existing landscape in the public open spaces (sidewalks, alleys, parks, civic and cultural facilities, and at schools).	<u>Consistent.</u> All landscaping and irrigation systems and plans shall conform to the requirements of the LAMC Title 13, Public Services, Chapter 13.05, Water Efficient Landscaping and the <i>Los Alamitos Medical Center Specific Plan</i> . A California licensed landscape architect shall prepare all landscape drawings and plans, and oversee the installation of all plantings and landscape materials within the Specific Plan Area. Furthermore, a landscape plan for the campus shall be provided at the time of site plan review for review and approval by the Community Development Director. The landscape area requirement may include setback areas and other unused areas of the site that are not intended for future use.



**Los Alamitos Medical Center Specific Plan
Program Environmental Impact Report**

**Table 5.1-1 (continued)
Consistency with Applicable General Plan Goals and Policies**

Applicable <i>General Plan</i> Implementing Goals and Policies	Consistency of Proposed Project
Policy 2-6.2: Encourage property owners to both maintain and promote landscaping on developed sites.	<u>Consistent.</u> All landscaping and irrigation systems and plans shall conform to the requirements of the <i>LAMC</i> and the <i>Los Alamitos Medical Center Specific Plan</i> . A California licensed landscape architect shall prepare all landscape drawings and plans, and oversee the installation of all plantings and landscape materials within the Specific Plan Area. Furthermore, a landscape plan for the campus shall be provided at the time of site plan review for review and approval by the Community Development Director. The landscape area requirement may include setback areas and other unused areas of the site that are not intended for future use.
Policy 2-6.3: Encourage developers to incorporate mature and specimen trees and other significant vegetation, which may exist on a site into the design of a development project for that site.	<u>Consistent.</u> All landscaping and irrigation systems and plans shall conform to the requirements of the <i>LAMC</i> and the <i>Los Alamitos Medical Center Specific Plan</i> . A California licensed landscape architect shall prepare all landscape drawings and plans, and oversee the installation of all plantings and landscape materials within the Specific Plan Area. Furthermore, a landscape plan for the campus shall be provided at the time of site plan review for review and approval by the Community Development Director. The landscape area requirement may include setback areas and other unused areas of the site that are not intended for future use.
SAFETY ELEMENT	
Goal One: Protect residents and property from natural disasters, fire, and crime.	<u>Consistent.</u> The proposed project was designed such that hazards would not threaten proposed structures or future hospital residents and employees. The proposed project would adhere to all applicable recommendations related to seismic safety as well as comply with all applicable building code requirements. The proposed project would incorporate all recommendations and requirements of the City Police Department and Orange County Fire Authority (OCFA). The City's <i>Emergency Operations Plan (EOP)</i> addresses the jurisdictions planned response to natural disasters and public safety emergency situations. According to the <i>General Plan</i> , the <i>EOP</i> is activated immediately upon the existences or declaration of a state of emergency for the state or nation, or locally if placed into effect by City officials. Furthermore, prior to the construction and operation of the proposed project, review and approval is required at the State level from the OSHPD and DHS as part of the approval and licensing process for hospitals outside of the purview of the City of Los Alamitos. Refer to Section 5.6, Geology and Seismic Hazards ; Section 5.7, Hazards and Hazardous Materials ; Section 5.8, Hydrology, Drainage, and Water Quality ; Section 5.9, Fire Protection ; and Section 5.10, Police Protection ; for a discussion of impacts and mitigation measures related to natural disasters, fire, and crime.
Policy 3-1.1: Take all necessary steps to be prepared for a major disaster.	<u>Consistent.</u> The proposed project was designed such that hazards would not threaten proposed structures or future hospital residents and employees. The proposed project would adhere to all applicable recommendations related to seismic safety as well as comply with all applicable building code requirements. The proposed project would incorporate all recommendations and requirements of the City Police Department, Fire Department, and OCFA. The City's <i>EOP</i> addresses



Table 5.1-1 (continued)
Consistency with Applicable General Plan Goals and Policies

Applicable <i>General Plan</i> Implementing Goals and Policies	Consistency of Proposed Project
	the jurisdictions planned response to natural disasters and public safety emergency situations. According to the <i>General Plan</i>, the <i>EOP</i> is activated immediately upon the existences or declaration of a state of emergency for the state or nation, or locally if placed into effect by City officials. Furthermore, prior to the construction and operation of the proposed project, review and approval is required at the State level from the OSHPD and DHS as part of the approval and licensing process for hospitals outside of the purview of the City of Los Alamitos. Refer to <u>Section 5.6, Geology and Seismic Hazards</u>; <u>Section 5.7, Hazards and Hazardous Materials</u>; <u>Section 5.8, Hydrology, Drainage, and Water Quality</u>; <u>Section 5.9, Fire Protection</u>; and <u>Section 5.10, Police Protection</u>; for a discussion of impacts and mitigation measures related to natural disasters, fire, and crime.
Policy 3-2.1: Take all necessary steps to be prepared for a major earthquake.	<u>Consistent.</u> The project site is located in tectonically active Southern California. However, the project site is not located on an Alquist-Priolo Earthquake Fault Zoning Map. The proposed project would meet or exceed all applicable seismic safety design standards, subject to review and approval by the City of Los Alamitos Building and Safety Division. The proposed project would adhere to all applicable recommendations related to seismic safety as well as comply with all applicable building code requirements. The City's <i>EOP</i> addresses the jurisdictions planned response to natural disasters and public safety emergency situations. According to the <i>General Plan</i>, the <i>EOP</i> is activated immediately upon the existences or declaration of a state of emergency for the state or nation, or locally if placed into effect by City officials. Furthermore, prior to the construction and operation of the proposed project, review and approval is required at the State level from the OSHPD and DHS as part of the approval and licensing process for hospitals outside of the purview of the City of Los Alamitos. Refer to <u>Section 5.6, Geology and Seismic Hazards</u>, and <u>Section 5.7, Hazards and Hazardous Materials</u>, for a discussion of impacts and mitigation measures related to natural disasters.
Policy 3-3.1: Take appropriate steps to protect new and existing development from flooding.	<u>Consistent.</u> Flood hazards related to storm events generally are described in terms of the "100-year flood." As its name implies, the 100-year flood is the largest flood event, which may be expected to occur within a 100-year period. This flood is considered a severe flood but one that can be reasonably predicted and therefore reasonably mitigated. According to the <i>General Plan</i>, the project site is not located in a flood zone. Additionally, the project does not propose any residential uses. However, according to the <i>County of Orange General Plan</i>, the Santa Ana River poses as a potential flood threat for the City. According to the <i>General Plan</i>, potential damage to the City from a failure of the Prado Dam on the Santa Ana River is no longer an issue due to recent dam upgrades. The City's <i>EOP</i> addresses the jurisdictions planned response to natural disasters and public safety emergency situations. According to the <i>General Plan</i>, the <i>EOP</i> is activated immediately upon the existences or declaration of a state of emergency for the state or nation, or locally if placed into effect by City officials. Furthermore, prior to the construction and operation of the



**Los Alamitos Medical Center Specific Plan
Program Environmental Impact Report**

**Table 5.1-1 (continued)
Consistency with Applicable General Plan Goals and Policies**

Applicable <i>General Plan</i> Implementing Goals and Policies	Consistency of Proposed Project
	proposed project, review and approval is required at the State level from the OSHPD and DHS as part of the approval and licensing process for hospitals outside of the purview of the City of Los Alamitos. Refer to Section 5.8, Hydrology, Drainage, and Water Quality for a discussion of impacts and mitigation measures related to flooding.
Policy 3-4.1: Maintain and expand programs that protect life and property from fire.	<u>Consistent</u> . The proposed project would incorporate all recommendations and requirements of the City Police Department and Orange County Fire Authority. Refer to Section 5.9, Fire Protection , and Section 5.10, Police Protection , for a discussion of impacts and mitigation related to fire hazards, fire protection services, and crime.
Policy 3-5.1: Continue to work closely with the Police Department and community groups to address crime problems and areas in the City.	<u>Consistent</u> . The proposed project would incorporate all recommendations and requirements of the City Police Department. Refer to Section 5.10, Police Protection , for a discussion of impacts and mitigation related to crime.
CIRCULATION AND TRANSPORTATION	
Goal One: Provide an efficient network of streets, bikeways, and pedestrian areas which promote the safe and efficient movement of people and goods.	<u>Consistent</u> . Kaylor Street will be vacated and reconfigured as a driveway access into the site, providing access to the new parking structure and surface parking lots. On the north, Kaylor Street will extend south from Catalina Street and serve a private road for ambulances to the new emergency room and access for employees and visitors. Kaylor Street will terminate in a cul-de-sac constructed to City and OCFA standards. No improvements are anticipated to be required for Katella Avenue other than frontage improvements associated with the new driveway entry. The proposed project would maintain existing pedestrian and bicycle access via sidewalks and bike lanes along adjacent roadways to allow pedestrian and cyclist mobility and access to the project site. Refer to Section 5.3, Traffic , for a discussion of impacts and mitigation measures related to traffic.
Goal Two: Provide adequate on-street parking and loading facilities for businesses and public facilities throughout the City.	<u>Consistent</u> . A total of 1,943 on-site parking spaces would be provided within the Specific Plan Area at buildout, configured in surface and structures parking areas. The total parking required at buildout is 1,934 spaces. Total parking spaces provided at buildout is 1,943 spaces, exceeding the requirement by 9 total spaces. Refer to Section 5.3, Traffic , for a discussion of impacts and mitigation measures related to parking and the proposed <i>Draft Los Alamitos Medical Center Specific Plan</i> .
Goal Three: Maintain safe and adequate infrastructure services.	<u>Consistent</u> . The project shall maintain safe and adequate infrastructure services for domestic water service, sanitary sewer service, and storm drain service. Refer to Section 5.8, Hydrology, Drainage, and Water Quality ; Section 5.11, Water ; Section 5.12, Wastewater ; and Section 5.14, Electricity and Natural Gas , for discussion of impacts and mitigation measures related to infrastructure services.
Policy 5-1.1: Maintain a Level of Service "D" or better on all City arterials and at intersections.	<u>Consistent</u> . Project implementation could increase vehicular movement in the vicinity of this project site during AM and PM peak hour periods. Forecast year 2013 with project phase 1 conditions AM & PM peak hour LOS would not result in a significant impact nor would forecast year 2035 with project conditions. Refer to Section 5.3, Traffic , for a discussion of impacts and mitigation measures related to



Table 5.1-1 (continued)
Consistency with Applicable General Plan Goals and Policies

Applicable <i>General Plan</i> Implementing Goals and Policies	Consistency of Proposed Project
	traffic and refer to the <i>Los Alamitos Medical Center Specific Plan Traffic Impact Analysis, Table 9 and 12, Appendix D.</i>
Policy 5-2.1: Protect and preserve residential neighborhoods from the intrusion of cut-through traffic.	<u>Consistent.</u> The proposed project would not create cut-through traffic. Refer to <u>Section 5.3, Traffic</u> , for a discussion of impacts and mitigation measures related to traffic.
Policy 5-4.1: Encourage walking and bicycling as attractive alternatives to vehicular transportation.	<u>Consistent.</u> The proposed project would maintain existing pedestrian and bicycle access via sidewalks and bike lanes along adjacent roadways to allow pedestrian and cyclist mobility and access to the project site.
Policy 5-4.2: Adequately illuminate and landscape City sidewalks and public areas to encourage pedestrian-oriented activities.	<u>Consistent.</u> Pedestrian scale lighting should be present at all entries, plazas, courtyards, parking lots, pedestrian ways, and other areas where nighttime pedestrian activity is expected. Refer to <i>Draft Los Alamitos Medical Center Specific Plan</i> Section 5 Design Guidelines, Section D Landscaping, 3 Lighting Design.
Policy 5-4.3: Support alternatives to single-occupancy vehicle use.	<u>Consistent.</u> The proposed project would maintain existing pedestrian and bicycle access via sidewalks and bike lanes along adjacent roadways to allow pedestrian and cyclist mobility and access to the project site. Furthermore, as deemed necessary by the City, the project's proposed parking areas would provide facilities for high-occupancy vehicles.
Policy 5-5.1: Encourage owners of substantially remodeled commercial and industrial centers to provide adequate on-site parking.	<u>Consistent.</u> Total parking required at buildout is 1,934 spaces. Total parking spaces provided at buildout is 1,943 spaces, exceeding the requirement by 9 total spaces. Refer to the <i>Draft Los Alamitos Medical Center Specific Plan</i> .
Policy 5-5.2: Provide adequate on-site parking at civic facilities (parks, City Hall, Los Alamitos, Community Center, etc.).	<u>Consistent.</u> A total of 1,943 on-site parking spaces would be provided within the Specific Plan Area at buildout, configured in surface and structures parking areas. On-street parking is also present on the adjacent public streets. This on-street parking does not count towards meeting the parking needs for the site. Refer to <u>Section 5.3, Traffic</u> , for a discussion of impacts and mitigation measures related to traffic.
Policy 5-7.1: Work with the Rossmoor-Los Alamitos Sewer District so that residents and businesses have adequate and efficient sewage waste disposal services.	<u>Consistent.</u> Sanitary sewer service is currently provided to Los Alamitos Medical Center campus by the Rossmoor/Los Alamitos Area Sewer District. Sewer treatment is provided by the Orange County Sanitation District treatment plant in Huntington Beach. Existing sewer lines ranging from eight to 30 inches are located in Cherry, Catalina, Kaylor, Kyle, Florista, and Bloomfield Streets, and Katella Avenue. Existing easements would be retained and new easements dedicated to meet district requirements. Proposed new structures would connect with existing sewer lines via lateral connections to individual buildings. Additionally, subsurface storage tanks would be located within the campus (adjacent to Kaylor Street near new Hospital Building 1) to provide for emergency sewage capacity in the case of temporary sewer service interruption per State requirements for hospitals. Refer to <u>Section 5.12, Wastewater</u> , for discussion of impacts and mitigation measures related to wastewater services.



**Los Alamitos Medical Center Specific Plan
Program Environmental Impact Report**

**Table 5.1-1 (continued)
Consistency with Applicable General Plan Goals and Policies**

Applicable <i>General Plan</i> Implementing Goals and Policies	Consistency of Proposed Project
Policy 5-7.2: Work with the Southern California Water Company so that residents and businesses have quality drinking water and adequate water supply for fire protection and landscaping needs.	<u>Consistent.</u> Domestic water is provided to the Medical Center by the Golden State Water Company. Existing water lines ranging from six to eight inches are located in Catalina Street, Kaylor Street, Florista Street, Bloomfield Avenue, and Katella Avenue. Existing easements would be retained and new easements dedicated to meet district requirements. It is anticipated that the proposed medical facilities within the Specific Plan Area would tie into existing pipes in adjacent streets. Proposed new buildings would be served by the existing water lines through a series of laterals. Additionally, subsurface water storage would be located within the campus (located adjacent to Kaylor Street near new Hospital Building 1) to provide for emergency water supply in the case of temporary water service interruption per State requirements for hospitals. Future development within the project site would increase the demand for water resources. All landscaping and irrigation systems and plans shall conform to the requirements of the LAMC and incorporate drought tolerant plants. The proposed project would incorporate all recommendations and requirements of the Golden State Water Company and Orange County Fire Authority. Refer to <u>Section 5.9, Fire Protection</u>, for a discussion of impacts and mitigation related to fire hazards and fire protection services. Refer to <u>Section 5.11, Water</u>, for a discussion of impacts and mitigation measures related to water supply and demand, and fire flow.
Policy 5-7.3: Work with the Los Angeles Flood Control District and Orange County Environmental Management Agency so that residents and businesses are adequately protected from flooding.	<u>Consistent.</u> According to the <i>General Plan</i>, the project site is not located in a flood zone; refer to <i>General Plan</i> Figure 3-2, <u>Flood Zone Map</u>, which was derived from FEMA Map, September 1989. Additionally, the project does not propose any residential uses. However, according to the <i>County of Orange General Plan</i>, the Santa Ana River poses as a potential flood threat for the City. According to the <i>General Plan</i>, potential damage to the City from a failure of the Prado Dam on the Santa Ana River is no longer an issue due to recent dam upgrades. The City's <i>EOP</i> addresses the jurisdictions planned response to natural disasters and public safety emergency situations. According to the <i>General Plan</i>, the <i>EOP</i> is activated immediately upon the existences or declaration of a state of emergency for the state or nation, or locally if placed into effect by City officials. Refer to <u>Section 5.7, Hazards and Hazardous Materials</u>, and <u>Section 5.8, Hydrology, Drainage, and Water Quality</u>, for a discussion of impacts and mitigation measures related to flooding.
Policy 5.7-4: Work with safety agencies, such as the Orange County Fire Authority and the AFRC Fire Department, so that residents and businesses are adequately protected from fires and other natural disasters.	<u>Consistent.</u> The proposed project was designed such that hazards would not threaten proposed structures or future hospital residents and employees. The proposed project would adhere to all applicable recommendations related to seismic safety as well as comply with all applicable building code requirements. The proposed project would incorporate all recommendations and requirements of the Orange County Fire Authority. The City's <i>Emergency Operations Plan (EOP)</i> addresses the jurisdictions planned response to natural disasters and public safety emergency situations. According to the <i>General Plan</i>, the <i>EOP</i> is activated immediately upon the existences or declaration of a state of emergency for the state or nation, or locally if placed into effect



**Los Alamitos Medical Center Specific Plan
Program Environmental Impact Report**

**Table 5.1-1 (continued)
Consistency with Applicable General Plan Goals and Policies**

Applicable <i>General Plan</i> Implementing Goals and Policies	Consistency of Proposed Project
	by City officials. Refer to <u>Section 5.6, Geology and Seismic Hazards</u> ; <u>Section 5.7, Hazards and Hazardous Materials</u> ; <u>Section 5.8, Hydrology, Drainage, and Water Quality</u> ; and <u>Section 5.9, Fire Protection</u> , for a discussion of impacts and mitigation measures related to natural disasters and fire.
NOISE ELEMENT	
Goal One: Protect noise sensitive land uses, including residences, schools, hospitals, libraries, churches and convalescent homes from high noise levels from both existing and future noise sources.	<u>Consistent</u> . The impacts of project-related noise have been evaluated as part of the environmental review process for the proposed project and shall comply with the <i>General Plan</i> Noise Element, <i>Municipal Code</i> Section 17.24.020(d) requirements, recommended mitigation measures, and the acoustical <i>Significance Criteria</i> and <i>Incremental Effects</i> . Existing and future noise levels have been evaluated in the project's acoustical analysis. Noise sources would be reduced, where appropriate, to protect sensitive receptors. Construction noise levels would be temporary and masked by intervening structures and traffic along adjacent streets. Furthermore, off-site buildings, streets, trees, and vegetation would serve as buffers between sensitive receptors. Refer to <u>Section 5.5, Noise</u> , for a discussion of impacts and mitigation measures related to noise.
Policy 6-1.1: Noise mitigation measures for future development should comply with the standards included in the City of Los Alamitos Noise Element.	<u>Consistent</u> . The impacts of project-related noise have been evaluated as part of the environmental review process for the proposed project and shall comply with the <i>General Plan</i> Noise Element, <i>Municipal Code</i> Section 17.24.020(d) requirements, recommended mitigation measures, and the acoustical <i>Significance Criteria</i> and <i>Incremental Effects</i> . Refer to <u>Section 5.5, Noise</u> , for a discussion of impacts and Mitigation Measures NOI-1, NOI-2, and NOI-3.
Policy 6-2.1: Potential noise impacts due to stationary sources should be mitigated in the planning stage.	<u>Consistent</u> . The impacts of project-related noise have been evaluated as part of the environmental review process for the proposed project and shall comply with the <i>General Plan</i> Noise Element, <i>Municipal Code</i> Section 17.24.020(d) requirements, recommended mitigation measures, and the acoustical <i>Significance Criteria</i> and <i>Incremental Effects</i> . The Central Plant is located approximately 386 feet northwest of the nearest sensitive receptors. Furthermore, the off-site buildings, Catalina Street, and street trees and vegetation would serve as a buffer between the project site and these residential uses. Refer to <u>Section 5.5, Noise</u> , for a discussion of impacts and Mitigation Measure NOI-1 which states stationary noise sources shall be located as far from adjacent receptors as possible, and they shall be muffled and enclosed within temporary sheds, incorporated insulations barriers, or other measures to the extent feasible.
ECONOMIC DEVELOPMENT ELEMENT	
Goal One: Enhance the fiscal viability of Los Alamitos by promoting retention and expansion of existing revenue bases, and development of new City revenue sources.	<u>Consistent</u> . The proposed project includes the expansion of the existing Los Alamitos Medical Center campus which would balance the growing population and availability of local medical services. The proposed project proposes an additional 164 hospital beds, two new hospital buildings, one new medical office building, a new central plant, and an additional 849 parking spaces. The proposed project would provide new jobs in the City, along with increased tax revenue.



Table 5.1-1 (continued)
Consistency with Applicable General Plan Goals and Policies

Applicable <i>General Plan</i> Implementing Goals and Policies	Consistency of Proposed Project
Policy 7-1.2: Actively promote expansion and retention of existing businesses.	<u>Consistent.</u> The proposed project includes the expansion of the existing Los Alamitos Medical Center campus which would balance the growing population and availability of local medical services. The existing medical center provides medical care to over 100,000 patients per year, with over 88-percent of admissions from within an eight-mile radius. The facility is a significant local employer and supports local services through utility, property, "first functional use" and sales taxes. With the changing trends in medical care and hospital design, an update of the hospital facilities is needed, to provide a modernized emergency room and reduced bed occupancy in hospital rooms, providing a higher percentage of low- or single-occupancy rooms. The proposed project proposes an additional 164 hospital beds, two new hospital buildings, one new medical office building, a new central plant, and an additional 849 parking spaces. The proposed expanded medical facilities would provide valuable medical services to the public and stimulate the local economy by providing jobs to residents in the City and expanded tax revenues.

Through the project application process, the proposed project would be reviewed by the City to conform consistency to the *General Plan* and other regulatory documents (i.e., *LAZC*). Additionally, based upon the analysis presented above in *Table 5-1.1*, implementation of the proposed project would not conflict with any applicable goals or policies of the *General Plan*. Furthermore, prior to the construction and operation of the existing hospital building's reconfiguration, the two planned hospital buildings, and the TotalCare Pavilion, review and approval is required at the State level from the OSHPD and CDPH as part of the approval and licensing process for hospitals outside of the purview of the City of Los Alamitos. Therefore, the proposed project would be consistent with the applicable goals, and policies of the *General Plan*, and impacts would be less than significant in this regard.

Mitigation Measures: No mitigation measures are required.

Level of Significance After Mitigation: Not Applicable.

Los Alamitos Zoning Code

- ◆ **THE PROPOSED PROJECT COULD CONFLICT WITH THE STANDARDS AND REQUIREMENTS OF THE CITY OF LOS ALAMITOS ZONING CODE.**

Level of Significance Before Mitigation: Less Than Significant Impact.

Impact Analysis: To ensure consistency between the proposed Specific Plan and the *LAZC* (Title 17, Zoning, of the *City of Los Alamitos Municipal Code*), the *LAZC* would be revised alongside the adoption of the Specific Plan. More specifically, the proposed Zone Change would establish the boundaries and replace the Specific Plan Area's existing zoning districts of Community Facilities (CF), Commercial Office (CO), and Planned Light Industrial (PM) with the



Los Alamitos Medical Center Specific Plan district. The *Los Alamitos Medical Center Specific Plan* would be both a regulatory and policy document needed to be adopted by the City of Los Alamitos by ordinance.

Additionally, the existing zoning district standards and regulations would be replaced with the Specific Plan's development standards and design standards/guidelines. As previously noted, Specific Plan Section 4, *Development Regulations*, includes development regulations for all uses included within the Specific Plan. They are precise specifications for such things as allowable uses, temporary uses and special events, conditional uses, intensity, general development standards, height, setbacks, building separation, landscaping requirements, fencing, parking requirements, signage, and development standards modifications. Application of these regulations is specifically intended to provide for the orderly development of the site and effective fulfillment of the project objectives, while protecting the health, safety, and welfare of the employees and users, as well as those of the surrounding community. Specific Plan Section 5, *Design Guidelines*, identifies design guidelines, which provides an overall vision for the redevelopment of the Los Alamitos Medical Center. The guidelines offer design guidance in the areas of architecture, landscape, and public spaces to ensure a certain level of aesthetic quality and functional efficiency, as well as compatibility between the project's components and surrounding community. The intent of the design guidelines is to encourage the highest level of design quality and creativity to ensure an atmosphere of wellness. Specific Plan Chapter 1, *Introduction*, establishes the goal that the City would enforce, in order to implement the Specific Plan. The goals are intended to serve as a benchmark for the Specific Plan. During project review and analysis, the goals can be used to determine if future development proposals are supportive of the spirit and intent of the Specific Plan. The goals also provide the foundation for the Development Plan, Development Regulations, and the Design Guidelines.

Implementation of the proposed Specific Plan would include the provision of an additional 164 hospital beds, two new hospital buildings, one new medical office building, a new central plant, and an additional 849 parking spaces. The proposed development would be located within an established site in an urbanized area, consistent with the existing on-site and surrounding established land use patterns. No expansion beyond the existing property boundaries would occur with the proposed project. The development review process would ensure that the proposed project would be consistent with the applicable zoning standards and other standards set forth by the Specific Plan. Thus, the proposed project would be less than significant in this regard.

Mitigation Measures: No mitigation measures are required.

Level of Significance After Mitigation: Not Applicable.

Airport Environs Land Use Plan

- ◆ **THE PROPOSED PROJECT COULD CONFLICT WITH THE STANDARDS AND REQUIREMENTS OF THE AIRPORT ENVIRONS LAND USE PLAN.**

Level of Significance Before Mitigation: Less Than Significant Impact.



Impact Analysis: The Airport Land Use Commission for Orange County has adopted an Airport Environs Land Use Plan that seeks to protect the public from adverse effects of aircraft noise to ensure that people and facilities are not concentrated in areas susceptible to aircraft accidents and that no structures or activities adversely affect navigable airspace. The proposed project is within the Airport Land Use Commission *Airport Environs Land Use Plan for Joint Forces Training Base Los Alamitos*. The proposed project is located within the Federal Aviation Regulation Part 77 Notification Area for Joint Forces Training Base; refer to Exhibit 5.1-1. As described in the Airport Environs Land Use Plan for Joint Forces Training Base, buildings that rise to the height of the horizontal surface, 150 feet above ground level, would violate the established approach criteria for the primary Joint Forces Training Base runway. In addition, with respect to building heights, development proposals which include the construction or alteration of structures more than 200 feet above ground level, require filing with the Federal Aviation Administration (FAA) and review by the Airport Land Use Commission. The proposed heights for both Hospital Building 1 and Hospital Building 2 are 68'-0". All other proposed buildings are below 68'-0". Therefore, the proposed project would not violate the established approach criteria for the runway, nor require a filing with FAA or review by Airport Land Use Commission. Furthermore, the proposed project is not located within the Joint Forces Training Base Los Alamitos Impact Zones; refer to Exhibit 5.1-2. Therefore, the proposed project would be consistent with the standards and requirements of the Airport Environs Land Use Plan and impacts would be less than significant in this regard.

Mitigation Measures: No mitigation measures are required.

Level of Significance After Mitigation: Not Applicable.

5.1.5 CUMULATIVE IMPACTS AND MITIGATION MEASURES

- **IMPLEMENTATION OF THE PROPOSED PROJECT AND OTHER RELATED CUMULATIVE PROJECTS COULD RESULT IN CUMULATIVELY CONSIDERABLE IMPACTS INVOLVING CONFLICTS WITH APPLICABLE LAND USE PLANS, POLICIES, OR REGULATIONS.**

Level of Significance Before Mitigation: Less Than Significant Impact.

Impact Analysis: The basis for cumulative analysis is presented in Section 4.0, Basis of Cumulative Analysis. Development of the proposed project, in combination with the identified cumulative projects located within the City of Los Alamitos, Seal Beach, and Cypress, would not result in cumulative land use impacts. As other projects are implemented Citywide and within adjacent cities, projects would be evaluated on a project-by-project basis. Each project would undergo a similar plan review process as the proposed project in order to determine potentially land use planning policy and regulation conflicts. As part of the review process, each new project would be required to demonstrate compliance with the provisions of the applicable zoning district(s). Each project would be analyzed independent of other land uses, as well as within the context of existing and planned developments to ensure that the goals and policies of the *General Plan* and *Municipal Code* are upheld. Furthermore, relevant goals and policies from the *General Plan* Elements were reviewed for



project consistency purposes in *Table 5.1-1*. Analysis has concluded that the proposed project would result in a less than significant cumulative impact in this regard.

Mitigation Measures: No mitigation measures are required.

Level of Significance After Mitigation: Not Applicable.

5.1.6 SIGNIFICANT UNAVOIDABLE IMPACTS

Implementation of the proposed project would result in less than significant project and cumulative impacts related to land use. As such, no significant unavoidable impacts would result from implementation of the Los Alamitos Medical Center Specific Plan.

5.1.7 SOURCES CITED

Airport Land Use Commission Letter correspondence, Kari A. Rigoni, Executive Officer, dated May 27, 2010.

City of Los Alamitos, *City of Los Alamitos 2010 General Plan*, adopted March 1989.

City of Los Alamitos, *City of Los Alamitos 2010 General Plan Background Technical Reports*, adopted March 1989.

City of Los Alamitos, *City of Los Alamitos 2010 General Plan Initial Study/Negative Declaration (IS/ND)*, March 1989.

City of Los Alamitos, *Los Alamitos Municipal Code and Zoning Code*, adopted 1995.
RBF Consulting, *Draft Los Alamitos Medical Center Specific Plan*, February 2010.

Office of Planning and Research, California, *General Plan Guidelines*, October 2003.

SCAG Region: *Compass Blueprint Case Study, Downtown San Bernardino*, Southern California Association of Governments, 2008.



5.2 Aesthetics



5.2 AESTHETICS

This section describes the existing aesthetic environment and analyzes potential project impacts to the aesthetic character/quality upon project implementation, and the introduction of new sources of light and glare are also included in this section. Information in this section was also obtained from the *City of Los Alamitos 2010 General Plan (General Plan)*; *City of Los Alamitos 2010 General Plan Background Technical Reports (GP BTR)*; *City of Los Alamitos 2010 General Plan Initial Study/Negative Declaration (IS/ND)*; *Los Alamitos Municipal Code (LAMC)*; *Los Alamitos Zoning Code (LAZC)*; the *Draft Los Alamitos Medical Center Specific Plan (Specific Plan or proposed project)*; and through a site visit conducted by RBF Consulting on November 16, 2009.

5.2.1 REGULATORY SETTING

CITY OF LOS ALAMITOS GENERAL PLAN

The *General Plan* is a comprehensive long-range plan for the City's physical development, which is used to guide future land use decisions. In essence, the *General Plan* serves as the blueprint for future growth and development. The *General Plan* is comprised of seven State-mandated elements (Land Use, Circulation and Transportation, Housing, Conservation, Open Space and Recreation, Noise and Safety) and two optional elements (Economic Development and Growth Management). The following goals, issues, and policies set forth in the *General Plan* pertain to changing character/quality within the City.

Land Use Element

- Goal One: Preserve and promote land uses which reflect Los Alamitos' small-town character with due regard for economic development and future growth potential.
 - Issue One: Compatibility among land uses in proximity to one another is of primary importance.
 - Policy 1-1.1: Employ accepted planning and engineering standards and practices as the basis for determining the compatibility of new land uses with existing uses.
 - Policy 1-1.2: Adopt feasible mitigation measures throughout the land use decision-making process to reduce impacts of new or expanded uses on existing residential neighborhoods.
 - Policy 1-1.3: Maintain consistency among General Plan Policies and Programs, the Zoning Ordinance, and related development regulations.
 - Policy 1-1.4: Encourage commercial, office, and industrial uses which are compatible with surrounding residential neighborhoods.



- Policy 1-1.5: Permit new residential construction only in areas where such development will not adversely impact conforming commercial and industrial uses.
- Goal Three: Promote and upgrade the quality of the City's commercial, industrial, and open space areas.
 - Issue Three: Commercial and industrial buildings and related improvements along the City's arterial streets lack visual unity and cohesion.
 - Policy 1-3.1: Apply appropriate and consistent standards in land use and site plan approvals to achieve continuity and cohesion in the physical development of the City.
 - Policy 1-3.2: Encourage consolidation of substandard commercially and industrially-zoned parcels whenever feasible.
 - Issue Six: Retain and enhance the small town character of Los Alamitos.
 - Policy 1-6.1: Develop and implement land use programs which address and promote the architectural and site design characteristics associated with small town character.

Conservation Element

- Goal Six: Preserve and enhance the quality of the City's landscaped environment.
 - Issue Six: Vegetation on both public and private property provides significant benefits.
 - Policy 2-6.1: Retain and maintain the quality and health of existing landscape in the public open spaces (sidewalks, alleys, parks, civic and cultural facilities, and at schools).
 - Policy 2-6.2: Encourage property owners to both maintain and promote landscaping on developed sites.
 - Policy 2-6.3: Encourage developers to incorporate mature and specimen trees and other significant vegetation, which may exist on a site into the design of a development project for that site.
 - Policy 2-6.5: Encourage procedures that optimize the useful life of all City owned and maintained trees and plants while ensuring that these trees and plants do not damage the City's infrastructure.



Refer to Table 5.1-1, Consistency with City of Los Alamitos General Plan Elements, in Section 5.1, Land Use, for a detailed consistency analysis between the project and the *General Plan* goals, issues, and policies.

CITY OF LOS ALAMITOS MUNICIPAL CODE

The *Los Alamitos Municipal Code (LAMC)* consists of all the regulatory, penal, and administrative ordinances of the City of Los Alamitos. It is the method the City uses to implement control of land uses, in accordance with *General Plan* goals and policies.

Title 17 of the City of *Los Alamitos Municipal Code (LAMC)* is referred to as the “*Los Alamitos Zoning Code*” (*LAZC*). The *LAZC* was adopted to promote the growth of the City in an orderly manner and to promote and protect the public health, safety, and general welfare of residents while preserving and enhancing the aesthetic quality of the City. The *LAZC* establishes zoning districts that includes the territory within the City’s boundaries. Within the established zoning districts it is unlawful to erect, construct, alter, or maintain buildings or uses of land that are not in conformance with the requirements and standards established in the *LAZC*. The purpose of the *LAZC* is to implement the policies of the *General Plan* by classifying and regulating the uses of land and structures within the City of Los Alamitos.

The zones established in the *LAZC* are illustrated on the Zoning Map; refer to Exhibit 5.1-2, Zoning Map. Zoning for the property is Community Facilities (CF), Commercial Office (CO), and Planned Light Industrial (PM).

Title 15 (Buildings and Construction) regulates the erection, construction, enlargement, alteration, repair, moving, removal, demolition, conversion, occupancy, equipment, use, height, area and maintenance of all buildings and/or structures in the City.

Title 8 (Health and Safety), Chapter 8.48, Lighting Performance Standards, Section 17.14.040, Light and Glare, and Section 17.16.050, Exterior Lighting, regulates outdoor lighting performance standards, materials and methods of installation, light and glare, and overall lighting guidelines.

5.2.2 ENVIRONMENTAL SETTING

Locally, the 18.3 gross-acre project site is on Katella Avenue. The project site is bordered by Katella Avenue on the south, Cherry Street on the west, Catalina and Florista Streets on the north, and Bloomfield Street on the east. Kaylor Street traverses the western portion of the Los Alamitos Medical Center campus, connecting Catalina Street on the north and Katella Avenue on the south. Land uses surrounding the project site include primarily commercial and office/industrial land uses to the west, with an area of residential to the northwest; commercial and industrial land uses and a water facility to the north; commercial and office land uses to the east; and commercial and residential land uses to the south.



EXISTING VISUAL CHARACTER/QUALITY

Site Conditions

Presently, the project site is occupied with the Los Alamitos Medical Center campus, which consists of a two-story hospital with 167 beds, three medical office buildings ranging from 2 to 4 stories in height, a TotalCare Pavilion, and surface parking; refer to *Exhibit 5.2-1a* through *Exhibit 5.2-1c, Existing On-Site Photographs*. A small administration/warehouse structure is also part of the Medical Center campus on Catalina Street at the extreme north end. A small surface parking area presently used for employee parking is located north of Florista Street. A total of 1,094 surface parking spaces are present, located within seven parking lots throughout the Medical Center campus. The existing site is generally flat in nature, with an elevation of approximately 27.5 feet above mean sea level on its eastern edge and an elevation of 25.5 feet along its western edge near the intersection of Katella Avenue and Cherry Street, an overall slope of approximately 0.2 percent.

Existing Views

Views from Off-Site Uses North onto Project Site

Existing northern views of the project site from commercial and residential uses to the south across Katella Avenue include:

- 1- to 3-story, 44'-6" tall TotalCare Pavilion
- 4-story, 58'-0" tall MOB 2
- 2-story, 31'-0" tall MOB 1
- 3-story, 44'-6" tall MOB 3
- Kaylor Street
- surface parking lots with mature trees
- street trees and vegetation align the public right-of-way along Katella Avenue adjacent to the project site

Views from Off-Site Uses East onto Project Site

Existing eastern views of the project site from residential, commercial and office/industrial uses to the west across Cherry Street include:

- 1- to 2-story, 30'-9" tall Main Hospital Building
- 3-story, 44'-6" tall MOB 3,
- the 2-story, 31'-0" tall MOB 1
- surface parking lot
- street trees and vegetation align the public right-of-way along Cherry Street



View of existing Main Hospital building (3751 Katella Avenue).



View of existing Main Hospital Building (3751 Katella Avenue).



View of existing Hospital Lobby/Patient Drop Off.



View of existing Total Care Pavilion (3951 Katella Avenue).



View of existing Total Care Pavillion (3951 Katella Avenue).



View of existing M.O.B.2 (3801 Katella Avenue).



View of existing M.O.B.2 (3801 Katella Avenue).



View of existing M.O.B.2 (3801 Katella Avenue).



View of existing M.O.B.3 (3771 Katella Avenue).



View of existing M.O.B.3 (3771 Katella Avenue).



View of existing M.O.B.1 (3791 Katella Avenue).



View of existing M.O.B.1 (3791 Katella Avenue).



Views from Off-Site Uses South onto Project Site

Existing southern views of the project site from commercial and industrial uses to the north across Catalina Street include:

- 1-story, 16'-6" tall Administration and Warehouse Building
- central surface parking area
- Kaylor Street
- street trees and vegetation align the public right-of-way along Catalina Street

Views from Off-Site Uses West onto Project Site

Existing western views of the project site from commercial and office uses to the east across Bloomfield Street include:

- Florista Street
- 1- to 3-story, 44'-6" tall TotalCare Pavilion
- street trees and vegetation align the public right-of-way along Bloomfield Street

Light and Glare

Lighting effects are associated with the use of artificial light during the evening and nighttime hours. There are two primary sources of light: light emanating from building interiors passing through windows and light from exterior sources (i.e., street lighting, building illumination, security lighting, parking lot lighting, and landscape lighting). Light introduction can be a nuisance to adjacent residential areas, diminish the view of the clear night sky, and if uncontrolled can disturb wildlife in natural habitat areas. Light spill is typically defined as the presence of unwanted light on properties adjacent to the property being illuminated. With respect to lighting, the degree of illumination may vary widely depending on the amount of light generated, height of the light source, presence of barriers or obstructions, type of light source, and weather conditions.

Glare is primarily a daytime occurrence caused by the reflection of sunlight or artificial light by highly polished surfaces such as window glass or reflective materials and, to a lesser degree, from broad expanses of light-colored surfaces. Perceived glare is the unwanted and potentially objectionable sensation as observed by a person as they look directly into the light source of a luminaire. Daytime glare generation is common in urban areas and is typically associated with buildings with exterior facades largely or entirely comprised of highly reflective glass. Glare can also be produced during evening and nighttime hours by the reflection of artificial light sources such as automobile headlights. Glare-sensitive uses included residences, hotels, transportation corridors, and aircraft landing corridors.

Currently, light and glare are being emitted from the existing Los Alamitos Medical Center campus. Existing sources of light include parking lot lighting, building illumination, and security lighting. Further, as the project site is bordered by Katella Avenue (a major arterial) on the south, car headlights and street and traffic lighting also influence light/glare on the project site and in the surrounding area. The project area experiences lighting typical of urban areas with development



such as residential, commercial, office, and industrial uses existing to the north, east, south, and west of the project site.

5.2.3 SIGNIFICANCE THRESHOLD CRITERIA

The environmental analysis in this section is patterned after the Initial Study Checklist recommended by the *CEQA Guidelines*, as amended, and used by the City of Los Alamitos in its environmental review process, and is contained in Appendix A of this EIR. The Initial Study includes questions relating to aesthetics and visual resources. The issues presented in the Initial Study Checklist have been utilized as thresholds of significance in this section. Accordingly, a project may create a significant environmental impact if one or more of the following occurs:

- Affect a scenic vista (refer to Section 8.0, Effects Found Not To Be Significant).
- Substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway (refer to Section 8.0, Effects Found Not To Be Significant).
- Substantially degrade the existing visual character or quality of the site and its surroundings; and
- Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area.

Based on these standards, the effects of the proposed project have been categorized as either a “less than significant impact” or a “potentially significant impact.” Mitigation measures are recommended for potentially significant impacts. If a potentially significant impact cannot be reduced to a less than significant level through the application of mitigation, it is categorized as a significant unavoidable impact.

5.2.4 PROJECT IMPACTS AND MITIGATION MEASURES

OVERVIEW OF LOS ALAMITOS MEDICAL CENTER SPECIFIC PLAN (PROPOSED PROJECT)

Refer to Section 5.1.4 for a detailed overview of the proposed *Los Alamitos Medical Center Specific Plan*. Below is an overview of key sections of the proposed Specific Plan that pertain to aesthetics: Section 4, Development Regulations, and Section 5, Design Guidelines.

Section 4 - Development Regulations

This section provides: A) General Provisions, B) Land Use Regulations, C) Definitions, and D) Site Development Standards.



Within the Site Development Standards subsection are standards relating to:

- Intensity
- General Development Standards
- Height
- Setbacks
- Building Separation
- Landscaping Requirements
- Fencing
- Parking Requirements
- Signage
- Development Standards Modification

Application of these regulations is specifically intended to provide for the orderly development of the site and effective fulfillment of the project objectives, while protecting the health, safety, and welfare of the employees and users, as well as those of the surrounding community.

Section 5 - Design Guidelines

Section 5 covers:

- Site Planning
- Architecture/Orientation/Massing
- Landscaping

This section identifies design guidelines, which provides an overall vision for the redevelopment of the Los Alamitos Medical Center. The guidelines offer design guidance in the areas of architecture, landscape, and public spaces to ensure a certain level of aesthetic quality and functional efficiency, as well as compatibility between the project's components and surrounding community. The intent of the design guidelines is to encourage the highest level of design quality and creativity to ensure an atmosphere of wellness.

SHORT-TERM CONSTRUCTION AESTHETIC, LIGHT, AND GLARE IMPACTS

- ◆ **CONSTRUCTION ACTIVITIES ASSOCIATED WITH ALL PHASES OF THE PROPOSED PROJECT COULD RESULT IN GRADING AND CONSTRUCTION ACTIVITIES THAT COULD TEMPORARILY ALTER THE EXISTING VISUAL CHARACTER OF THE PROJECT SITE AND THE SURROUNDING AREA AND INTRODUCE NEW SOURCES OF LIGHT/GLARE.**

Level of Significance Before Mitigation: Potentially Significant Impact.

Impact Analysis: Project construction activities would alter views across portions of the project site from surrounding locations. Graded surfaces, construction materials, equipment and truck traffic



would be visible. Soil could be stockpiled and equipment for grading activities could be staged at various locations throughout the project site. These visual impacts can be considered significant unless mitigated. With implementation of the recommended Mitigation Measure AES-1 pertaining to equipment staging areas and the use of appropriate screening, impacts in this regard are concluded as less than significant. Furthermore, construction-related activities are not considered significant as they are anticipated to be short-term.

Short-term light and glare impacts associated with construction activity would likely be limited to nighttime lighting necessary for security purposes. Relative to potential short-term construction impacts, lighting from construction activities may pose a nighttime lighting impacts to the residences located to the northwest of the project site. In accordance with the City's *Municipal Code* Section 17.24.020 (D), construction activities would be allowed between the hours of 7:00 AM and 8:00 PM on weekdays and Saturday. Work is not permitted on Sundays and City-recognized holidays. As construction activities would be limited by the *Municipal Code*, it is anticipated that construction-related light and glare impacts would be inherently limited to this time as well. Short-term light and glare impacts can be considered significant unless mitigated. With implementation of Mitigation Measure AES-2 pertaining to construction-related lighting to be located and focused away from adjacent residential areas, impacts in this regard are concluded as less than significant.

Mitigation Measures:

- AES-1 Construction equipment staging areas shall use appropriate screening (i.e., temporary fencing with opaque material) to buffer views of construction equipment and material, when feasible. Staging locations shall be indicated in the Construction Management Plan (CMP).
- AES-2 All construction-related lighting shall be located and focused away from adjacent residential areas and consist of the minimal wattage necessary to provide safety at the construction site. A construction safety lighting plan shall be submitted to the City for review concurrent with Grading Permit applications and the Construction Management Plan (CMP).

Level of Significance After Mitigation: Less Than Significant Impact.

LONG-TERM AESTHETIC IMPACTS/VISUAL CHARACTER

- ◆ **DEVELOPMENT ASSOCIATED WITH IMPLEMENTATION OF THE PROPOSED PROJECT COULD ALTER THE EXISTING VISUAL CHARACTER AND VIEWSHED FROM SURROUNDING LOCATIONS.**

Level of Significance Before Mitigation: Potentially Significant Impact.



Impact Analysis:

Phase 1

Three medical office buildings, the TotalCare Pavilion, and the Main Hospital Building would remain unaltered during Phase 1. Phase 1 consists of the following elements:

- Vacation of the right-of-way for Kaylor Street; however, Kaylor Street would still provide access as a private street from the north and a driveway from the south. Parking would be provided in a district setting, with parking spaces provided throughout the site and not specifically allocated by building. Kaylor Street would function as a private street during Phase 1, but would not be reconfigured.
- Construction of a new 3-story medical office building (MOB A) on the Katella Avenue project frontage, totaling 75,100 gross square feet.
- Construction of a new parking structure north of the new MOB A; refer to *Exhibit 3-4, Land Use Plan – Phase 1*.

Views from Off-Site Uses North onto Project Site

With implementation of Phase 1, the existing MOB 2/TotalCare Pavilion shared surface parking lot would be demolished and become the proposed 3-story, 50'-6" tall MOB A, viewable off-site uses located to the south across Katella Avenue. A portion of the existing central surface parking lot located behind the existing MOB 2/TotalCare Pavilion shared parking lot would also be demolished to allow construction of the 6-level, 50'-6" Parking Structure 1. However, a majority of the proposed Parking Structure 1 would be shielded behind the existing 4-story, 58'-0" tall MOB 2 and proposed MOB A.

Views from Off-Site Uses East onto Project Site

The views would remain unchanged with implementation of Phase 1. The proposed MOB A and Parking Structure 1 would be shielded by the existing medical office buildings (MOB 1, 2, and 3) and the existing Main Hospital Building.

Views from Off-Site Uses South onto Project Site

The views remain primarily unchanged with implementation of Phase 1. The proposed MOB A and Parking Structure 1 would be mostly shielded by adjacent off-site uses.

Views from Off-Site Uses West onto Project Site

The views remain unchanged with implementation of Phase 1. The proposed MOB A and Parking Structure 1 would be shielded by the existing TotalCare Pavilion and adjacent off-site uses.



Phase 2

Phase 2 consists of the following elements:

- Demolition of an existing 24,000-square foot medical office building (MOB 1) located at the northwest corner of Kaylor Street and Katella Avenue to allow for reconfiguration of surface parking areas; as part of Phase 2, Kaylor Street south of the Main hospital Building would be reconfigured as a driveway and parking area.
- Demolition of an existing 15,099-square foot administrative/warehouse building along Catalina/Kaylor Street and construction of surface parking.
- Construction of the new four-story Hospital Building 1 totaling 92 beds, resulting in a 38-bed net increase as a portion of the Main Hospital Building would be renovated resulting in a reduced bed count. The Main Hospital Building bed count would be reduced to 113 beds from the present total of 167 to allow for modernization of hospital room configurations. The emergency room would be relocated to the ground floor of the new bed Hospital Building 1 and the vacated emergency room space would be reconfigured for outpatient services for special procedures. A corridor would be constructed to link the Main Hospital Building with the new Hospital Building 1; refer to *Exhibit 3-5*.

Views from Off-Site Uses North onto Project Site

With implementation of Phase 2, the existing 2-story, 31'-0" tall MOB 1 would be demolished for additional surface parking creating views to the north from off-site uses to the south of the Main Hospital Building during Phase 2. The proposed 4-story, 68'-0" tall Hospital Building 1 would be partially shielded by the existing 4-story, 58'-0" tall MOB 2. The demolished Administrative and Warehouse Building would not be visible due to its rear location adjacent to Catalina Street.

Views from Off-Site Uses East onto Project Site

With implementation of Phase 2, a portion of existing MOB 2 would become visible to the east from off-site uses to the west as MOB 1 would be demolished. The proposed 4-story, 68'-0" tall Hospital Building 1 would be partially shielded by the existing 1- to 2-story, 30'-9" tall Main Hospital Building. The demolished Administration and Warehouse Building with proposed surface parking would be shielded by adjacent off-site buildings.

Views from Off-Site Uses South onto Project Site

With implementation of Phase 2, the demolished Administration and Warehouse Building with proposed surface parking would be viewed to the south from off-site uses to the north. A portion of proposed Hospital Building 1 would be visible. The demolished MOB 1 with proposed surface parking would be shielded by the Main Hospital Building.



Views from Off-Site Uses West onto Project Site

The views remain unchanged with implementation of Phase 2. The demolished Administration and Warehouse Building and MOB 1 with proposed surface parking would be shielded by on-site and off-site buildings. The proposed 4-story, 68'-0" tall Hospital Building 1 would be partially shielded by the proposed 6-level, 50'-6" tall Parking Structure 1 and off-site buildings.

Phase 3/Buildout

Phase 3 consists of the following elements:

- Construction of the four-story bed Hospital Building 2 totaling 126 beds to the north of Hospital Building 1 (Phase 1). An elevated corridor would connect the Hospital Buildings 1 and 2.
- Construction of a Central Plant to service the new and existing hospital buildings.
- Construction of second parking structure to meet parking standards; refer to Exhibit 3-6.

Views from Off-Site Uses North onto Project Site

The views remain unchanged with implementation of Phase 3. The proposed Central Plant, Hospital Building 2, and Parking Structure 2 would be shielded by on-site and off-site buildings.

Views to the East from Off-Site Uses to the West

The views remain unchanged with implementation of Phase 3. The proposed Central Plant, Hospital Building 2, and Parking Structure 2 would be shielded by on-site and off-site buildings.

Views to the South from Off-Site Uses to the North

With implementation of Phase 3, the proposed Central Plant and Parking Structure 2 would be visible. The proposed 4-story, 68'-0" tall Hospital Building 2 would be partially shielded by the proposed 4-level, 36'-0" tall Parking Structure 2.

Views to the West from Off-Site Uses to the East

The views remain unchanged with implementation of Phase 3. The proposed Central Plant, Hospital Building 2, and Parking Structure 2 would be shielded by on-site and off-site buildings.

Site Development Standards

As noted previously, the proposed *Los Alamitos Medical Center Specific Plan* includes Site Development Standards (Section 4D). The following development standards are applicable to aesthetics:



Intensity

The floor area ratio within the Specific Plan area as a campus, including the medical center, existing and new medical office uses, and the central plant, based on gross acreage, shall not exceed 0.75.

Height

Within the Los Alamitos Medical Center will be several new mid-rise structures including two four story patient care buildings, a three story medical office building, and four- and six-level parking structures. Maximum heights shall be as follows, measured from top of parapet to finished grade:

- *New Buildings: Maximum of four (4) stories or 70 feet (whichever is greater), measured to top of parapet*

Once complete, the Medical Center campus would include 582,824 square feet of hospital and hospital-related uses, medical office space, support facilities, and parking. The floor area ratio (FAR) would increase from an existing 0.45 FAR to 0.73 FAR once the Medical Center campus is built out. The increase in FAR is below the 0.75 FAR standard established in the proposed *Los Alamitos Medical Center Specific Plan*.

In addition, all new buildings could not exceed four stories or 70 feet in height (measured to the top of the parapet). Existing on-site buildings range in height from 30'-9" for the Main Hospital Building and the Administration/Warehouse Building to 58 feet for MOB 2. The heights of the proposed buildings range from 43'-6" for the new Central Plant to 50'-6" for MOB A to 68 feet for the two new Hospital Buildings. The proposed buildings' heights are compatible with existing on-site buildings and would be consistent with the four-story/70-foot height standard established in the proposed *Los Alamitos Medical Center Specific Plan*.

The placement of the taller buildings in the interior of the project site is designed to avoid adverse visual impacts to views from Katella Avenue, as well as views from surrounding residential and commercial uses due to the addition of new buildings and parking structures. Thus, the proposed project would not significantly alter the visual character of the project site.

Impact Conclusion

Presently, the project site is occupied with the Los Alamitos Medical Center campus, which consists of a two-story hospital with 167 beds, three medical office buildings ranging from 2 to 4 stories in height, a TotalCare Pavilion, and surface parking. A small administration/warehouse structure is also part of the Medical Center campus on Catalina Street at the extreme north end. A small surface parking area presently used for employee parking is located north of Florista Street. A total of 1,094 surface parking spaces are present, located within seven parking lots throughout the Medical Center campus.

The project site and its surroundings are primarily urbanized and contain a mix of land uses with structures of various age and condition. The proposed project would be visually consistent with on-site and adjoining uses, consistent with the City's Early California theme, and consist of similar mass, heights, and landscaping. The proposed project ranges from one to six stories consistent with the



existing on-site and neighboring buildings. The proposed project would involve minor grading, demolition of existing asphalt parking areas, and precise grading for planned structures with varying heights and massing, increasing the intensity of uses within the project site. Furthermore, no expansion beyond the existing property boundaries would occur with the proposed project. Thus, the proposed project would not adversely affect the visual quality of adjacent land uses.

Long-term visual impacts would not occur due to the development of additional structures within the currently developed and occupied Los Alamitos Medical Center campus. The proposed project would not conflict with existing developments on adjacent/surrounding properties.

The proposed project is subject to the standards in the *Los Alamitos Medical Center Specific Plan*. In addition, the proposed project would be required to comply with Title 17 (*Los Alamitos Zoning Code*) of the *Municipal Code*. Thus, compliance with all applicable site development regulations and requirements, conditions of approval, and Mitigation Measure AES-3 would ensure that development associated with implementation of all phases of the proposed project would not adversely affect the existing visual character or quality of the site and its surrounding. Therefore, impacts are concluded to be less than significant.

Mitigation Measures:

AES-3 Prior to issuance of building permits, each structure shall undergo Site Plan Review approval in conformance with the adopted Specific Plan and conditions of approval for overall site design and architectural conformity.

Level of Significance After Mitigation: Less Than Significant Impact.

LONG-TERM LIGHT AND GLARE IMPACTS

◆ **DEVELOPMENT ASSOCIATED WITH IMPLEMENTATION OF THE PROPOSED PROJECT COULD AFFECT DAYTIME AND/OR NIGHTTIME VIEWS IN THE AREA.**

Level of Significance Before Mitigation: Potentially Significant Impact.

Impact Analysis: Light spill and glare are the major environmental concerns associated with outdoor lighting installations. Unless mitigated, light and glare from the proposed development has the potential to create significant impacts on adjacent land uses. Development associated with implementation of the proposed project would result in increased utilization of the property. Implementation of the proposed project would create the following new light sources: building exterior and interior lighting, security lighting, signage, parking lot lighting, and additional vehicle headlights. The project site and on-site structures would be lit through the evening and early morning hours. The existing project site produces light from the existing buildings and lighted surface parking areas of the Medical Center campus. Other light sources in the area include residential, commercial, office, and industrial uses surrounding the project site.



Residential uses to the northwest of the project site would not experience a substantial change in the amount of light spill or glare resulting from the proposed project as the proposed Central Plant, Hospital Building 2, and Parking Structure 2 are mostly shielded by off-site buildings. The residential uses to the northwest are located approximately 386 feet of the proposed Central Plant. The off-site buildings, Catalina Street, and street trees and vegetation would serve as a buffer between the project site and these residential uses. Furthermore, the proposed Central Plant would replace the existing Administration and Warehouse Building of which produces similar light. The proposed Hospital Building 1 and Parking Structure 1 are centrally located within the project area, shielded by several on-site and off-site buildings. The proposed MOB A is located adjacent to the existing MOB 2 along Katella Avenue and would produce similar light. Katella Avenue would provide a buffer of approximately 100 feet to the nearest residential unit, 140 feet south of the proposed MOB A.

The proposed *Los Alamitos Medical Center Specific Plan* includes the following general standards regarding Lighting Design in Section 5 – Design Guidelines:

- a. *The type and location of parking area and building lighting should preclude direct glare on to adjacent properties.*
- b. *Pedestrian scale lighting should be present at all entries, plazas, courtyards, parking lots, pedestrian ways, and other areas where nighttime pedestrian activity is expected.*
- c. *Lighting design of fixtures and their structural support should be architecturally compatible with the architecture of the project.*
- d. *When appropriate, wall-mounted lighting may be incorporated. Wall-mounted lights should be compatible with the building's architectural style.*

In addition, all lighting must comply with *Title 8* (Health and Safety), Chapter 8.48, Lighting Performance Standards, Section 17.14.040, Light and Glare, and Section 17.16.050, Exterior Lighting, of the City's *Municipal Code* which regulates outdoor lighting performance standards, materials and methods of installation, light and glare, overall lighting guidelines, and which focuses on the physical effects of outdoor lighting, as well as the effect lighting may have on surrounding neighborhoods and Chapter 8.48.080, Lighting Guidelines, which regulates lighting in the City, reducing impacts to a less than significant level.

In consideration of the existing urban environment and the existing buffers, and compliance with the lighting standards in the proposed *Los Alamitos Medical Center Specific Plan*, the City's *Municipal Code*, and the recommended mitigation measure, implementation of the proposed project would not result in significant light and glare impacts that could affect daytime and/or nighttime views in the area to the adjacent residences or other sensitive uses. Thus, impacts are concluded to be less than significant impacts in this regard.



Mitigation Measures:

AES-4 Prior to site plan approval, the City of Los Alamitos Community Development Department shall ensure that the following elements are included in the project plans, as appropriate:

- The project plans shall comply with all lighting standards contained in the *Los Alamitos Medical Center Specific Plan*.
- The project plans shall comply with all lighting standards contained in the City's *Municipal Code*, including, but not limited to Chapter 8.48, Lighting Performance Standards, Section 17.14.040, Light and Glare, and Section 17.16.050, Exterior Lighting, as applicable.
- All exterior lighting shall be designed and located as to avoid intrusive effects on adjacent residential properties and undeveloped areas adjacent to the project site. Low-intensity street lighting and low-intensity exterior lighting shall be used throughout the development to the extent feasible. Lighting fixtures shall use shielding, if necessary, to prevent spill lighting on adjacent off-site uses.
- Design and placement of site lighting shall minimize glare affecting adjacent properties, buildings, and roadways.
- Fixtures and standards shall conform to state and local safety and illumination requirements.
- Development projects shall use minimally reflective glass, and all other materials used on exterior building and structures shall be selected with attention to minimizing reflective glare.
- Automatic timers on lighting shall be designed to maximize personal safety during nighttime use while saving energy.

Level of Significance After Mitigation: Less Than Significant Impact.

5.2.5 CUMULATIVE IMPACTS AND MITIGATION MEASURES

- ◆ **IMPLEMENTATION OF THE PROPOSED PROJECT AND OTHER RELATED CUMULATIVE PROJECTS COULD RESULT IN CUMULATIVELY CONSIDERABLE AESTHETICS, LIGHT, AND GLARE IMPACTS.**

Level of Significance Before Mitigation: Potentially Significant Impact.



Impact Analysis: The proposed project, in combination with other development identified in Section 4.0, would contribute to the continued urbanization of the aesthetic character of the Cities of Los Alamitos, Cypress, and Seal Beach. The proposed project and other development in the three cities would transform the character of the area by fully utilizing existing land uses and adding urban uses in currently developed and undeveloped areas.

The aesthetic, light, and glare impacts of individual development projects can be mitigated through careful site design, avoidance of significant visual features, the use of building materials that are consistent with the general character of the area, landscape design and proper lighting techniques to direct light on-site and away from adjacent properties and compliance with each City's *General Plan* and *Municipal Code*. The proposed project, in combination with other related cumulative projects identified in Section 4.0, would contribute to the existing urbanized character of the City of Los Alamitos and surrounding area. With implementation of recommended mitigation measures, and compliance with the *General Plan* and *Municipal Code*, cumulative long-term aesthetic, light, and glare impacts would be reduced to a less than significant level.

Mitigation Measures: Refer to Mitigation Measure AES-1 through AES-4. No additional mitigation measures are required.

Level of Significance After Mitigation: Less Than Significant Impact.

5.2.6 SIGNIFICANT UNAVOIDABLE IMPACTS

With imposition of the required mitigation measures, implementation of the proposed project would result in less than significant project impacts related to long-term aesthetics and light and glare. All other identified impacts were concluded to be at less than significant levels, and did not require mitigation. As such, no significant unavoidable impacts would result from the implementation of the Los Alamitos Medical Center Specific Plan.

5.2.7 SOURCES CITED

City of Los Alamitos, *City of Los Alamitos 2010 General Plan*, adopted March 1989.

City of Los Alamitos, *City of Los Alamitos 2010 General Plan Background Technical Reports*, adopted March 1989.

City of Los Alamitos, *City of Los Alamitos 2010 General Plan Initial Study/Negative Declaration (IS/ND)*, March 1989.

City of Los Alamitos, *Los Alamitos Municipal Code and Zoning Code*, adopted 1995.

RBF Consulting, *Draft Los Alamitos Medical Center Specific Plan*, February 2010.



Los Alamitos Medical Center Specific Plan Program Environmental Impact Report

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5.3 Traffic



5.3 TRAFFIC

The analysis presented in this section addresses traffic impacts related to the Los Alamitos Medical Center Specific Plan. Mitigation measures are recommended to avoid or lessen the project's traffic impacts where necessary. Information in this section was obtained from the *City of Los Alamitos 2010 General Plan (General Plan)*, *City of Los Alamitos 2010 General Plan Background Technical Reports (GP BTR)*, *City of Los Alamitos 2010 General Plan Initial Study/Negative Declaration (IS/ND)*, *Los Alamitos Municipal Code (LAMC)*, *Los Alamitos Zoning Code (LAZC)*, *Los Alamitos Medical Center Specific Plan Traffic Impact Analysis (Traffic Impact Analysis)*, and the *Draft Los Alamitos Medical Center Specific Plan* (Specific Plan or proposed project).

5.3.1 REGULATORY SETTING

CITY OF LOS ALAMITOS GENERAL PLAN CIRCULATION AND TRANSPORTATION ELEMENT¹

The Circulation and Transportation Element is intended to guide the development of the City's circulation system in a manner that is compatible with the Land Use Element. The element is also intended to guide decision-making in providing a safe, sensible, and efficient circulation system for the City.

The Circulation Element portrays the roadway system needed to serve traffic generated by uses permitted in the Land Use Element, as well as increased development in the surrounding areas. The element is closely linked with the Noise Element since traffic forecasts are used in conjunction with other data to determine noise contours for general plan uses. The Element is also related to the Seismic/Public Safety Element and the Open Space/Parks/Conservation Element. The Public Safety Element addresses evacuation routes and minimum roadway widths to accommodate City residents in the event of a catastrophe, and the Open Space/Parks Conservation Element identified landscaping standards for scenic highways, roadways, and multi-use recreation trails. Due to its transportation-related issues, the Growth Management Element also has a relationship with the Circulation Element. The Growth Management Element mandates that growth and development be based upon the City's ability to provide an adequate circulation system. Refer to [Section 5.1, Land Use](#), for a discussion of the proposed project's consistency with applicable *General Plan* goals and policies.

General Plan Chapter 5, Circulation and Transportation, includes the following goals, issues, and policies:

- Goal One: Provide an efficient network of streets, bikeways, and pedestrian areas which promote the safe and efficient movement of people and goods.
- Goal Two: Provide adequate on-street parking and loading facilities for businesses and public facilities throughout the City.

¹ *City of Los Alamitos 2010 General Plan – Circulation and Transportation Element*, Page 5-1, dated August 1999.



- Goal Three: Maintain safe and adequate infrastructure services.
 - Issue One: Certain City arterials and intersections are operating at substandard Levels of Service.
 - Policy 5-1.1: Maintain a Level of Service “D” or better on all City arterials and at intersections.
 - Policy 5-1.2: Employ feasible mitigation measures so that levels of service of nearby arterials and intersections are not degraded by traffic to and from the Armed Forces Reserve Center.
 - Policy 5-1.3: Take steps whenever feasible so that development proposals in adjacent cities will not diminish levels of service on arterials or at intersections within the City of Los Alamitos.
 - Policy 5-1.4: Cooperate with neighboring cities, the California Department of Transportation and the Orange County Transportation Authority in making mutually-beneficial transportation improvements.
 - Issue Two: Certain neighborhoods are impacted by through traffic.
 - Policy 5-2.1: Protect and preserve residential neighborhoods from the intrusion of cut-through traffic.
 - Policy 5-2.2: Take feasible steps to minimize traffic impacts to residential areas to and from the Armed Forces Reserve Center.
 - Issue Three: Extension of several streets would improve the City’s overall circulation systems.
 - Policy 5-3.1: Where feasible, utilize underdeveloped, vacant, or surplus railroad rights-of-way lands for through street extensions.
 - Issue Four: Due to regional air quality problems and traffic congestion, utilization of public transit and non-motorized means of transportation is important. Current transportation infrastructure discourages alternatives to automobile travel.
 - Policy 5-4.1: Encourage walking and bicycling as attractive alternatives to vehicular transportation.
 - Policy 5-4.2: Adequately illuminate and landscape City sidewalks and public areas to encourage pedestrian-oriented activities.
 - Policy 5-4.3: Support alternatives to single-occupancy vehicle use.



- Issue Five: Parking is substandard and/or lacking at some commercial and industrial centers, and at Civic facilities.
 - Policy 5-5.1: Encourage owners of substantially remodeled commercial and industrial centers to provide adequate on-site parking.
 - Policy 5-5.2: Provide adequate on-site parking at civic facilities (parks, City Hall, Los Alamitos Community Center, etc.).
- Issue Six: Certain City roadways are not designed to support trucks without sustaining structural damage.
 - Policy 5-6.1: Develop a truck route ordinance defining truck routes and setting forth weight limitations, as required.
- Issue Seven: Los Alamitos' infrastructure (sewer, water, drainage lines, streets, sidewalks) is older and requires regular maintenance, repair, and upgrading.

5.3.2 ENVIRONMENTAL SETTING

STUDY AREA

The study area includes roadways and intersections near the project site and those locations where project-generated traffic could cause an impact. Appendix D, Traffic Impact Analysis, evaluates the following 35 intersections in the vicinity of the project site:

1. I-605 Southbound Off-Ramp/Spring Street (signalized);
2. I-605 Northbound On-Ramp/Spring Street (signalized);
3. I-605 Northbound On-Ramp/Katella Avenue (signalized);
4. Norwalk Boulevard/Wardlow Road (signalized);
5. Los Alamitos Boulevard/Cerritos Avenue (signalized);
6. Los Alamitos Boulevard/Sausalito Street (signalized);
7. Los Alamitos Boulevard/Catalina Street South (one-way stop-controlled);
8. Los Alamitos Boulevard/Florista Street (signalized);
9. Los Alamitos Boulevard/Katella Avenue (signalized);
10. Los Alamitos Boulevard/Farquhar Avenue (signalized);
11. Los Alamitos Boulevard/Orangewood Avenue (signalized);
12. Seal Beach Boulevard/Plymouth Drive (signalized);
13. Seal Beach Boulevard/Lampson Avenue (signalized);
14. Seal Beach Boulevard/I-405 Northbound Off-Ramp-Old Ranch Parkway (signalized);
15. Seal Beach Boulevard/I-405 Southbound Ramps-Beverly Manor Drive (signalized);
16. Reagan Street/Sausalito Street (two-way stop-controlled);

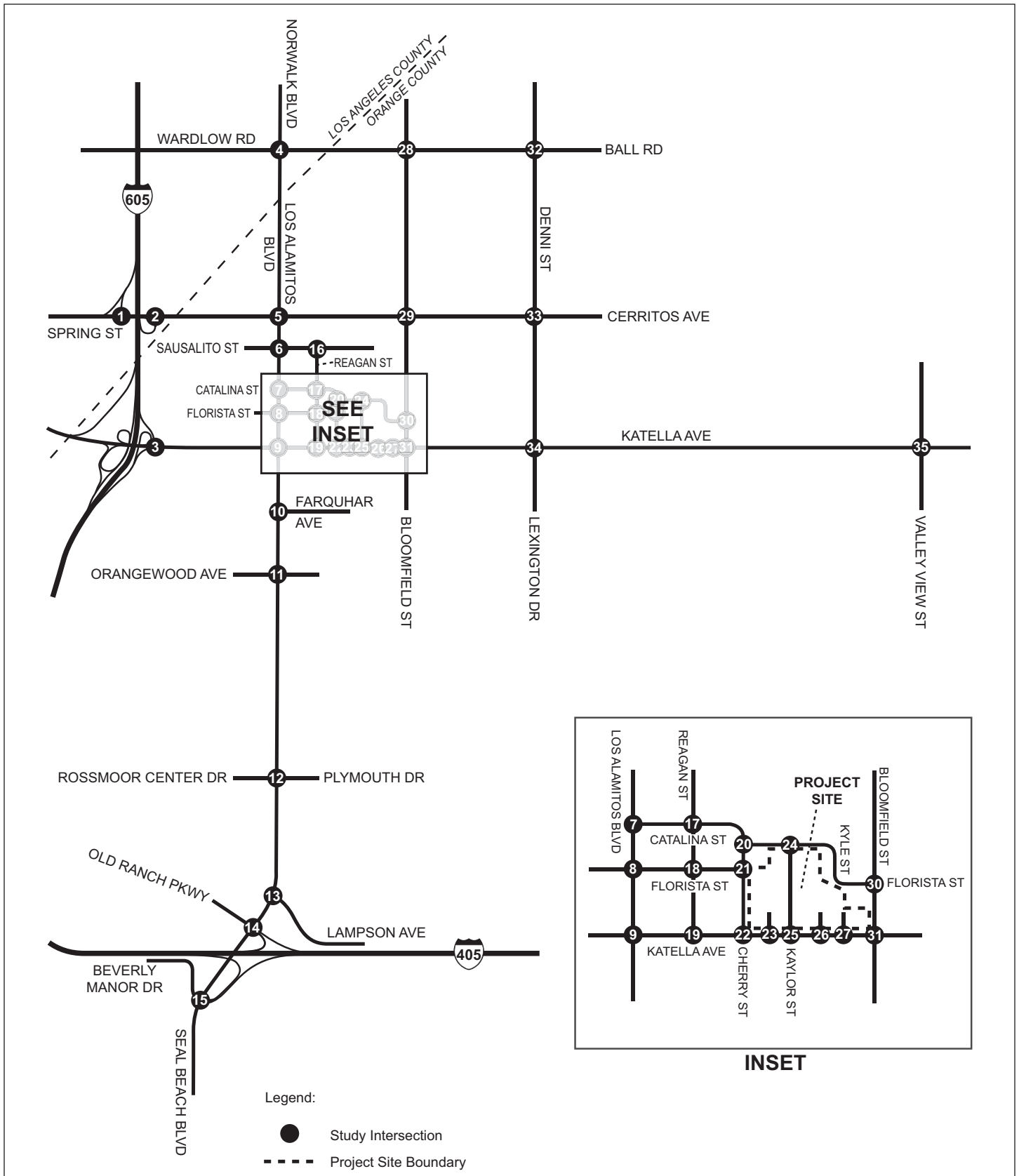


17. Reagan Street/Catalina Street (all-way stop-controlled);
18. Reagan Street/Florista Street (all-way stop-controlled);
19. Reagan Street/Katella Avenue (two-way stop-controlled);
20. Cherry Street/Catalina Street (one-way stop-controlled);
21. Cherry Street/Florista Street (all-way stop-controlled);
22. Cherry Street/Katella Avenue (signalized);
23. Hospital Driveway 1/Katella Avenue (one-way stop-controlled);
24. Kaylor Street/Catalina Street (one-way stop-controlled);
25. Kaylor Street/Katella Avenue (one-way stop-controlled);
26. Hospital Driveway 2/Katella Avenue (one-way stop-controlled);
27. Hospital Driveway 3/Katella Avenue (one-way stop-controlled);
28. Bloomfield Street/Ball Road (signalized);
29. Bloomfield Street/Cerritos Avenue (signalized);
30. Bloomfield Street/Florista Street (one-way stop-controlled);
31. Bloomfield Street/Katella Avenue (signalized);
32. Denni Street/Ball Road (signalized);
33. Denni Street-Lexington Street/Cerritos Avenue (signalized);
34. Lexington Street/Katella Avenue (signalized);
35. Valley View Street/Katella Avenue (signalized).

Exhibit 5.3-1, Study Intersection Locations, illustrates the location of the study intersections, which are analyzed for the following five study scenarios:

- Existing Conditions
- Forecast Year 2013 Without Project Conditions
- Forecast Year 2013 With Project Conditions
- Forecast Year 2035 Without Project Conditions
- Forecast Year 2035 With Project Conditions

Table 5.3-1, Summary of Intersections by Jurisdiction, summarizes the intersections by applicable jurisdiction.



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09/10 • JN 10-107031

ENVIRONMENTAL IMPACT REPORT
LOS ALAMITOS MEDICAL CENTER SPECIFIC PLAN

Study Intersection Locations

Exhibit 5.3-1



Los Alamitos Medical Center Specific Plan Program Environmental Impact Report

**Table 5.3-1
Summary of Intersections by Jurisdiction**

Study Intersection	City of Los Alamitos	City of Cypress	City of Long Beach	City of Seal Beach	Caltrans
1 – I-605 SB Off-Ramp/Spring St					X
2 – I-605 NB On-Ramp/Spring St					X
3 – I-605 NB On-Ramp/Katella Ave					X
4 – Norwalk Blvd/Wardlow Rd			X		
5 – Los Alamitos Blvd/Cerritos Ave	X				
6 – Los Alamitos Blvd/Sausalito St	X				
7 – Los Alamitos Blvd/Catalina St South	X				
8 – Los Alamitos Blvd/Florista St	X				
9 – Los Alamitos Blvd/Katella Ave	X				
10 – Los Alamitos Blvd/Farquhar Ave	X				
11 – Los Alamitos Blvd/Orangewood Ave	X				
12 – Seal Beach Blvd/Plymouth Dr				X	
13 – Seal Beach Blvd/Lampson Ave				X	
14 – Seal Beach Blvd/I-405 NB Off-Ramp-Old Ranch Pkwy					X
15 – Seal Beach Blvd/I-405 SB Ramps-Beverly Manor Dr					X
16 – Reagan St/Sausalito St	X				
17 – Reagan St/Catalina St	X				
18 – Reagan St/Florista St	X				
19 – Reagan St/Katella Ave	X				
20 – Cherry St/Catalina St	X				
21 – Cherry St/Florista St	X				
22 – Cherry St/Katella Ave	X				
23 – Hospital Drwy 1/Katella Ave	X				
24 – Kaylor St/Catalina St	X				
25 – Kaylor St/Katella Ave	X				
26 – Hospital Drwy 2/Katella Ave	X				
27 – Hospital Drwy 3/Katella Ave	X				
28 – Bloomfield St/Ball Rd	X	X			
29 – Bloomfield St/Cerritos Ave	X	X			
30 – Bloomfield St/Florista St	X				
31 – Bloomfield St/Katella Ave	X				
32 – Denni St/Ball Rd		X			
33 – Denni St-Lexington St/Cerritos Ave	X	X			
34 – Lexington St/Katella Ave	X				
35 – Valley View St/Katella Ave		X			
Source: RBF Consulting, Los Alamitos Medical Center Specific Plan Traffic Impact Analysis, dated June 18, 2010.					



ROADWAY SYSTEM

The characteristics of the Los Alamitos roadway system in the vicinity of the project site are described below.

Interstate 405 (I-405) provides regional access for the project site as an eight- to twelve-lane freeway facility trending generally in a northwest-southeast direction. I-405 originates northerly at Interstate 5 in City of San Fernando and terminates southerly at Interstate 5 in City of Irvine. In the project vicinity, I-405 is a twelve-lane freeway.

Interstate 605 (I-605) provides regional access for the project site as a six- to eight-lane freeway facility trending in a north-south orientation. I-605 originates northerly at Interstate 210 in City of Irwindale and terminates southerly at Interstate 405 in City of Seal Beach. In the project vicinity, I-605 is an eight-lane freeway.

Ball Road is a four-lane divided roadway with a raised median trending in an east-west direction. The posted speed limit on Ball Road is 40 miles per hour west of Bloomfield Street and 45 miles per hour east of Bloomfield Street; on-street parking is prohibited. Ball Road terminates westerly just east of Norwalk Boulevard where it changes name to Wardlow Road.

Beverly Manor Drive is a two-lane undivided roadway trending in an east-west direction. The posted speed limit on Beverly Manor Drive is 35 miles per hour; on-street parking is prohibited. Beverly Manor Drive terminates easterly at Seal Beach Boulevard.

Bloomfield Street varies from a four-lane undivided roadway to a four-lane divided roadway with a continuous left-turn lane trending in a north-south direction. The posted speed limit on Bloomfield Street is 40 miles per hour north of Cerritos Avenue and 35 miles per hour south of Cerritos Avenue; on-street parking is permitted.

Catalina Street is a two-lane undivided roadway trending in an east-west direction. The speed limit is not posted on Catalina Street; on-street parking is permitted. Catalina Street terminates westerly at Oak Street and terminates easterly at Kyle Street.

Cerritos Avenue varies from a four-lane divided roadway with a raised median to a four-lane divided roadway with a continuous left-turn lane trending in an east-west direction. The posted speed limit on Cerritos Avenue is 45 miles per hour east of Denni Street-Lexington Drive, 40 miles per hour between Bloomfield Street and Denni Street-Lexington Drive, and 35 miles per hour west of Bloomfield Street; on-street parking is permitted. Cerritos Avenue terminates westerly just east of I-605 where it changes name to Spring Street.

Cherry Street is a discontinuous two-lane undivided roadway trending in a north-south direction. The speed limit is not posted on Cherry Street; on-street parking is permitted. In the project vicinity, Cherry Street terminates northerly at Catalina Street and terminates southerly at Katella Avenue.



Denni Street is a four-lane undivided roadway trending in a north-south direction. The posted speed limit on Denni Street is 25 miles per hour; on-street parking is prohibited. Denni Street terminates southerly at Cerritos Avenue where it changes name to Lexington Drive.

Farquhar Avenue is a two-lane undivided roadway trending in an east-west direction. The posted speed limit on Farquhar Avenue is 25 miles per hour; on-street parking is permitted. Farquhar Avenue terminates westerly at Los Alamitos Boulevard.

Florista Street is a discontinuous two-lane undivided roadway trending in an east-west direction. The westerly segment of Florista Street terminates westerly at Oak Street and terminates easterly at Cherry Street; the easterly segment of Florista Street terminates westerly at Kyle Street and terminates easterly at Bloomfield Street. The speed limit is not posted on Florista Street; on-street parking is permitted.

Katella Avenue varies from a four- to six-lane divided roadway with a raised median trending in an east-west direction. The posted speed limit on Katella Avenue varies from 35 miles per hour to 45 miles per hour; on-street parking is permitted on various sections in the vicinity of the project site.

Kaylor Street is a two-lane undivided roadway trending in a north-south direction. The speed limit is not posted on Kaylor Street; on-street parking is permitted. Kaylor Street terminates northerly at Catalina Street and terminates southerly at Katella Avenue.

Kyle Street is a two-lane undivided roadway trending in a north-south direction. The speed limit is not posted on Kyle Street; on-street parking is permitted. Kyle Street terminates northerly at Catalina Street and terminates southerly at Florista Street.

Lampson Avenue is a four-lane divided roadway with a raised median trending in at east-west direction. The posted speed limit on Lampson Avenue is 45 miles per hour; on-street parking is prohibited. Lampson Avenue terminates westerly at Seal Beach Boulevard.

Lexington Drive varies from a two-lane undivided roadway to a two-lane divided roadway with a continuous left-turn lane trending in a north-south direction. Lexington Drive terminates northerly at Cerritos Avenue where it changes name to Denni Street. The posted speed limit on Lexington Drive is 30 miles per hour; on-street parking is permitted on Lexington Drive south of Katella Avenue.

Los Alamitos Boulevard varies from a four-lane undivided roadway to a six-lane undivided roadway trending in a north-south direction. The posted speed limit on Los Alamitos is 35 miles per hour north of Katella Avenue and 40 miles per hour south of Katella Avenue; on-street parking is permitted on various sections of Los Alamitos Boulevard. Los Alamitos Boulevard terminates northerly just south of Wardlow Road where it changes name to Norwalk Boulevard and terminates southerly at Bradbury Road where it changes name to Seal Beach Boulevard.

Old Ranch Parkway is a two-lane undivided roadway trending in an east-west to north-south direction. The posted speed limit on Old Ranch Parkway is 30 miles per hour; on-street parking is prohibited. Old Ranch Parkway terminates easterly at Seal Beach Boulevard.



Orangewood Avenue varies from a four-lane undivided roadway to a two-lane undivided roadway trending in an east-west direction. The posted speed limit on Orangewood Avenue is 35 miles per hour; on-street parking is permitted.

Plymouth Drive is a two-lane undivided roadway trending in an east-west direction. Plymouth Drive terminates westerly at Seal Beach Boulevard where it changes name to Rossmoor Center Way. The speed limit is not posted on Plymouth Drive; on-street parking is prohibited.

Reagan Street is a two-lane undivided roadway trending in a north-south direction. The speed limit is not posted on Reagan Street; on-street parking is permitted. Reagan Street terminates southerly at Harrisburg Road and terminates northerly at Sausalito Street.

Rossmoor Center Drive is a two-lane undivided driveway trending in an east-west direction. Rossmoor Center Drive provides access to *The Shops at Rossmoor* shopping center. Rossmoor Center Drive terminates easterly at Seal Beach Boulevard where it changes name to Plymouth Drive. The speed limit is not posted on Rossmoor Center Drive; on-street parking is prohibited.

Sausalito Street is a two-lane undivided roadway trending in an east-west direction. Sausalito Street is also named Briggeman Street east of Los Alamitos Boulevard. The speed limit is not posted on Sausalito Street; on-street parking is permitted.

Seal Beach Boulevard varies from a six-lane divided roadway with a continuous left-turn lane to a six-lane divided roadway with a raised median trending in a north-south direction. Seal Beach Boulevard terminates northerly at Bradbury Road where it changes name to Los Alamitos Boulevard and terminates southerly at Electric Avenue where it changes name to Ocean Avenue. The posted speed limit on Seal Beach Boulevard is 50 miles per hour; on-street parking is prohibited.

Spring Street is a four-lane divided roadway with a raised median trending in an east-west direction. Spring Street terminates easterly just east of I-605 where it changes name to Cerritos Avenue. The posted speed limit on Spring Street is 45 miles per hour; on-street parking is prohibited.

Valley View Street is a six-lane divided roadway with a raised median trending in a north-south direction. The posted speed limit on Valley View Street is 45 miles per hour; on-street parking is prohibited.

Wardlow Road is a four-lane divided roadway with a raised median trending in an east-west direction. The posted speed limit on Wardlow Road is 40 miles per hour; on-street parking is prohibited. Wardlow Road terminates easterly just east of Norwalk Boulevard where it changes name to Ball Road.

SMART STREET PROGRAM

The Orange County Transportation Authority (OCTA) coordinates with local jurisdictions to implement Smart Streets on regional routes of significance. As identified by OCTA, the Smart Street concept seeks to improve roadway traffic capacity and smooth traffic flow through potential measures such as traffic signal synchronization, bus turnouts, parking restrictions, intersection



improvements and addition of travel lanes. The network as identified by OCTA includes 21 roadways, with Beach Boulevard implementation in 1996 as the first Smart Street. Katella Avenue is a designated Smart Street within the City of Los Alamitos, as mentioned above. Implementation of specific Smart Street concepts on the Katella Avenue Smart Street are based on coordination between residents, business owners, and other public stakeholders and agency staff.

ORANGE COUNTY CONGESTION MANAGEMENT PROGRAM

The purpose of the Orange County Congestion Management Program (CMP) is to develop a coordinated approach to managing and decreasing traffic congestion by linking the various transportation, land use and air quality planning programs throughout the County. The program is consistent with that of the Southern California Association of Governments (SCAG). The CMP program requires review of significant individual projects, which might on their own impact the CMP transportation system.

According to the *Orange County CMP*, those proposed projects, which meet the following criteria, shall be evaluated:

- Project generating 1,600 trips per day and that would directly access or be in close proximity to a CHP Highway System link.

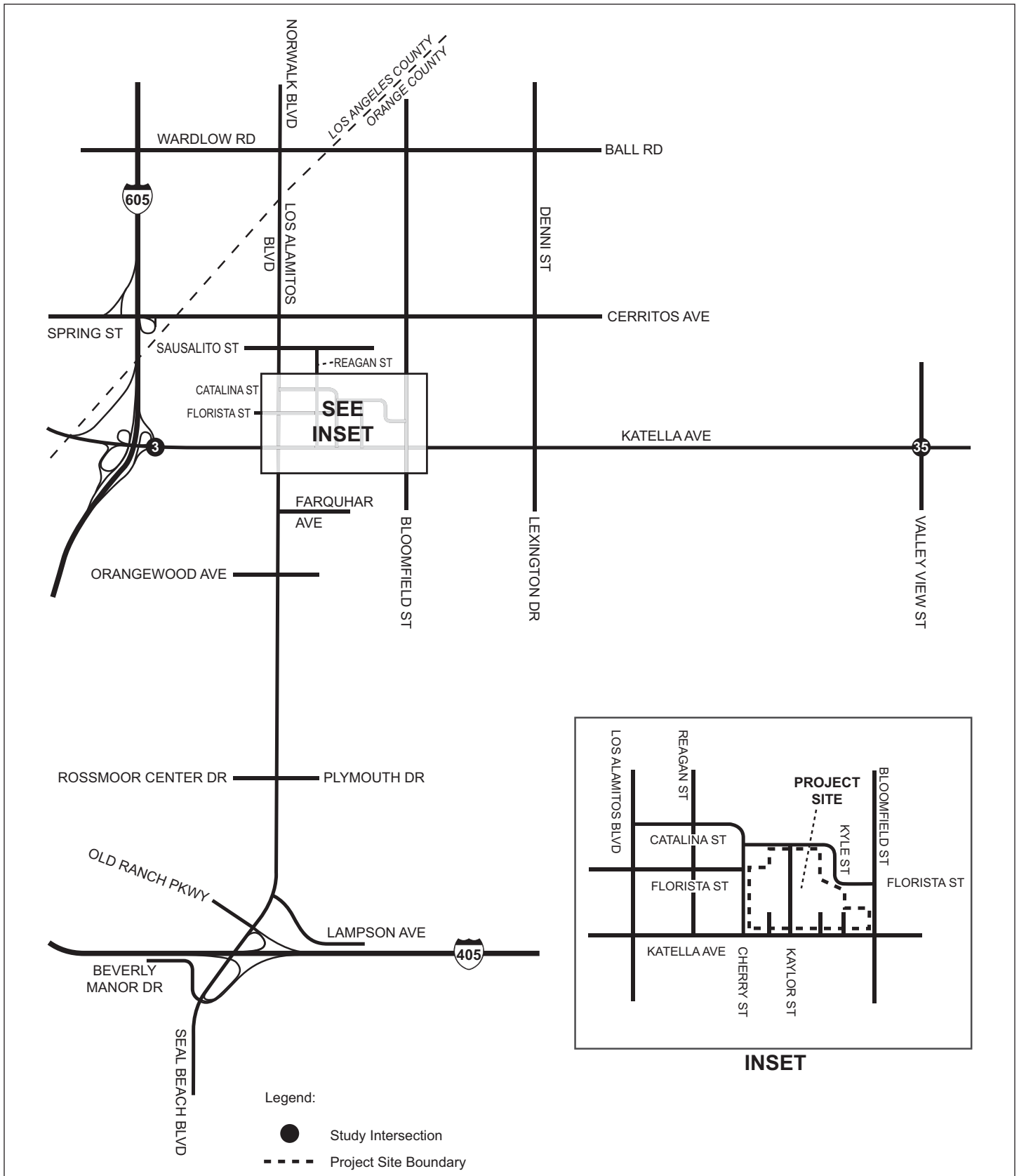
Utilizing CMP guidelines, the following intersections are included in the CMP study area and are shown Exhibit 5.3-2, CMP Study Intersection Locations:

- Valley View Boulevard/Katella Avenue; and
- I-605 Northbound On-Ramp/Katella Avenue.

ANALYSIS METHODOLOGY

The following analysis methodology was used during the preparation *Traffic Impact Analysis*, refer to Appendix D.

Level of service (LOS) is commonly used as a qualitative description of intersection operation and is based on the capacity of the intersection and the volume of traffic using the intersection. The Intersection Capacity Utilization (ICU) analysis method is utilized by the City of Los Alamitos, City of Cypress, City of Long Beach, and City of Seal Beach to determine the operating LOS of signalized intersections. The ICU analysis methodology describes the operation of an intersection using a range of LOS from LOS A (free-flow conditions) to LOS F (severely congested conditions), based on the corresponding Volume/Capacity (V/C) ratios shown in Table 5.3-2, V/C & LOS Ranges.



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09/10 • JN 10-107031

ENVIRONMENTAL IMPACT REPORT
LOS ALAMITOS MEDICAL CENTER SPECIFIC PLAN

CMP Study Intersection Locations

Exhibit 5.3-2



Table 5.3-2
V/C & LOS Ranges

Signalized Intersections	
V/C Ratio	LOS
≤ 0.60	A
0.61 to ≤ 0.70	B
0.71 to ≤ 0.80	C
0.81 to ≤ 0.90	D
0.91 to ≤ 1.00	E
> 1.00	F
Source: 1990 Transportation Research Board.	

The only unsignalized study intersections analyzed in the *Traffic Impact Analysis* are governed by the City of Los Alamitos and Caltrans, which utilize the Highway Capacity Manual (HCM) intersection analysis methodology to analyze the operation of unsignalized intersections. The HCM analysis methodology describes the operation of an intersection using a range of LOS from LOS A (free-flow conditions) to LOS F (severely congested conditions), based on the corresponding stopped delay experienced per vehicle for unsignalized intersections shown in Table 5.3-3, LOS & Delay Ranges.

Table 5.3-3
LOS & Delay Ranges

LOS	Delay (seconds/vehicle)
	Unsignalized Intersections
A	< 10.0
B	> 10.0 to ≤ 15.0
C	> 15.0 to ≤ 25.0
D	> 25.0 to ≤ 35.0
E	> 35.0 to ≤ 50.0
F	> 50.0
Source: 2000 Highway Capacity Manual.	

LOS is based on the average stopped delay per vehicle for all movements of signalized intersections and all-way stop-controlled intersections; for one-way or two-way stop-controlled intersections, LOS is based on the worst stop-controlled approach.



EXISTING TRAFFIC OPERATIONS

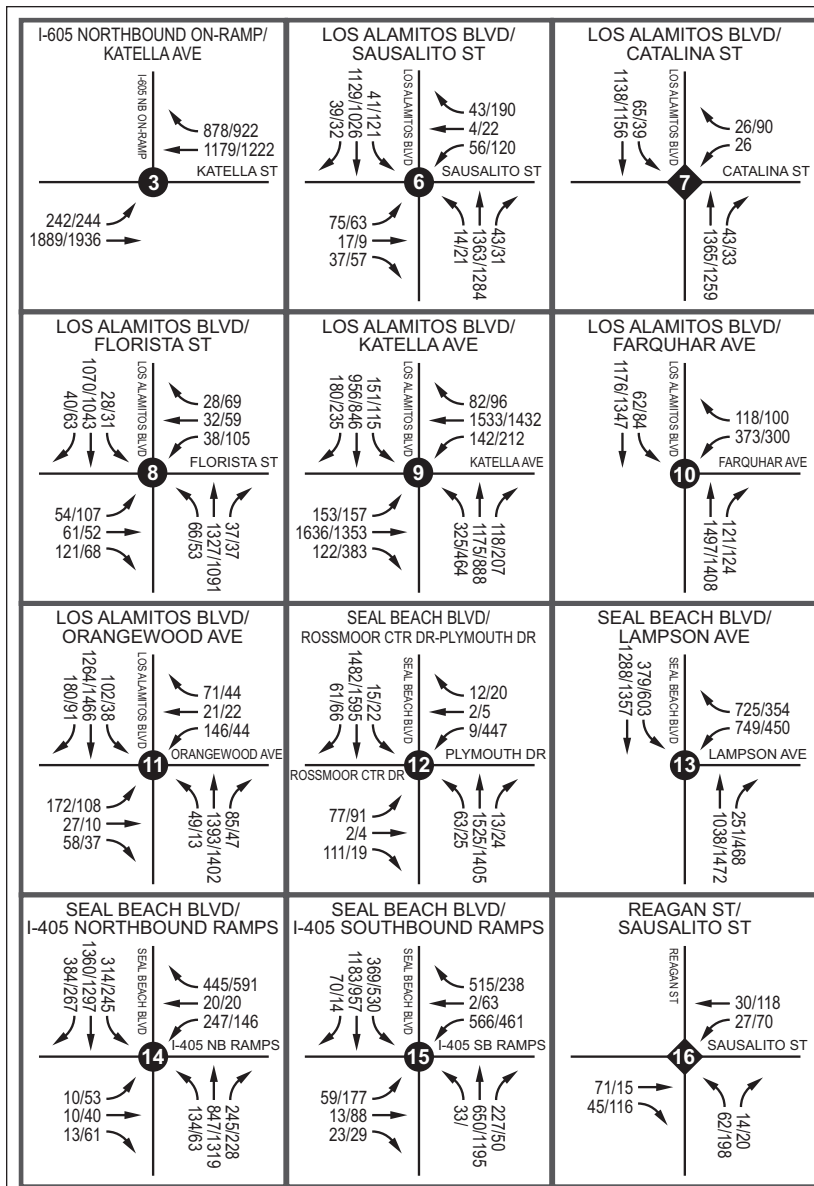
Existing Conditions – Peak Hour Traffic Volumes

The existing operations of the study intersections were determined by utilizing AM and PM peak hour intersection movement counts collected in October 2008. While more than one year has passed since data collection, reduced motorist trip-making primarily due to the current economy has been observed. Since year 2010 traffic counts would likely show less traffic volumes at intersections, this analysis conservatively utilizes year 2008 baseline traffic counts. The AM peak period intersection counts were collected from 7:00 to 9:00 AM, the PM peak period intersection counts were collected from 4:00 to 6:00 PM. The counts used in this analysis were taken from the highest hour within the peak period counted. Detailed traffic count data is contained in Appendix D.

Due to the large number of study intersections, exhibits showing traffic volumes and geometry have been organized into three areas for presentation purposes. Exhibit 5.3-3, Area 1 – Existing AM/PM Peak Hour Intersection Volumes; Exhibit 5.3-4, Area 2 – Existing AM/PM Peak Hour Intersection Volumes; and Exhibit 5.3-5, Area 3 – Existing AM/PM Peak Hour Intersection Volumes show existing conditions AM and PM peak hour volumes at the study intersections. Exhibit 5.3-6, Area 1 – Existing Study Intersection/Roadway Geometry; Exhibit 5.3-7, Area 2 – Existing Study Intersection/Roadway Geometry; and Exhibit 5.3-8, Area 3 – Existing Study Intersection/Roadway Geometry show existing study intersection/roadway geometry.

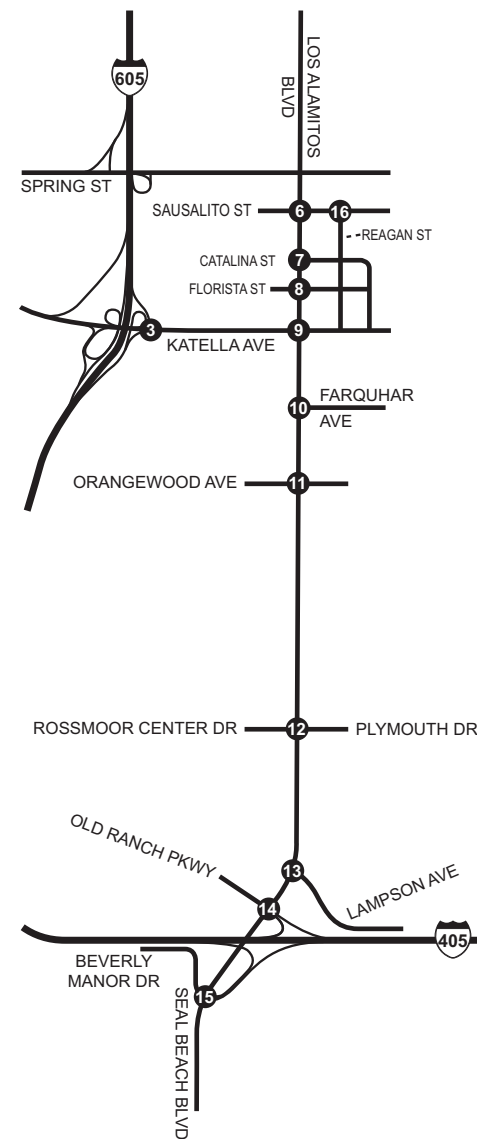
Existing Conditions –Level of Service

Table 5.3-4, Existing Conditions AM & PM Peak Hour Level of Service, summarizes conditions AM peak hour and PM peak hour LOS of the study intersections; refer to Appendix D, for detailed LOS analysis sheets.



Legend:

XX/XX AM/PM Intersection Volumes



NOT TO SCALE

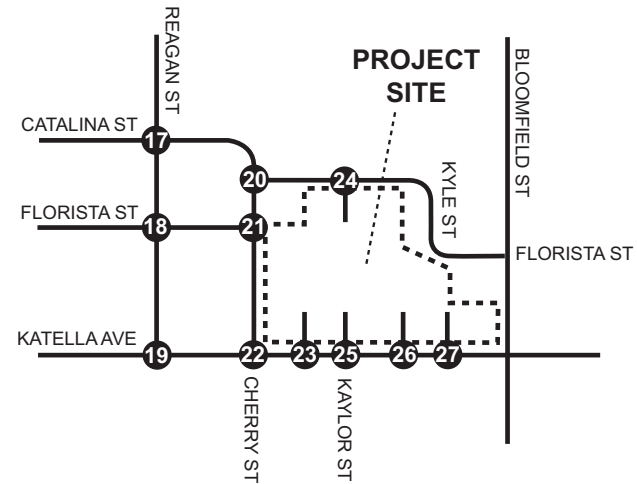
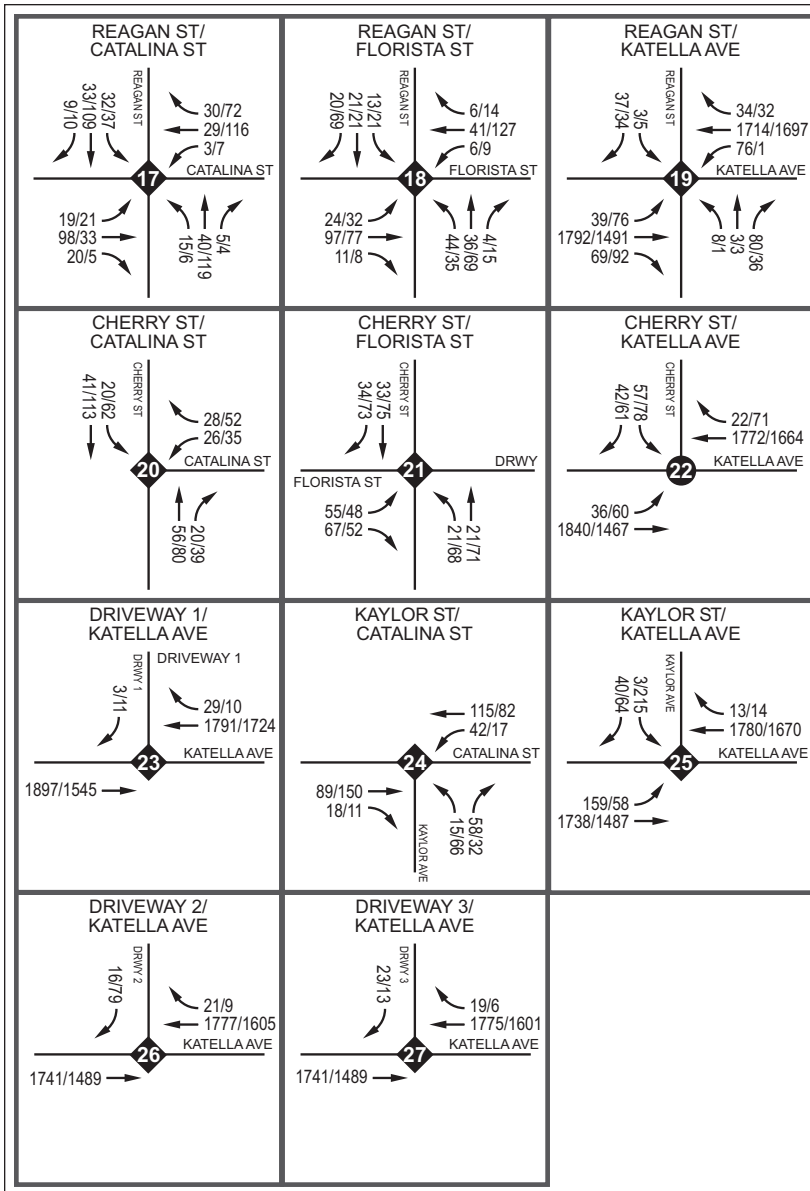


09/10 • JN 10-107031

ENVIRONMENTAL IMPACT REPORT
LOS ALAMITOS MEDICAL CENTER SPECIFIC PLAN

Area 1 – Existing AM/PM Peak Hour Intersection Volumes

Exhibit 5.3-3



Legend:

XX/XX AM/PM Intersection Volumes

----- Project Site Boundary

NOT TO SCALE

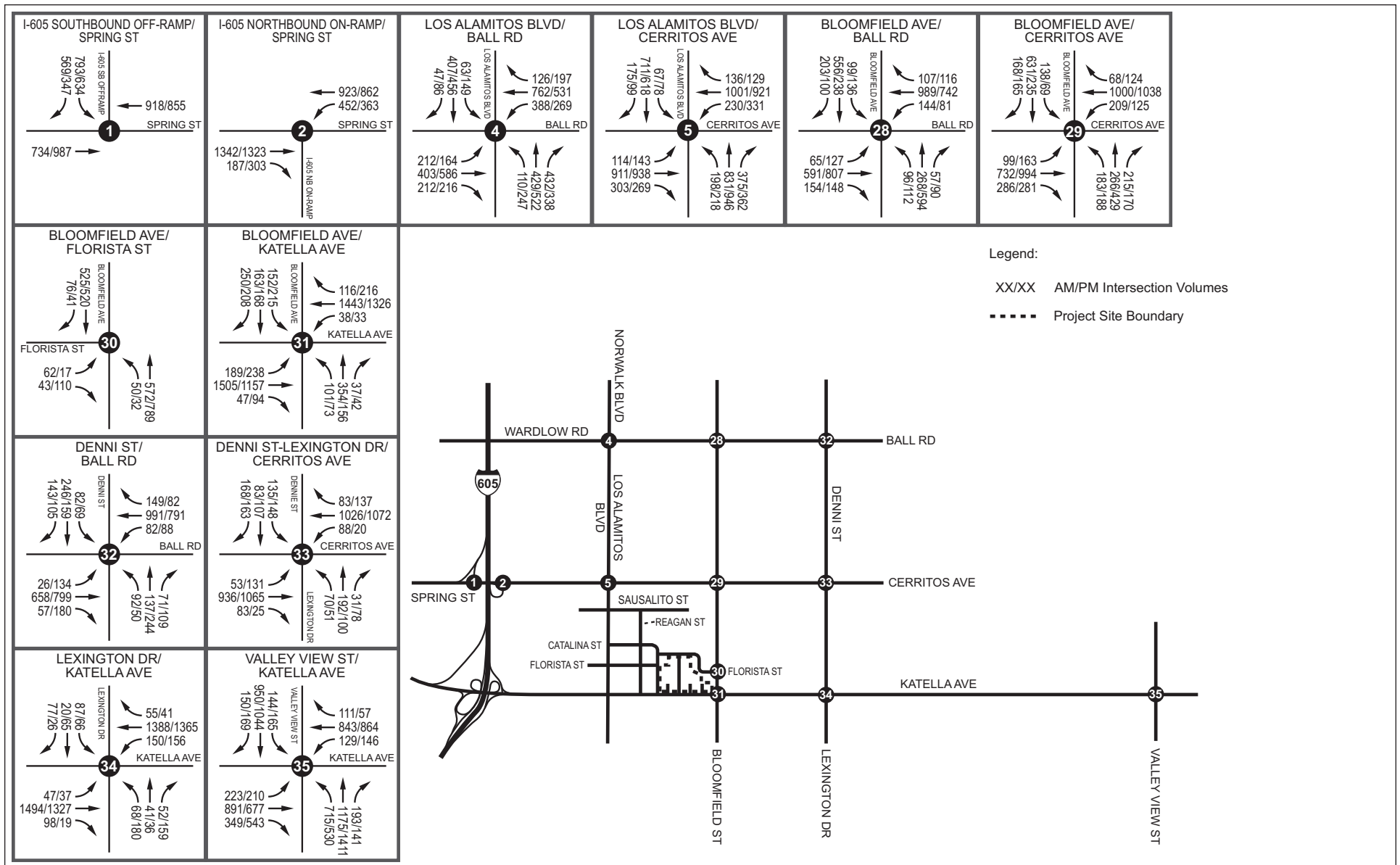


09/10 • JN 10-107031

ENVIRONMENTAL IMPACT REPORT
LOS ALAMITOS MEDICAL CENTER SPECIFIC PLAN

Area 2 – Existing AM/PM Peak Hour Intersection Volumes

Exhibit 5.3-4



NOT TO SCALE

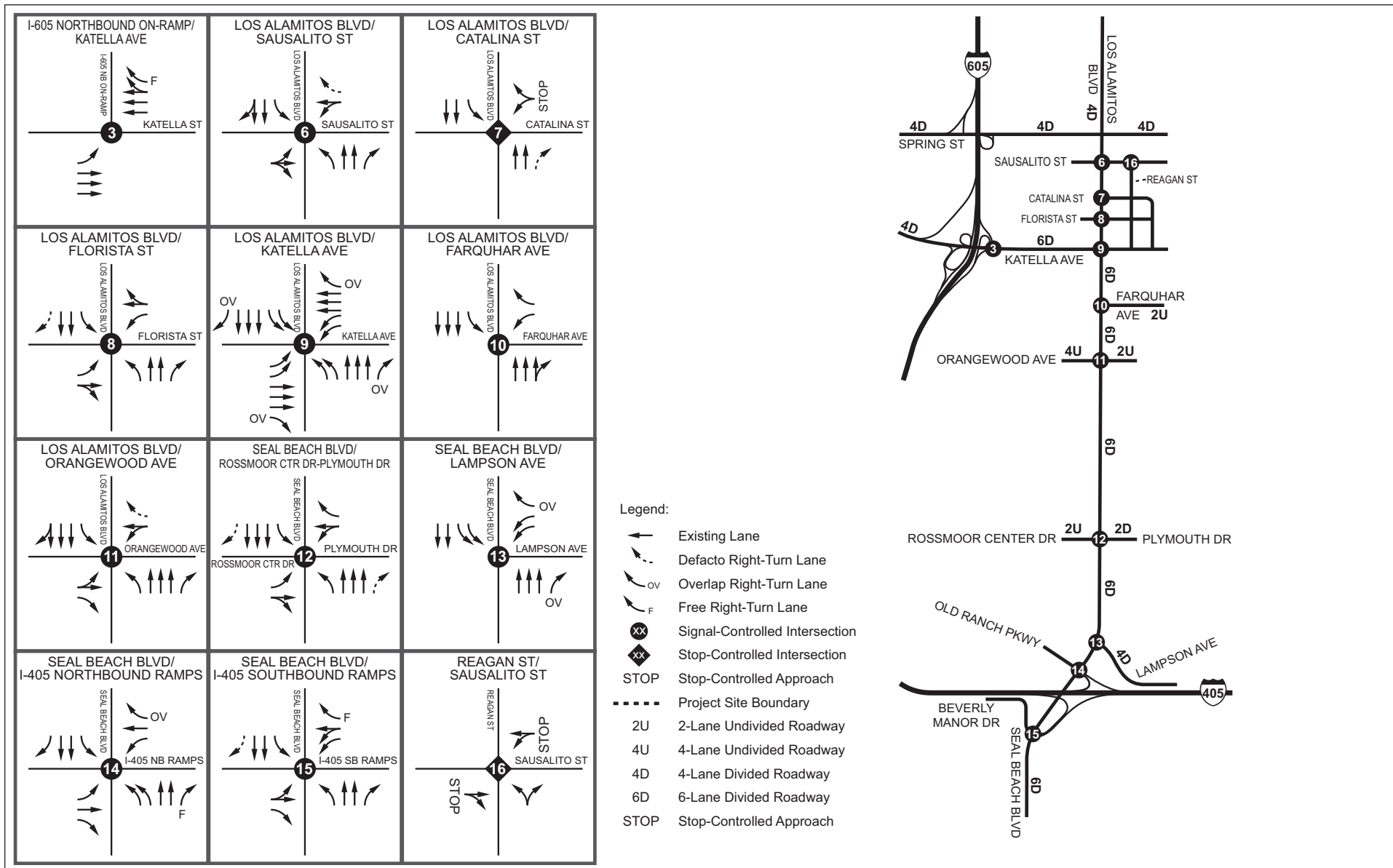


09/10 • JN 10-107031

ENVIRONMENTAL IMPACT REPORT
LOS ALAMITOS MEDICAL CENTER SPECIFIC PLAN

Area 3 – Existing AM/PM Peak Hour Intersection Volumes

Exhibit 5.3-5



NOT TO SCALE

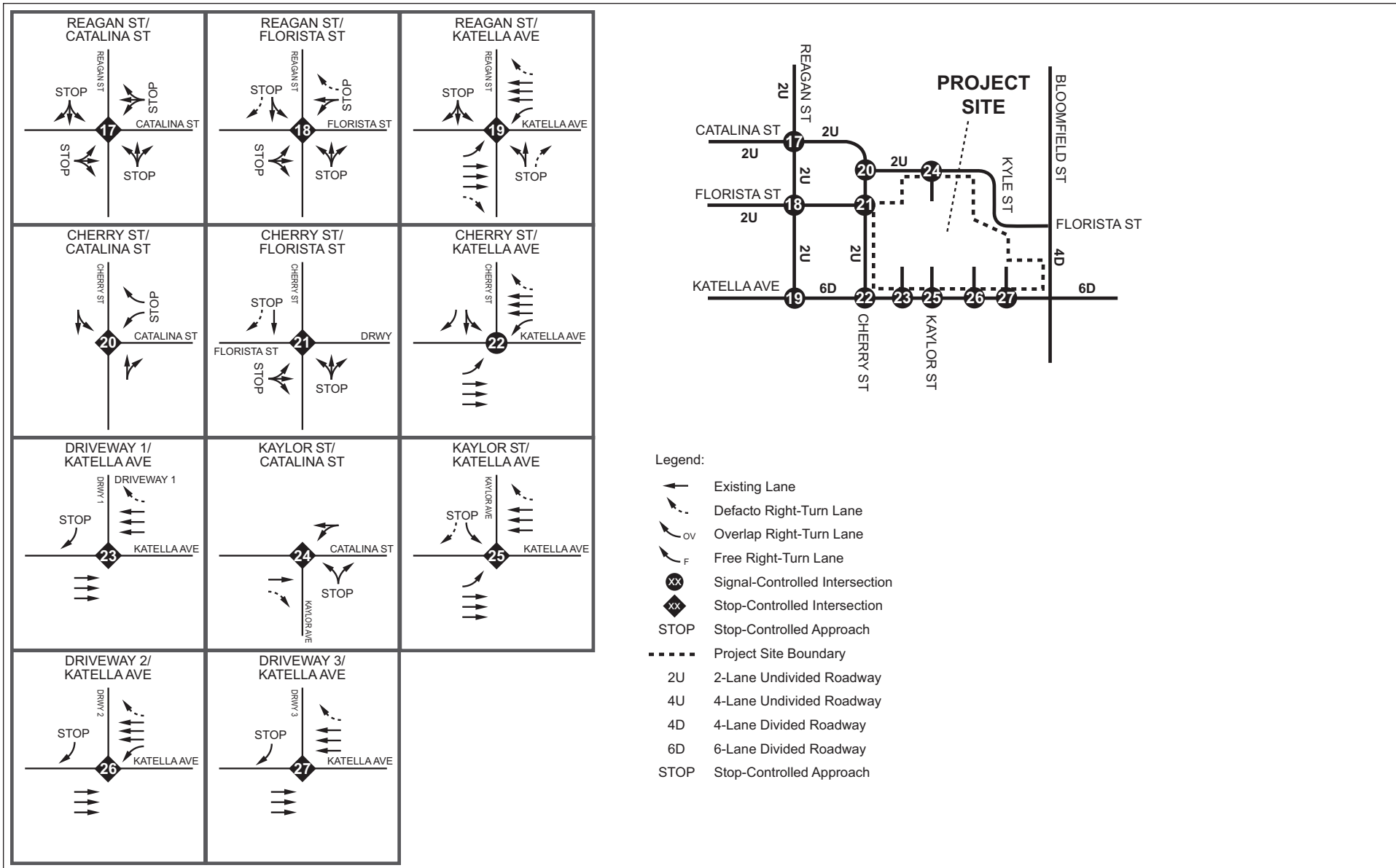


09/10 • JN 10-107031

ENVIRONMENTAL IMPACT REPORT
LOS ALAMITOS MEDICAL CENTER SPECIFIC PLAN

Area 1 – Existing Study Intersection/Roadway Geometry

Exhibit 5.3-6



NOT TO SCALE

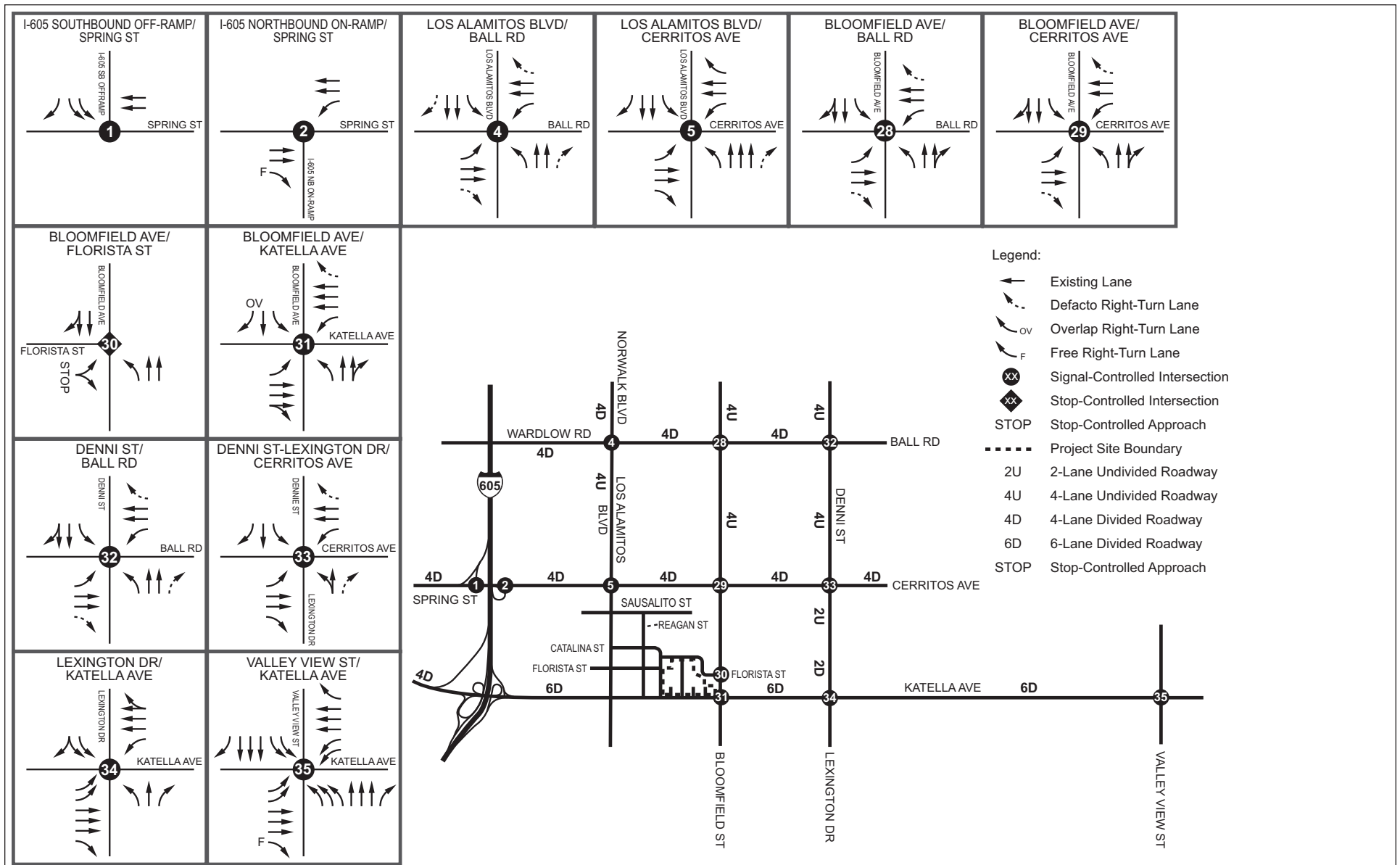


09/10 • JN 10-107031

ENVIRONMENTAL IMPACT REPORT
LOS ALAMITOS MEDICAL CENTER SPECIFIC PLAN

Area 2 – Existing Study Intersection/Roadway Geometry

Exhibit 5.3-7



NOT TO SCALE



09/10 • JN 10-107031

ENVIRONMENTAL IMPACT REPORT
LOS ALAMITOS MEDICAL CENTER SPECIFIC PLAN

Area 3 – Existing Study Intersection/Roadway Geometry

Exhibit 5.3-8



Table 5.3-4
Existing Conditions AM & PM Peak Hour Level of Service

Study Intersection	AM Peak Hour	PM Peak Hour
	V/C – Delay – LOS	V/C – Delay – LOS
1 – I-605 SB Off-Ramp/Spring St	N/A – 18.6 – B	N/A – 16.9 – B
2 – I-605 NB On-Ramp/Spring St	N/A – 13.8 – B	N/A – 11.9 – B
3 – I-605 NB On-Ramp/Katella Ave	N/A – 6.6 – A	N/A – 6.6 – A
4 – Norwalk Blvd/Wardlow Rd	0.74 – N/A – C	0.72 – N/A – C
5 – Los Alamitos Blvd/Cerritos Ave	0.78 – N/A – C	0.83 – N/A – D
6 – Los Alamitos Blvd/Sausalito St	0.59 – N/A – A	0.69 – N/A – B
7 – Los Alamitos Blvd/Catalina St South ¹	N/A – 109.5 – F	N/A – 58.5 – F
8 – Los Alamitos Blvd/Florista St	0.59 – N/A – A	0.53 – N/A – A
9 – Los Alamitos Blvd/Katella Ave	0.68 – N/A – B	0.68 – N/A – B
10 – Los Alamitos Blvd/Farquhar Ave	0.62 – N/A – B	0.58 – N/A – A
11 – Los Alamitos Blvd/Orangewood Ave	0.59 – N/A – A	0.47 – N/A – A
12 – Seal Beach Blvd/Plymouth Dr	0.45 – N/A – A	0.46 – N/A – A
13 – Seal Beach Blvd/Lampson Ave	0.74 – N/A – C	0.65 – N/A – B
14 – Seal Beach Blvd/I-405 NB Off-Ramp-Old Ranch Pkwy	N/A – 20.7 – C	N/A – 25.5 – C
15 – Seal Beach Blvd/I-405 SB Ramps-Beverly Manor Dr	N/A – 26.2 – C	N/A – 50.9 – D
16 – Reagan St/Sausalito St	N/A – 10.7 – B	N/A – 22.2 – C
17 – Reagan St/Catalina St	N/A – 7.8 – A	N/A – 8.7 – A
18 – Reagan St/Florista St	N/A – 8.6 – A	N/A – 9.0 – A
19 – Reagan St/Katella Ave ¹	N/A – >999.9 – F	N/A – 118.7 – F
20 – Cherry St/Catalina St	N/A – 9.0 – A	N/A – 9.8 – A
21 – Cherry St/Florista St	N/A – 7.5 – A	N/A – 8.0 – A
22 – Cherry St/Katella Ave	0.45 – N/A – A	0.46 – N/A – A
23 – Hospital Drwy 1/Katella Ave	N/A – 13.0 – B	N/A – 12.9 – B
24 – Kaylor St/Catalina St	N/A – 9.4 – A	N/A – 10.3 – B
25 – Kaylor St/Katella Ave	N/A – 40.1 – E	N/A – 17.2 – C
26 – Hospital Drwy 2/Katella Ave	N/A – 13.2 – B	N/A – 13.6 – B
27 – Hospital Drwy 3/Katella Ave	N/A – 13.3 – B	N/A – 12.5 – B
28 – Bloomfield St/Ball Rd	0.65 – N/A – B	0.62 – N/A – B
29 – Bloomfield St/Cerritos Ave	0.75 – N/A – C	0.68 – N/A – B
30 – Bloomfield St/Florista St	N/A – 20.1 – C	N/A – 13.2 – B
31 – Bloomfield St/Katella Ave	0.65 – N/A – B	0.64 – N/A – B
32 – Denni St/Ball Rd	0.53 – N/A – A	0.47 – N/A – A
33 – Denni St-Lexington St/Cerritos Ave	0.61 – N/A – B	0.62 – N/A – B
34 – Lexington St/Katella Ave	0.53 – N/A – A	0.56 – N/A – A
35 – Valley View St/Katella Ave	0.60 – N/A – A	0.60 – N/A – A
Note: NB = Northbound; SB = Southbound; V/C = volume to capacity ratio; delay shown in seconds per vehicle; 1 = LOS and delay for one-way and two-way stop-controlled intersections is based on worst case minor street approach. While HCM LOS conservatively reports notable delay, visual observations indicate negligible delay for motorists on high volume major roadway. N/A = Not Applicable; deficient intersection operation shown in bold. Source: RBF Consulting, Los Alamitos Medical Center Specific Plan Traffic Impact Analysis, dated June 18, 2010.		



As indicated in *Table 5.3-4*, the following three study intersections are currently operating at a deficient LOS (LOS F) according to agency performance criteria:

- Los Alamitos Boulevard/Catalina Street South (both AM and PM peak hours);
- Seal Beach Boulevard/I-405 Southbound Ramps-Beverly Manor Drive (PM peak hour only); and
- Reagan Street/Katella Avenue (both AM and PM peak hours).

The HCM methodology reports notable delay at the following two deficient stop-controlled intersections based on the delay for motorists crossing the major roadway, however, negligible delay is experienced by motorists on Los Alamitos Boulevard and Katella Avenue at the following locations:

- Los Alamitos Boulevard/Catalina Street South; and
- Reagan Street/Katella Avenue.

The deficient Seal Beach Boulevard/I-405 Southbound Ramps-Beverly Manor Drive intersection is planned for improvement by a City of Seal Beach sponsored project, however, preliminary design is underway and plans are not yet available.

Existing Conditions – CMP Intersection Peak Hour Level of Service

The following two CMP study intersections are analyzed utilizing CMP guidelines; refer to *Exhibit 5.3-2*:

- I-605 Northbound On-Ramp/Katella Avenue; and
- Valley View Boulevard/Katella Avenue.

CMP Transit Review

The following transit services are available in the vicinity of the project site:

- OCTA fixed Route 50 travels along Katella Avenue adjacent the project site.
- Other OCTA fixed routes in the vicinity of the project site include Route 42, which travels along Los Alamitos Boulevard just west of the project site, Route 46, which travels along Bloomfield Street and Cerritos Avenue just north of the project site, and Route 701, which travels along Katella Avenue and Los Alamitos Boulevard just west of the project site.

Existing Conditions – State Highway Intersection Peak Hour Level of Service

The purpose of the Caltrans *Guide for the Preparation of Traffic Impact Studies* (State of California Department of Transportation, December 2002) is to provide a safe and efficient State transportation system, provide consistency and uniformity in the identification of traffic impacts generated by local land use proposals, and consistency and equity in the identification of measures to



mitigate the traffic impacts generated by land use proposals. The Caltrans traffic studies guide identifies review of substantial individual projects, which might on their own impact the State Highway transportation system.

Mitigation measures identified to reduce significant traffic impacts on State Highway facilities are subject to the following:

- The allocation of a public sector financial component;
- Securing fair share private sector financing from multiple development applicants; and
- Caltrans and Los Angeles County Metropolitan Transportation Authority approval authority for the programming, scheduling, and construction.

Since there is no mechanism for development project proponents to pay fees or make fair share contributions towards improving State Highway facilities, implementation of potential mitigation measures on State Highway facilities is speculative in timing and scope.

This section evaluates the forecast impact of project-generated trips at the following State Highway study freeway segments:

- I-405 West of Seal Beach Boulevard;
- I-405 East of Seal Beach Boulevard;
- I-605 North of Katella Avenue; and
- I-605 South of Katella Avenue.

Traffic analysis is prepared at freeway segments (basic segments).

Caltrans advocates the use of HCM analysis methodology to analyze the operation of freeway segments. HCM analysis methodology describes the operation of freeway segment components using a range of LOS from LOS A to LOS F based on corresponding density (passenger cars/mile/lane) shown in *Table 5.3-5, Level of Service & Density Ranges for State Highway Facilities*. Caltrans target for operation within the study area is LOC C or better.

Table 5.3-5
LOS & Density Ranges for State Highway Facilities

LOS	Freeway Segments – Density (pc/mi/lane)
A	≤ 11
B	$11.01 \leq 18.00$
C	$18.01 \leq 26.00$
D	$26.01 \leq 35.00$
E	$35.01 \leq 45.00$
F	> 45.00
Note: pc/mi/lane = passenger cars per mile per lane.	
Source: RBF Consulting, Los Alamitos Medical Center Specific Plan Traffic Impact Analysis, dated June 18, 2010.	



Los Alamitos Medical Center Specific Plan Program Environmental Impact Report

According to the Caltrans website, freeway volumes were collected in year 2008. Traffic volumes on the Caltrans website provide a volume for the peak hour without identification of either AM or PM peak hour. This traffic analysis assumes the Caltrans website provided data is the PM peak hour.

Table 5.3-6, Existing Conditions AM & PM Peak Hour State Highway Study Segment Level of Service, summarizes existing AM peak hour and PM peak hour LOS of the State Highway study segments; detailed HCM analysis sheets are contained in Appendix D.

**Table 5.3-6
Existing Conditions AM & PM Peak Hour State Highway Study Segment Level of Service**

Study Freeway Segment	Type	Mainline Lanes	Mainline Volume	Density (pc/mi/la)	LOS
Westbound AM					
I-405 East of Seal Beach Blvd	Basic	6	11,014	29.2	D
I-405 West of Seal Beach Blvd	Basic	6	11,014	29.2	D
Westbound PM					
I-405 East of Seal Beach Blvd	Basic	6	13,534	43.7	E
I-405 West of Seal Beach Blvd	Basic	6	13,534	43.7	E
Eastbound AM					
I-405 East of Seal Beach Blvd	Basic	6	12,836	38.5	E
I-405 West of Seal Beach Blvd	Basic	6	12,836	38.5	E
Eastbound PM					
I-405 East of Seal Beach Blvd	Basic	6	12,966	39.3	E
I-405 West of Seal Beach Blvd	Basic	6	12,966	39.3	E
Northbound AM					
I-605 South of Katella Ave	Basic	4	5,689	21.4	C
I-605 North of Katella Ave	Basic	4	6,580	25.3	C
Northbound PM					
I-605 South of Katella Ave	Basic	4	7,342	29.2	D
I-605 North of Katella Ave	Basic	4	8,492	37.8	E
Southbound AM					
I-605 North of Katella Ave	Basic	4	7,370	29.4	D
I-605 South of Katella Ave	Basic	4	6,371	24.3	C
Southbound PM					
I-605 North of Katella Ave	Basic	4	7,008	27.4	D
I-605 South of Katella Ave	Basic	4	6,058	22.9	C
Note: On = freeway on-ramp; Off = freeway off-ramp; Density = passenger cars per mile per lane; deficient segment operation shown in bold.					
Source: RBF Consulting, Los Alamitos Medical Center Specific Plan Traffic Impact Analysis, dated June 18, 2010.					

As shown in *Table 5.3-6*, the State Highway freeway segments are currently operating at a deficient LOS (LOS D or worse) according to agency performance criteria during one or both analysis time periods in one direction or another.



5.3.3 SIGNIFICANCE THRESHOLD CRITERIA

PERFORMANCE CRITERIA

The City of Los Alamitos and the City of Cypress target for peak hour intersection operation is LOS D or better at most intersections and the target for peak hour intersection operation is LOS E or better for intersections on Katella Avenue consistent with the *Orange County Congestion Management Program (CMP)*. The City of Long Beach and the City of Seal Beach target for peak hour intersection operation is LOS D or better. The Caltrans target for peak hour intersection operation is the transition between LOS C and LOS D, which for the purposes of this analysis is assumed as LOS C or better. *Table 5.3-7, Performance Criteria by Study Intersection*, summarizes the performance criteria by study intersections according to the applicable jurisdiction.

Table 5.3-7
Performance Criteria by Study Intersection

Study Intersection	Performance Criteria
1 – I-605 SB Off-Ramp/Spring St	LOS C
2 – I-605 NB On-Ramp/Spring St	LOS C
3 – I-605 NB On-Ramp/Katella Ave	LOS C
4 – Norwalk Blvd/Wardlow Rd	LOS D
5 – Los Alamitos Blvd/Cerritos Ave	LOS D
6 – Los Alamitos Blvd/Sausalito St	LOS D
7 – Los Alamitos Blvd/Catalina St South	LOS D
8 – Los Alamitos Blvd/Florista St	LOS D
9 – Los Alamitos Blvd/Katella Ave	LOS E
10 – Los Alamitos Blvd/Farquhar Ave	LOS D
11 – Los Alamitos Blvd/Orangewood Ave	LOS D
12 – Seal Beach Blvd/Plymouth Dr	LOS D
13 – Seal Beach Blvd/Lampson Ave	LOS D
14 – Seal Beach Blvd/I-405 NB Off-Ramp-Old Ranch Pkwy	LOS C
15 – Seal Beach Blvd/I-405 SB Ramps-Beverly Manor Dr	LOS C
16 – Reagan St/Sausalito St	LOS D
17 – Reagan St/Catalina St	LOS D
18 – Reagan St/Florista St	LOS D
19 – Reagan St/Katella Ave	LOS E
20 – Cherry St/Catalina St	LOS D
21 – Cherry St/Florista St	LOS D
22 – Cherry St/Katella Ave	LOS E



Table 5.3-7 (continued)
Performance Criteria by Study Intersection

Study Intersection	Performance Criteria
23 – Hospital Drwy 1/Katella Ave	LOS E
24 – Kaylor St/Catalina St	LOS D
25 – Kaylor St/Katella Ave	LOS E
26 – Hospital Drwy 2/Katella Ave	LOS E
27 – Hospital Drwy 3/Katella Ave	LOS E
28 – Bloomfield St/Ball Rd	LOS D
29 – Bloomfield St/Cerritos Ave	LOS D
30 – Bloomfield St/Florista St	LOS D
31 – Bloomfield St/Katella Ave	LOS E
32 – Denni St/Ball Rd	LOS D
33 – Denni St-Lexington St/Cerritos Ave	LOS D
34 – Lexington St/Katella Ave	LOS E
35 – Valley View St/Katella Ave	LOS E

City of Los Alamitos and City of Cypress Thresholds of Significance

To determine whether the addition of project-generated trips at a signalized study intersection results in a significant impact, the City of Los Alamitos and City of Cypress utilized the following thresholds of significance consistent with the *Orange County Congestion Management Program (CMP)*:

A significant impact occurs when a proposed project increases traffic demand at a signalized study intersection causing LOS F; or

- A significant impact occurs when a proposed project increases traffic demand at a signalized study intersection operating at a deficient LOS (LOS F) by one percent or more of capacity ($V/C \geq 0.01$), worsening LOS F ($V/C \geq 1.00$).

While the City of Los Alamitos has not established a threshold of significance for unsignalized intersections, this analysis assumes the following threshold of significance:

- A significant impact occurs when a proposed project increases traffic demand at an unsignalized intersection causing LOS F.

City of Long Beach Thresholds of Significance

To determine whether the addition of project-generated trips at a signalized study intersection results in a significant impact, the City of Long Beach has established the following thresholds of significance:



- A significant impact occurs when a proposed project increases traffic demand at a signalized study intersection operating at a deficient LOS (LOS E or worse) by two percent or more of capacity ($V/C \geq 0.02$), causing or worsening LOS F ($V/C \geq 1.00$); or
- A significant impact occurs when a proposed project increases traffic demand at an unsignalized study intersection operating at LOS E or LOS F by 2 percent of delay (second per vehicle).

City of Seal Beach Thresholds of Significance

To determine whether the addition of project-generated trips at a signalized study intersection results in a significant impact, the City of Seal Beach has established the following thresholds of significance:

- At signalized intersections, a significant project-related impact occurs if the addition of project-generated trips causes an increase of 0.01 or more in ICU at a signalized intersection that currently, or in the future, operates at, or with the addition of project traffic, would operate at a deficient LOS (LOS E or worse).
- A significant impact occurs when a proposed project increases traffic demand at an unsignalized study intersection operating at LOS E or LOS F by one second of delay.

CMP Thresholds of Significance

To determine whether the addition of project-generated trips results in a significant impact at the CMP study facility, and thus requires mitigation, the *Orange County CMP* utilizes the following threshold of significance:

- A significant project impact occurs when a proposed project increases traffic demand at a CMP study facility by one-percent or more of capacity ($V/C \geq 0.10$), causing or worsening LOS F ($V/C > 1.00$).

State Highway Intersection Threshold of Significance

While Caltrans has not established traffic thresholds of significance at State Highway intersections, this traffic analysis utilizes the following traffic threshold of significance:

- A significant project impact occurs at a State Highway study intersection when the addition of project-generated trips causes the peak hour level of service of the study intersection to change from acceptable operation (LOS A, B, or C) to deficient operation (LOS D, E or F).

State Highway Freeway Segment Thresholds of Significance

During RBF coordination with Caltrans staff on other projects, Caltrans staff had identified the following threshold of significance at State Highway freeway segments:



- A significant project impact occurs at a State Highway study segment with the addition of at least 50 project-generated peak hour trips and the peak hour level of service of the study segment is operating at an unacceptable condition (LOS E or worse).

SIGNIFICANCE CRITERIA

The environmental analysis in this section is patterned after the Initial Study Checklist recommended by the *CEQA Guidelines*, as amended, and used by the City of Los Alamitos in its environmental review process, and is contained in Appendix A of the EIR. The Initial Study includes questions relating to traffic resources. The issues presented in the Initial Study Checklist have been utilized as thresholds of significance in this section. Accordingly, a project may create a significant environmental impact if it causes one or more of the following to occur:

- Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit.
- Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways.
- Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks; (refer to Section 8.0, Effects Found Not To Be Significant).
- Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).
- Result in inadequate emergency access.
- Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

Based on these significance standards, the effects of the proposed project have been categorized as either “no impact,” a “less than significant impact,” or a “potentially significant impact.” Mitigation measures are recommended for potentially significant impacts. If a potentially significant impact cannot be reduced to a less than significant level through the application of mitigation, it is categorized as a significant unavoidable impact.



5.3.4 PROJECT IMPACTS AND MITIGATION MEASURES

PROPOSED PROJECT OVERVIEW

The project site currently consists of a two-story hospital with 167 beds, three medical office buildings ranging from two to four stories in height, a Total Care Pavilion, a small administrative/warehouse structure and surface parking. The proposed project would include the provision of an additional 164 hospital beds, two new hospital buildings, one new medical office building, a new central plant, and an additional 849 parking spaces; refer to [Section 3.0, Project Description](#).

Regional Access

Regional access to the Los Alamitos Medical Center Specific Plan area is provided by Interstate 405 (I-405) and Interstate 605 (I-605) Freeways. I-405 is located approximately two and one-half miles to the south, and I-605 is located approximately one and one-half miles to the west. The Medical Center campus fronts Katella Avenue, which is accessible by the I-605 Freeway to the west. Los Alamitos Boulevard, located to the west of the project area, provides access to I-405.

Local Access

Pay parking would be instituted upon completion of Phase 1 project components. Therefore, a detailed review of anticipated site access operations is provided by phase. Review provided below discusses site access for visitors and staff, location of pay kiosks, and general parking operations:

Phase 1

Access to visitor parking areas would be provided via two locations on Katella Avenue (one fewer than existing conditions due to construction of MOB A), one location on Cherry Street, and two locations on Kaylor Street. Access to staff parking areas would be provided via three locations on Kaylor Street, two locations on Florista Street, and one location on Catalina Street. Visitor parking would generally be provided via surface parking lots near Katella Avenue and in Parking Structure 1. Parking fees would be collected upon exiting the facilities via pay kiosks on Cherry Avenue, Kaylor Street, and Driveway 3 exiting Parking Structure 1; refer to [Exhibit 5.3-9, Project Parking and Site Access – Phase 1](#) for Phase 1 parking and site access.

Phases 2 and 3

Access to visitor parking areas would be provided via one location on Cherry Street, one location on Katella Avenue (one fewer than provided for with implementation of Phase 1 due to construction of a surface parking lot north of Katella Avenue between Cherry Street and Kaylor Street), and two locations on Kaylor Street. Access to staff parking areas would be provided via one location on Kaylor Street, two locations on Florista Street, and one location on Catalina Street. Visitor parking would generally be provided via surface parking lots near Katella Avenue and in Parking Structure 1. Parking fees would be collected upon exit via pay kiosks on Cherry Avenue, Kaylor Street, and



Driveway 3 exiting the parking structure; refer to *Exhibit 5.3-10, Project Parking and Site Access – Phase 2*, and *Exhibit 5.3-11, Project Parking and Site Access – Phase 3*.

Perimeter Roads

Katella Avenue

Katella Avenue is designated as an Orange County Transportation Authority (OCTA) Smart Street, meaning Katella Avenue is eligible for OCTA funding for roadway segment and intersection improvements to provide smoother traffic flow. The *General Plan* states that Smart Streets are designated as six- to eight-lane roadways with a maximum right of way width of 122 feet. The Smart Street eight-lane configuration is estimated to have a design capacity of 60,000 vehicles per day (east of Los Alamitos Boulevard). A center median currently exists along the Katella Avenue Medical Center frontage, with a break at Kaylor Street and a break at Maple Street allowing for left turn movements into and out of the site. The intersection of Cherry Street and Katella Avenue is signalized.

Katella Avenue provides parallel parking on each side of the street at the present time. The project would not propose any changes to the public right-of-way configuration. No improvements are anticipated to be required for Katella Avenue as part of the Specific Plan implementation other than frontage improvements associated with the new driveway entries as discussed above.

Cherry Street

Cherry Street is a two-lane local street that serves as the western border of the project area and runs north to south. Angled parking is currently provided on both sides of Cherry Street. Several entrances along Cherry Street are anticipated to allow access to the project area. The intersection of Cherry Street and Katella Avenue is signalized.

Florista, Kyle and Catalina Streets

Additional perimeter streets include Florista, Kyle, and Catalina Streets, which from the northern boundary to the campus and provide access from Cherry Street to Bloomfield Street. These remaining streets would provide vehicular access to the project area.

Internal Circulation

Kaylor Street

Kaylor Street is a public roadway that currently serves as the only full access point from Katella Avenue. It roughly bisects the site and intersects Catalina Street to the north. As part of project implementation, Kaylor would be modified as follows:



- Phase 1. Kaylor Street would be vacated during Phase 1 of project implementation but would remain unaltered in configuration, providing full access into the site as a private street. A public access easement would be placed on the private driveway; refer to Exhibit 5.3-9.
- Phases 2 and 3. As part of Phase 2, Kaylor Street would be reconfigured as a driveway access point into the site, providing access to the new parking structure and surface parking lots from Katella Avenue. On the north, Kaylor Street would extend south from Catalina Street and serve a private street for ambulances to the new emergency room and access for employees and visitors. Kaylor Street would terminate in a cul-de-sac constructed to City and OCFA standards; refer to Exhibit 5.3-10 and Exhibit 5.3-11.

Emergency Room Access

Access to the medical center emergency room is currently provided via an entrance on Cherry Street for public use and an entrance on Kaylor Street for Emergency Medical Services (EMS) providers. Wayfinding and directional signs direct the public to access the emergency room at the Cherry Street access. Access to the emergency room would remain unchanged for project Phase 1.

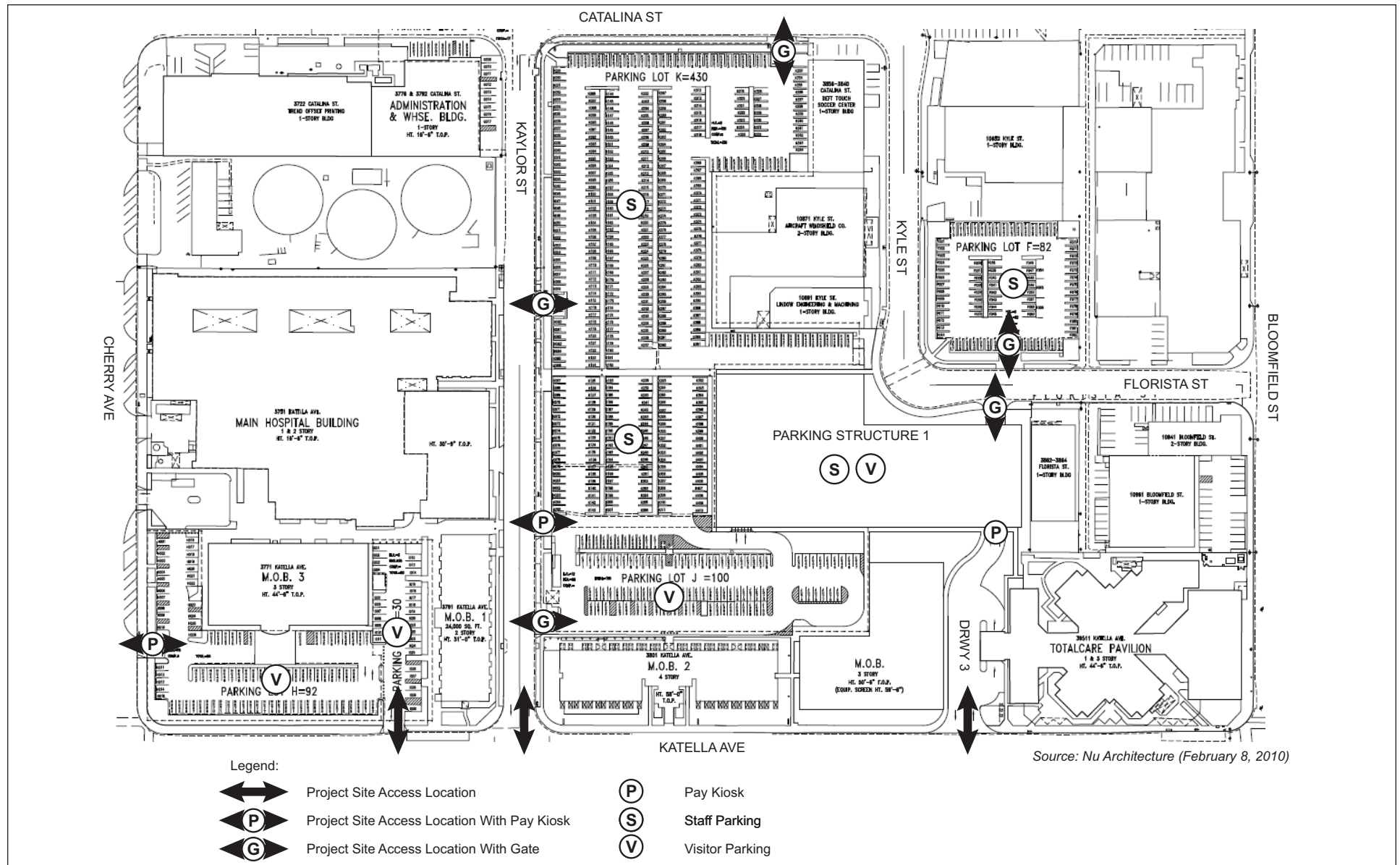
Upon completion of the proposed Phase 2, access by the public to the emergency room would be reoriented to Katella Avenue via the vacated Kaylor Street. EMS providers would access the emergency room via Catalina Street and the vacated Kaylor Street. State code requires separation of access to the emergency room between public users and EMS providers. Wayfinding and directional signs would direct the public to access the emergency room using the Kaylor Street/Katella Avenue intersection.

EMS Delivery Frequency and Routing

As requested by City staff, the applicant has provided information about the EMS site access operations and frequency of deliveries to the Los Alamitos Medical Center (LAMC). Based on information provided by the project applicant, Care Ambulance Service typically makes about 400 patient deliveries to LAMC each month, which equates to approximately 14 ambulance deliveries per day.

The majority of ambulance trips currently utilize Katella Avenue and Kaylor Street to access the medical center EMS entry point along Kaylor Street. With the proposed project, the Hospital EMS entry point would be on Kaylor Street accessed from Catalina Street. Therefore, with the proposed project, EMS trips to the medical center can continue to utilize Cherry Street, Catalina Street, and Florista Street, and Bloomfield Street.

The infrequency of EMS trips and the lack of collision history between EMS and passenger cars near the medical center indicates the proposed re-routing of EMS vehicles would not create a hazard in the area. The project applicant has gained preliminary approval from Care Ambulance Service of the new configuration for EMS deliveries to the Hospital and should continue to guarantee the project site plan satisfies agency requirements for deliveries.



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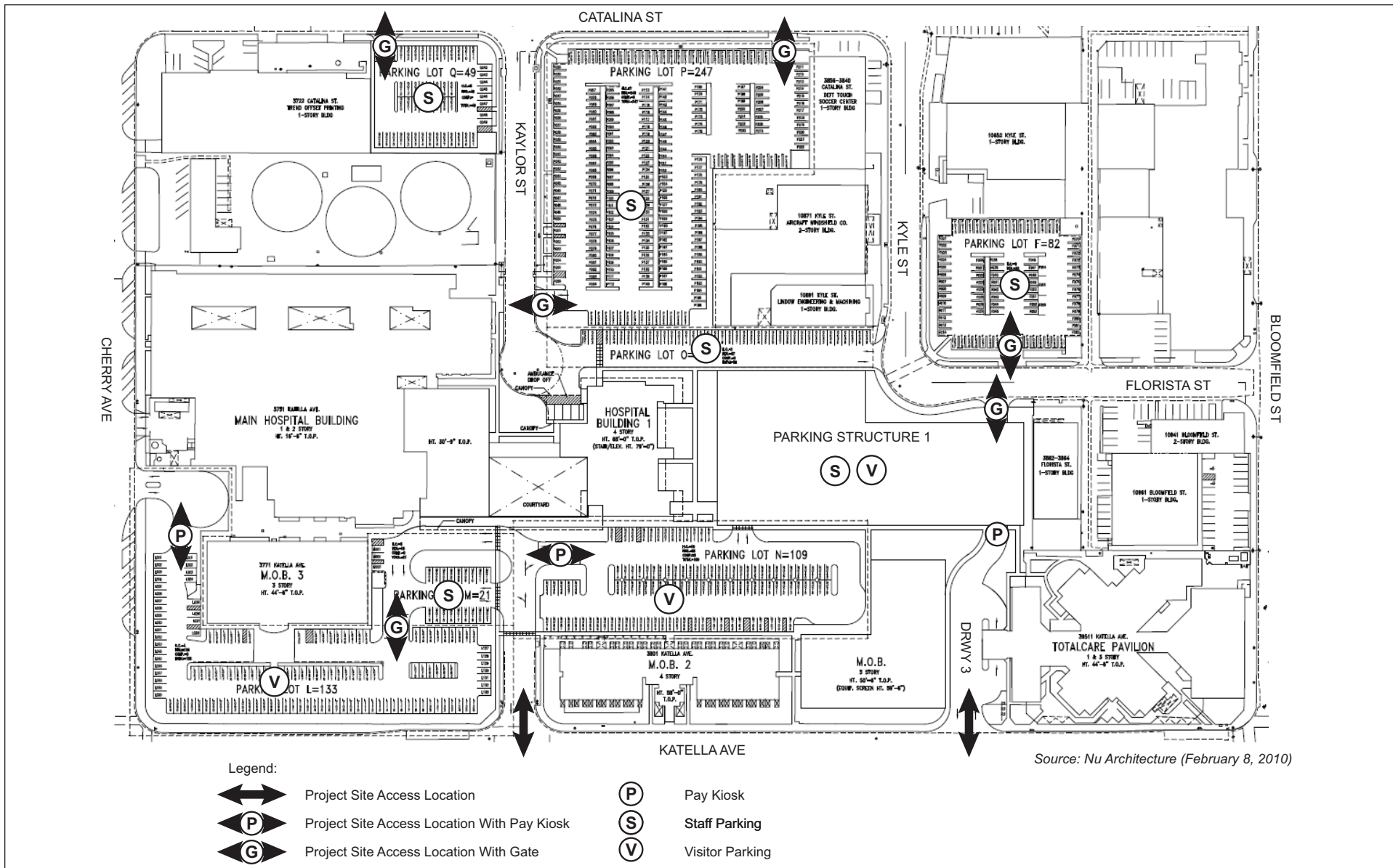


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LOS ALAMITOS MEDICAL CENTER SPECIFIC PLAN

Project Parking and Site Access - Phase 1

Exhibit 5.3-9



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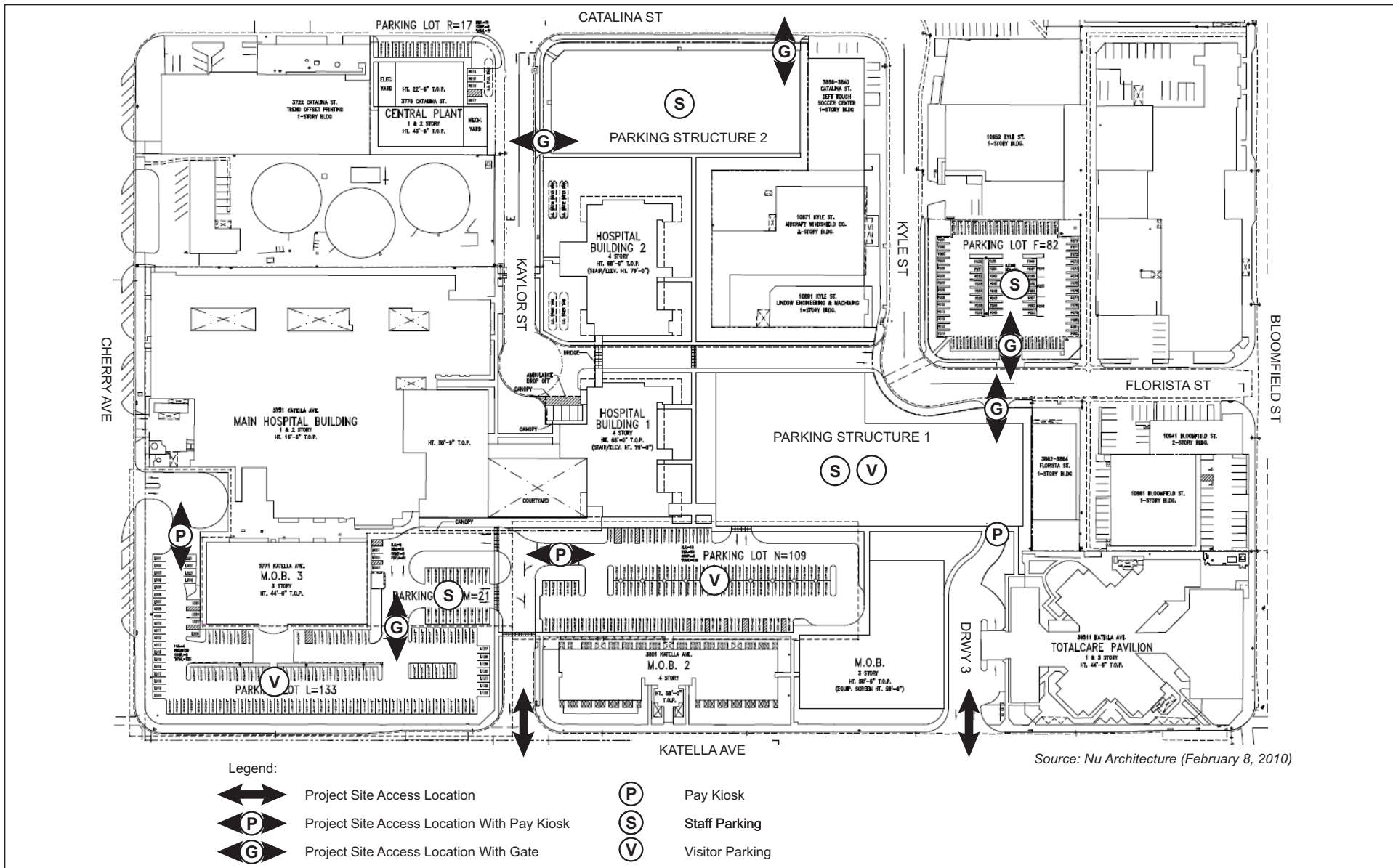


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Project Parking and Site Access - Phase 2

Exhibit 5.3-10



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ENVIRONMENTAL IMPACT REPORT
LOS ALAMITOS MEDICAL CENTER SPECIFIC PLAN

Project Parking and Site Access - Phase 3

Exhibit 5.3-11



Parking Plan

A total of 1,943 on-site parking spaces, configured in surface and structured parking area, would be provided within the project site at buildout. Parking would be provided at ratios that meet or exceed the parking standards of the *Los Alamitos Medical Center Specific Plan Development Regulations* as shown in *Table 5.3-8, Parking Requirements*, based on the anticipated phased buildout of the proposed project. The final parking requirement would be based on the parking ratios outlined in the Development Regulations of the Specific Plan, calculated at the time of final site plan review, and thus may vary slightly based on final square footages. Parking would be on a paid basis, with employee parking provided at no charge. Employees would take access to the parking areas and/or structure(s) via separate key carded entry points.

**Table 5.3-8
Parking Requirements**

Use	Square Feet	Beds	Parking Required
Phase 1			
Existing Main Hospital	121,748	167	292
Existing MOB 1 (interim until demolished in Phase 2)	24,000	--	120
Existing MOB 2 (unaltered)	64,000	--	320
Existing MOB 3 (unaltered)	60,000	--	300
Existing Total Care Pavilion (unaltered)	71,676	--	358
Existing Administration/Warehouse Building (interim until demolished in Phase 2)	15,099	--	26
New Medical Office Building A	75,100	--	376
Subtotal Phase 1 (Stand Alone)	431,623	167	1,792
Phase 2			
Existing Main Hospital (internal reconfiguration with bed count reduction)	(no change)	-54	-94 Reduction due to reduced bed count
New Patient Care Building 1	88,100	92	161
Demolition of MOB 1	-24,000	--	-120
Demolition of Administration/Warehouse Bldg.	-15,099	--	-26
Subtotal Phase 2 (net)	49,001	92	-79
Cumulative Total Phase 2	480,624	205	1,713
Phase 3/Buildout			
New Patient Care Building 2	88,100	126	221
New Central Plant	14,100	--	--
Subtotal Phase 3/Buildout	102,200	--	221
BUILD-OUT TOTAL	582,824	331	1,934
Notes: Parking ratios: Hospital (1.75 spaces/bed), Medical Office (5 spaces/1,000 sf), Office (4 spaces/1,000 sf), warehouse (1 space/1,000 sf)			

During Phase 1, parking would be re-configured. A portion of the surface parking would be demolished, and concurrent with re-configuration of the surface parking spaces, Parking Structure 1 would be constructed. Parking in the two existing lots in the northern portion of the site would be employee/staff parking. *Table 5.3-9, On-Site Parking*, outlines the provided on-site parking by type.



Parking Structure 2 is proposed for construction in Phase 3, as Specific Plan buildout nears completion.

On-street parking is also present on the adjacent public streets. This on-street parking does not count towards meeting the parking needs for the site. As shown in *Table 5.3-9*, the proposed parking exceeds requirements.

**Table 5.3-9
On-Site Parking**

Phase	Parking Spaces Provide	Parking Required	Levels
Phase 1			
Surface Parking	751		Surface
Parking Structure 1	1,050		6 levels, above ground
<i>Subtotal Phase 1</i>	<i>1,801</i>	<i>1,792</i>	
Phase 2			
Surface Parking	680		Surface
Parking Structure 1	1,050		6 levels, above ground
<i>Subtotal Phase 2</i>	<i>1,730</i>	<i>1,713</i>	
Phase 3/Buildout			
Surface Parking	362		Surface
Parking Structure 1	1,050		6 levels, above ground
Parking Structure 2	531		4 levels, above ground
Total at Buildout	1,943	1,934	

Project Trip Generation

Table 5.3-10, ITE Trip Rates for Proposed Project, summarizes the *Institute of Transportation Engineers (ITE)* trip generation rates used to calculate the number of trips forecast to be generated by the proposed project.

**Table 5.3-10
ITE Trip Rates for Proposed Project**

Land Use (ITE Code)	Units	AM Peak Hour			PM Peak Hour			Daily Trip Rate
		In	Out	Total	In	Out	Total	
Light Industrial (110)	tsf	0.81	0.11	0.92	0.12	0.85	0.97	6.97
Hospital (610)	beds	0.81	0.33	1.14	0.47	0.84	1.31	11.81
Medical/Dental Office (720)	tsf	1.82	0.48	2.30	0.93	2.53	3.46	36.13
Note: tsf = thousand square feet.								
Source: 2008 ITE Trip Generation Manual, 8 th Edition.								



A 15,099 square foot building would be demolished in Phase 2 for the provision of a surface parking lot; however, the administrative and warehousing operations would continue at the campus through relocation into other buildings. Therefore, no trip reduction is included associated with the 15,099 square foot building demolition. *Table 5.3-11, Forecast Trip Generation of Proposed Project*, summarizes the trips forecast to be generated by the proposed project by phase utilizing the trip generation data shown in *Table 5.3-10*.

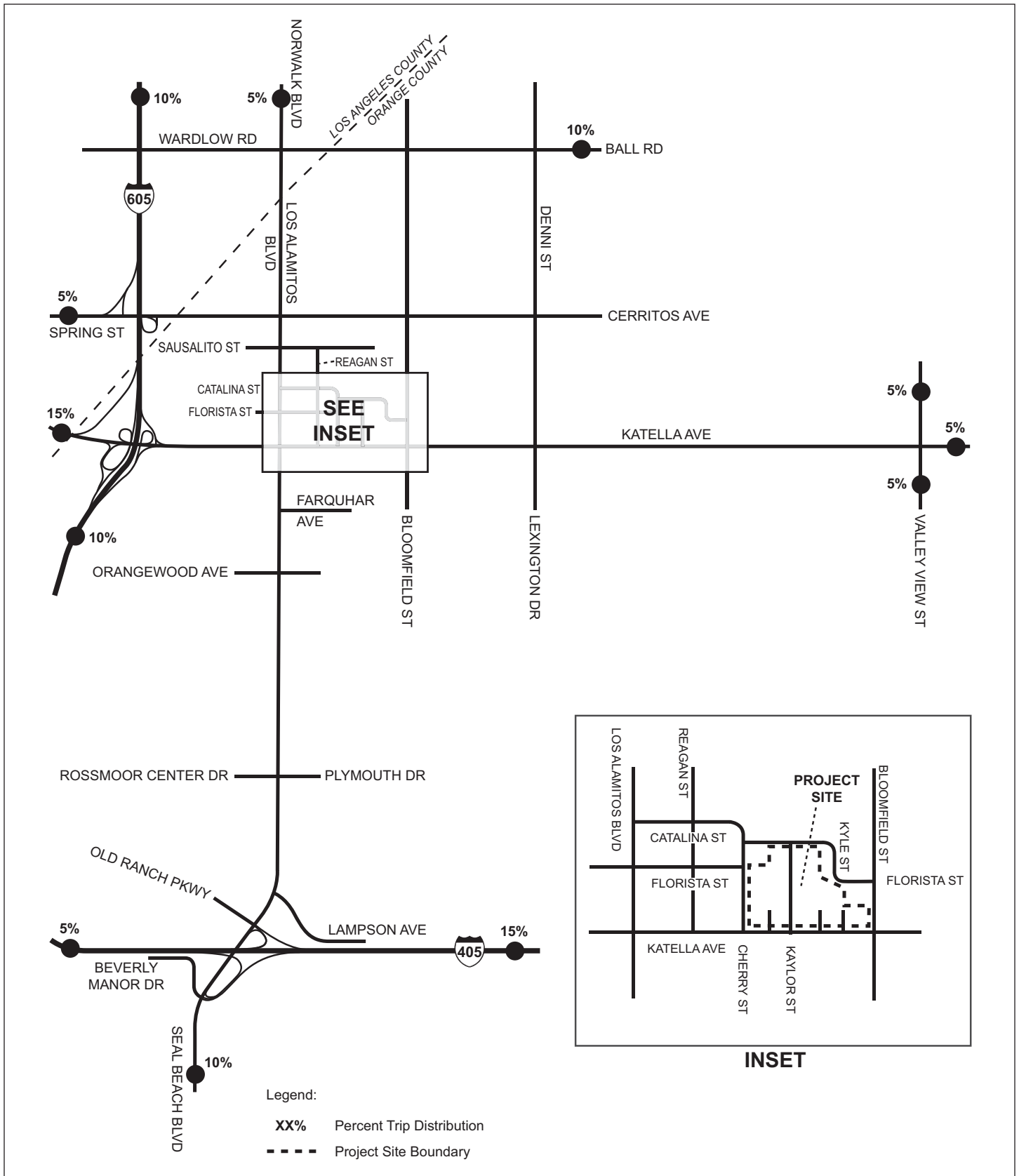
**Table 5.3-11
Forecast Trip Generation of Proposed Project**

Land Use	AM Peak Hour Trips			PM Peak Hour Trips			Daily Trips
	In	Out	Total	In	Out	Total	
Phase 1							
New 75.1 tsf Medical Office Building A	137	36	173	70	190	260	2,713
Phase 1 Subtotal	137	36	173	70	190	260	2,713
Phase 2							
Demolition							
-15.099 tsf Administration/Warehouse ¹	0	0	0	0	0	0	0
-54 bed Hospital Reconfiguration ²	-44	-18	-62	-25	-45	-70	-638
-24.0 tsf Medical Office	-44	-12	-56	-22	-61	-83	-867
New 92 bed Hospital Building 1 (38 net new beds)	75	30	105	43	77	120	1,087
Phase 2 Subtotal	-13	0	-13	-4	-29	-33	-418
Phase 3							
New 126 bed Hospital Building 2	102	42	144	59	106	165	1,488
New 14.1 tsf Light Industrial (Central Plant)	11	2	13	2	12	14	98
Phase 3 Subtotal	113	44	157	61	118	179	1,586
Total Forecast Trip Generation of Proposed Project	237	80	317	127	279	406	3,881
Note: tsf = thousand square feet. 1 = While 15,099 square foot administration/warehouse building is demolished, operations would continue at campus through relocation to other buildings. 2 = While reconfiguration of hospital results in a 54 bed decrease, available square footage is not considered new square footage for additional operations.							

As shown in *Table 5.3-11*, the proposed project is forecast to generate approximately 3,881 daily trips, which include approximately 317 AM peak hour trips and approximately 406 PM peak hour trips. It is worth noting, implementation of Phase 2 is forecast to result in a net negative trip generation.

Project Trip Distribution

Exhibit 5.3-12, Forecast Trip Percent Distribution of Proposed Project shows forecast trip percent distribution of project-generated trips determined based on current traffic patterns, proposed access points, proximity to major thoroughfares, and surrounding land use configurations.



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ENVIRONMENTAL IMPACT REPORT LOS ALAMITOS MEDICAL CENTER SPECIFIC PLAN Forecast Trip Percent Distribution of Proposed Project

Exhibit 5.3-12



Project Trip Assignment

Exhibit 5.3-13, Area 1 – Forecast AM & PM Peak Hour Trip Assignment of Proposed Project Phase 1; Exhibit 5.3-14, Area 2 – Forecast AM & PM Peak Hour Trip Assignment of Proposed Project Phase 1; and Exhibit 5.3-15, Area 3 – Forecast AM & PM Peak Hour Trip Assignment of Proposed Project Phase 1, show the corresponding assignment of project-generated phase peak hour trips assuming the trip percent distribution shown in Exhibit 5.3-12. Exhibit 5.3-16, Area 1 – Forecast AM & PM Peak Hour Trip Assignment of Proposed Project Phases 1-3; Exhibit 5.3-17, Area 2 – Forecast AM & PM Peak Hour Trip Assignment of Proposed Project Phases 1-3; and Exhibit 5.3-18, Area 3 – Forecast AM & PM Peak Hour Trip Assignment of Proposed Project Phases 1-3, show the corresponding assignment of project-generated phases 1 through 3 peak hour trips assuming the trip percent distribution shown in Exhibit 5.3-12.

FORECAST YEAR 2013 PROPOSED PROJECT TRAFFIC IMPACTS

- ◆ **DEVELOPMENT ASSOCIATED WITH IMPLEMENTATION OF THE PROPOSED PROJECT COULD RESULT IN ADVERSE IMPACTS TO THE FUNCTION OF INTERSECTIONS IN THE PROJECT AREA UNDER FORECAST YEAR 2013 TRAFFIC CONDITIONS.**

Level of Significance Before Mitigation: Potentially Significant Impact.

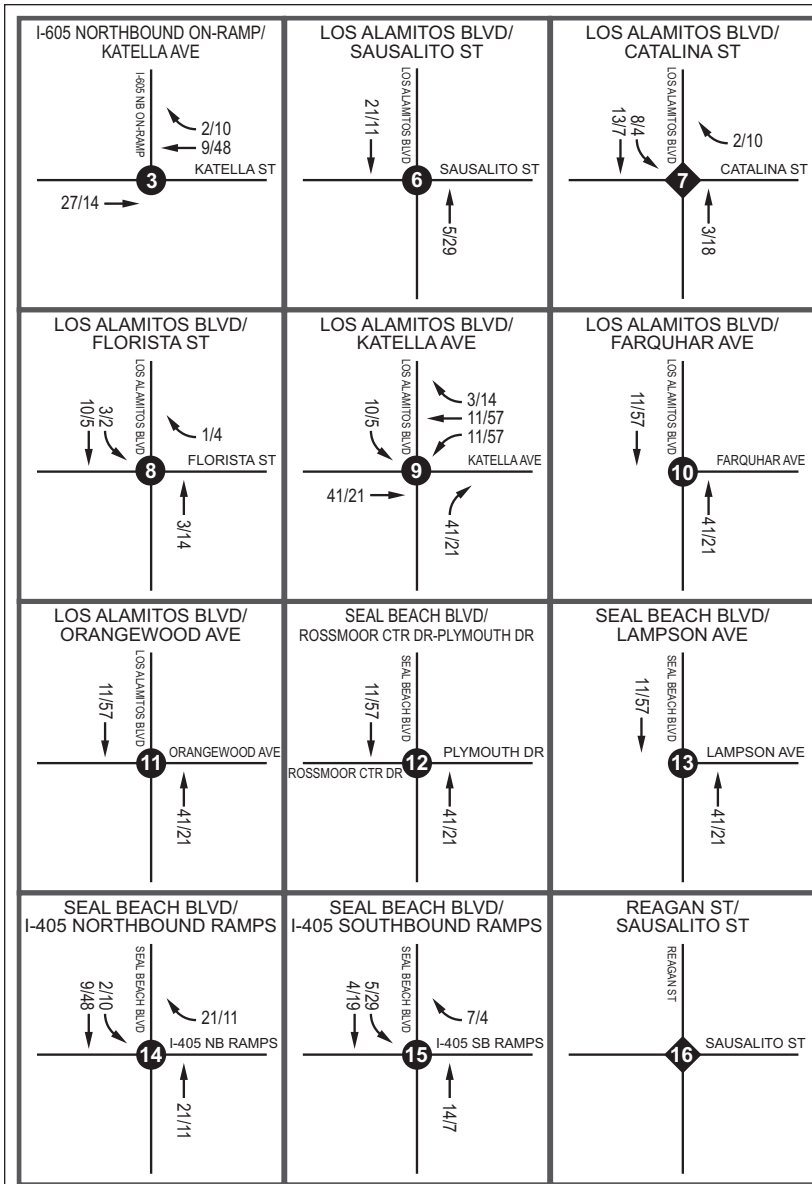
Impact Analysis:

Forecast Year 2013 Without Project Conditions

The proposed project Phase 1 is planned to open in 2013. To determine traffic conditions associated with the proposed project, forecast year 2013 without project conditions are examined prior to forecast year 2013 with project conditions.

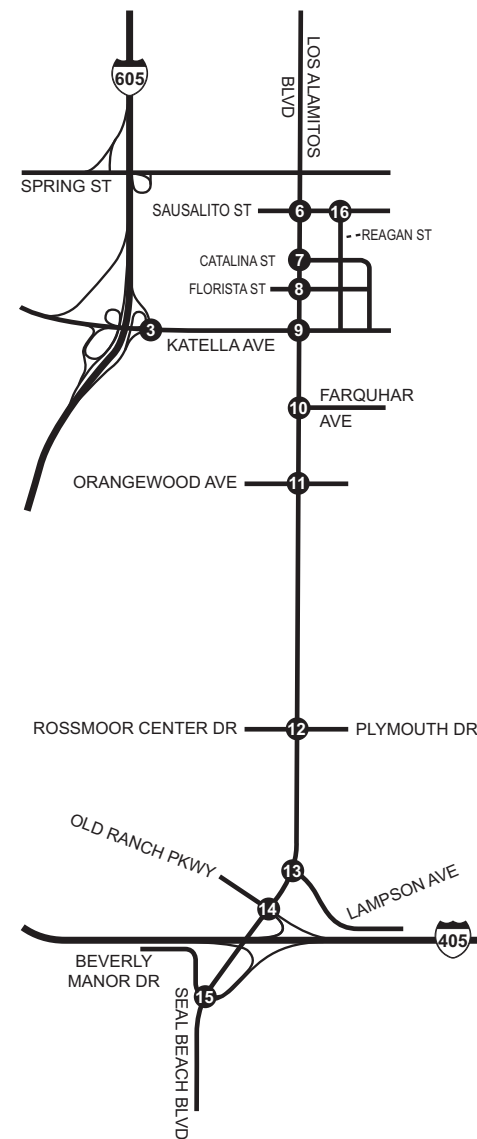
Forecast year 2013 without project conditions study area traffic volumes were derived by applying an annual growth rate factor of 0.5 percent per year to existing traffic volumes consistent with other traffic studies in the vicinity of the project site. Additionally, trips were added from the following six cumulative projects in the vicinity of the project site, which have already been approved, but have not yet been constructed, and therefore are not yet generating traffic; cumulative projects were determined based on discussions with agency staff:

- 17,500 square foot Rite-Aid project at northwest corner of the Seal Beach Boulevard/St. Cloud Drive intersection (City of Seal Beach);
- 13-acre retail project at northwest corner of the Katella Avenue/Winners Circle intersection (City of Cypress);
- 38,031 square foot expansion of SeaCoast Grace Church at 5100 Cerritos Avenue (City of Cypress);
- 11,000 square foot CVS Pharmacy project at 3401 Katella Avenue (City of Los Alamitos);



Legend:

XX/XX AM/PM Intersection Volumes



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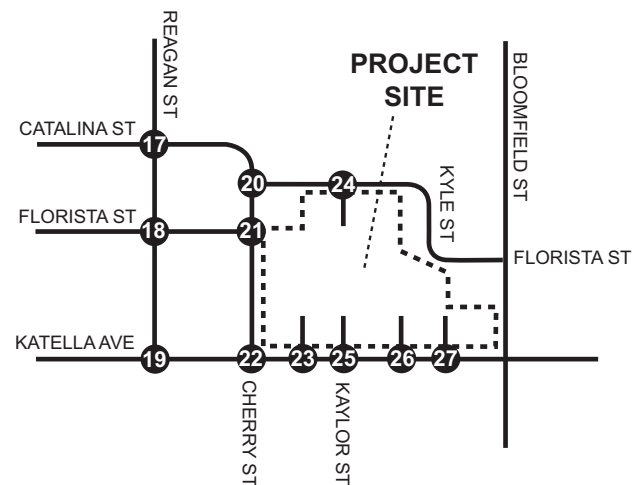
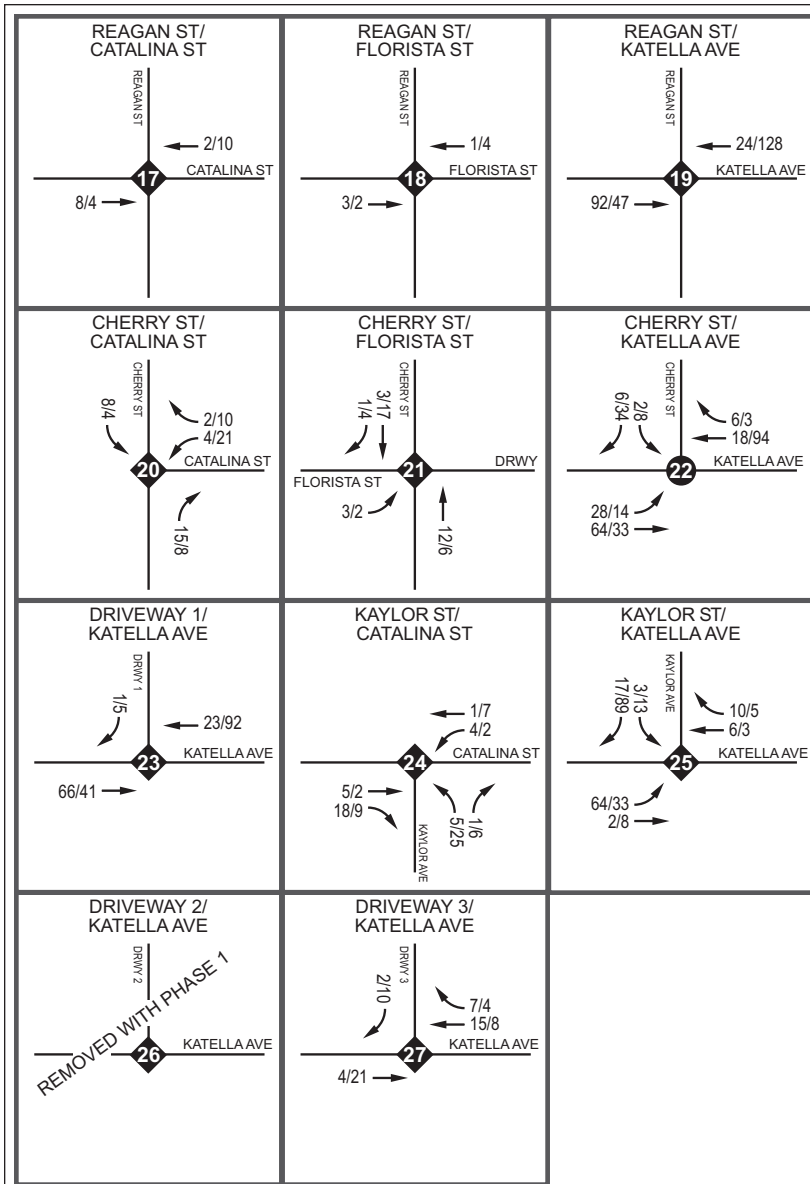


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ENVIRONMENTAL IMPACT REPORT
LOS ALAMITOS MEDICAL CENTER SPECIFIC PLAN

Area 1 – Forecast AM/PM Peak Hour Trip Assignment of Proposed Project Phase 1

Exhibit 5.3-13



Legend:

XX/XX AM/PM Intersection Volumes

----- Project Site Boundary

NOT TO SCALE

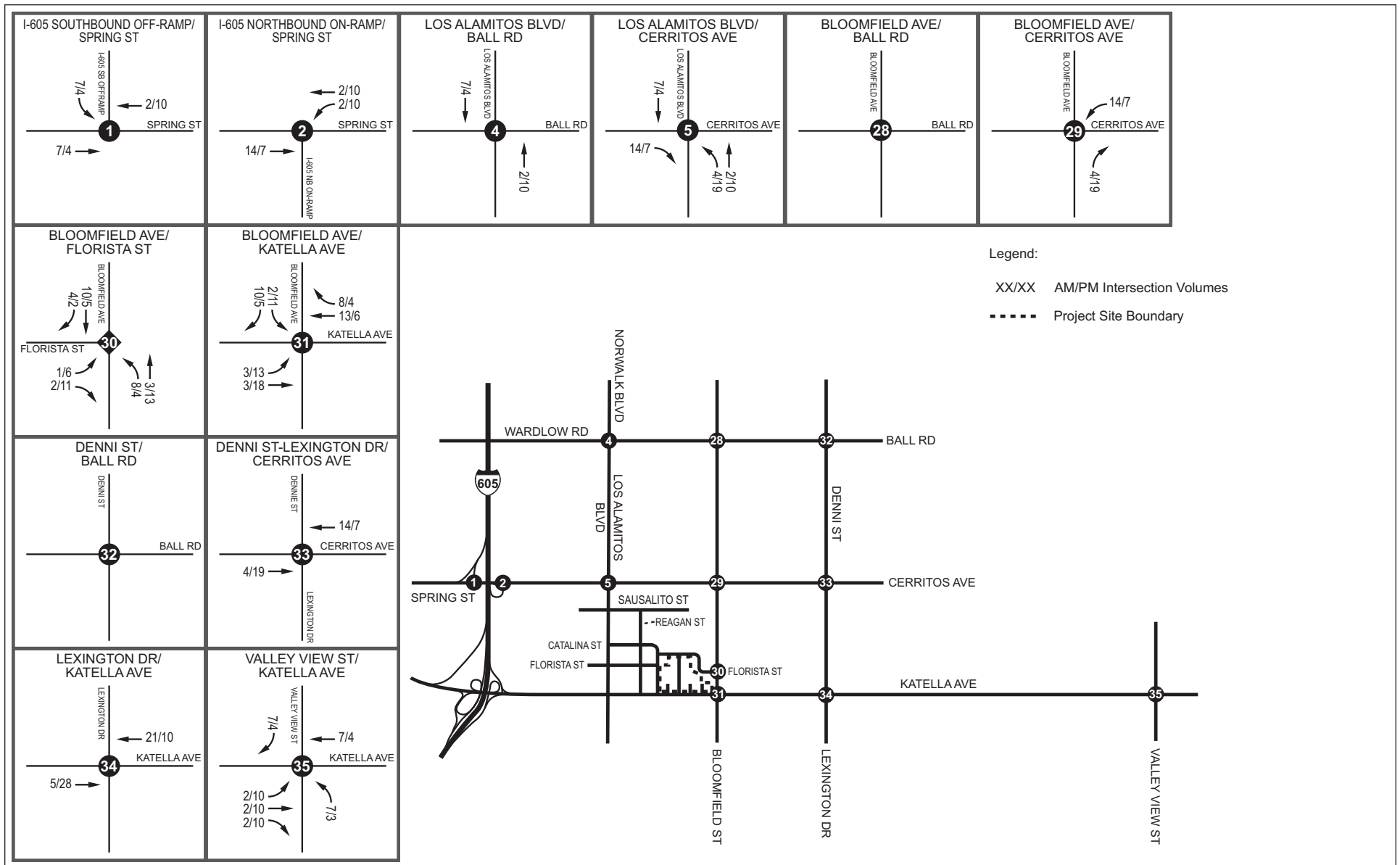


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ENVIRONMENTAL IMPACT REPORT
LOS ALAMITOS MEDICAL CENTER SPECIFIC PLAN

Area 2 – Forecast AM/PM Peak Hour Trip Assignment of Proposed Project Phase 1

Exhibit 5.3-14



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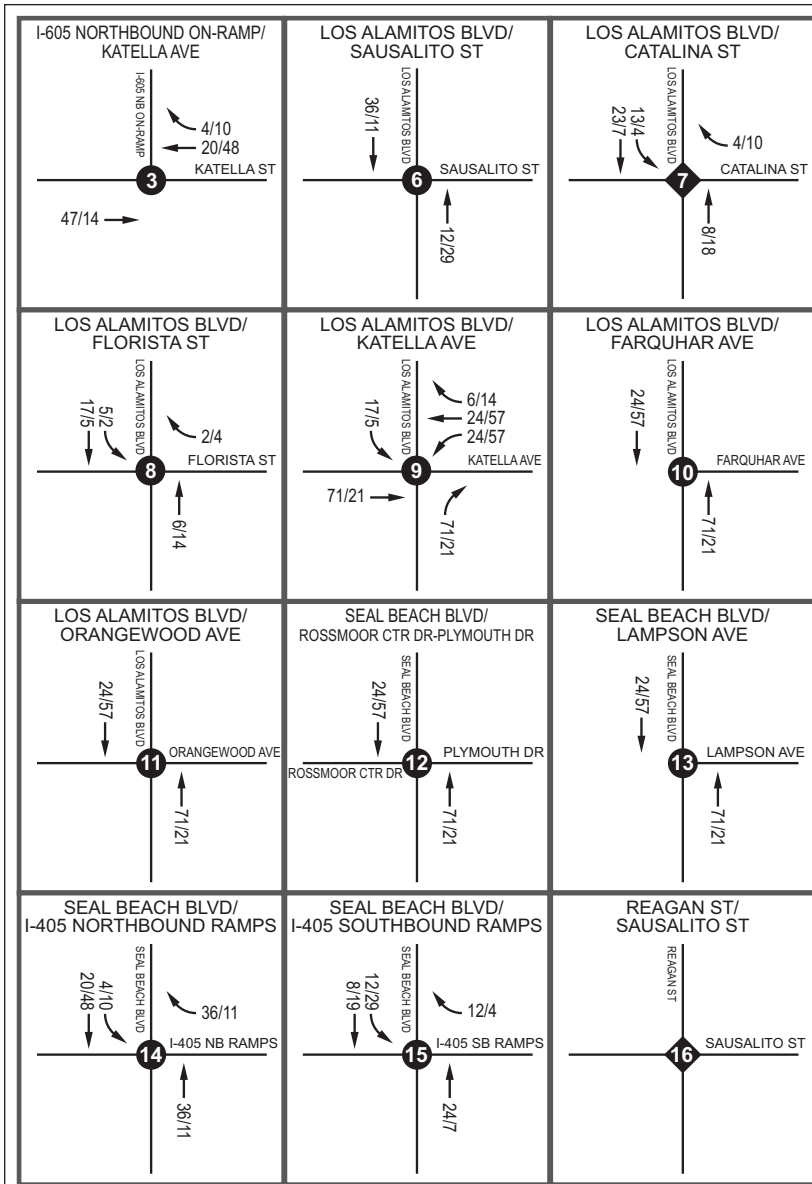


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LOS ALAMITOS MEDICAL CENTER SPECIFIC PLAN

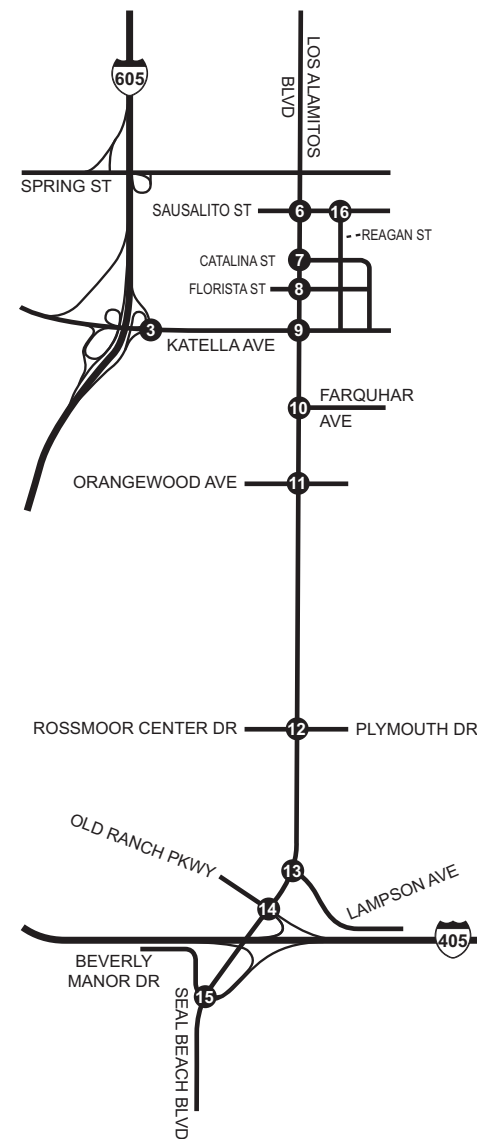
Area 3 – Forecast AM/PM Peak Hour Trip Assignment of Proposed Project Phase 1

Exhibit 5.3-15



Legend:

XX/XX AM/PM Intersection Volumes



NOT TO SCALE

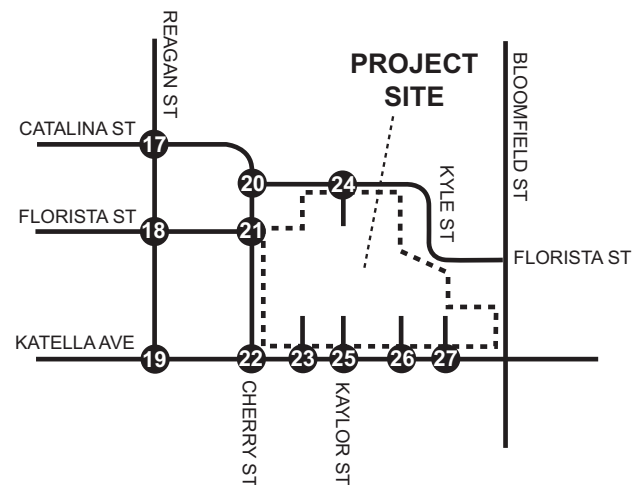
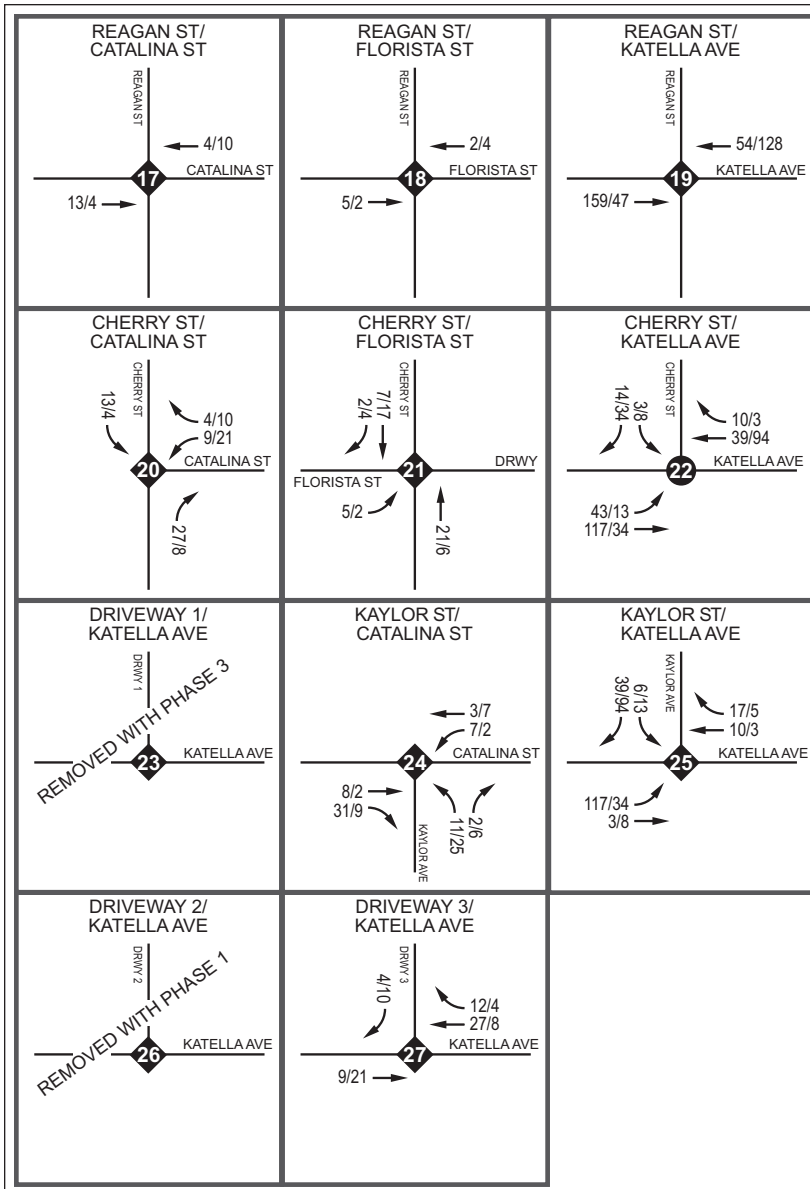


09/10 • JN 10-107031

ENVIRONMENTAL IMPACT REPORT
LOS ALAMITOS MEDICAL CENTER SPECIFIC PLAN

Area 1 – Forecast AM/PM Peak Hour Trip Assignment of Proposed Project Phases 1 - 3

Exhibit 5.3-16



Legend:

XX/XX AM/PM Intersection Volumes

----- Project Site Boundary

NOT TO SCALE

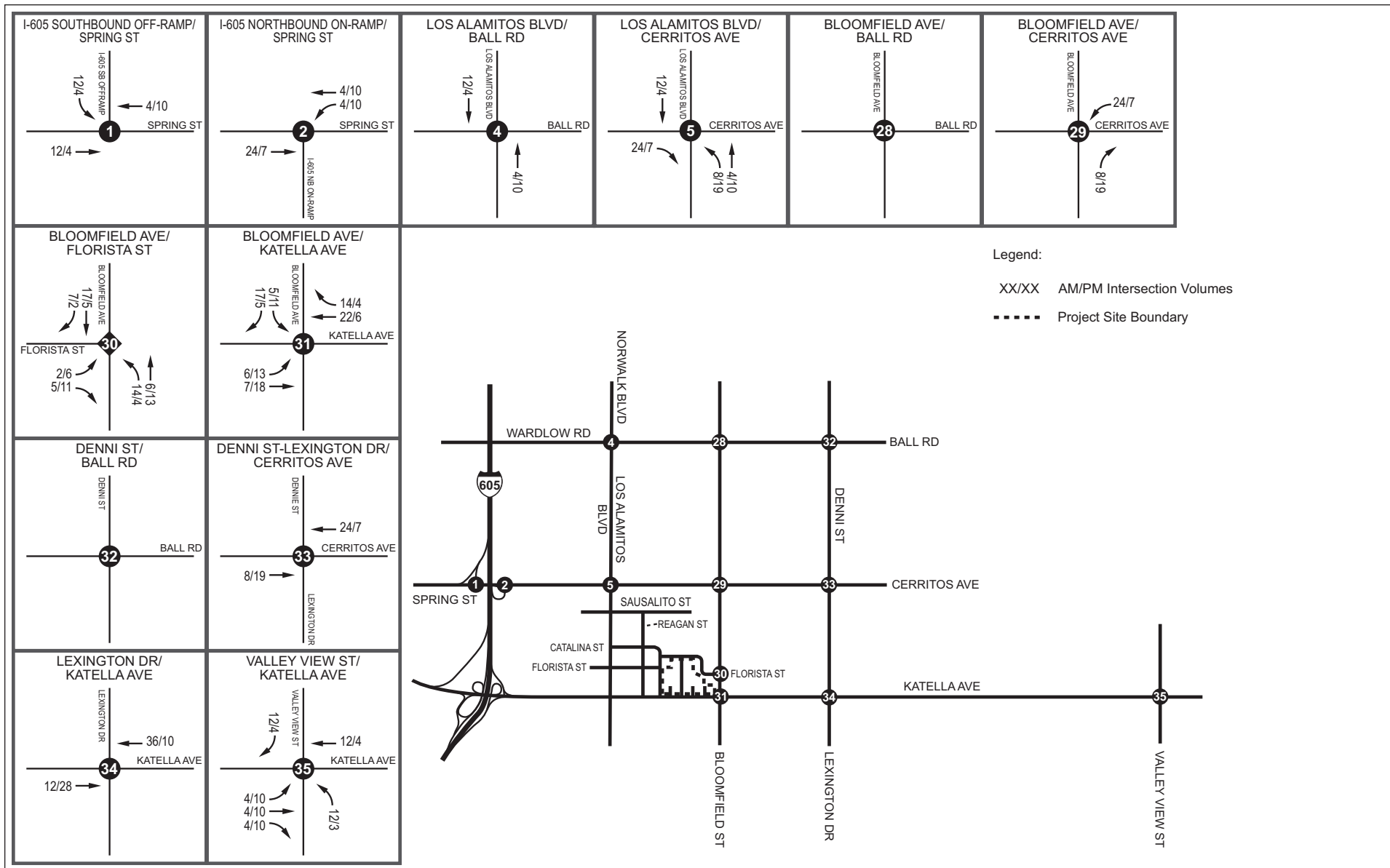


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ENVIRONMENTAL IMPACT REPORT
LOS ALAMITOS MEDICAL CENTER SPECIFIC PLAN

Area 2 – Forecast AM/PM Peak Hour Trip Assignment of Proposed Project Phases 1 - 3

Exhibit 5.3-17



NOT TO SCALE



09/10 • JN 10-107031

ENVIRONMENTAL IMPACT REPORT
LOS ALAMITOS MEDICAL CENTER SPECIFIC PLAN

Area 3 – Forecast AM/PM Peak Hour Trip Assignment of Proposed Project Phases 1 - 3

Exhibit 5.3-18



Los Alamitos Medical Center Specific Plan Program Environmental Impact Report

- 35,549 square foot general office building at 3742 Katella Avenue (City of Los Alamitos); and
- Joint Forces Training Base Headquarters project at JFTB Los Alamitos.

Forecast Trip Generation of Approved/Pending Projects

To determine forecast trip generation of the approved/pending projects, *Institute of Transportation Engineers (ITE) Trip Generation (8th Edition, 2008)* published trip generation rates were used.

Table 5.3-12, Forecast Trip Generation of the Approved/Pending Projects, summarizes the forecast AM peak hour and PM peak hour trip generation of the six approved/pending projects.

**Table 5.3-12
Forecast Trip Generation of the Approved/Pending Projects**

Land Use	Source	AM Peak Hour Trips			PM Peak Hour Trips			Daily Trips
		In	Out	Total	In	Out	Total	
17.500 tsf Drug Store (Rite-Aid) - ITE Pass-By Trip Reduction (PM: 49%)	1	27 N/A	20 N/A	47 N/A	91 -45	90 -44	181 -89	1,543 -89
13-acre Retail Project	2	96	59	155	194	195	389	6,786
38.031 tsf SeaCoast Grace Church Expansion Project (Auditorium)	3	13	8	21	10	11	21	346
CVS Pharmacy Project	4	-9	9	0	23	5	28	472
35.549 tsf Office Building	4	48	7	55	9	44	53	391
Joint Forces Training Base Project	5	10	0	10	0	10	10	26
Total Forecast Trip Generation of Approved/Pending Projects		185	103	288	282	311	593	9,475

Notes: N/A = Not applicable.

1 = City of Seal Beach email correspondence (May 17, 2010).

2 = Traffic Analysis for the Proposed Commercial Development at Katella Avenue and Winners Circle in the City of Cypress (Kimley-Horn and Associates, July 2007)

3 = SeaCoast Grace Church Expansion Project (Kimley-Horn and Associations, April 2009).

4 = Traffic Impact Analysis CVS Pharmacy Project (Linscott, Law & Greenspan, Engineers, February 2009).

5 = Environmental Assessment for Proposed California Army National Guard & U.S. Army Reserve Construction of New Headquarters Facilities at JFTB Los Alamitos, California (February 2010, Page 62).

As shown in Table 5.3-12, the six approved/pending projects are forecast to generate approximately 9,475 daily trips, which include approximately 288 AM peak hour trips and approximately 593 PM peak hour trips; refer to Exhibit 4.1 for cumulative project locations.



Forecast Year 2013 Without Project Conditions Traffic Volumes

Exhibit 5.3-19, Area 1 – Forecast Year 2013 Without Project Conditions AM & PM Peak Hour Volumes; Exhibit 5.3-20, Area 2 – Forecast Year 2013 Without Project Conditions AM & PM Peak Hour Volumes; and Exhibit 5.3-21, Area 3 – Forecast Year 2013 Without Project Conditions AM & PM Peak Hour Volumes, illustrate forecast year 2013 without project conditions AM and PM peak hour volumes at the study intersections.

Forecast Year 2013 Without Project Conditions Level of Service

Table 5.3-13, Forecast Year 2013 Without Project Conditions AM & PM Peak Hour Level of Service, summarizes forecast year 2013 without project conditions AM peak hour and PM peak hour LOS of the study intersections; refer to Appendix D for detailed LOS analysis sheets.

Table 5.3-13
Forecast Year 2013 Without Project Conditions AM & PM Peak Hour Level of Service

Study Intersection	AM Peak Hour	PM Peak Hour
	V/C – Delay – LOS	V/C – Delay – LOS
1 – I-605 SB Off-Ramp/Spring St	N/A – 18.7 – B	N/A – 17.0 – B
2 – I-605 NB On-Ramp/Spring St	N/A – 14.1 – B	N/A – 12.1 – B
3 – I-605 NB On-Ramp/Katella Ave	N/A – 6.6 – A	N/A – 6.6 – A
4 – Norwalk Blvd/Wardlow Rd	0.76 – N/A – C	0.73 – N/A – C
5 – Los Alamitos Blvd/Cerritos Ave	0.80 – N/A – C	0.85 – N/A – D
6 – Los Alamitos Blvd/Sausalito St	0.60 – N/A – A	0.71 – N/A – C
7 – Los Alamitos Blvd/Catalina St South ¹	N/A – 133.4 – F	N/A – 71.6 – F
8 – Los Alamitos Blvd/Florista St	0.60 – N/A – A	0.54 – N/A – B
9 – Los Alamitos Blvd/Katella Ave	0.69 – N/A – B	0.70 – N/A – B
10 – Los Alamitos Blvd/Farquhar Ave	0.64 – N/A – B	0.59 – N/A – A
11 – Los Alamitos Blvd/Orangewood Ave	0.60 – N/A – A	0.48 – N/A – A
12 – Seal Beach Blvd/Plymouth Dr	0.46 – N/A – A	0.47 – N/A – A
13 – Seal Beach Blvd/Lampson Ave	0.76 – N/A – C	0.66 – N/A – B
14 – Seal Beach Blvd/I-405 NB Off-Ramp-Old Ranch Pkwy	N/A – 21.0 – C	N/A – 26.3 – C
15 – Seal Beach Blvd/I-405 SB Ramps-Beverly Manor Dr	N/A – 26.5 – C	N/A – 55.7 – E
16 – Reagan St/Sausalito St	N/A – 10.8 – B	N/A – 23.5 – C
17 – Reagan St/Catalina St	N/A – 7.8 – A	N/A – 8.7 – A
18 – Reagan St/Florista St	N/A – 8.6 – A	N/A – 9.1 – A
19 – Reagan St/Katella Ave ¹	N/A – >999.9 – F	N/A – 224.4 – F
20 – Cherry St/Catalina St	N/A – 9.1 – A	N/A – 9.8 – A
21 – Cherry St/Florista St	N/A – 7.5 – A	N/A – 8.0 – A



Table 5.3-13 (continued)
Forecast Year 2013 Without Project Conditions AM & PM Peak Hour Level of Service

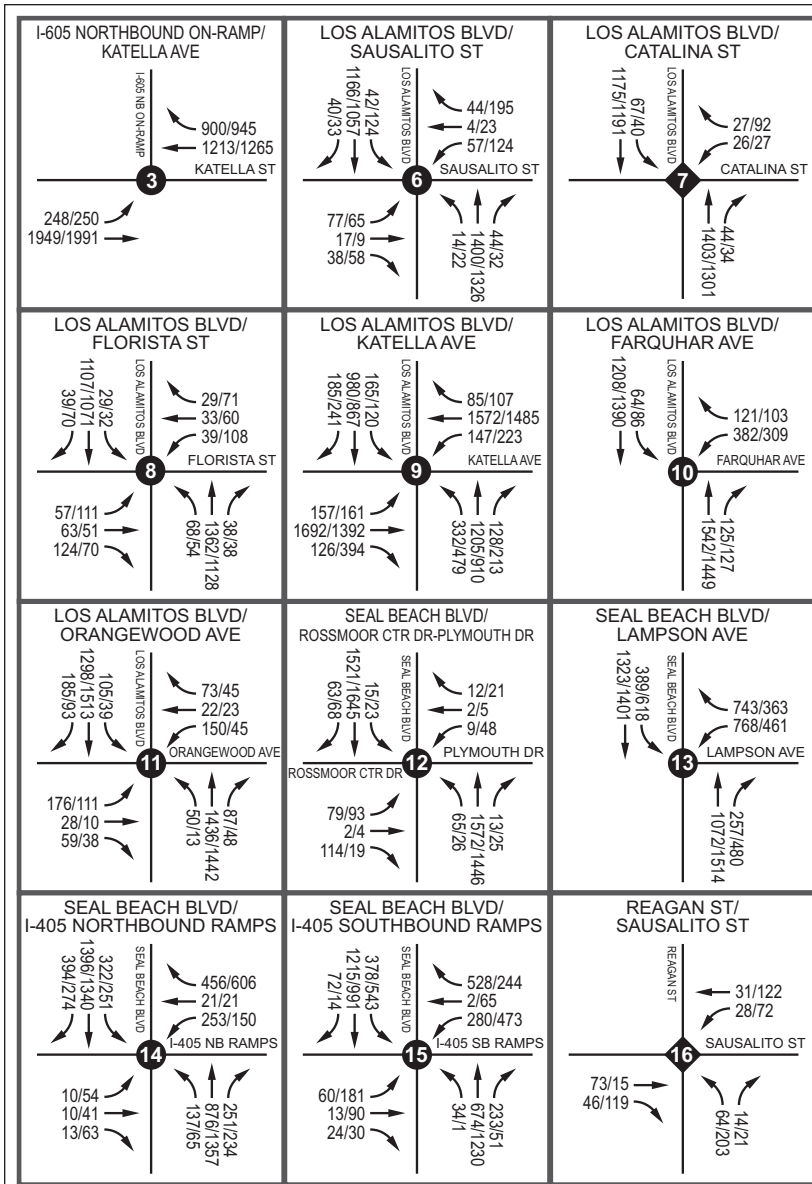
Study Intersection	AM Peak Hour	PM Peak Hour
	V/C – Delay – LOS	V/C – Delay – LOS
22 – Cherry St/Katella Ave	0.46 – N/A – A	0.47 – N/A – A
23 – Hospital Drwy 1/Katella Ave	N/A – 13.3 – B	N/A – 13.2 – B
24 – Kaylor St/Catalina St	N/A – 9.4 – A	N/A – 10.4 – B
25 – Kaylor St/Katella Ave	N/A – 48.1 – E	N/A – 18.2 – C
26 – Hospital Drwy 2/Katella Ave	N/A – 13.5 – B	N/A – 14.0 – B
27 – Hospital Drwy 3/Katella Ave	N/A – 13.7 – B	N/A – 12.7 – B
28 – Bloomfield St/Ball Rd	0.68 – N/A – B	0.64 – N/A – B
29 – Bloomfield St/Cerritos Ave	0.76 – N/A – C	0.70 – N/A – B
30 – Bloomfield St/Florista St	N/A – 21.2 – C	N/A – 13.5 – B
31 – Bloomfield St/Katella Ave	0.67 – N/A – B	0.66 – N/A – B
32 – Denni St/Ball Rd	0.54 – N/A – A	0.49 – N/A – A
33 – Denni St-Lexington St/Cerritos Ave	0.63 – N/A – B	0.64 – N/A – B
34 – Lexington St/Katella Ave	0.55 – N/A – A	0.58 – N/A – A
35 – Valley View St/Katella Ave	0.62 – N/A – B	0.61 – N/A – B
Note: NB = Northbound; SB = Southbound; V/C = volume to capacity ratio; delay shown in seconds per vehicle; N/A = Not Applicable; deficient intersection operation shown in bold . 1 = LOS and delay for one-way and two-way stop-controlled intersections is based on worst case minor street approach. While HCM LOS conservatively reports notable delay, visual observations indicate negligible delay for motorists on high volume major roadway.		

As shown in *Table 5.3-13*, the following three study intersections are forecast to continue to operate at a deficient LOS (LOS F) according to agency performance criteria for forecast year 2013 without project conditions:

- Los Alamitos Boulevard/Catalina Street South (both AM and PM peak hours);
- Seal Beach Boulevard/I-405 Southbound Ramps-Beverly Manor Drive (PM peak hour only); and
- Reagan Street/Katella Avenue (both AM and PM peak hours).

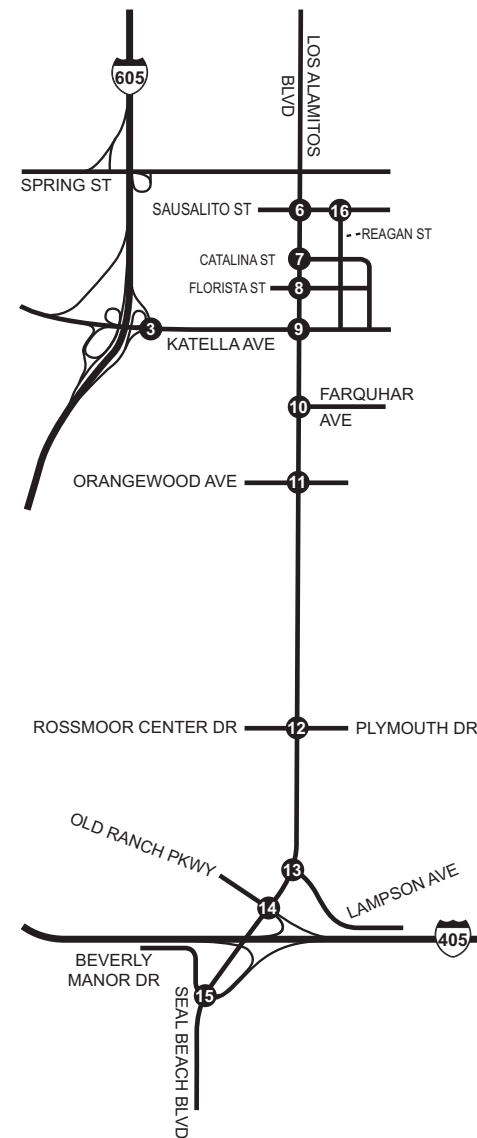
The HCM methodology reports notable delay at the following two deficient stop-controlled intersections based on the delay for motorists crossing the major roadway, however, negligible delay is experienced by motorists on Los Alamitos Boulevard and Katella Avenue at the following locations:

- Los Alamitos Boulevard/Catalina Street South; and
- Reagan Street/Katella Avenue.



Legend:

XX/XX AM/PM Intersection Volumes



NOT TO SCALE



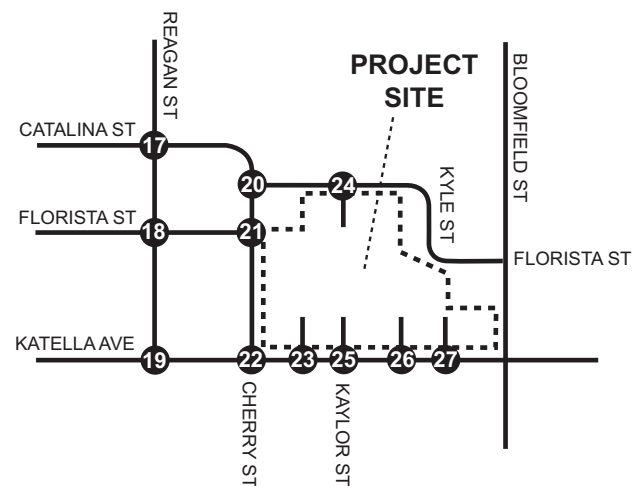
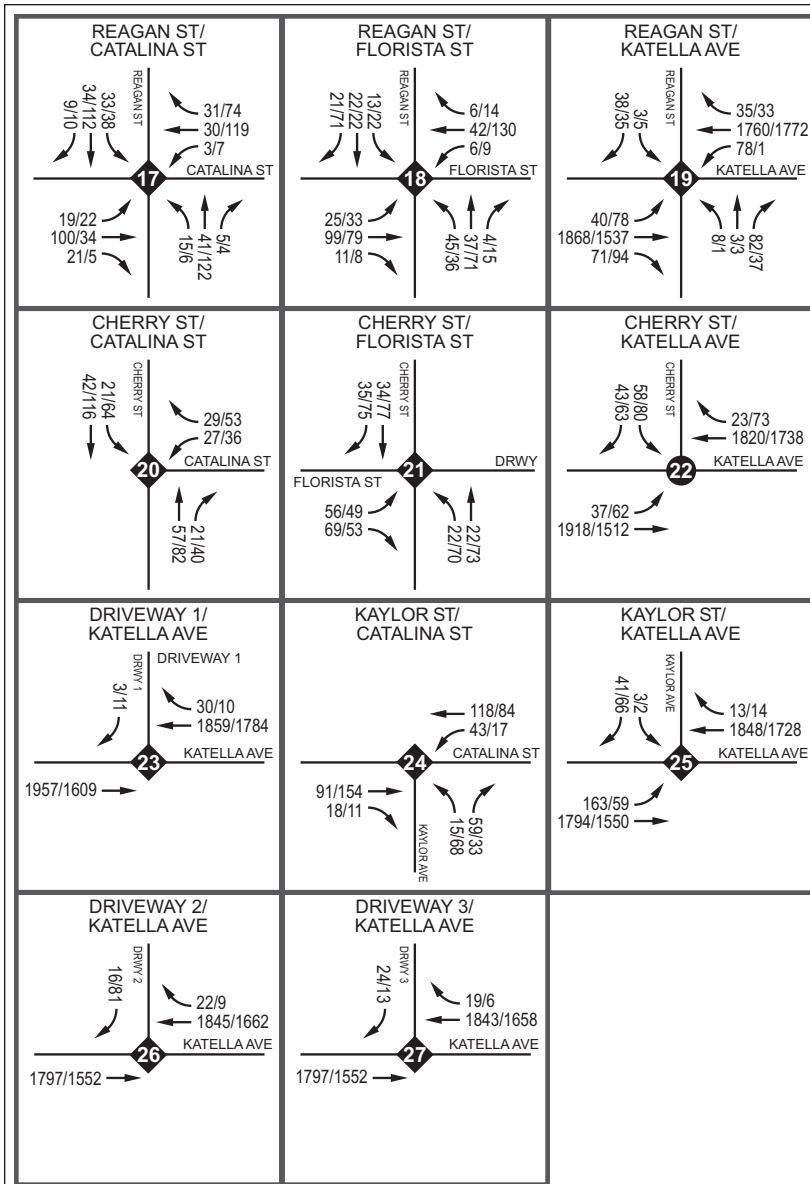
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ENVIRONMENTAL IMPACT REPORT
LOS ALAMITOS MEDICAL CENTER SPECIFIC PLAN

Area 1 – Forecast Year 2013

Without Project Conditions AM/PM Peak Hour Volumes

Exhibit 5.3-19



Legend:

XX/XX AM/PM Intersection Volumes

----- Project Site Boundary

ENVIRONMENTAL IMPACT REPORT
LOS ALAMITOS MEDICAL CENTER SPECIFIC PLAN

Area 2 – Forecast Year 2013

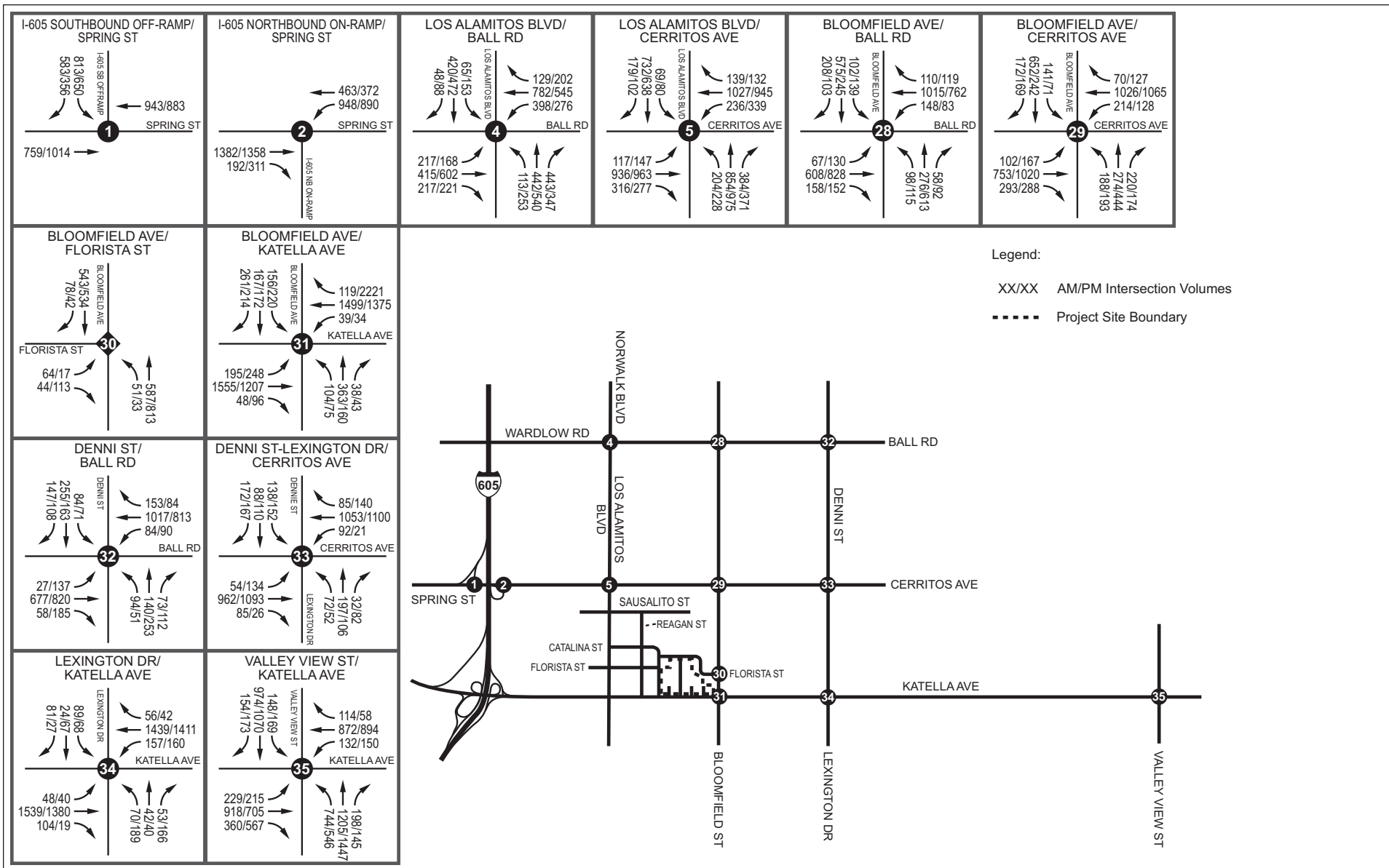
Without Project Conditions AM/PM Peak Hour Volumes

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Exhibit 5.3-20



NOT TO SCALE



09/10 • JN 10-107031

ENVIRONMENTAL IMPACT REPORT
LOS ALAMITOS MEDICAL CENTER SPECIFIC PLAN

Area 3 – Forecast Year 2013 Without Project Conditions AM/PM Peak Hour Volumes

Exhibit 5.3-21



The deficient Seal Beach Boulevard/I-405 Southbound Ramps-Beverly Manor Drive intersection is planned for improvement by a City of Seal Beach sponsored project, however, preliminary design is underway and plans are not yet available.

Forecast Year 2013 With Project Phase 1 Conditions

This section analyzes traffic conditions associated with the addition of trips forecast to be generated by the proposed project Phase 1 to forecast year 2013 without project conditions. This analysis conservatively assumes implementation of Phase 1 only, since inclusion of phase 2, which results in net negative trips, would further reduce potential traffic impacts.

Forecast Year 2013 With Project Phase 1 Conditions Traffic Volumes

Forecast year 2013 with project conditions volumes were derived by adding project Phase 1-generated trips to forecast year 2013 without project conditions traffic volumes. *Exhibit 5.3-22, Area 1 – Forecast Year 2013 With Project Conditions AM & PM Peak Hour Volumes*; *Exhibit 5.3-23, Area 2 – Forecast Year 2013 With Project Conditions AM & PM Peak Hour Volumes*; and *Exhibit 5.3-24, Area 3 – Forecast Year 2013 With Project Conditions AM & PM Peak Hour Volumes*, illustrate forecast year 2013 with project Phase 1 conditions AM and PM peak hour volumes at the study intersections.

Forecast Year 2013 With Project Phase 1 Conditions Level of Service

Table 5.3-14, Forecast Year 2013 With Project Phase 1 Conditions AM & PM Peak Hour Level of Service summarizes forecast year 2013 with project Phase 1 conditions AM peak hour and PM peak hour LOS of the study intersections; refer to Appendix D for detailed LOS analysis sheets.

Table 5.3-14
Forecast Year 2013 With Project Phase 1 Conditions
AM & PM Peak Hour Level of Service

Study Intersection	Forecast Year 2013 Without Project Conditions		Forecast Year 2013 With Project Phase 1 Conditions		Significant Impact?
	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	
	V/C – Delay – LOS	V/C – Delay – LOS	V/C – Delay – LOS	V/C – Delay – LOS	
1 – I-605 SB Off-Ramp/Spring St	N/A – 18.7 – B	N/A – 17.0 – B	N/A – 18.8 – B	N/A – 17.0 – B	No
2 – I-605 NB On-Ramp/Spring St	N/A – 14.1 – B	N/A – 12.1 – B	N/A – 14.2 – B	N/A – 12.3 – B	No
3 – I-605 NB On-Ramp/Katella Ave	N/A – 6.6 – A	N/A – 6.6 – A	N/A – 6.6 – A	N/A – 6.6 – A	No
4 – Norwalk Blvd/Wardlow Rd	0.76 – N/A – C	0.73 – N/A – C	0.76 – N/A – C	0.73 – N/A – C	No
5 – Los Alamitos Blvd/Cerritos Ave	0.80 – N/A – C	0.85 – N/A – D	0.80 – N/A – C	0.87 – N/A – D	No
6 – Los Alamitos Blvd/Sausalito St	0.60 – N/A – A	0.71 – N/A – C	0.60 – N/A – A	0.71 – N/A – C	No
7 – Los Alamitos Blvd/Catalina St South ¹	N/A – 133.4 – F	N/A – 71.6 – F	N/A – 144.9 – F	N/A – 79.7 – F	No ²



Table 5.3-14 (continued)
Forecast Year 2013 With Project Phase 1 Conditions
AM & PM Peak Hour Level of Service

Study Intersection	Forecast Year 2013 Without Project Conditions		Forecast Year 2013 With Project Phase 1 Conditions		Significant Impact?
	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	
	V/C – Delay – LOS	V/C – Delay – LOS	V/C – Delay – LOS	V/C – Delay – LOS	
8 – Los Alamitos Blvd/Florista St	0.60 – N/A – A	0.54 – N/A – B	0.60 – N/A – A	0.55 – N/A – A	No
9 – Los Alamitos Blvd/Katella Ave	0.69 – N/A – B	0.70 – N/A – B	0.70 – N/A – B	0.71 – N/A – C	No
10 – Los Alamitos Blvd/Farquhar Ave	0.64 – N/A – B	0.59 – N/A – A	0.65 – N/A – B	0.60 – N/A – A	No
11 – Los Alamitos Blvd/Orangewood Ave	0.60 – N/A – A	0.48 – N/A – A	0.61 – N/A – B	0.49 – N/A – A	No
12 – Seal Beach Blvd/Plymouth Dr	0.46 – N/A – A	0.47 – N/A – A	0.46 – N/A – A	0.49 – N/A – A	No
13 – Seal Beach Blvd/Lampson Ave	0.76 – N/A – C	0.66 – N/A – B	0.77 – N/A – C	0.67 – N/A – B	No
14 – Seal Beach Blvd/I-405 NB Off-Ramp-Old Ranch Pkwy	N/A – 21.0 – C	N/A – 26.3 – C	N/A – 21.1 – C	N/A – 26.6 – C	No
15 – Seal Beach Blvd/I-405 SB Ramps-Beverly Manor Dr	N/A – 26.5 – C	N/A – 55.7 – E	N/A – 26.5 – C	N/A – 59.4 – E	No ²
16 – Reagan St/Sausalito St	N/A – 10.8 – B	N/A – 23.5 – C	N/A – 10.8 – B	N/A – 23.5 – C	No
17 – Reagan St/Catalina St	N/A – 7.8 – A	N/A – 8.7 – A	N/A – 7.9 – A	N/A – 8.8 – A	No
18 – Reagan St/Florista St	N/A – 8.6 – A	N/A – 9.1 – A	N/A – 8.6 – A	N/A – 9.1 – A	No
19 – Reagan St/Katella Ave ¹	N/A – >999.9 – F	N/A – 224.4 – F	N/A – >999.9 – F	N/A – 768.8 – F	No ²
20 – Cherry St/Catalina St	N/A – 9.1 – A	N/A – 9.8 – A	N/A – 9.2 – A	N/A – 10.1 – B	No
21 – Cherry St/Florista St	N/A – 7.5 – A	N/A – 8.0 – A	N/A – 7.6 – A	N/A – 8.1 – A	No
22 – Cherry St/Katella Ave	0.46 – N/A – A	0.47 – N/A – A	0.48 – N/A – A	0.51 – N/A – A	No
23 – Hospital Drwy 1/Katella Ave	N/A – 13.3 – B	N/A – 13.2 – B	N/A – 13.4 – B	N/A – 13.7 – B	No
24 – Kaylor St/Catalina St	N/A – 9.4 – A	N/A – 10.4 – B	N/A – 9.6 – A	N/A – 10.8 – B	No
25 – Kaylor St/Katella Ave	N/A – 48.1 – E	N/A – 18.2 – C	N/A – 131.6 – F	N/A – 45.2 – E	Yes
26 – Hospital Drwy 2/Katella Ave	N/A – 13.5 – B	N/A – 14.0 – B	³	³	No
27 – Hospital Drwy 3/Katella Ave	N/A – 13.7 – B	N/A – 12.7 – B	N/A – 13.8 – B	N/A – 12.9 – B	No
28 – Bloomfield St/Ball Rd	0.68 – N/A – B	0.64 – N/A – B	0.68 – N/A – B	0.64 – N/A – B	No
29 – Bloomfield St/Cerritos Ave	0.76 – N/A – C	0.70 – N/A – B	0.76 – N/A – C	0.69 – N/A – B	No
30 – Bloomfield St/Florista St	N/A – 21.2 – C	N/A – 13.5 – B	N/A – 22.3 – C	N/A – 14.5 – B	No
31 – Bloomfield St/Katella Ave	0.67 – N/A – B	0.66 – N/A – B	0.67 – N/A – B	0.67 – N/A – B	No
32 – Denni St/Ball Rd	0.54 – N/A – A	0.49 – N/A – A	0.54 – N/A – A	0.49 – N/A – A	No



Table 5.3-14 (continued)
Forecast Year 2013 With Project Phase 1 Conditions
AM & PM Peak Hour Level of Service

Study Intersection	Forecast Year 2013 Without Project Conditions		Forecast Year 2013 With Project Phase 1 Conditions		Significant Impact?
	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	
	V/C – Delay – LOS	V/C – Delay – LOS	V/C – Delay – LOS	V/C – Delay – LOS	
33 – Denni St-Lexington St/Cerritos Ave	0.63 – N/A – B	0.64 – N/A – B	0.64 – N/A – B	0.64 – N/A – B	No
34 – Lexington St/Katella Ave	0.55 – N/A – A	0.58 – N/A – A	0.55 – N/A – A	0.59 – N/A – A	No
35 – Valley View St/Katella Ave	0.62 – N/A – B	0.61 – N/A – B	0.62 – N/A – B	0.62 – N/A – B	No
Note: NB = Northbound; SB = Southbound; V/C = volume to capacity ratio; delay shown in seconds per vehicle; N/A = Not Applicable; deficient intersection operation shown in bold; significant impact identified in bold. 1 = LOS and delay for one-way and two-way stop-controlled intersections is based on worst case minor street approach. While HCM LOS conservatively reports notable delay, visual observations indicate negligible delay for motorists on high volume major roadway. 2 = No significant impact forecast based on applicable thresholds of significance. 3 = Driveway removed as part of proposed project Phase 1.					

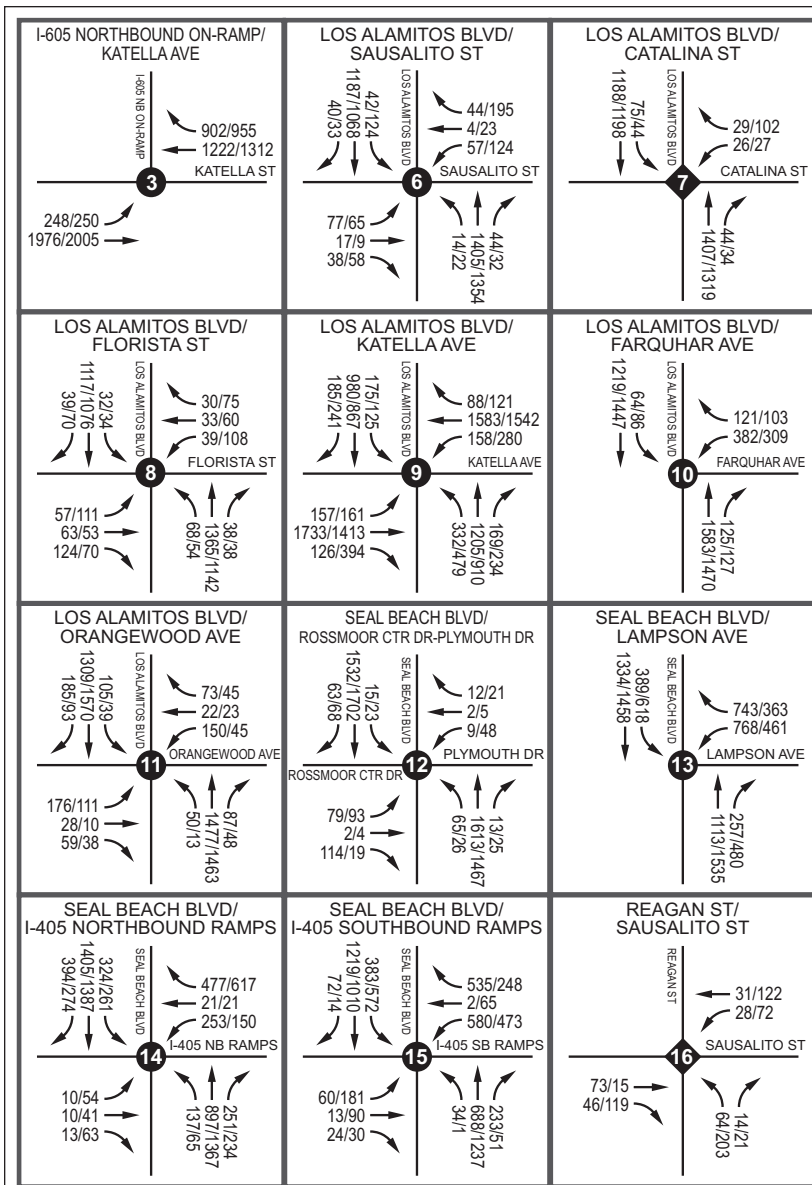
As shown in *Table 5.3-14*, with the addition of project Phase 1-generated trips, the following four study intersections are forecast to operate at a deficient LOS (LOS E or worse) according to agency performance criteria for forecast year 2013 with project Phase 1 conditions:

- Los Alamitos Boulevard/Catalina Street South (both AM and PM peak hours);
- Seal Beach Boulevard/I-405 Southbound Ramps-Beverly Manor Drive (PM peak hour only);
- Reagan Street/Katella Avenue (both AM and PM peak hours); and
- Kaylor Street/Katella Avenue (AM peak hour only).

The HCM methodology reports notable delay at the following two deficient stop-controlled intersections based on the delay for motorists crossing the major roadway, however, negligible delay is experienced by motorists on Los Alamitos Boulevard and Katella Avenue at the following locations:

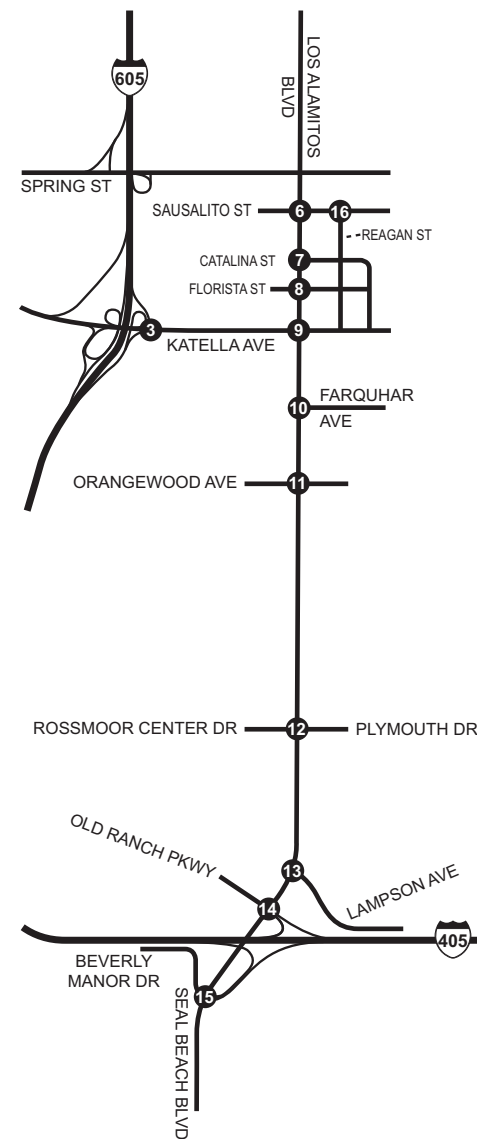
- Los Alamitos Boulevard/Catalina Street South; and
- Reagan Street/Katella Avenue.

Traffic signal warrant analysis was prepared at the two deficient stop-controlled intersections listed above. As determined based on review of the traffic signal warrant analysis sheets, neither the Los Alamitos Boulevard/Catalina Street South nor the Reagan Street/Katella Avenue intersection satisfy traffic signal warrants.



Legend:

XX/XX AM/PM Intersection Volumes



NOT TO SCALE

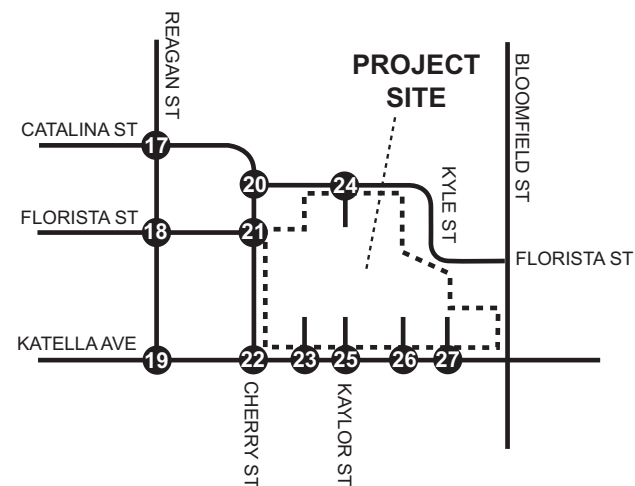
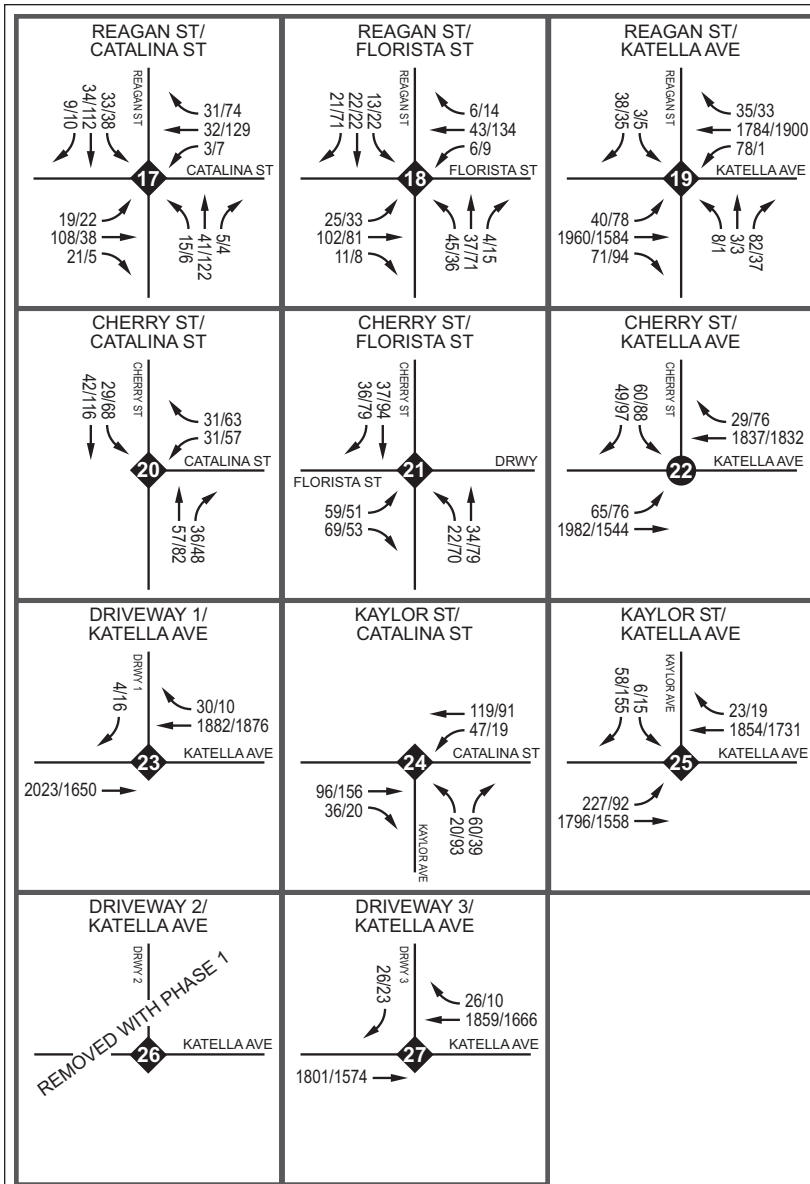


09/10 • JN 10-107031

ENVIRONMENTAL IMPACT REPORT
LOS ALAMITOS MEDICAL CENTER SPECIFIC PLAN

Area 1 – Forecast Year 2013 With Project Conditions AM/PM Peak Hour Volumes

Exhibit 5.3-22



Legend:

XX/XX AM/PM Intersection Volumes

----- Project Site Boundary

NOT TO SCALE

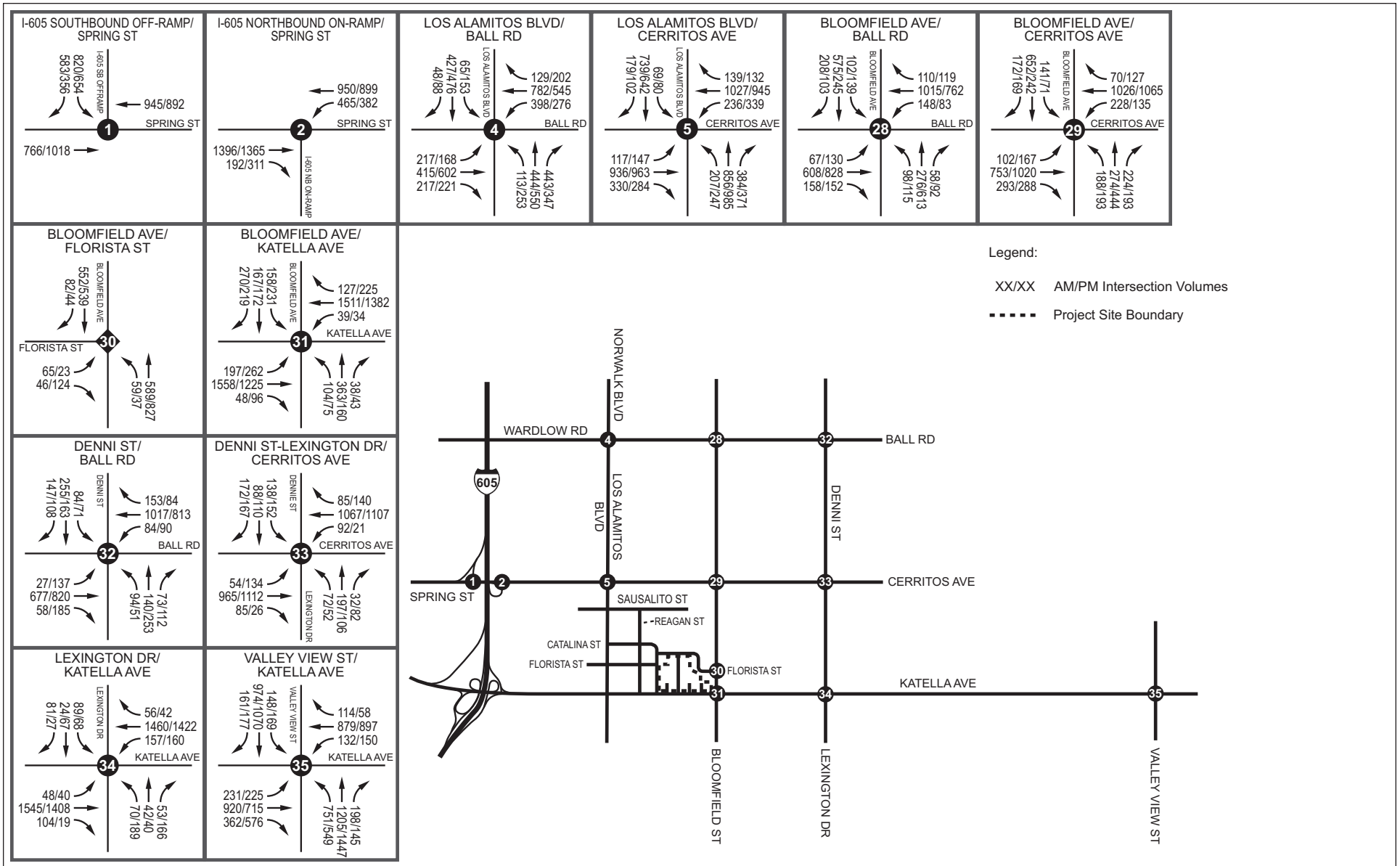


09/10 • JN 10-107031

ENVIRONMENTAL IMPACT REPORT
LOS ALAMITOS MEDICAL CENTER SPECIFIC PLAN

Area 2 – Forecast Year 2013 With Project Conditions AM/PM Peak Hour Volumes

Exhibit 5.3-23



NOT TO SCALE



09/10 • JN 10-107031

ENVIRONMENTAL IMPACT REPORT
LOS ALAMITOS MEDICAL CENTER SPECIFIC PLAN

Area 3 – Forecast Year 2013 With Project Conditions AM/PM Peak Hour Volumes

Exhibit 5.3-24



The deficient Seal Beach Boulevard/I-405 Southbound Ramps-Beverly Manor Drive intersection is planned for improvement by a City of Seal Beach sponsored project, however, preliminary design is underway and plans are not yet available.

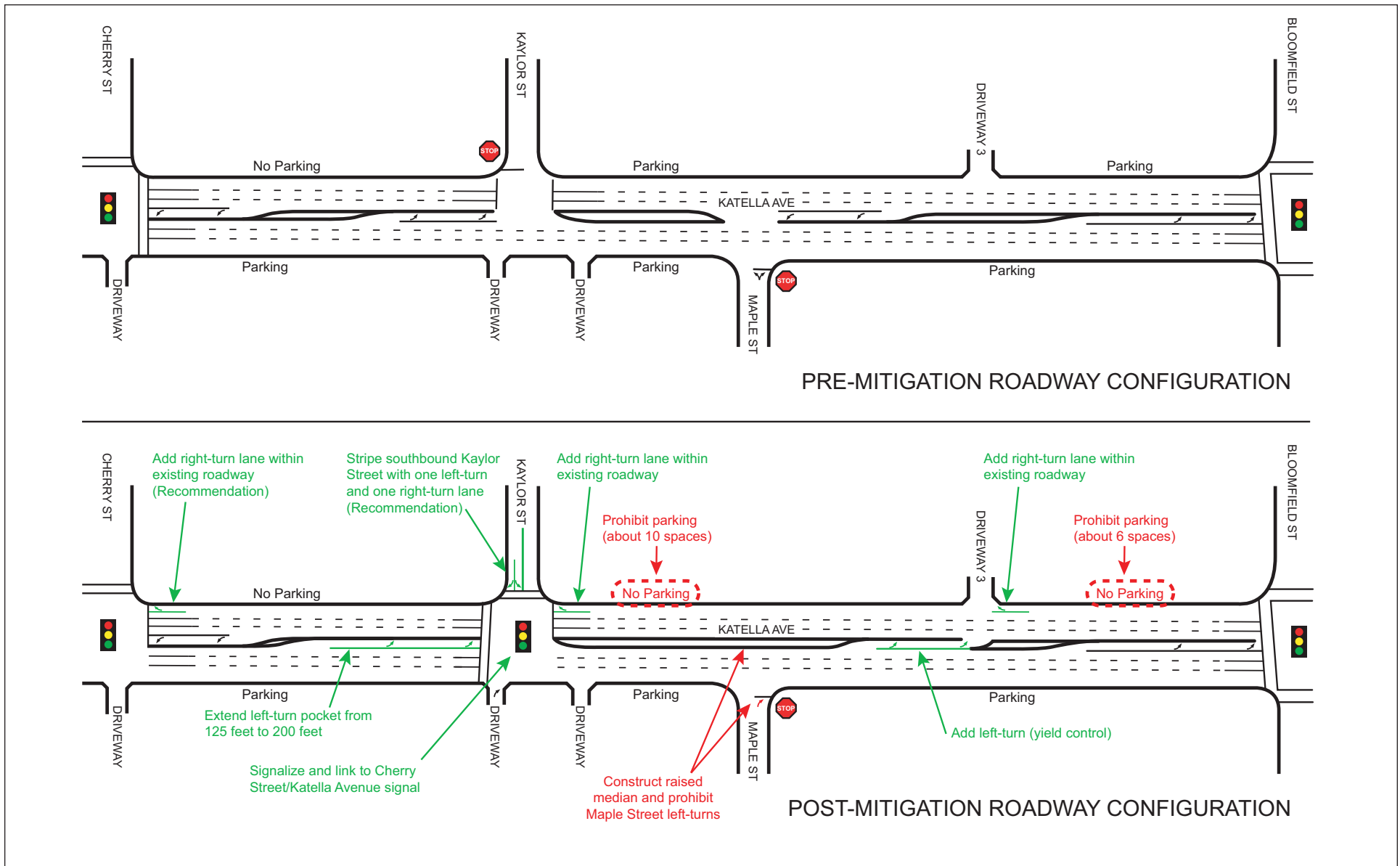
While deficiencies are forecast to continue at the following three intersections, no significant impact is identified since the proposed project doesn't cause deficient operations.

- Los Alamitos Boulevard/Catalina Street South (both AM and PM peak hours);
- Seal Beach Boulevard/I-405 Southbound Ramps-Beverly Manor Drive (PM peak hour only); and
- Reagan Street/Katella Avenue (both AM and PM peak hours).

As also shown in Table 5.3-14, based on agency-established thresholds of significance, the addition of project Phase 1-generated trips is forecast to result in a significant impact at the Kaylor Street/Katella Avenue study intersection for forecast year 2013 with project conditions.

Recommended Forecast Year 2013 With Phase 1 Project Conditions Mitigation Measures

Operations at the Kaylor Street/Katella Avenue intersection are directly related to operations at the adjacent Cherry Street/Katella Avenue and Maple Street/Katella Avenue intersections, as well as site access to the Los Alamitos Medical Center. Therefore, implementation of Mitigation Measure TRF-1a-c and TRF-2 would eliminate the significant traffic impact at the Kaylor Street/Katella Avenue study intersection to achieve acceptable corridor operations along Katella Avenue for forecast year 2013 with project Phase 1 conditions. Through adjustments to the signal timing and phasing data, the progression of traffic along Katella Avenue is maintained, primarily due to the relocation of the pedestrian crossing from the Cherry Street/Katella Avenue intersection to the Kaylor Street/Katella Avenue intersection. The maintained Katella Avenue operations provide acceptable operations and efficient flows of traffic in both the eastbound and westbound directions. Mitigation Measures TRF-1a-c and TRF-2 are consistent with the OCTA Smart Street Program to improve traffic flow and realize available traffic capacity on regional routes of significance. The modified median on Katella Avenue would be continuous between Kaylor Street and Bloomfield Street with a break only at Driveway 3 for an eastbound left-turn lane. Westbound left-turn movements onto Maple Street would be redistributed to Bloomfield Street or can make a u-turn at the Cherry Street/Katella Avenue intersection. While some local traffic may be redistributed onto Bloomfield Street and Green Avenue south of Katella Avenue, the traffic circulation and access management along Katella Avenue would be improved. The existing grid pattern of roadways south of Katella Avenue supports the Katella Avenue raised median modifications and circulation enhancement. Exhibit 5.3-25, Mitigated Katella Avenue Corridor, shows the Katella Avenue corridor with and without the recommended mitigation measures.



NOT TO SCALE



01/11 • JN 10-107031

ENVIRONMENTAL IMPACT REPORT
LOS ALAMITOS MEDICAL CENTER SPECIFIC PLAN

Mitigated Katella Avenue Corridor

Exhibit 5.3-25



Mitigated Forecast Year 2013 With Project Phase 1 Conditions Level of Service

Table 5.3-15, Mitigated Forecast Year 2013 With Project Conditions AM & PM Peak Hour Level of Service, summarizes forecast year 2013 with project Phase 1 conditions AM peak hour and PM peak hour LOS at the affected study intersections assuming implementation of the identified mitigation measures and forecast redistribution of traffic; refer to Appendix D for detailed LOS analysis.

Table 5.3-15
Mitigated Forecast Year 2013 With Project Phase 1 Conditions
AM & PM Peak Hour Level of Service

Study Intersection	Forecast Year 2013 Without Project Conditions		Forecast Year 2013 With Project Phase 1 Conditions		Significant Impact?
	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	
	V/C – Delay – LOS	V/C – Delay – LOS	V/C – Delay – LOS	V/C – Delay – LOS	
25 – Kaylor St/Katella Ave ¹	N/A – 48.1 – E	N/A – 18.2 – C	0.55 – N/A – A	0.51 – N/A – A	No
27 – Hospital Drwy 3/Katella Ave	N/A – 13.7 – B	N/A – 12.7 – B	N/A – 18.2 – C	N/A – 15.7 – C	No
31 – Bloomfield St/Katella Ave	0.67 – N/A – B	0.66 – N/A – B	0.67 – N/A – B	0.67 – N/A – C	No
Note: V/C = volume to capacity ratio; delay shown in seconds per vehicle. 1 = Modified to signalized intersection for with project conditions.					

As shown in *Table 5.3-15*, assuming implementation of the identified mitigation measures, the project-related traffic impact at the affected study intersections is reduced to a level considered less than significant during the AM peak hour and PM peak hour for forecast year 2013 with project Phase 1 conditions. Additionally, operations along Katella Avenue are improved through consistency and implementation of the OCTA Smart Street Program.

Due to the close proximity of intersections, preliminary traffic synchronization analysis has been prepared for the Katella Avenue corridor between Los Alamitos Boulevard and Bloomfield Street. The analysis has been prepared based on currently available traffic signal timing and phasing data provided by City staff. Through adjustments to the signal timing and phasing data, the progression of traffic along Katella Avenue is maintained, primarily due to the relocation of the pedestrian crossing from the Cherry Street/Katella Avenue intersection to the Kaylor Street/Katella Avenue intersection. The maintained Katella Avenue operations provide acceptable operations and efficient flows of traffic in both the eastbound and westbound directions.

Adherence to *General Plan* goals and policies and compliance with the recommended Mitigation Measure TRF-1a-c and TRF-2 would minimize any traffic impacts associated with forecast year 2013, and would ensure that impacts are reduced to a less than significant level.

Mitigation Measures:

TRF-1a Kaylor Street/Katella Avenue. Prior to issuance of certificate of occupancy for MOB A, the project applicant shall install the following improvements:



- Signalize the Kaylor Street/Katella Avenue intersection and lengthen the eastbound Katella Avenue left-turn pocket at Kaylor Street from 125 feet to 200 feet.
- To accommodate eastbound left-turn queuing of vehicles accessing the medical center, modify the raised median on Katella Avenue to include an eastbound left-turn pocket approximately 100 feet in length at the Driveway 3/Katella Avenue intersection (refer to Exhibit 5.3-25).
- Provide traffic signal interconnect and synchronization between the Kaylor Street/Katella Avenue intersection and the Cherry Street/Katella Avenue intersection.

TRF-1b Kaylor Street/Katella Avenue. Prior to issuance of certificate of occupancy for MOB A, the project applicant shall install the following improvements:

1. Defer construction of a median restricting the Maple Street/Katella Avenue intersection to right-in/right-out movements as recommended in TRF-1c2 below, and provide a pilot project to restrict only the northbound left-turns and maintain the westbound left-turn access from Katella Avenue to Maple Street via roadway striping modifications.

TRF-1c Kaylor Street/Katella Avenue. Within 12 months following installation of TRF-1b, the following are required:

1. The City of Los Alamitos shall collect data on the operation of the access measures noted in TRF-1b1 above. The project applicant shall reimburse the City for these costs.
2. Based on review and analysis of the data collected in TRF-1c1 by City of Los Alamitos, the project applicant, at the direction of the City of Los Alamitos, shall permanently implement TRF-1b1, or modify the Katella Avenue median to restrict the Maple Street/Katella Avenue intersection to right-in/right-out movements, or implement other similar improvements to address vehicular movements at the Maple Street/Katella Avenue intersection.

TRF-2 Katella Avenue. Prior to issuance of certificate of occupancy for MOB A, the project applicant shall install the following improvements:

- Further implement the OCTA Smart Street Program by coordinating with the City to prohibit on-street parking on Katella Avenue adjacent to the project site between Kaylor Street and Bloomfield Street.
- Provide a dedicated right-turn lane at the westbound approach to the Kaylor Street/Katella Avenue and Driveway 3/Katella Avenue intersections (refer to Exhibit 5.3-25).
- Continue to prohibit on-street parking on the north side of Katella Avenue between Cherry Street and Kaylor Street.



Level of Significance After Mitigation: Less Than Significant Impact.

FORECAST YEAR 2035 PROPOSED PROJECT TRAFFIC IMPACTS

- ◆ **DEVELOPMENT ASSOCIATED WITH IMPLEMENTATION OF THE PROPOSED PROJECT COULD RESULT IN ADVERSE IMPACTS TO THE FUNCTION OF INTERSECTIONS IN THE PROJECT AREA UNDER BUILDOUT FORECAST YEAR 2035 TRAFFIC CONDITIONS.**

Level of Significance Before Mitigation: Potentially Significant Impact.

Impact Analysis:

Forecast Year 2035 Without Project Conditions

Buildout of all three phases of the proposed project are expected to occur over multiple years. Based on discussion with City staff, a 2035 analysis year was selected consistent with the typical long-range horizon year targets utilized within the industry. Therefore, to determine potential long-range impacts, forecast year 2035 without project conditions are analyzed to establish a baseline for comparison.

Forecast year 2035 conditions analysis scenarios do not assume Mitigation Measures TRF-1a-c and TRF-2 identified for forecast year 2013 with project conditions.

Forecast Year 2035 Conditions County-Planned Improvements

Forecast year 2035 conditions include the following OCTA-planned improvements at the Seal Beach Boulevard/I-405 Freeway interchange:

- Seal Beach Boulevard crossing Interstate 405 (I-405) is planned to be widened from a four-lane divided roadway to a six-lane divided roadway.
- The southbound Seal Beach Boulevard approach at Beverly Manor Road-I-405 Southbound ramps is planned to be widened from one left-turn lane, two through lanes, and one defacto right-turn lane to consist of one left-turn lane, three through lanes, and one defacto right-turn lane.
- The northbound Seal Beach Boulevard approach at Old Ranch Parkway-I-405 northbound off-ramp is planned to be widened from two left-turn lanes and two through lanes to consist of two left-turn lanes and three through lanes. Additionally, the I-405 northbound off-ramp approach at Seal Beach Boulevard is planned to be widened from one left-turn lane, one shared left-turn/through/right-turn lane, and one right-turn lane to consist of two left-turn lanes, one shared through/right-turn lane, and one right-turn lane.



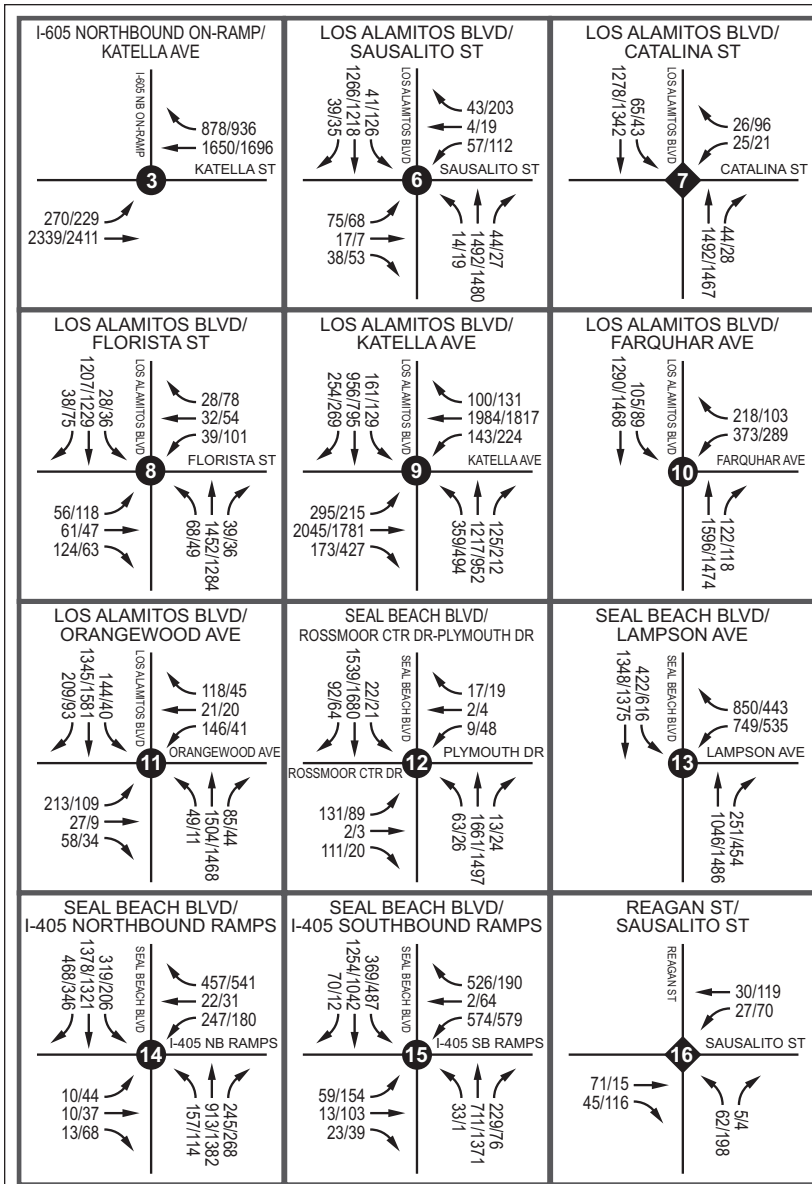
Forecast Year 2035 Without Project Conditions Traffic Volumes

OCTA maintains a travel demand forecast model for the County of Orange. The model is based on input variables such as population, households, employment, school enrollment, income, traffic counts, traffic speeds, intersection configuration, and planned roadway networks from a variety of sources such as locally approved General Plan land use entitlements, local planning department input, and state and federal data sources. The model forecasts the demand for future transportation infrastructure by prediction of future traffic patterns based on the input variables.

Forecast year 2035 traffic volumes are based on post-processed model runs provided by OCTA staff. AM and PM peak-period link volume forecasts were provided by OCTA staff for the base year (2008) and forecast year 2035 based on the applicable land use assumptions, regional demographics and planned highway network. Post-processing of the model data to provide peak hour intersection volumes was conducted in accordance with industry standards utilizing the B-Turns software. *Exhibit 5.3-26, Area 1 – Forecast Year 2035 Without Project Conditions AM & PM Peak Hour Volumes*; *Exhibit 5.3-27, Area 2 – Forecast Year 2035 Without Project Conditions AM & PM Peak Hour Volumes*; and *Exhibit 5.3-28, Area 3 – Forecast Year 2035 Without Project Conditions AM & PM Peak Hour Volumes*, illustrate forecast year 2035 without project conditions AM and PM peak hour volumes at the study intersections.

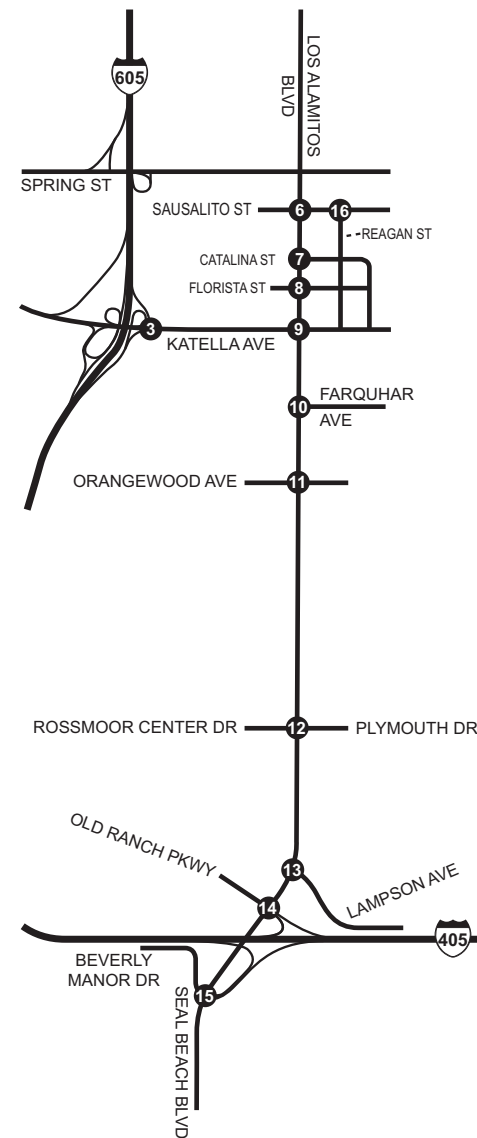
Forecast Year 2035 Without Project Conditions Level of Service

Table 5.3-16, Forecast Year 2035 Without Project Conditions AM & PM Peak Hour Level of Service, summarizes forecast year 2035 without project conditions AM peak hour and PM peak hour LOS of the study intersections; refer to Appendix D for detailed LOS analysis.



Legend:

XX/XX AM/PM Intersection Volumes



NOT TO SCALE

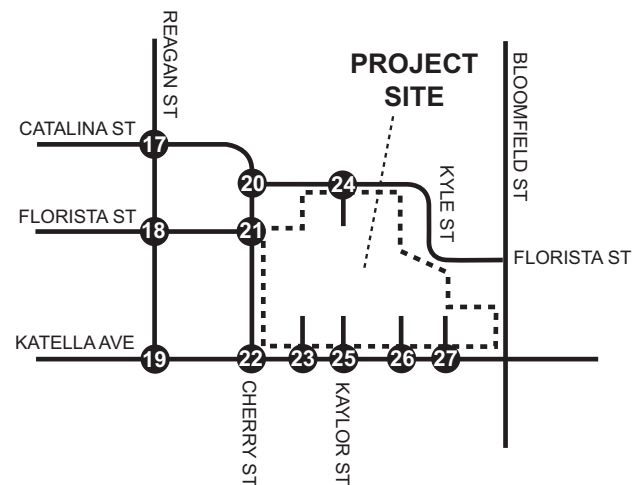
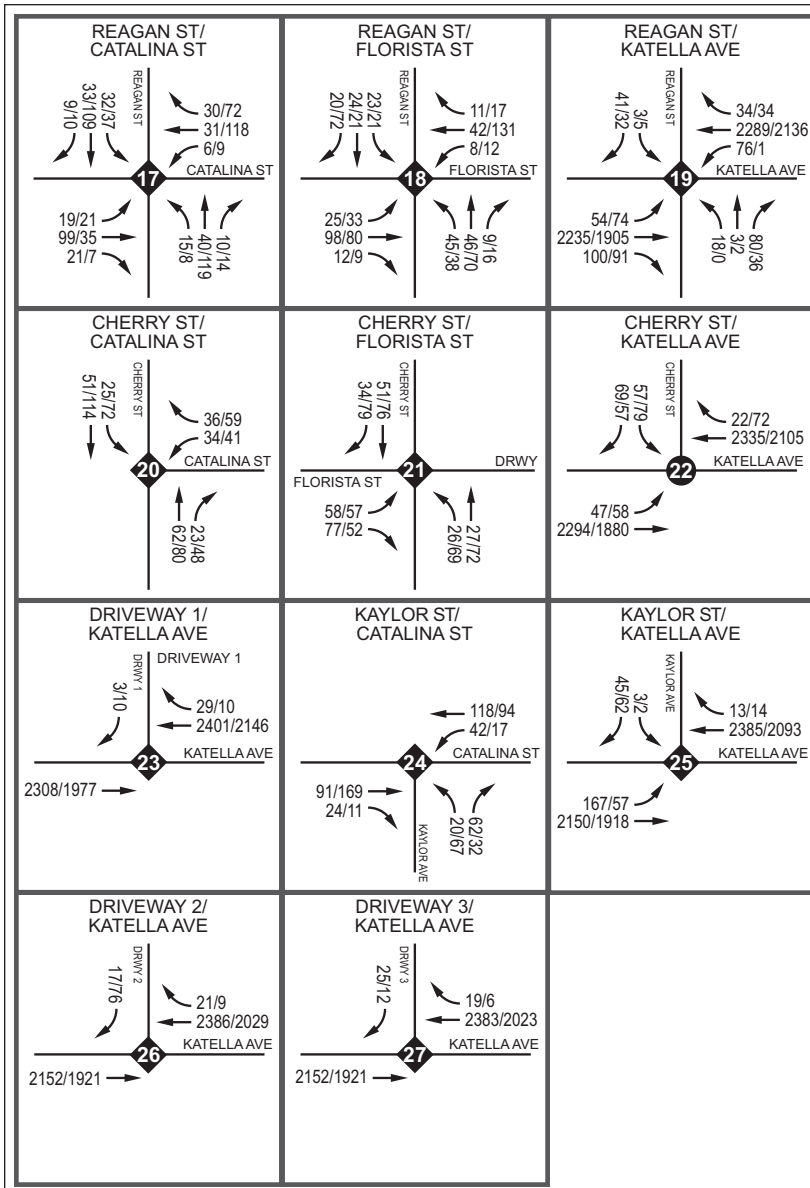


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ENVIRONMENTAL IMPACT REPORT
LOS ALAMITOS MEDICAL CENTER SPECIFIC PLAN

Area 1 – Forecast Year 2035 Without Project Conditions AM/PM Peak Hour Volumes

Exhibit 5.3-26



Legend:

XX/XX AM/PM Intersection Volumes

----- Project Site Boundary

ENVIRONMENTAL IMPACT REPORT
LOS ALAMITOS MEDICAL CENTER SPECIFIC PLAN

Area 2 – Forecast Year 2035

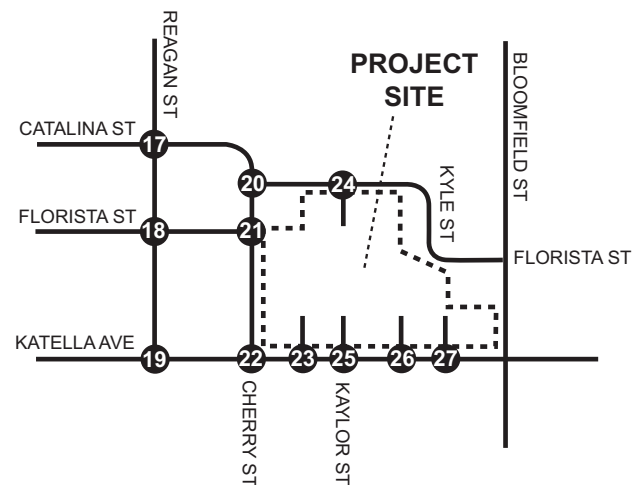
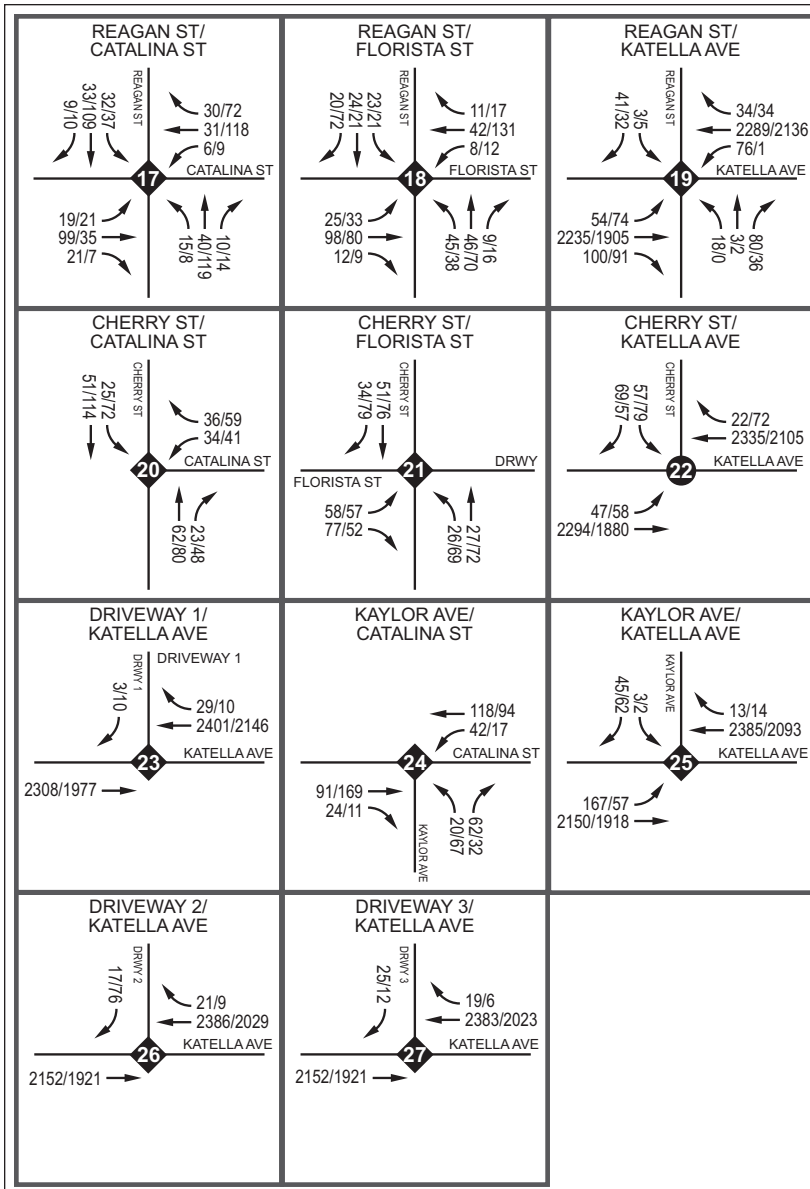
Without Project Conditions AM/PM Peak Hour Volumes

NOT TO SCALE



09/10 • JN 10-107031

Exhibit 5.3-27



Legend:

XX/XX AM/PM Intersection Volumes

----- Project Site Boundary

ENVIRONMENTAL IMPACT REPORT
LOS ALAMITOS MEDICAL CENTER SPECIFIC PLAN

Area 3 – Forecast Year 2035

Without Project Conditions AM/PM Peak Hour Volumes

NOT TO SCALE



09/10 • JN 10-107031

Exhibit 5.3-28



Los Alamitos Medical Center Specific Plan
Program Environmental Impact Report

Table 5.3-16
Forecast Year 2035 Without Project Conditions AM & PM Peak Hour Level of Service

Study Intersection	AM Peak Hour	PM Peak Hour
	V/C – Delay – LOS	V/C – Delay – LOS
1 – I-605 SB Off-Ramp/Spring St	N/A – 23.3 – C	N/A – 11.7 – B
2 – I-605 NB On-Ramp/Spring St	N/A – 22.5 – C	N/A – 8.3 – A
3 – I-605 NB On-Ramp/Katella Ave	N/A – 6.6 – A	N/A – 5.8 – A
4 – Norwalk Blvd/Wardlow Rd	0.94 – N/A – E	0.83 – N/A – D
5 – Los Alamitos Blvd/Cerritos Ave	0.85 – N/A – D	0.96 – N/A – E
6 – Los Alamitos Blvd/Sausalito St	0.63 – N/A – B	0.75 – N/A – C
7 – Los Alamitos Blvd/Catalina St South ¹	N/A – 193.2 – F	N/A – 106.7 – F
8 – Los Alamitos Blvd/Florista St	0.63 – N/A – B	0.60 – N/A – A
9 – Los Alamitos Blvd/Katella Ave	0.82 – N/A – D	0.77 – N/A – C
10 – Los Alamitos Blvd/Farquhar Ave	0.67 – N/A – B	0.59 – N/A – A
11 – Los Alamitos Blvd/Orangewood Ave	0.65 – N/A – B	0.49 – N/A – A
12 – Seal Beach Blvd/Plymouth Dr	0.47 – N/A – A	0.48 – N/A – A
13 – Seal Beach Blvd/Lampson Ave	0.82 – N/A – D	0.68 – N/A – B
14 – Seal Beach Blvd/I-405 NB Off-Ramp-Old Ranch Pkwy	N/A – 19.9 – B	N/A – 22.5 – C
15 – Seal Beach Blvd/I-405 SB Ramps-Beverly Manor Dr	N/A – 25.5 – C	N/A – 61.2 – E
16 – Reagan St/Sausalito St	N/A – 10.7 – B	N/A – 21.9 – C
17 – Reagan St/Catalina St	N/A – 7.8 – A	N/A – 8.8 – A
18 – Reagan St/Florista St	N/A – 8.7 – A	N/A – 9.1 – A
19 – Reagan St/Katella Ave ¹	N/A – >999.9 – F	N/A – >999.9 – F
20 – Cherry St/Catalina St	N/A – 9.2 – A	N/A – 9.9 – A
21 – Cherry St/Florista St	N/A – 7.6 – A	N/A – 8.0 – A
22 – Cherry St/Katella Ave	0.58 – N/A – A	0.54 – N/A – A
23 – Hospital Driveway 1/Katella Avenue	N/A – 15.9 – C	N/A – 14.8 – B
24 – Kaylor St/Catalina St	N/A – 9.5 – A	N/A – 10.6 – B
25 – Kaylor St/Katella Ave	N/A – 242.6 – F	N/A – 27.0 – D
26 – Hospital Drwy 2/Katella Ave	N/A – 16.3 – C	N/A – 16.1 – C
27 – Hospital Drwy 3/Katella Ave	N/A – 16.6 – C	N/A – 14.2 – B
28 – Bloomfield St/Ball Rd	0.76 – N/A – C	0.71 – N/A – C
29 – Bloomfield St/Cerritos Ave	0.81 – N/A – D	0.75 – N/A – C
30 – Bloomfield St/Florista St	N/A – 25.1 – D	N/A – 13.9 – B
31 – Bloomfield St/Katella Ave	0.79 – N/A – C	0.74 – N/A – C
32 – Denni St/Ball Rd	0.63 – N/A – B	0.53 – N/A – A
33 – Denni St-Lexington St/Cerritos Ave	0.65 – N/A – B	0.65 – N/A – B
34 – Lexington St/Katella Ave	0.66 – N/A – B	0.68 – N/A – B
35 – Valley View St/Katella Ave	0.74 – N/A – C	0.76 – N/A – C
Note: NB = Northbound; SB = Southbound; V/C = volume to capacity ratio; delay shown in seconds per vehicle; N/A = Not Applicable; deficient intersection operation shown in bold. 1 = LOS and delay for one-way and two-way stop-controlled intersections is based on worst case minor street approach. While HCM LOS conservatively reports notable delay, visual observations indicate negligible delay for motorists on high volume major roadway.		



As shown in *Table 5-3.16* the following six study intersections are forecast to operate at a deficient LOS (LOS F) according to agency performance criteria for forecast year 2035 without project conditions:

- Norwalk Boulevard/Wardlow Road (AM peak hour only);
- Los Alamitos Boulevard/Cerritos Avenue (PM peak hour only);
- Los Alamitos Boulevard/Catalina Street South (both AM and PM peak hours);
- Seal Beach Boulevard/I-405 Southbound Ramps/Beverly Manor Drive (PM peak hour only);
- Reagan Street/Katella Avenue (both AM and PM peak hours); and
- Kaylor Street/Katella Avenue (AM peak hour only).

The HCM methodology reports notable delay at the following two deficient stop-controlled intersections based on the delay for motorists crossing the major roadway, however, negligible delay is experienced by motorists on Los Alamitos Boulevard and Katella Avenue at the following locations:

- Los Alamitos Boulevard/Catalina Street South; and
- Reagan Street/Katella Avenue.

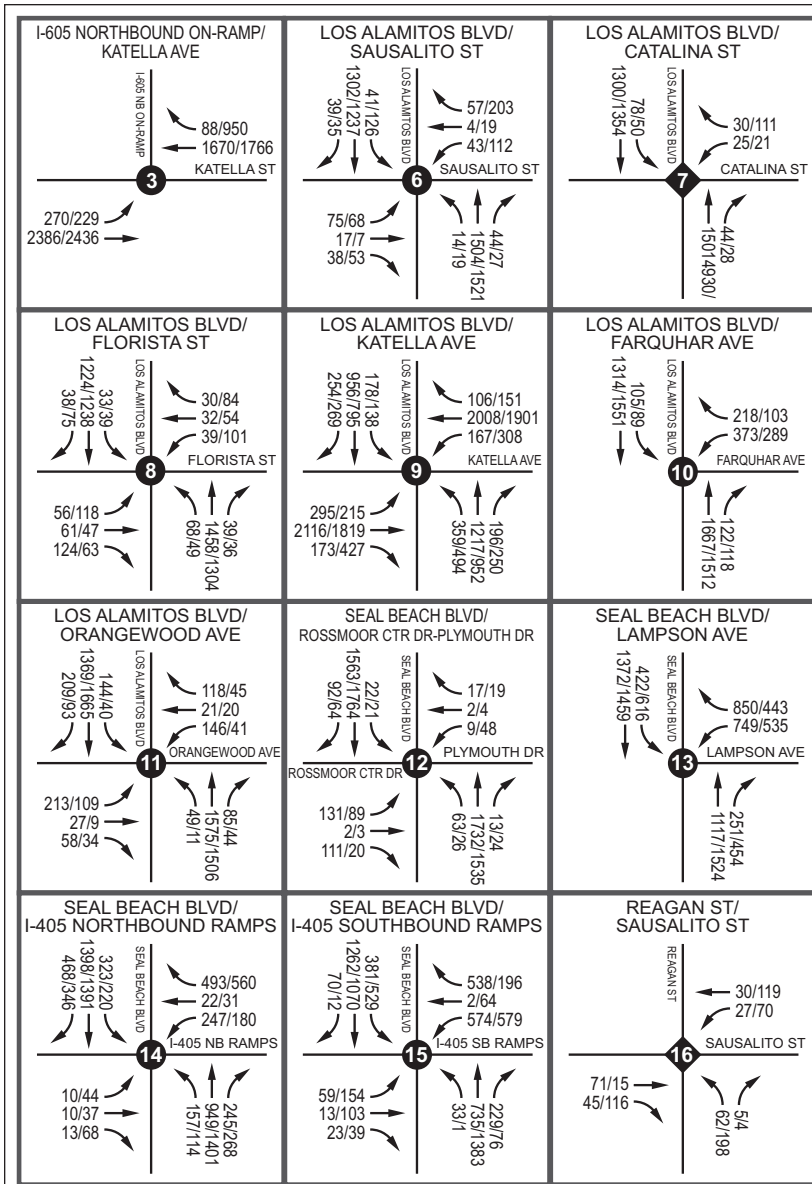
The deficient Seal Beach Boulevard/I-405 Southbound Ramps-Beverly Manor Drive intersection is planned for improvement by a City of Seal Beach sponsored project, however, preliminary design is underway and plans are not yet available.

Forecast Year 2035 With Project Conditions

This section analyzes traffic conditions associated with the addition of trips forecast to be generated by the proposed project (Phases 1-3) to forecast year 2035 without project conditions traffic volumes. During year 2035 with project conditions analysis, all project phases, Phases 1 through 3 are included in the analysis.

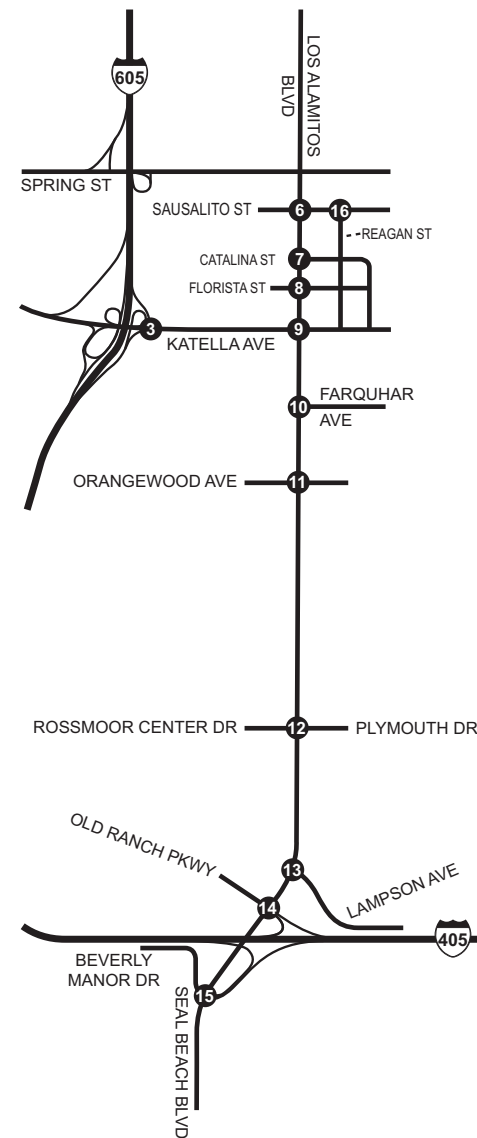
Forecast Year 2035 With Project Conditions Traffic Volumes

Forecast year 2035 with project conditions volumes were derived by adding project-generated trips to forecast year 2035 without project conditions traffic volumes. *Exhibit 5.3-29, Area 1 – Forecast Year 2035 With Project Conditions AM & PM Peak Hour Volumes; Exhibit 5.3-30, Area 2 – Forecast Year 2035 With Project Conditions AM & PM Peak Hour Volumes; and Exhibit 5.3-31, Area 3 – Forecast Year 2035 With Project Conditions AM & PM Peak Hour Volumes*, show forecast year 2035 with project conditions AM and PM peak hour volumes at the study intersections.



Legend:

XX/XX AM/PM Intersection Volumes



NOT TO SCALE

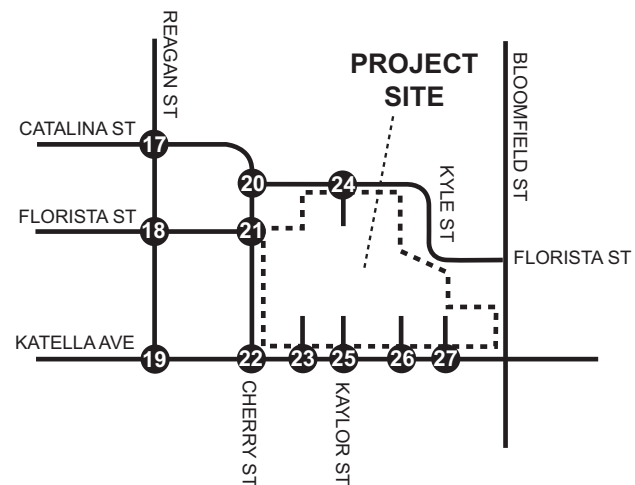
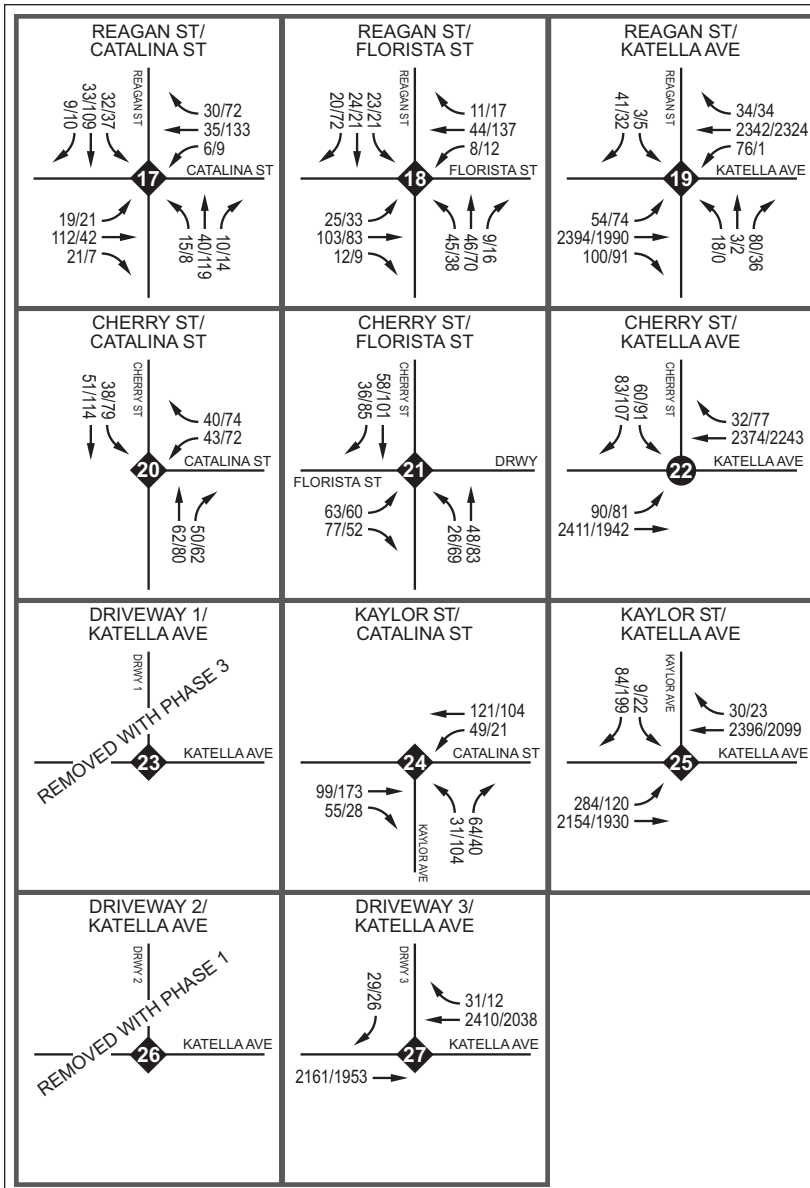


09/10 • JN 10-107031

ENVIRONMENTAL IMPACT REPORT
LOS ALAMITOS MEDICAL CENTER SPECIFIC PLAN

Area 1 – Forecast Year 2035 With Project Conditions AM/PM Peak Hour Volumes

Exhibit 5.3-29



Legend:

XX/XX AM/PM Intersection Volumes

----- Project Site Boundary

NOT TO SCALE

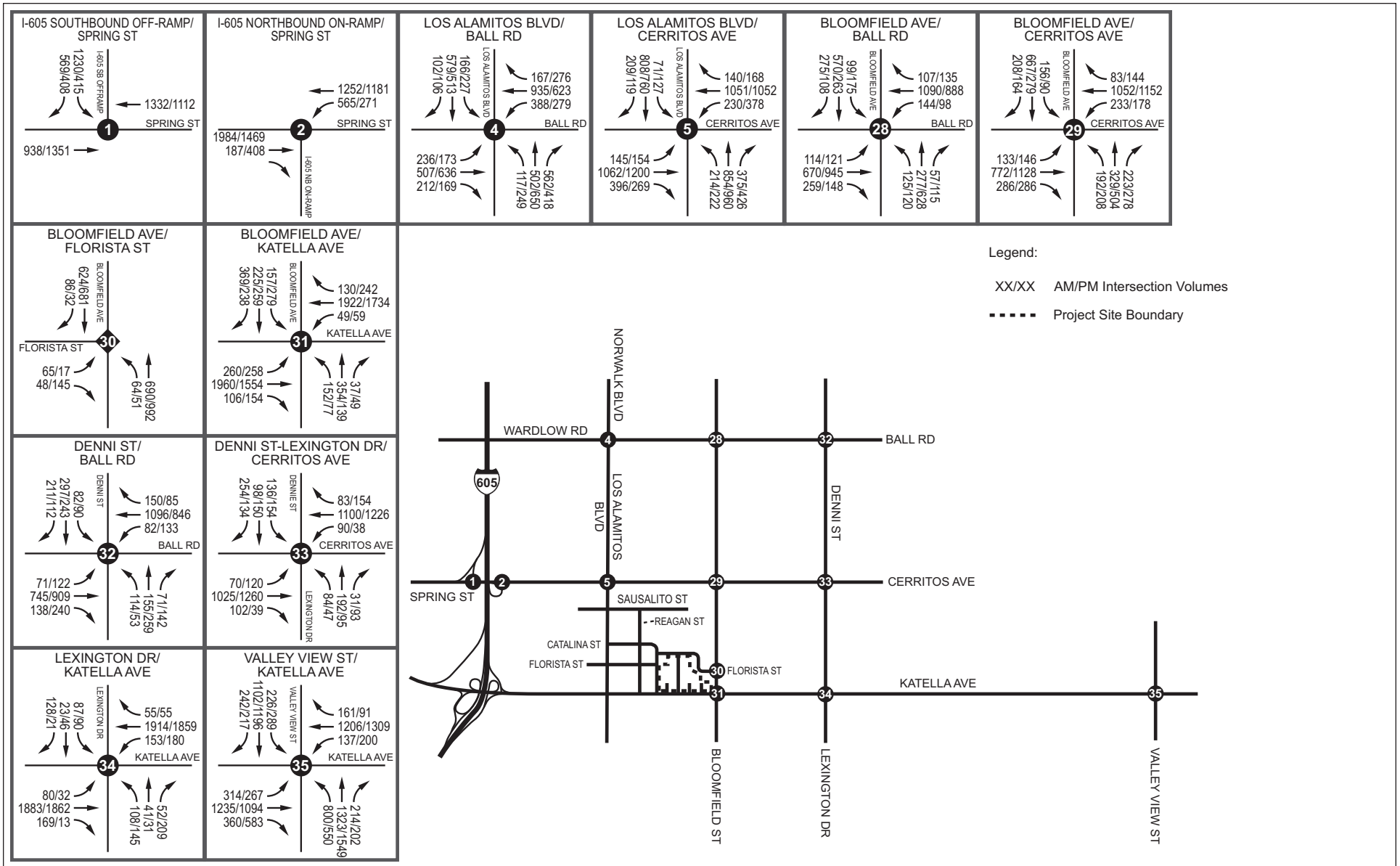


09/10 • JN 10-107031

ENVIRONMENTAL IMPACT REPORT
LOS ALAMITOS MEDICAL CENTER SPECIFIC PLAN

Area 2 – Forecast Year 2035 With Project Conditions AM/PM Peak Hour Volumes

Exhibit 5.3-30



NOT TO SCALE



09/10 • JN 10-107031

ENVIRONMENTAL IMPACT REPORT
LOS ALAMITOS MEDICAL CENTER SPECIFIC PLAN

Area 3 – Forecast Year 2035 With Project Conditions AM/PM Peak Hour Volumes

Exhibit 5.3-31



Los Alamitos Medical Center Specific Plan Program Environmental Impact Report

Forecast Year 2035 With Project Conditions Level of Service

Table 5.3-17, Forecast Year 2035 With Project Conditions AM & PM Peak Hour Level of Service, summarizes forecast year 2035 with project conditions AM peak hour and PM peak hour LOS of the study intersections; refer to Appendix D for detailed LOS analysis sheets.

**Table 5.3-17
Forecast Year 2035 With Project Conditions AM & PM Peak Hour Level of Service**

Study Intersection	Forecast Year 2035 Without Project Conditions		Forecast Year 2035 With Project Conditions		Significant Impact?
	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	
	V/C – Delay – LOS	V/C – Delay – LOS	V/C – Delay – LOS	V/C – Delay – LOS	
1 – I-605 SB Off-Ramp/Spring St	N/A – 23.3 – C	N/A – 11.7 – B	N/A – 23.4 – C	N/A – 11.8 – B	No
2 – I-605 NB On-Ramp/Spring St	N/A – 22.5 – C	N/A – 8.3 – A	N/A – 23.5 – C	N/A – 8.7 – A	No
3 – I-605 NB On-Ramp/Katella Ave	N/A – 6.6 – A	N/A – 5.8 – A	N/A – 6.6 – A	N/A – 5.8 – A	No
4 – Norwalk Blvd/Wardlow Rd	0.94 – N/A – E	0.83 – N/A – D	0.94 – N/A – E	0.83 – N/A – D	No ²
5 – Los Alamitos Blvd/Cerritos Ave	0.85 – N/A – D	0.96 – N/A – E	0.86 – N/A – D	0.98 – N/A – E	Yes
6 – Los Alamitos Blvd/Sausalito St	0.63 – N/A – B	0.75 – N/A – C	0.63 – N/A – B	0.77 – N/A – C	No
7 – Los Alamitos Blvd/Catalina St South ¹	N/A – 193.2 – F	N/A – 106.7 – F	N/A – 223.5 – F	N/A – 130.3 – F	No ²
8 – Los Alamitos Blvd/Florista St	0.63 – N/A – B	0.60 – N/A – A	0.63 – N/A – B	0.61 – N/A – A	No
9 – Los Alamitos Blvd/Katella Ave	0.82 – N/A – D	0.77 – N/A – C	0.82 – N/A – D	0.79 – N/A – C	No
10 – Los Alamitos Blvd/Farquhar Ave	0.67 – N/A – B	0.59 – N/A – A	0.68 – N/A – B	0.59 – N/A – A	No
11 – Los Alamitos Blvd/Orangewood Ave	0.65 – N/A – B	0.49 – N/A – A	0.67 – N/A – B	0.50 – N/A – A	No
12 – Seal Beach Blvd/Plymouth Dr	0.47 – N/A – A	0.48 – N/A – A	0.49 – N/A – A	0.49 – N/A – A	No
13 – Seal Beach Blvd/Lampson Ave	0.82 – N/A – D	0.68 – N/A – B	0.83 – N/A – D	0.69 – N/A – B	No
14 – Seal Beach Blvd/I-405 NB Off-Ramp-Old Ranch Pkwy	N/A – 19.9 – B	N/A – 22.5 – C	N/A – 20.3 – C	N/A – 22.7 – C	No
15 – Seal Beach Blvd/I-405 SB Ramps-Beverly Manor Dr	N/A – 25.5 – C	N/A – 61.2 – E	N/A – 25.6 – C	N/A – 67.7 – E	No ²
16 – Reagan St/Sausalito St	N/A – 10.7 – B	N/A – 21.9 – C	N/A – 10.7 – B	N/A – 21.9 – C	No
17 – Reagan St/Catalina St	N/A – 7.8 – A	N/A – 8.8 – A	N/A – 7.9 – A	N/A – 8.9 – A	No
18 – Reagan St/Florista St	N/A – 8.7 – A	N/A – 9.1 – A	N/A – 8.7 – A	N/A – 9.2 – A	No
19 – Reagan St/Katella Ave ¹	N/A – >999.9 – F	N/A – >999.9 – F	N/A – >999.9 – F	N/A – >999.9 – F	No ²
20 – Cherry St/Catalina St	N/A – 9.2 – A	N/A – 9.9 – A	N/A – 9.4 – A	N/A – 10.5 – A	No
21 – Cherry St/Florista St	N/A – 7.6 – A	N/A – 8.0 – A	N/A – 7.8 – A	N/A – 8.2 – A	No
22 – Cherry St/Katella Ave	0.58 – N/A – A	0.54 – N/A – A	0.62 – N/A – B	0.60 – N/A – A	No
23 – Hospital Driveway 1/Katella Avenue	N/A – 15.9 – C	N/A – 14.8 – B	3	3	No
24 – Kaylor St/Catalina St	N/A – 9.5 – A	N/A – 10.6 – B	N/A – 9.8 – A	N/A – 11.3 – B	No
25 – Kaylor St/Katella Ave	N/A – 242.6 – F	N/A – 27.0 – D	N/A – >999.9 – F	N/A – 211.9 – F	Yes
26 – Hospital Drwy 2/Katella Ave	N/A – 16.3 – C	N/A – 16.1 – C	4	4	No
27 – Hospital Drwy 3/Katella Ave	N/A – 16.6 – C	N/A – 14.2 – B	N/A – 16.9 – C	N/A – 14.7 – B	No
28 – Bloomfield St/Ball Rd	0.76 – N/A – C	0.71 – N/A – C	0.76 – N/A – C	0.71 – N/A – C	No



Table 5.3-17 (continued)
Forecast Year 2035 With Project Conditions AM & PM Peak Hour Level of Service

Study Intersection	Forecast Year 2035 Without Project Conditions		Forecast Year 2035 With Project Conditions		Significant Impact?
	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	
	V/C – Delay – LOS	V/C – Delay – LOS	V/C – Delay – LOS	V/C – Delay – LOS	
29 – Bloomfield St/Cerritos Ave	0.81 – N/A – D	0.75 – N/A – C	0.81 – N/A – D	0.77 – N/A – C	No
30 – Bloomfield St/Florista St	N/A – 25.1 – D	N/A – 13.9 – B	N/A – 27.9 – D	N/A – 16.3 – C	No
31 – Bloomfield St/Katella Ave	0.79 – N/A – C	0.74 – N/A – C	0.80 – N/A – C	0.76 – N/A – C	No
32 – Denni St/Ball Rd	0.63 – N/A – B	0.53 – N/A – A	0.63 – N/A – B	0.53 – N/A – A	No
33 – Denni St-Lexington St/Cerritos Ave	0.65 – N/A – B	0.65 – N/A – B	0.66 – N/A – B	0.66 – N/A – B	No
34 – Lexington St/Katella Ave	0.66 – N/A – B	0.68 – N/A – B	0.66 – N/A – B	0.69 – N/A – B	No
35 – Valley View St/Katella Ave	0.74 – N/A – C	0.76 – N/A – C	0.74 – N/A – C	0.77 – N/A – C	No
Note: NB = Northbound; SB = Southbound; V/C = volume to capacity ratio; delay shown in seconds per vehicle; N/A = Not Applicable; deficient intersection operation shown in bold; significant impact identified in bold. 1 = LOS and delay for one-way and two-way stop-controlled intersections is based on worst case minor street approach. While HCM LOS conservatively reports notable delay, visual observations indicate negligible delay for motorists on high volume major roadway. 2 = No significant impact forecast based on applicable thresholds of significance. 3 = Driveway removed as part of proposed project Phase 3. 4 = Driveway removed as part of proposed project Phase 1.					

As shown in *Table 5.3-17*, with the addition of project-generated trips, the following six study intersections are forecast to continue to operate at a deficient LOS (LOS F) according to agency performance criteria for forecast year 2035 with project conditions:

- Norwalk Boulevard/Wardlow Road (AM peak hour only);
- Los Alamitos Boulevard/Cerritos Avenue (PM peak hour only);
- Los Alamitos Boulevard/Catalina Street South (both AM and PM peak hours);
- Seal Beach Boulevard/I-405 Southbound Ramps/Beverly Manor Drive (PM peak hour only);
- Reagan Street/Katella Avenue (both AM and PM peak hours); and
- Kaylor Street/Katella Avenue (AM peak hour only).

The HCM methodology reports notable delay at the following two deficient stop-controlled intersections based on the delay for motorists crossing the major roadway, however, negligible delay is experienced by motorists on Los Alamitos Boulevard and Katella Avenue at the following locations:

- Los Alamitos Boulevard/Catalina Street South; and
- Reagan Street/Katella Avenue.



The deficient Seal Beach Boulevard/I-405 Southbound Ramps-Beverly Manor Drive intersection is planned for improvement by a City of Seal Beach sponsored project, however, preliminary design is underway and plans are not yet available.

While deficiencies are forecast to continue at the following four intersections, no significant impact is identified since the proposed project doesn't cause deficient operations for the following intersections:

- Norwalk Boulevard/Wardlow Road (AM peak hour only);
- Los Alamitos Boulevard/Catalina Street South (both AM and PM peak hours);
- Seal Beach Boulevard/I-405 Southbound Ramps/Beverly Manor Drive (PM peak hour only); and
- Reagan Street/Katella Avenue (both AM and PM peak hours).

As also shown in *Table 5.3-17*, based on agency-established thresholds of significance, the addition of project-generated trips is forecast to result in a significant impact at the following two study intersections for forecast year 2035 with project conditions:

- Los Alamitos Boulevard/Cerritos Avenue; and
- Kaylor Street/Katella Avenue.

Recommended Forecast Year 2035 With Project Conditions Mitigation Measures

Operations at the Kaylor Street/Katella Avenue intersection are directly related to operations at the adjacent Cherry Street/Katella Avenue and Maple Street/Katella Avenue intersections, as well as site access to the Los Alamitos Medical Center. Mitigation Measures TRF-1a-c, TRF-2, and TRF-3 are identified to eliminate the significant traffic impacts at the following two intersections, and to achieve acceptable corridor operations along Katella Avenue for forecast year 2035 with project conditions.

Through adjustments to the signal timing and phasing data, the progression of traffic along Katella Avenue is maintained, primarily due to the relocation of the pedestrian crossing from the Cherry Street/Katella Avenue intersection to the Kaylor Street/Katella Avenue intersection. The maintained Katella Avenue operations provide acceptable operations and efficient flows of traffic in both the eastbound and westbound directions.

Mitigation Measures TRF-1a-c and TRF-2 are consistent with the OCTA Smart Street Program to improve traffic flow and realize available traffic capacity on regional routes of significance. The modified median on Katella Avenue would be continuous between Kaylor Street and Bloomfield Street with a break only at Driveway 3 for an eastbound left-turn lane. Westbound left-turn movements onto Maple Street would be redistributed to Bloomfield Street or can make a u-turn at the Cherry Street/Katella Avenue intersection. While some local traffic may be redistributed access management along Katella Avenue would be improved. The existing grid pattern of roadways south of Katella Avenue supports the Katella Avenue raised median modifications and circulation



enhancements. *Exhibit 5.3-32, Mitigated Forecast Year 2035 With Project Conditions Study Intersection Geometry – Los Alamitos Boulevard/Cerritos Avenue*, shows mitigated forecast year 2035 with project conditions intersection geometry and *Exhibit 5.3-25, Mitigated Katella Avenue Corridor*, shows the Katella Avenue corridor with and without the recommended mitigation measures.

Mitigated Forecast Year 2035 With Project Conditions Level of Service

Table 5.3-18, Mitigated Forecast Year 2035 With Project Conditions AM & PM Peak Hour Level of Service, summarizes forecast year 2035 with project conditions AM peak hour and PM peak hour LOS at the affected study intersections assuming implementation of the identified mitigation measures; detailed LOS analysis sheets are contained in Appendix D.

**Table 5.3-18
Mitigated Forecast Year 2035 With Project Conditions
AM & PM Peak Hour Level of Service**

Study Intersection	Forecast Year 2035 Without Project Conditions		Forecast Year 2035 With Project Conditions		Significant Impact?
	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	
	V/C – Delay – LOS	V/C – Delay – LOS	V/C – Delay – LOS	V/C – Delay – LOS	
5 – Los Alamitos Blvd/Cerritos Ave	0.85 – N/A – D	0.96 – N/A – E	0.81 – N/A – D	0.87 – N/A – D	No
25 – Kaylor St/Katella Ave ¹	N/A – 242.6 – F	N/A – 27.0 – D	0.71 – N/A – C	0.62 – N/A – B	No
27 – Hospital Drwy 3/Katella Ave	N/A – 16.6 – C	N/A – 14.2 – B	N/A – 29.6 – D	N/A – 20.8 – C	No
31 – Bloomfield St/Katella Ave	0.79 – N/A – C	0.74 – N/A – C	0.81 – N/A – D	0.76 – N/A – D	No

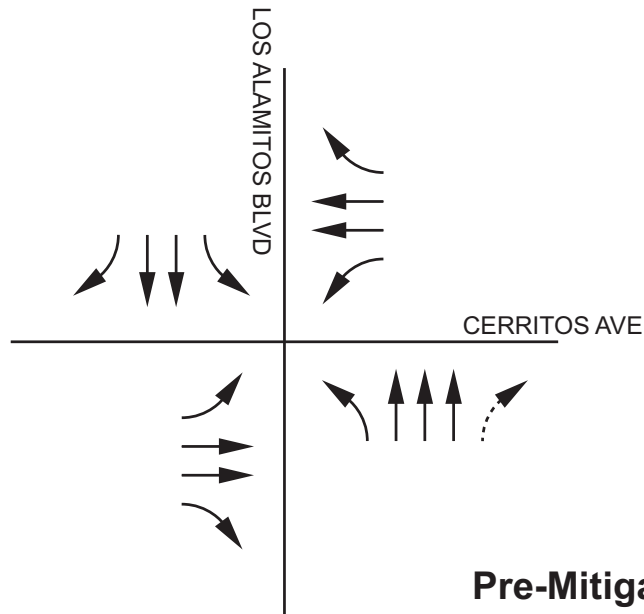
Note: SB = Southbound; V/C = volume to capacity ratio; delay shown in seconds per vehicle deficient intersection operation shown in bold.

1 = Modified to signalized intersection for with project conditions.

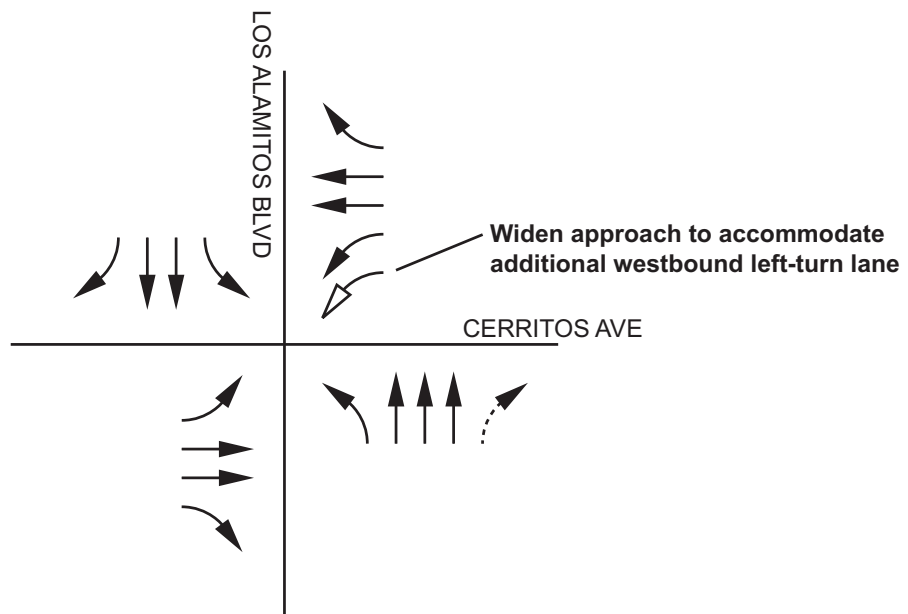
As shown in *Table 5.3-18*, assuming implementation of the identified mitigation measures, the project traffic impacts at the affected study intersections are reduced to a level considered less than significant during the AM peak hour and PM peak hour for forecast year 2035 with project conditions. Additionally, operations along Katella Avenue are improved through consistency and implementation with the OCTA Smart Street Program.

As requested by City staff, a left-turn queue analysis has been prepared assuming the recommended Mitigation Measures are implemented for forecast year 2035 with project conditions at the following three intersections:

- Cherry Street/Katella Avenue;
- Kaylor Street/Katella Avenue; and
- Driveway 3/Katella Avenue.



Pre-Mitigation Geometry



Mitigated Geometry

Legend:

- ← Existing Lane
- Modified Lane

NOT TO SCALE



09/10 • JN 10-107031

ENVIRONMENTAL IMPACT REPORT LOS ALAMITOS MEDICAL CENTER SPECIFIC PLAN **Mitigated Forecast Year 2035 With Project Conditions Intersection Geometry - Los Alamitos Blvd/Cerritos Ave**

Exhibit 5.3-32



Table 5.3-19, Mitigated Forecast Year 2035 With Project Conditions Katella Avenue Left-Turn Queue Analysis Summary, summarizes the forecast year 2035 with project conditions Katella Avenue left-turn queue analysis.

**Table 5.3-19
Mitigated Forecast Year 2035 With Project Conditions
Katella Avenue Left-Turn Queue Analysis Summary**

Study Intersection	Storage Provided (feet)	Forecast Year 2035 Without Project Conditions		Mitigated Forecast Year 2035 With Project Conditions		Adequate Storage Provided?
		Queue (feet)		Queue (feet)		
		AM	PM	AM	PM	
22 – Cherry Street/Katella Avenue - Eastbound Left-Turn	125	50	75	100	75	Yes
25 – Kaylor Street/Katella Avenue - Eastbound Left-Turn	200 ¹	150	<25	200	75	Yes
27 – Driveway 3/Katella Avenue - Eastbound Left-Turn	100	N/A ²	N/A ²	25	<25	Yes
1 = Assumes lengthening of left-turn pocket identified in Mitigation Measure TRF-1a-c. 2 = Not applicable since eastbound left-turn movement does not exist for without project conditions.						

As shown in *Table 5.3-19*, assuming implementation of the identified mitigation measures, adequate left-turn storage capacity on Katella Avenue is available at the study intersections for mitigated forecast year 2035 with project conditions. Adherence to *General Plan* goals and policies and compliance with the recommended Mitigation Measure TRF-1a-c, TRF-2, and TRF-3 would minimize any traffic impacts associated with forecast year 2035, and would ensure that impacts are reduced to a less than significant level.

Mitigation Measures: Refer to Mitigation Measures TRF-1a-c and TRF-2. In addition, the following mitigation measure is recommended.

TRF-3 Los Alamitos Boulevard/Cerritos Avenue. Prior to issuance of certificate of occupancy for Hospital Building 2, the project applicant shall pay a proportionate share contribution to the City of Los Alamitos to widen the westbound Cerritos Avenue approach from one left-turn lane, two through lanes, and one right-turn lane to consist of two left-turn lanes, two through lanes, and one right-turn lane.

Level of Significance After Mitigation: Less Than Significant Impact.



FORECAST YEAR 2013 PROPOSED PROJECT TRAFFIC IMPACTS ON STATE HIGHWAY FACILITIES

- ◆ **DEVELOPMENT ASSOCIATED WITH IMPLEMENTATION OF THE PROPOSED PROJECT COULD RESULT IN ADVERSE IMPACTS TO THE FUNCTION OF STATE HIGHWAY FACILITIES IN THE PROJECT AREA UNDER FORECAST YEAR 2013 TRAFFIC CONDITIONS.**

Level of Significance Before Mitigation: Less Than Significant Impact.

Impact Analysis:

Forecast Year 2013 Without Project Conditions

The proposed project is planned to open in 2013. To determine the potential traffic impacts of the proposed project, forecast year 2013 without project conditions are examined prior to forecast year 2013 with project conditions.

Forecast year 2013 without project conditions study area traffic volumes were derived by applying an annual growth rate factor of one percent per year to existing traffic volumes as directed by City staff. Additionally, trips were added from six cumulative projects in the vicinity of the project site, which have already been approved, but have not yet been constructed, and therefore are not yet generating traffic.

Table 5.3-20, Forecast Year 2013 Without Project Conditions AM & PM Peak Hour State Highway Study Segment Level of Service, summarizes forecast year 2013 without project conditions AM peak hour and PM peak hour LOS of the State Highway study segments; refer to Appendix D for detailed HCM analysis sheets.

Table 5.3-20
Forecast Year 2013 Without Project Conditions
AM & PM Peak Hour State Highway Study Segment Level of Service

Study Freeway Segment	Type	Mainline Lanes	Mainline Volume	Density (pc/mi/la)	LOS
Westbound AM					
I-405 East of Seal Beach Blvd	Basic	6	11,293	30.4	D
I-405 West of Seal Beach Blvd	Basic	6	11,293	30.4	D
Westbound PM					
I-405 East of Seal Beach Blvd	Basic	6	13,876	>45.0	F
I-405 West of Seal Beach Blvd	Basic	6	13,876	>45.0	F
Eastbound AM					
I-405 East of Seal Beach Blvd	Basic	6	13,161	40.7	E
I-405 West of Seal Beach Blvd	Basic	6	13,161	40.7	E



Table 5.3-20 (continued)
Forecast Year 2013 Without Project Conditions
AM & PM Peak Hour State Highway Study Segment Level of Service

Study Freeway Segment	Type	Mainline Lanes	Mainline Volume	Density (pc/mi/la)	LOS
Eastbound PM					
I-405 East of Seal Beach Blvd	Basic	6	13,295	41.7	E
I-405 West of Seal Beach Blvd	Basic	6	13,295	41.7	E
Northbound AM					
I-605 South of Katella Ave	Basic	4	5,833	22.0	C
I-605 North of Katella Ave	Basic	4	6,747	26.1	D
Northbound PM					
I-605 South of Katella Ave	Basic	4	7,528	30.4	D
I-605 North of Katella Ave	Basic	4	8,707	40.0	E
Southbound AM					
I-605 North of Katella Ave	Basic	4	7,556	30.5	D
I-605 South of Katella Ave	Basic	4	6,532	25.0	C
Southbound PM					
I-605 North of Katella Ave	Basic	4	7,185	28.4	D
I-605 South of Katella Ave	Basic	4	6,211	23.6	C
Note: On = freeway on-ramp; Off = freeway off-ramp; Density = passenger cars per mile per lane; deficient segment operation shown in bold.					

As shown in *Table 5.3-20*, the State Highway freeway segments are forecast to operate at a deficient LOS (LOS D or worse) according to agency performance criteria during one or both analysis time periods in one direction or another for forecast year 2013 without project conditions.

Forecast Year 2013 With Project Conditions

Table 5.3-21, Forecast Year 2013 With Project Conditions AM & PM Peak Hour State Highway Study Segment Level of Service, summarizes forecast year 2013 with project conditions AM peak hour and PM peak hour LOS of the State Highway study segments; detailed HCM analysis sheets are contained in Appendix D.



Los Alamitos Medical Center Specific Plan
Program Environmental Impact Report

Table 5.3-21
Forecast Year 2013 With Project Conditions
AM & PM Peak Hour State Highway Study Segment Level of Service

Study Freeway Segment	Type	Mainline Lanes	Forecast Year 2013 Without Project Conditions			Forecast Year 2013 With Project Conditions			Significant Impact?
			Mainline Volume	Density (pc/mi/la)	LOS	Mainline Volume	Density (pc/mi/la)	LOS	
Westbound AM									
I-405 East of Seal Beach Blvd	Basic	6	11,293	30.4	D	11,314	30.5	D	No
I-405 West of Seal Beach Blvd	Basic	6	11,293	30.4	D	11,295	30.4	D	No
Westbound PM									
I-405 East of Seal Beach Blvd	Basic	6	13,876	>45.0	F	13,887	>45.0	F	No
I-405 West of Seal Beach Blvd	Basic	6	13,876	>45.0	F	13,886	>45.0	F	No
Eastbound AM									
I-405 East of Seal Beach Blvd	Basic	6	13,161	40.7	E	13,166	40.8	E	No
I-405 West of Seal Beach Blvd	Basic	6	13,161	40.7	E	13,168	40.8	E	No
Eastbound PM									
I-405 East of Seal Beach Blvd	Basic	6	13,295	41.7	E	13,324	42.0	E	No
I-405 West of Seal Beach Blvd	Basic	6	13,295	41.7	E	13,299	41.8	E	No
Northbound AM									
I-605 South of Katella Ave	Basic	4	5,833	22.0	C	5,847	22.1	C	No
I-605 North of Katella Ave	Basic	4	6,747	26.1	D	6,749	26.1	D	No
Northbound PM									
I-605 South of Katella Ave	Basic	4	7,528	30.4	D	7,535	30.4	D	No
I-605 North of Katella Ave	Basic	4	8,707	40.0	E	8,727	40.2	E	No
Southbound AM									
I-605 North of Katella Ave	Basic	4	7,556	30.5	D	7,563	30.6	D	No
I-605 South of Katella Ave	Basic	4	6,532	25.0	C	6,536	25.1	C	No
Southbound PM									
I-605 North of Katella Ave	Basic	4	7,185	28.4	D	7,189	28.4	D	No
I-605 South of Katella Ave	Basic	4	6,211	23.6	C	6,230	23.7	C	No

Note: Density = passenger cars per mile per lane; deficient segment operation shown in bold.



As shown in *Table 5.3-21*, with the addition of project-generated trips, the State Highway freeway segments are forecast to continue to operate at a deficient LOS (LOS D or worse) according to agency performance criteria during one or both analysis time periods in one direction or another for forecast year 2013 with project conditions.

As also shown in *Table 5.3-21*, the addition of project-generated trips is forecast to result in no significant impacts at the State Highway freeway segments for forecast year 2013 with project conditions since the proposed project adds less than 50 trips to deficiently operating State Highway study segments.

Mitigation Measures: No mitigation measures are required.

Level of Significance After Mitigation: Not Applicable.

FORECAST YEAR 2035 PROPOSED PROJECT TRAFFIC IMPACTS ON STATE HIGHWAY FACILITIES

- ◆ **DEVELOPMENT ASSOCIATED WITH IMPLEMENTATION OF THE PROPOSED PROJECT COULD RESULT IN ADVERSE IMPACTS TO THE FUNCTION OF STATE HIGHWAY FACILITIES IN THE PROJECT AREA UNDER BUILDOUT FORECAST YEAR 2035 TRAFFIC CONDITIONS.**

Level of Significance Before Mitigation: Less Than Significant Impact.

Impact Analysis:

Forecast Year 2035 Without Project Conditions

Forecast year 2035 conditions study area traffic volumes are based on OCTA model runs for the project area. Additionally, trips were added from six cumulative projects in the vicinity of the project site, which have already been approved, but have not yet been constructed, and therefore are not yet generating traffic. Forecast year 2035 conditions analysis conservatively does not assume additional freeway capacity associated with the West County Connectors (WCC) project, which is under design.

Table 5.3-22, Forecast Year 2035 Without Project Conditions AM & PM Peak Hour State Highway Study Segment Level of Service, summarizes forecast year 2035 without project conditions AM peak hour and PM peak hour LOS of the State Highway study segments; detailed HCM analysis sheets are contained in Appendix D.



Table 5.3-22
Forecast Year 2035 Without Project Conditions
AM & PM Peak Hour State Highway Study Segment Level of Service

Study Freeway Segment	Type	Mainline Lanes	Mainline Volume	Density (pc/mi/la)	LOS
Westbound AM					
I-405 East of Seal Beach Blvd	Basic	6	13,250	41.4	E
I-405 West of Seal Beach Blvd	Basic	6	13,250	41.4	E
Westbound PM					
I-405 East of Seal Beach Blvd	Basic	6	16,281	>45.0	F
I-405 West of Seal Beach Blvd	Basic	6	16,281	>45.0	F
Eastbound AM					
I-405 East of Seal Beach Blvd	Basic	6	15,442	>45.0	F
I-405 West of Seal Beach Blvd	Basic	6	15,442	>45.0	F
Eastbound PM					
I-405 East of Seal Beach Blvd	Basic	6	15,599	>45.0	F
I-405 West of Seal Beach Blvd	Basic	6	15,599	>45.0	F
Northbound AM					
I-605 South of Katella Ave	Basic	4	6,844	26.5	D
I-605 North of Katella Ave	Basic	4	7,916	33.0	D
Northbound PM					
I-605 South of Katella Ave	Basic	4	8,832	41.4	E
I-605 North of Katella Ave	Basic	4	10,216	>45.0	F
Southbound AM					
I-605 North of Katella Ave	Basic	4	8,866	41.8	E
I-605 South of Katella Ave	Basic	4	7,665	31.3	D
Southbound PM					
I-605 North of Katella Ave	Basic	4	8,430	37.2	E
I-605 South of Katella Ave	Basic	4	7,288	28.9	D
Note: On = freeway on-ramp; Off = freeway off-ramp; Density = passenger cars per mile per lane; deficient segment operation shown in bold.					

As shown in *Table 5.3-22*, State Highway freeway segments are forecast to operate at a deficient LOS (LOS D or worse) according to agency performance criteria during both analysis time periods for forecast year 2035 without project conditions.

Forecast Year 2035 With Project Conditions

Table 5.3-23, Forecast Year 2035 With Project Conditions AM & PM Peak Hour State Highway Study Segment Level of Service, summarizes forecast year 2035 with project conditions AM peak hour and PM peak hour LOS of the State Highway study segments; detailed HCM analysis sheets are contained in Appendix D.



Los Alamitos Medical Center Specific Plan
Program Environmental Impact Report

Table 5.3-23
Forecast Year 2035 With Project Conditions
AM & PM Peak Hour State Highway Study Segment Level of Service

Study Freeway Segment	Type	Mainline Lanes	Forecast Year 2035 Without Project Conditions			Forecast Year 2035 With Project Conditions			Significant Impact?
			Mainline Volume	Density (pc/mi/la)	LOS	Mainline Volume	Density (pc/mi/la)	LOS	
Westbound AM									
I-405 East of Seal Beach Blvd	Basic	6	13,250	41.4	E	13286	41.7	E	No
I-405 West of Seal Beach Blvd	Basic	6	13,250	41.4	E	13254	41.4	E	No
Westbound PM									
I-405 East of Seal Beach Blvd	Basic	6	16,281	>45.0	F	16300	>45.0	F	No
I-405 West of Seal Beach Blvd	Basic	6	16,281	>45.0	F	16295	>45.0	F	No
Eastbound AM									
I-405 East of Seal Beach Blvd	Basic	6	15,442	>45.0	F	15454	>45.0	F	No
I-405 West of Seal Beach Blvd	Basic	6	15,442	>45.0	F	15454	>45.0	F	No
Eastbound PM									
I-405 East of Seal Beach Blvd	Basic	6	15,599	>45.0	F	15641	>45.0	F	No
I-405 West of Seal Beach Blvd	Basic	6	15,599	>45.0	F	15605	>45.0	F	No
Northbound AM									
I-605 South of Katella Ave	Basic	4	6,844	26.5	D	6868	26.7	D	No
I-605 North of Katella Ave	Basic	4	7,916	33.0	D	7920	33.0	D	No
Northbound PM									
I-605 South of Katella Ave	Basic	4	8,832	41.4	E	8845	41.6	E	No
I-605 North of Katella Ave	Basic	4	10,216	>45.0	F	10230	>45.0	F	No
Southbound AM									
I-605 North of Katella Ave	Basic	4	8,866	41.8	E	8878	41.9	E	No
I-605 South of Katella Ave	Basic	4	7,665	31.3	D	7673	31.3	D	No
Southbound PM									
I-605 North of Katella Ave	Basic	4	8,430	37.2	E	8436	37.3	E	No
I-605 South of Katella Ave	Basic	4	7,288	28.9	D	7316	29.1	D	No
Note: Density = passenger cars per mile per lane; deficient segment operation shown in bold.									



As shown in *Table 5.3-23*, with the addition of project-generated trips, all of the State Highway freeway segments are forecast to continue to operate at a deficient LOS (LOS D or worse) according to agency performance criteria during both analysis time periods for forecast year 2035 with project conditions.

As also shown in *Table 5.3-23*, the addition of project-generated trips is forecast to result in no significant impacts at the State Highway freeway segments for forecast year 2035 with project conditions since the project adds less than 50 trips to deficiently operating State Highway study segments.

Mitigation Measures: No mitigation measures are required.

Level of Significance After Mitigation: Not Applicable.

FORECAST YEAR 2013 PROPOSED PROJECT TRAFFIC IMPACTS ON CMP HIGHWAY FACILITIES

- ◆ **DEVELOPMENT ASSOCIATED WITH IMPLEMENTATION OF THE PROPOSED PROJECT COULD RESULT IN ADVERSE IMPACTS TO THE FUNCTION OF CMP IN THE PROJECT AREA UNDER FORECAST YEAR 2013 TRAFFIC CONDITIONS.**

Level of Significance Before Mitigation: Less Than Significant Impact.

Impact Analysis:

Forecast Year 2013 With Project Conditions CMP Intersection Peak Hour Level of Service

Table 5.3-24, Forecast Year 2013 With Project Conditions CMP Peak Hour Level of Service, summarizes forecast year 2013 with project conditions AM peak hour and PM peak hour LOS of the CMP study intersection; refer to Appendix D for detailed LOS analysis sheets.

Table 5.3-24
Forecast Year 2013 With Project Conditions CMP Peak Hour Level of Service

CMP Study Intersection	Forecast Year 2013 Without Project Conditions		Forecast Year 2013 With Project Conditions		Significant Impact?
	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	
	V/C – LOS	V/C – LOS	V/C – LOS	V/C – LOS	
3 – I-605 NB On-Ramp/Katella Ave	0.48 –A	0.50 –A	0.49 –A	0.50 –A	No
35 – Valley View St/Katella Ave	0.66 –B	0.66 –B	0.66 –B	0.66 –B	No

V/C = volume to capacity ratio; deficient intersection operation shown in bold.



As shown in *Table 5.3-24*, based on agency thresholds of significance, the addition of project-generated trips is forecast to result in no significant impact at the CMP study intersections for forecast year 2035 with project conditions. Furthermore, the OCTA fixed Route 50 travels along Katella Avenue serving the project site. Additionally, other OCTA fixed routes in the vicinity of the project site include Route 42, which travels along Los Alamitos Boulevard just west of the project site, Route 46, which travels along Bloomfield Street and Cerritos Avenue just north of the project site, and Route 701, which travels along Katella Avenue and Los Alamitos Boulevard just west of the project site.

Mitigation Measures: No mitigation measures are required.

Level of Significance After Mitigation: Not Applicable.

FORECAST YEAR 2035 PROPOSED PROJECT TRAFFIC IMPACTS ON CMP HIGHWAY FACILITIES

- ◆ **DEVELOPMENT ASSOCIATED WITH THE IMPLEMENTATION OF THE PROPOSED PROJECT COULD RESULT IN ADVERSE IMPACTS TO THE FUNCTION OF CMP IN THE PROJECT AREA UNDER BUILDOUT FORECAST YEAR 2035 TRAFFIC CONDITIONS.**

Level of Significance Before Mitigation: Less Than Significant Impact.

Impact Analysis:

Forecast Year 2035 With Project Conditions CMP Intersection Peak Hour LOS

Table 5.3-25, Forecast Year 2035 With Project Conditions CMP Intersection Peak Hour Level of Service, summarizes forecast year 2035 with project conditions AM peak hour and PM peak hour LOS of the CMP study intersection; refer to Appendix D for detailed LOS analysis sheets.

**Table 5.3-25
Forecast Year 2035 With Project Conditions CMP Peak Hour Level of Service**

CMP Study Intersection	Forecast Year 2035 Without Project Conditions		Forecast Year 2035 With Project Conditions		Short-Term Significant Impact?
	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	
	V/C – LOS	V/C – LOS	V/C – LOS	V/C – LOS	
3 – I-605 NB On-Ramp/Katella Ave	0.58 – A	0.57 – A	0.59 – A	0.58 – A	No
35 – Valley View St/Katella Ave	0.78 – C	0.80 – C	0.79 – C	0.81 – D	No

Note: V/C = volume to capacity ratio; deficient intersection operation shown in bold.



As shown in *Table 5.3-25*, based on agency thresholds of significance, the addition of project-generated trips is forecast to result in no significant impact at the CMP study intersections for forecast year 2035 with project conditions. Furthermore, OCTA fixed Route 50, 42, 46, and 701 serve the project area.

Mitigation Measures: No mitigation measures are required.

Level of Significance After Mitigation: Not Applicable.

TRAFFIC HAZARDS/EMERGENCY ACCESS

- ◆ **DEVELOPMENT ASSOCIATED WITH THE IMPLEMENTATION OF THE PROPOSED PROJECT COULD RESULT IN HAZARDOUS CONDITIONS DUE TO A DESIGN FEATURE OR INCOMPATIBLE USE OR COULD RESULT IN INADEQUATE EMERGENCY ACCESS.**

Level of Significance Before Mitigation: Potentially Significant Impact.

Impact Analysis: Kaylor Street is a public roadway that currently serves as the only full access point from Katella Avenue. It roughly bisects the site and intersects Catalina Street to the north. As part of project implementation, Kaylor would be modified as follows:

- Phase 1. Kaylor Street would be vacated during Phase 1 of project implementation but would remain unaltered in configuration, providing full access into the site as a private street. A public access easement would be placed on the private driveway; refer to *Exhibit 5.3-9*.
- Phases 2 and 3. As part of Phase 2, Kaylor Street would be reconfigured as a driveway access point from the south into the site, providing access to the new parking structure and surface parking lots. On the north, Kaylor Street would extend south from Catalina Street and serve as a private road for ambulances to the new emergency room and access for employees and visitors. Kaylor Street would terminate in a cul-de-sac constructed to City and OCFA standards; refer to *Exhibit 5.3-10* and *Exhibit 5.3-11*.

Adherence to Mitigation Measure TRF-4 would provide a dedicated left-turn lane and dedicated right turn lane at the southbound approach to the Kaylor Street/Katella Avenue to improve safety and lessen confusion.

The ambulance route for the medical center would vary by phase.

- Phase 1. There would be no change to the existing ambulance route to the emergency room in the existing hospital.
- Phase 2. Upon construction of Hospital Building 1 in Phase 2, the emergency room would be relocated to the ground floor of that building. Ambulance access to the emergency room would be via Kaylor Street from the north and a driveway off of Florista Street.



Care Ambulance Service typically delivers patients to LAMC about 400 occurrences each month, which equates to approximately 14 deliveries per day. The majority of the ambulance trips currently utilize Katella Avenue and Kaylor Street to access the Hospital Emergency Medical Services (EMS) entry point along Kaylor Street. With project implementation, the Hospital EMS entry point would be on Kaylor Street accessed from Catalina Street. Therefore, with the proposed project, EMS trips to the Hospital would utilize Los Alamitos Boulevard and turn at the Los Alamitos/Catalina Street intersection or the Los Alamitos Boulevard/Florista Street intersection to access Kaylor Street from Catalina Street.

The infrequency of EMS trips and the lack of collision history between EMS and passenger cars near the hospital indicate the proposed re-routing of EMS vehicles would not create a hazard in the project area. The project applicant has been granted preliminary approval from Care Ambulance Service of the new configuration for EMS deliveries to the Hospital and should continue to guarantee the project site plan satisfies agency requirements for deliveries. Furthermore, compliance with Mitigation Measure TRF-6 would further improve safety and eliminate driver confusion and maximize site efficiency by the continued coordination with the applicable ambulance service and agency staff on the site access for EMS deliveries and by providing a wayfinding system for the public to locate the Emergency Room.

The proposed project does not propose any changes to other public right-of-ways. Adherence to *General Plan* goals and policies and City standards and compliance with the recommended Mitigation Measures TRF-4, TRF-5, and TRF-6 would ensure that impacts are reduced to a less than significant level.

Mitigation Measures:

- TRF-4 Kaylor Street/Katella Avenue. Prior to issuance of certificate of occupancy for MOB A, the project applicant shall install the following improvements:
- A dedicated left-turn lane at the southbound approach on Katella Avenue to the Kaylor Street/Katella Avenue intersection.
 - A dedicated right-turn lane at the southbound approach on Katella Avenue to the Kaylor Street/Katella Avenue intersection.
- TRF-5 Cherry Street/Katella Avenue. Prior to issuance of certificate of occupancy for MOB A, the project applicant shall install the following improvement:
- A dedicated right-turn lane at the westbound approach to the Cherry Street/Katella Avenue intersection. Due to the restricted on-street parking, a defacto right-turn lane currently exists, and can be striped to better facilitate right-turns.
- TRF-6 Ambulance Service. The project applicant shall continue to coordinate with the applicable ambulance service and applicable agency staff on the site access for EMS deliveries. The applicant shall provide a wayfinding system for public understanding of the location of the Emergency Room when arriving at the Medical Center.



Level of Significance After Mitigation: Less Than Significant Impact.

SHORT-TERM CONSTRUCTION-RELATED PARKING

◆ IMPLEMENTATION OF THE PROPOSED PROJECT COULD RESULT IN ADVERSE IMPACTS RELATED TO THE FUNCTION OF PARKING SYSTEMS DURING CONSTRUCTION ACTIVITIES.

Level of Significance Before Mitigation: Potentially Significant Impact.

Impact Analysis: The proposed project would be built out over a 25-year period, with the medical office building (MOB A), two hospital buildings, and parking structures being constructed at various times throughout that time period. The construction of the on-site structures could impact on-site parking, as parking would be needed for construction crews, patients, visitors, on-site tenants, and employees. All construction workers who drive to the project site would require a convenient off-street parking supply and, where applicable, quick and reliable transportation from the parking facility to the project site. In addition, parking for patients and visitors would need to be accessible to the existing and proposed buildings, while parking for employees would need to be provided.

In order to ensure sufficient quantity on the project site to meet projected needs during the construction period, mitigation has been proposed to address parking specifically for the construction period. The proposed mitigation measure is consistent with Section 6.0, Implementation, of the *Draft Los Alamitos Medical Center Specific Plan*. Thus, parking for construction crews, patients, visitors, and employees would be provided in sufficient quantity in the project area to meet projected needs during the construction period. Therefore, with implementation of Mitigation Measure TRF-7, impacts related to providing adequate parking during construction would be less than significant.

Mitigation Measures:

TRF-7 The project applicant shall prepare as part of the site plan submittal and implement during the construction phases of the project a Construction Management Plan. The Construction Management Plan shall include, but is not limited to, details on construction staging hours and construction equipment and supply staging locations, construction truck routes, and provisions for employee parking and parking management during construction. With respect to parking provisions during construction, the Construction Management Plan may include provisions for: 1) no construction worker parking on-site, and 2) off-site parking at an existing facility or facilities with a parking surplus, with a shuttle system, or other similar transportation method to and from the hospital campus. The Construction Management Plan shall be prepared as part of the site plan submittal and be approved by the Community Development Director prior to the issuance of any building permit.

Level of Significance After Mitigation: Less Than Significant Impact.



5.3.5 CUMULATIVE IMPACTS AND MITIGATION MEASURES

- ◆ **IMPLEMENTATION OF THE PROPOSED PROJECT AND OTHER RELATED CUMULATIVE PROJECTS COULD RESULT IN CUMULATIVELY CONSIDERABLE TRAFFIC IMPACTS.**

Level of Significance Before Mitigation: Potentially Significant Impact.

Impact Analysis: The proposed project, in combination with other development identified in Section 4.0, would contribute to the continued increase of traffic for the Cities of Los Alamitos, Cypress, and Seal Beach; refer to Exhibit 4-1 for approximate locations of the cumulative projects and Table 5.3-12 which summarizes the forecast AM peak hour and PM peak hour trip generations of the six approved/pending projects. The proposed project would not result in a cumulatively considerable traffic and circulation impact in regards to local intersections, consistency with the *Orange County CMP*, State Highway intersections or segments, traffic hazards due to design features, or create inadequate emergency access. With implementation of recommended mitigation measures, and compliance with the *General Plan* and *Municipal Code* and City design standards, cumulative traffic impacts would be reduced to a less than significant level.

Mitigation Measures: Refer to Mitigation Measure TRF-1a-c through TRF-6. No additional mitigation measures are required.

Level of Significance After Mitigation: Less Than Significant Impact.

5.3.6 SIGNIFICANT UNAVOIDABLE IMPACTS

With imposition of the required mitigation measures, implementation of the proposed project would result in less than significant project and cumulative impacts related to traffic, hazardous traffic conditions/emergency access, and short-term construction-related parking. All other impacts, including those on State Highway facilities and CMP Highway facilities were concluded to be at less than significant levels, and did not require mitigation. As such, no significant unavoidable impacts would result from the implementation of the Los Alamitos Medical Center Specific Plan.

5.3.7 SOURCES CITED

City of Los Alamitos, *City of Los Alamitos 2010 General Plan*, adopted March 1989.

City of Los Alamitos, *City of Los Alamitos 2010 General Plan Background Technical Reports*, adopted March 1989.

City of Los Alamitos, *City of Los Alamitos 2010 General Plan Initial Study/Negative Declaration (IS/ND)*, March 1989.



Los Alamitos Medical Center Specific Plan Program Environmental Impact Report

City of Los Alamitos, *Los Alamitos Municipal Code and Zoning Code*, adopted 1995.

RBF Consulting, *Draft Los Alamitos Medical Center Specific Plan*, February 2010.

RBF Consulting, *Los Alamitos Medical Center Specific Plan Traffic Impact Analysis*, June 18, 2010.



Los Alamitos Medical Center Specific Plan Program Environmental Impact Report

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5.4 Air Quality/Greenhouse Gas Emissions



5.4 AIR QUALITY/GREENHOUSE GAS EMISSIONS

The purpose of this section is to evaluate potential air quality impacts associated with the proposed Los Alamitos Medical Center Specific Plan. This section also includes a comprehensive global climate change analysis. Information in this section is based primarily on the *Los Alamitos Medical Center Specific Plan Traffic Impact Analysis*, prepared by RBF Consulting, June 18, 2010; the *Draft Los Alamitos Medical Center Specific Plan*, prepared by RBF Consulting, May 2010; the *CEQA Air Quality Handbook*, prepared by the South Coast Air Quality Management District (SCAQMD), April 1993 (as revised through November 1993); Air Quality Data (California Air Resources Board [CARB] 2007 through 2009); and the *Final Air Quality Management Plan for the South Coast Air Basin*, prepared by the SCAQMD, 2007.

5.4.1 REGULATORY SETTING

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

The United States Environmental Protection Agency (EPA) is responsible for implementing the Federal Clean Air Act, which was first enacted in 1955 and was amended numerous times. The Federal Clean Air Act established Federal air quality standards known as the National Ambient Air Quality Standards (NAAQS). These standards identify levels of air quality for “criteria” pollutants that are considered the maximum levels of ambient (background) air pollutants considered safe, with an adequate margin of safety, to protect the public health and welfare. The criteria pollutants are Ozone (O₃), Carbon Monoxide (CO), Nitrogen Dioxide (NO₂) (which is a form of nitrogen oxides [NO_x]), Sulfur Dioxide (SO₂) (which is a form of sulfur oxides [SO_x]), Particulate Matter (PM₁₀), Fine Particulate Matter (PM_{2.5}), and Lead (Pb); refer to *Table 5.4-1, National and California Ambient Air Quality Standards*.

CALIFORNIA AIR RESOURCES BOARD

CARB administers the air quality policy in California. The California Ambient Air Quality Standards (CAAQS) were established in 1969 pursuant to the Mulford-Carrell Act. These standards, included with the NAAQS in *Table 5.4-1*, are generally more stringent and apply to more pollutants than the NAAQS. In addition to the criteria pollutants, CAAQS have been established for visibility reducing particulates, hydrogen sulfide, and sulfates.

STATE AIR TOXICS PROGRAM

Toxic air contaminants are another group of pollutants of concern in Southern California. There are hundreds of different types of toxic air contaminants, with varying degrees of toxicity. Sources of toxic air contaminants include industrial processes such as petroleum refining and chrome plating operations, commercial operations such as gasoline stations and dry cleaners, and motor vehicle engine exhaust. Public exposure to toxic air contaminants can result from emissions from normal operations, as well as accidental releases of hazardous materials during upset spill conditions. Health effects of toxic air contaminants include cancer, birth defects, neurological damage, and death.



California regulates toxic air contaminants through its air toxics program, mandated in Chapter 3.5 (Toxic Air Contaminants) of the *Health and Safety Code* (*Health and Safety Code* Section 39660 et seq.) and Part 6 (Air Toxics “Hot Spots” Information and Assessment) (*Health and Safety Code* Section 44300 et seq.). CARB, working in conjunction with the State Office of Environmental Health Hazard Assessment, identifies toxic air contaminants. Air toxic control measures may then be adopted to reduce ambient concentrations of the identified toxic air contaminant to below a specific threshold, based on its effects on health, or to the lowest concentration achievable through use of best available control technology (BACT) for toxics. The program is administered by CARB. Air quality control agencies, including the SCAQMD, must incorporate air toxic control measures into their regulatory programs or adopt equally stringent control measures as rules within six months of adoption by CARB.

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

The South Coast Air Quality Management District (SCAQMD) is one of 35 air quality management districts that have prepared Air Quality Management Plans to accomplish a five-percent annual reduction in emissions. The *2007 Air Quality Management Plan for the South Coast Air Basin (2007 AQMP)* relies on a multi-level partnership of governmental agencies at the Federal, State, regional, and local level. The *2007 AQMP* proposes policies and measures to achieve Federal and State standards for improved air quality in the Basin and those portions of the Salton Sea Air Basin (formerly named the Southeast Desert Air Basin) that are under the SCAQMD jurisdiction. The *2007 AQMP* includes new information on key elements such as:

- Current air quality;
- Improved emission inventories, particularly significant increases in mobile source emissions;
- An overall control strategy comprised of SCAQMD, State, and Federal Stationary and Mobile Source Control Measures, and the Southern California Association of Governments Regional Transportation Strategy and Control Measures;
- New attainment demonstration for PM_{2.5} and O₃;
- Milestones to the Federal Reasonable Further Progress Plan; and
- Preliminary motor vehicle emission budgets for transportation conformity purposes.

In addition to the 2007 AQMP and its rules and regulations, the SCAQMD published the *CEQA Air Quality Handbook*.¹ The *CEQA Air Quality Handbook* provides guidance to assist local government agencies and consultants in developing the environmental documents required by CEQA. With the help of the *CEQA Air Quality Handbook*, local land use planners and other consultants are able to analyze and document how proposed and existing projects affect air quality and should be able to fulfill the requirements of the CEQA review process. The SCAQMD is in the process of developing an *Air Quality Analysis Guidance Handbook* to replace the current *CEQA Air Quality Handbook*.

¹ Approved by the South Coast Air Quality Management District Governing Board in 1993.



Los Alamitos Medical Center Specific Plan Program Environmental Impact Report

**Table 5.4-1
National and California Ambient Air Quality Standards**

Pollutant	Averaging Time	California ¹		Federal ²	
		Standard ³	Attainment Status	Standards ⁴	Attainment Status
Ozone (O ₃)	1 Hour	0.09 ppm (180 µg/m ³)	Nonattainment	NA ⁵	NA ⁵
	8 Hours	0.07 ppm (137 µg/m ³)	Unclassified	0.075 ppm (147 µg/m ³)	Nonattainment
Particulate Matter (PM ₁₀)	24 Hours	50 µg/m ³	Nonattainment	150 µg/m ³	Nonattainment
	Annual Arithmetic Mean	20 µg/m ³	Nonattainment	NA ⁶	Nonattainment
Fine Particulate Matter (PM _{2.5})	24 Hours	No Separate State Standard		35 µg/m ³	Unclassified
	Annual Arithmetic Mean	12 µg/m ³	Nonattainment	15 µg/m ³	Nonattainment
Carbon Monoxide (CO)	8 Hours	9 ppm (10 mg/m ³)	Attainment	9 ppm (10 mg/m ³)	Attainment
	1 Hour	20 ppm (23 mg/m ³)	Attainment	35 ppm (40 mg/m ³)	Attainment
Nitrogen Dioxide (NO ₂) ⁷	Annual Arithmetic Mean	0.030 ppm (57 µg/m ³)	NA	0.053 ppm (100 µg/m ³)	Attainment
	1 Hour	0.18 ppm (339 µg/m ³)	Attainment	0.100 ppm	NA
Lead (Pb)	30 days average	1.5 µg/m ³	Attainment	N/A	NA
	Calendar Quarter	N/A	NA	1.5 µg/m ³	Attainment
Sulfur Dioxide (SO ₂)	Annual Arithmetic Mean	N/A	NA	0.030 ppm (80 µg/m ³)	Attainment
	24 Hours	0.04 ppm (105 µg/m ³)	Attainment	0.14 ppm (365 µg/m ³)	Attainment
	3 Hours	N/A	NA	N/A	Attainment
	1 Hour	0.25 ppm (655 µg/m ³)	Attainment	N/A	NA
Visibility-Reducing Particles	8 Hours (10 a.m. to 6 p.m., PST)	Extinction coefficient = 0.23 km@<70% RH	Unclassified	No Federal Standards	
Sulfates	24 Hour	25 µg/m ³	Attainment		
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m ³)	Unclassified		
Vinyl Chloride	24 Hour	0.01 ppm (26 µg/m ³)	Unclassified		

Source: California Air Resources Board and U.S. Environmental Protection Agency, February 16, 2010.

µg/m³ = micrograms per cubic meter; ppm = parts per million; km = kilometer(s); RH = relative humidity; PST = Pacific Standard Time.

N/A = Not Applicable

- California standards for ozone, carbon monoxide (except Lake Tahoe), sulfur dioxide (1- and 24-hour), nitrogen dioxide, suspended particulate matter-PM₁₀ and visibility-reducing particles are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations. In 1990, the California Air Resources Board (CARB) identified vinyl chloride as a toxic air contaminant, but determined that there was not sufficient available scientific evidence to support the identification of a threshold exposure level. This action allows the implementation of health-protective control measures at levels below the 0.010 parts per million ambient concentration specified in the 1978 standard.
- National standards (other than ozone, particulate matter and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once a year. EPA also may designate an area as *attainment/unclassifiable*, if: (1) it has monitored air quality data that show that the area has not violated the ozone standard over a three-year period; or (2) there is not enough information to determine the air quality in the area. For PM₁₀, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m³ is equal to or less than one. For PM_{2.5}, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard.
- Concentration is expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 mm of mercury. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 mm of mercury (1,013.2 millibar); ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
- National Primary Standards: The levels of air quality necessary, with an adequate margin of safety, to protect the public health.
- The Federal 1-hour ozone standard was revoked on June 15, 2005 in all areas except the 14 8-hour ozone nonattainment Early Action Compact (EAC) areas.
- The Environmental Protection Agency revoked the annual PM₁₀ standard in 2006 (effective December 16, 2006).
- To attain this standard, the 3-year average of the 98th percentile of the daily maximum 1-hour average at each monitor within an area must not exceed 0.100 ppm (effective January 22, 2010).



SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS

The Southern California Association of Governments (SCAG) is the regional planning agency for Los Angeles, Orange, Ventura, Riverside, San Bernardino, and Imperial Counties, and serves as a forum for regional issues relating to transportation, the economy, community development, and the environment. SCAG serves as the Federally-designated metropolitan planning organization for the Southern California region and is the largest metropolitan planning organization in the United States. With respect to air quality planning, SCAG has prepared the *Regional Comprehensive Plan and Guide*, which includes Growth Management and Regional Mobility chapters that form the basis for the land use and transportation control portions of the 2007 *Air Quality Management Plan*. SCAG is responsible under the Federal Clean Air Act for determining conformity of projects, plans, and programs with the SCAQMD.

CALIFORNIA GLOBAL CLIMATE CHANGE REGULATORY PROGRAMS

Assembly Bill 1493. In response to the transportation sector accounting for more than one-half of California's carbon dioxide (CO₂) emissions, Assembly Bill (AB) 1493 (AB 1493, Pavley) was enacted on July 22, 2002. AB 1493 required CARB to set greenhouse gas (GHG) emission standards for passenger vehicles, light duty trucks, and other vehicles whose primary use is noncommercial personal transportation in the State. The bill required that CARB set the GHG emission standards for motor vehicles manufactured in 2009 and all subsequent model years. In setting these standards, CARB must consider cost effectiveness, technological feasibility, economic impacts, and provide maximum flexibility to manufacturers. CARB adopted the standards in September 2004. These standards are intended to reduce emissions of carbon dioxide and other GHGs (e.g., nitrous oxide and methane). Some currently used technologies that achieve GHG reductions include small engines with superchargers, continuously variable transmissions, and hybrid electric drive.

Assembly Bill 32. The Legislature enacted AB 32 (AB 32, Nuñez), the California Global Warming Solutions Act of 2006, which Governor Schwarzenegger signed on September 27, 2006 to further the goals of Executive Order S-3-05. AB 32 represents the first enforceable statewide program to limit GHG emissions from all major industries, with penalties for noncompliance. CARB has been assigned to carry out and develop the programs and requirements necessary to achieve the goals of AB 32. The foremost objective of CARB is to adopt regulations that require the reporting and verification of statewide GHG emissions. This program would be used to monitor and enforce compliance with the established standards. The first GHG emissions limit is equivalent to the 1990 levels, which are to be achieved by 2020. CARB is also required to adopt rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emission reductions. AB 32 allows CARB to adopt market-based compliance mechanisms to meet the specified requirements. Finally, CARB is ultimately responsible for monitoring compliance and enforcing any rule, regulation, order, emission limitation, emission reduction measure, or market-based compliance mechanism adopted. In order to advise CARB, it must convene an Environmental Justice Advisory Committee and an Economic and Technology Advancement Advisory Committee. In December 2008, CARB adopted a scoping plan to achieve reductions in GHG emissions in California. The



plan indicates how reductions in significant GHG sources would be achieved through regulations, market mechanisms, and other actions.

Executive Order S-3-05. In June 2005, Governor Schwarzenegger established California's GHG emissions reduction targets in Executive Order S-3-05. The Executive Order established the following goals: GHG emissions should be reduced to 2000 levels by 2010; GHG emissions should be reduced to 1990 levels by 2020; and GHG emissions should be reduced to 80 percent below 1990 levels by 2050. The Secretary of the California Environmental Protection Agency (the Secretary) is required to coordinate efforts of various agencies in order to collectively and efficiently reduce GHGs. Some of the agencies involved in the GHG reduction plan include Secretary of Business, Transportation, and Housing Agency, Secretary of Department of Food and Agriculture, Secretary of Resources Agency, Chairperson of CARB, Chairperson of the Energy Commission, and the President of the Public Utilities Commission. The Secretary is required to submit a biannual progress report to the Governor and State Legislature disclosing the progress made toward GHG emission reduction targets. In addition, another biannual report must be submitted illustrating the impacts of global warming on California's water supply, public health, agriculture, and the coastline and forestry, and reporting possible mitigation and adaptation plans to combat these impacts.

Executive Order S-1-07. On January 18, 2007, California further solidified its dedication to reducing GHGs by setting a new Low Carbon Fuel Standard for transportation fuels sold within the State. Executive Order S-1-07 sets a declining standard for GHG emissions measured in carbon dioxide equivalent gram per unit of fuel energy sold in California. The target of the Low Carbon Fuel Standard is to reduce the carbon intensity of California passenger vehicle fuels by at least ten percent by 2020. The Low Carbon Fuel Standard applies to refiners, blenders, producers, and importers of transportation fuels, and would use market-based mechanisms to allow these providers to choose how they reduce emissions during the "fuel cycle" using the most economically feasible methods. The Executive Order requires the Secretary of the California Environmental Protection Agency to coordinate with actions of the California Energy Commission, CARB, the University of California, and other agencies to develop a protocol to measure the "life cycle carbon intensity" of transportation fuels.

Senate Bill 97. Senate Bill (SB) 97 of 2007 requires the California Office of Planning and Research to develop CEQA guidelines for analysis and, if necessary, the mitigation of effects of GHG emissions to the Resources Agency. These guidelines for analysis and mitigation must address, but are not limited to, GHG emissions effects associated with transportation or energy consumption. On December 30, 2009, the Natural Resources Agency adopted the CEQA Guidelines Amendments prepared by OPR, as directed by SB 97. On February 16, 2010, the Office of Administration Law approved the CEQA Guidelines Amendments, and filed them with the Secretary of State for inclusion in the California Code of Regulations. The CEQA Guidelines Amendments became effective on March 18, 2010. These new guidelines require a survey of existing climate change analyses performed by various lead agencies under CEQA². In his signing statement, Governor Arnold Schwarzenegger noted:

² http://ceres.ca.gov/ceqa/docs/Adopted_Text_of_SB97_CEQA_Guidelines_Amendments.pdf. Accessed June 2010.



Current uncertainty as to what type of analysis of greenhouse gas emissions is required under the California Environmental Quality Act has led to legal claims being asserted, which would stop these important infrastructure projects. Litigation under CEQA is not the best approach to reduce greenhouse gas emissions and maintain a sound and vibrant economy. To achieve these goals, we need a coordinated policy, not a piecemeal approach dictated by litigation.

Senate Bill 375. SB 375 would require metropolitan planning organizations to include sustainable communities strategies in their regional transportation plans. The purpose of SB 375 would be to reduce GHG emissions from automobiles and light trucks, require CARB to provide GHG emission reduction targets from the automobile and light truck sector for 2020 and 2035 by January 1, 2010, and update the regional targets until 2050. SB 375 would require certain transportation planning and programming activities to be consistent with the sustainable communities strategies contained in the regional transportation plan. The bill would also require affected regional agencies to prepare an alternative planning strategy to the sustainable communities strategies if the sustainable communities strategy is unable to achieve the GHG emissions reduction targets. Governor Schwarzenegger signed and approved SB 375 on September 30, 2008.

Senator Steinberg, author of SB 375, is also making efforts to clean up the bill. The clean up efforts include CEQA streamlining changes for projects that are consistent with the Sustainable Community Strategy (SCS). Currently, SB 375 applies those streamlining provisions to residential and mixed-use projects. The Governor and many interest groups are also lobbying to extend those provisions to Proposition 1B Transportation projects, state highway projects, and infrastructure, retail, and commercial development. A timetable to eliminate schedule conflicts with the new eight-year housing element and the four-year Regional Transportation Plans is also being considered. In addition to a clean up bill, there will continue to be ongoing discussions with CARB to coordinate AB 32 local land use implementation strategies with SB 375, including a new proposed CARB CEQA thresholds of significance proposal to determine which projects will be subject to AB 32 requirements.

5.4.2 ENVIRONMENTAL SETTING

SOUTH COAST AIR BASIN

The South Coast Air Basin (Basin), in which the City of Los Alamitos is located, is characterized as having a “Mediterranean” climate (a semi-arid environment with mild winters, warm summers, and moderate rainfall). The Basin is a 6,600-square mile area bounded by the Pacific Ocean to the west, and the San Gabriel, the San Bernardino, and the San Jacinto Mountains to the north and east. The Basin includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties, in addition to the San Geronio Pass area in Riverside County. The Basin’s terrain and geographical location (i.e., a coastal plain with connecting broad valleys and low hills) determine its distinctive climate.

The general region lies in the semi-permanent high-pressure zone of the eastern Pacific. The climate is mild and tempered by cool sea breezes. The usually mild climatological pattern is interrupted infrequently by periods of extremely hot weather, winter storms, or Santa Ana winds. The extent and severity of the air pollution problem in the Basin is a function of the area’s natural physical



characteristics (weather and topography), as well as man-made influences (development patterns and lifestyle). Factors such as wind, sunlight, temperature, humidity, rainfall, and topography all affect the accumulation and/or dispersion of pollutants throughout the Basin.

CLIMATE

The climate in the Basin is characterized by moderate temperatures and comfortable humidity, with precipitation limited to a few storms during the winter season (November through April). The average annual temperature varies little and averages 75 degrees Fahrenheit. However, with a less pronounced oceanic influence, the eastern inland portions of the Basin show greater variability in annual minimum and maximum temperatures. January is usually the coldest month at all locations, while July and August are usually the hottest months of the year. Although the Basin has a semi-arid climate, the air near the surface is moist due to the presence of a shallow marine layer. Except for infrequent periods when dry, continental air is brought in by offshore winds. Periods with heavy fog are frequent, and low stratus clouds, occasionally referred to as “high fog,” are a characteristic climate feature.

In the City of Los Alamitos, the climate is typically warm during summer when temperatures tend to be in the 70s and 80s and cool during winter when temperatures tend to be in the 50s. The warmest month of the year is August with an average maximum temperature of 85 degrees Fahrenheit, while the coldest month of the year is December with an average minimum temperature of 45 degrees Fahrenheit. Temperature variations between night and day tend to be moderate during summer with a difference that can reach 19 degrees Fahrenheit, and moderate during winter with a difference of approximately 24 degrees Fahrenheit. The annual average precipitation in Los Alamitos is 12.94 inches. Rainfall occurs most frequently in February, with an average rainfall of 3.01 inches.³

PHOTOCHEMICAL SMOG

The presence and intensity of sunlight are necessary prerequisites for the formation of photochemical smog. Under the influence of the ultraviolet radiation of sunlight, certain original or “primary” pollutants (mainly reactive hydrocarbons and oxides of nitrogen) react to form “secondary” pollutants (primarily oxidants). Since this process is time dependent, secondary pollutants can be formed many miles downwind from the emission sources. Because of the prevailing daytime winds and time-delayed nature of photochemical smog, oxidant concentrations are highest in the inland areas of Southern California.

TEMPERATURE INVERSIONS

Under ideal meteorological conditions and irrespective of topography, pollutants emitted into the air would be mixed and dispersed into the upper atmosphere. However, the Southern California region frequently experiences temperature inversions in which pollutants are trapped and accumulate close to the ground. The inversion, a layer of warm, dry air overlaying cool, moist marine air, is a normal condition in the southland. When the inversion is approximately 2,500 feet above sea level, the sea breezes carry the pollutants inland to escape over the mountain slopes or through the passes. At a

³ The Weather Channel, *Average Weather for Los Alamitos, CA*,
<http://www.weather.com/outlook/health/airquality/wxclimatology/monthly/graph/USCA0635?role=>, Accessed June 15, 2010.



height of 1,200 feet, the terrain prevents the pollutants from entering the upper atmosphere, resulting in a settlement in the foothill communities. Below 1,200 feet, the inversion puts a tight lid on pollutants, concentrating them in a shallow layer over the entire coastal basin. Smog in Southern California is generally the result of these temperature inversions combining with coastal day winds and local mountains to contain the pollutants for long periods of time, allowing them to form secondary pollutants by reacting with sunlight.

MONITORED AIR QUALITY LEVELS

The SCAQMD and CARB monitor the local ambient air quality from approximately 250 air monitoring stations located across the State. Air quality monitoring stations usually measure pollutant concentrations ten feet above ground level; therefore, air quality is often referred to in terms of ground-level concentrations. The communities within a Source Receptor Area (SRA) have similar climatology and ambient air pollutant concentrations. The City of Los Alamitos is located in SRA 17 (Central Orange County), and the nearest monitoring station within SRA 17 (Anaheim-Pampas Lane Monitoring Station) is located at 1630 Pampas Lane in the City of Anaheim.

Air quality data from 2007 to 2009 for the Anaheim-Pampas Lane Monitoring Station is provided in *Table 5.4-2, Local Air Quality Levels*. The following air quality information briefly describes the various types of pollutants monitored at the local stations.

Ozone. Ozone (O_3) occurs in two layers of the atmosphere. The layer surrounding the earth's surface is the troposphere. The troposphere extends approximately ten miles above ground level, where it meets the second layer, the stratosphere. The stratospheric (the "good" ozone) layer extends upward from about ten to 30 miles and protects life on earth from the sun's harmful ultraviolet rays (UV-B). "Bad" ozone is a photochemical pollutant, and needs volatile organic compounds (VOCs), Nitrogen Oxides (NO_x) and sunlight to form; therefore, VOCs and NO_x are ozone precursors. VOCs and NO_x are emitted from various sources throughout the City. Significant ozone formation generally requires an adequate amount of precursors in the atmosphere and several hours in a stable atmosphere with strong sunlight. High ozone concentrations can form over large regions when emissions from motor vehicles and stationary sources are carried hundreds of miles from their origins.

Many respiratory ailments, as well as cardiovascular disease, are aggravated by exposure to high ozone levels. Ozone also damages natural ecosystems (such as forests and foothill plant communities) and damages agricultural crops and some man-made materials (such as rubber, paint and plastics). Societal costs from ozone damage include increased healthcare costs, the loss of human and animal life, accelerated replacement of industrial equipment and reduced crop yields.



Table 5.4-2
Local Air Quality Levels

Pollutant ¹	California Standard	Federal Primary Standard	Year	Maximum ² Concentration	Days (Samples) State/Federal Std. Exceeded
1-hour Ozone (O ₃)	0.09 ppm for 1 hour	NA ⁵	2007 2008 2009	0.127 ppm 0.105 0.093	2/1 2/0 0/0
8-hour Ozone (O ₃)	0.07 ppm for 8 hours	0.075 ppm for 8 hours	2007 2008 2009	0.099 ppm 0.086 0.077	7/1 10/5 2/1
8-hour Carbon Monoxide (CO)	9.0 ppm	9.0 ppm	2007 2008 2009	2.91 ppm 3.44 2.73	0/0 0/0 0/0
1-hour Carbon Monoxide (CO)	20 ppm	35 ppm	2007 2008 2009	3.6 ppm 4.1 3.2	0/0 0/0 0/0
Nitrogen Dioxide (NO ₂)	0.18 ppm for 1 hour	0.100 ppm For 1 hour	2007 2008 2009	0.086 ppm 0.093 0.068	0/NA 0/NA 0/NA
Fine Particulate Matter (PM _{2.5}) ⁴	No Separate Standard	35 µm ³ for 24 hours	2007 2008 2009	79.4 µm ³ 67.8 64.5	NA/14 NA/13 NA/9
Particulate Matter (PM ₁₀) ^{3, 4}	50 µm ³ for 24 hours	150 µm ³ for 24 hours	2007 2008 2009	489.0 µm ³ 61.0 63.0	6/1 3/0 1/0

Source: Aerometric Data Analysis and Measurement System (ADAM), summaries from 2007 to 2009, <http://www.arb.ca.gov/adam>.

ppm = parts per million; PM₁₀ = particulate matter 10 microns in diameter or less; NM = not measured; µg/m³ = micrograms per cubic meter; PM_{2.5} = particulate matter 2.5 microns in diameter or less; NA = not applicable.

Notes:

1. Data collected from the Anaheim-Pampas Lane Monitoring Station located at 1630 Pampas Lane, Anaheim CA 92802.
2. Maximum concentration is measured over the same period as the California Standards.
3. PM₁₀ exceedances are based on State thresholds established prior to amendments adopted on June 20, 2002.
4. PM₁₀ and PM_{2.5} exceedances are derived from the number of samples exceeded, not days.
5. The Federal standard was revoked in June 2005.

Carbon Monoxide. Carbon monoxide (CO) is an odorless, colorless toxic gas that is emitted by mobile and stationary sources as a result of incomplete combustion of hydrocarbons or other carbon-based fuels. In cities, automobile exhaust can cause as much as 95 percent of all CO emissions. At high concentrations, CO can reduce the oxygen-carrying capacity of the blood and cause headaches, dizziness, and unconsciousness.

Nitrogen Dioxide. Nitrogen oxides (NO_x) are a family of highly reactive gases that are a primary precursor to the formation of ground-level O₃, and react in the atmosphere to form acid rain. NO₂ (often used interchangeably with NO_x) is a reddish-brown gas that can cause breathing difficulties at high levels. Peak readings of NO₂ occur in areas that have a high concentration of combustion sources (e.g., motor vehicle engines, power plants, refineries, and other industrial operations).



NO₂ can irritate and damage the lungs, and lower resistance to respiratory infections such as influenza. The health effects of short-term exposure are still unclear. However, continued or frequent exposure to NO₂ concentrations that are typically much higher than those normally found in the ambient air may increase acute respiratory illnesses in children and increase the incidence of chronic bronchitis and lung irritation. Chronic exposure to NO₂ may aggravate eyes and mucus membranes and cause pulmonary dysfunction.

Coarse Particulate Matter (PM₁₀). PM₁₀ refers to suspended particulate matter, which is smaller than ten microns or ten one-millionths of a meter. PM₁₀ arises from sources such as road dust, diesel soot, combustion products, construction operations, and dust storms. PM₁₀ scatters light and significantly reduces visibility. In addition, these particulates penetrate the lungs and can potentially damage the respiratory tract. On June 19, 2003, CARB adopted amendments to the statewide 24-hour particulate matter standards based upon requirements set forth in the Children's Environmental Health Protection Act (SB 25).

Fine Particulate Matter (PM_{2.5}). Due to recent increased concerns over health impacts related to fine particulate matter (particulate matter 2.5 microns in diameter or less), both State and Federal PM_{2.5} standards have been created. Particulate matter impacts primarily affect infants, children, the elderly, and those with pre-existing cardiopulmonary disease. In 1997, the Environmental Protection Agency (EPA) announced new PM_{2.5} standards. Industry groups challenged the new standard in court and the implementation of the standard was blocked. However, upon appeal by the EPA, the U.S. Supreme Court reversed this decision and upheld the EPA's new standards.

On January 5, 2005, the EPA published a Final Rule in the Federal Register that designates the Basin as a nonattainment area for Federal PM_{2.5} standards. On June 20, 2002, CARB adopted amendments for statewide annual ambient particulate matter air quality standards. These standards were revised/established due to increasing concerns by CARB that previous standards were inadequate, as almost everyone in California is exposed to levels at or above the current State standards during some parts of the year, and the statewide potential for significant health impacts associated with particulate matter exposure was determined to be large and wide-ranging.

Reactive Organic Gases and Volatile Organic Compounds. Hydrocarbons are organic gases that are formed solely of hydrogen and carbon. There are several subsets of organic gases including reactive organic gases (ROGs) and volatile organic compounds (VOCs). Both ROGs and VOCs are emitted from the incomplete combustion of hydrocarbons or other carbon-based fuels. The major sources of hydrocarbons are combustion engine exhaust, oil refineries, and oil-fueled power plants; other common sources are petroleum fuels, solvents, dry cleaning solutions, and paint (via evaporation).

Global Climate Change Gases. The natural process through which heat is retained in the troposphere is called the "greenhouse effect."⁴ The greenhouse effect traps heat in the troposphere through a three fold process summarized as follows: Short wave radiation emitted by the Sun is absorbed by the Earth; the Earth emits a portion of this energy in the form of long wave radiation; and greenhouse gases (GHGs) in the upper atmosphere absorb this long wave radiation and emit

⁴ The troposphere is the bottom layer of the atmosphere, which varies in height from the Earth's surface to 10 to 12 kilometers.



this long wave radiation into space and toward the Earth. This “trapping” of the long wave (thermal) radiation emitted back toward the Earth is the underlying process of the greenhouse effect.

The most abundant GHGs are water vapor and carbon dioxide. Many other trace gases have greater ability to absorb and re-radiate long wave radiation; however, these gases are not as plentiful. For this reason, and to gauge the potency of GHGs, scientists have established a Global Warming Potential for each GHG based on its ability to absorb and re-radiate long wave radiation. The Global Warming Potential of a gas is determined using carbon dioxide as the reference gas with a Global Warming Potential of 1.

GHGs include, but are not limited to, the following:⁵

- Water Vapor (H_2O). Although water vapor has not received the scrutiny of other GHGs, it is the primary contributor to the greenhouse effect. Natural processes, such as evaporation from oceans and rivers, and transpiration from plants, contribute 90 percent and 10 percent of the water vapor in our atmosphere, respectively.

The primary human related source of water vapor comes from fuel combustion in motor vehicles; however, this is not believed to contribute a significant amount (less than one percent) to atmospheric concentrations of water vapor. The Intergovernmental Panel on Climate Change has not determined a Global Warming Potential for water vapor.

- Carbon Dioxide (CO_2). Carbon dioxide is primarily generated by fossil fuel combustion in stationary and mobile sources. Due to the emergence of industrial facilities and mobile sources in the past 250 years, the concentration of carbon dioxide in the atmosphere has increased 35 percent.⁶ Carbon dioxide is the most widely emitted GHG and is the reference gas (Global Warming Potential of 1) for determining Global Warming Potentials for other GHGs.
- Methane (CH_4). Methane is emitted from biogenic sources, incomplete combustion in forest fires, landfills, manure management, and leaks in natural gas pipelines. In the United States, the top three sources of methane are landfills, natural gas systems, and enteric fermentation. Methane is the primary component of natural gas, which is used for space and water heating, steam production, and power generation. The Global Warming Potential of methane is 21.
- Nitrous Oxide (N_2O). Nitrous oxide is produced by both natural and human related sources. Primary human related sources include agricultural soil management, animal manure management, sewage treatment, mobile and stationary combustion of fossil fuel, adipic acid production, and nitric acid production. The Global Warming Potential of nitrous oxide is 310.

⁵ All Global Warming Potentials are given as 100 year Global Warming Potential. Unless noted otherwise, all Global Warming Potentials were obtained from the Intergovernmental Panel on Climate Change. Climate Change (Intergovernmental Panel on Climate Change, *Climate Change, The Science of Climate Change – Contribution of Working Group I to the Second Assessment Report of the IPCC*, 1996).

⁶ United States Environmental Protection Agency, *Inventory of U.S. Greenhouse Gas Emissions and Sinks 1990 to 2004*, April 2006, <http://www.epa.gov/climatechange/emissions/usinventoryreport.html>.



- Hydrofluorocarbons (HFCs). HFCs are typically used as refrigerants for both stationary refrigeration and mobile air conditioning. The use of HFCs for cooling and foam blowing is growing, as the continued phase out of chlorofluorocarbons (CFCs) and hydrochlorofluorocarbons (HCFCs) gains momentum. The Global Warming Potential of HFCs range from 140 for HFC-152a to 6,300 for HFC-236fa.
- Perfluorocarbons (PFCs). Perfluorocarbons are compounds consisting of carbon and fluorine. They are primarily created as a byproduct of aluminum production and semi conductor manufacturing. Perfluorocarbons are potent GHGs with a Global Warming Potential several thousand times that of carbon dioxide, depending on the specific PFC. Another area of concern regarding PFCs is their long atmospheric lifetime (up to 50,000 years).⁷ The Global Warming Potential of PFCs range from 5,700 to 11,900.
- Sulfur Hexafluoride (SF₆). Sulfur hexafluoride is a colorless, odorless, nontoxic, nonflammable gas. It is most commonly used as an electrical insulator in high voltage equipment that transmits and distributes electricity. Sulfur hexafluoride is the most potent GHG that has been evaluated by the Intergovernmental Panel on Climate Change with a Global Warming Potential of 23,900. However, its global warming contribution is not as high as the Global Warming Potential would indicate due to its low mixing ratio compared to carbon dioxide (4 parts per trillion [ppt] in 1990 versus 365 parts per million [ppm]).⁸

In addition to the six major GHGs discussed above (excluding water vapor), many other compounds have the potential to contribute to the greenhouse effect. Some of these substances were previously identified as stratospheric O₃ depleters; therefore, their gradual phase out is currently in effect. The following is a listing of these compounds:

- Hydrochlorofluorocarbons (HCFCs). HCFCs are solvents, similar in use and chemical composition to CFCs. The main uses of HCFCs are for refrigerant products and air conditioning systems. As part of the Montreal Protocol, all developed countries that adhere to the Montreal Protocol are subject to a consumption cap and gradual phase out of HCFCs. The United States is scheduled to achieve a 100 percent reduction to the cap by 2030. The Global Warming Potentials of HCFCs range from 93 for HCFC-123 to 2,000 for HCFC-142b.⁹
- 1,1,1 trichloroethane. 1,1,1 trichloroethane or methyl chloroform is a solvent and degreasing agent commonly used by manufacturers. The Global Warming Potential of methyl chloroform is 110 times that of carbon dioxide.¹⁰
- Chlorofluorocarbons (CFCs). CFCs are used as refrigerants, cleaning solvents, and aerosols spray propellants. CFCs were also part of the EPA's Final Rule (57 FR 3374) for the phase

⁷ Energy Information Administration, *Other Gases: Hydrofluorocarbons, Perfluorocarbons, and Sulfur Hexafluoride*, October 29, 2001, http://www.eia.doe.gov/oiaf/1605/gg00rpt/other_gases.html.

⁸ United States Environmental Protection Agency, *High GWP Gases and Climate Change*, October 19, 2006, <http://www.epa.gov/highgwp/scientific.html#sf6>.

⁹ United States Environmental Protection Agency, *Protection of Stratospheric Ozone: Listing of Global Warming Potential for Ozone Depleting Substances*, November 7, 2006, http://www.epa.gov/fedrgstr/EPA_AIR/1996/January/Day_19/pr_372.html.

¹⁰ United States Environmental Protection Agency, *Protection of Stratospheric Ozone: Listing of Global Warming Potential for Ozone Depleting Substances*, November 7, 2006, http://www.epa.gov/fedrgstr/EPA_AIR/1996/January/Day_19/pr_372.html.



out of O₃ depleting substances. Currently, CFCs have been replaced by HFCs in cooling systems and a variety of alternatives for cleaning solvents. Nevertheless, CFCs remain suspended in the atmosphere contributing to the greenhouse effect. CFCs are potent GHGs with Global Warming Potentials ranging from 4,600 for CFC 11 to 14,000 for CFC 13.¹¹

SENSITIVE RECEPTORS

Sensitive populations are more susceptible to the effects of air pollution than the general population. Sensitive populations (or sensitive receptors) that are in proximity to localized sources of toxics and CO are of particular concern. Land uses considered sensitive receptors include residences, schools, playgrounds, childcare centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes. Sensitive uses within the vicinity of the project area include residential uses to the northwest, south and west, institutional uses to the north, east, and west, and park uses to the east, south, and west. Sensitive uses within the project area include the existing hospital facilities.

5.4.3 SIGNIFICANCE THRESHOLD CRITERIA

The environmental analysis in this section is patterned after the Initial Study Checklist recommended by the *CEQA Guidelines*, as amended, and used by the City of Los Alamitos in its environmental review process, and is contained in Appendix A of the EIR. The Initial Study includes questions relating to air quality and greenhouse gas emissions. The issues presented in the Initial Study Checklist have been utilized as thresholds of significance in this section. Accordingly, a project may create a significant environmental impact if it causes one or more of the following to occur:

- Conflict with or obstruct implementation of the applicable air quality plan.
- Violate any air quality standard or contribute substantially to an existing or projected air quality violation.
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable Federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).
- Expose sensitive receptors to substantial pollutant concentrations.
- Creation of objectionable odors affecting a substantial number of people (refer to Section 8.0, Effects Found Not To Be Significant).
- Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.
- Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

¹¹ United States Environmental Protection Agency, *Class I Ozone Depleting Substances*, March 7, 2006, <http://www.epa.gov/ozone/ods.html>.



AIR QUALITY

Under *CEQA*, the SCAQMD is an expert commenting agency on air quality and related matters within its jurisdiction or impacting its jurisdiction. The SCAQMD reviews projects to ensure that they will not: (1) cause or contribute to any new violation of any air quality standard; (2) increase the frequency or severity of any existing violation of any air quality standard; or (3) delay timely attainment of any air quality standard or any required interim emission reductions or other milestones of any federal attainment plan. The *CEQA Air Quality Handbook* provides significance thresholds for both construction and operation of projects within the SCAQMD jurisdictional boundaries. If the SCAQMD thresholds are exceeded, a potentially significant impact could result. However, ultimately the lead agency determines the thresholds of significance for impacts. If a project proposes development in excess of the established thresholds, as outlined in *Table 5.4-3, SCAQMD Emission Thresholds*, a significant air quality impact may occur and additional analysis is warranted to fully assess the significance of impacts.

Table 5.4-3
SCAQMD Emissions Thresholds

Phase	Pollutant (lbs/day)					
	ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Construction	75	100	550	150	150	55
Operational	55	55	550	150	150	55
Source: SCAQMD, <i>CEQA Air Quality Handbook</i> , page 6-1, April 1993.						
ROG = reactive organic gases NO _x = nitrogen oxides PM _{2.5} = particulate matter less than 2.5 microns CO = carbon monoxide SO _x = sulfur oxides PM ₁₀ = particulate matter less than 10 microns						

Additionally, the SCAQMD recommends performing a CO hotspot analysis when a project increases the volume to capacity ratio (also called the intersection capacity utilization) by 0.02 (2 percent) for any intersection with an existing level of service (LOS) D or worse.

GREENHOUSE GASES

At this time, there is no absolute consensus in the State of California among CEQA lead agencies regarding the analysis of global climate change and the selection of significance criteria. In fact, numerous organizations, both public and private, have released advisories and guidance with recommendations designed to assist decision-makers in the evaluation of GHG emissions given the current uncertainty regarding when emissions reach the point of significance. That being said, several options are available to lead agencies.

First, lead agencies may elect to rely on thresholds of significance recommended or adopted by state or regional agencies with expertise in the field of global climate change. (See *CEQA Guidelines* Section 15064.7(c).) However, to date, neither CARB nor the SCAQMD have adopted significance



thresholds for GHG emissions for residential or commercial development under *CEQA*.¹² CARB has suspended all efforts to develop a threshold, and SCAQMD's threshold remains in draft form. Accordingly, this option (i.e., reliance on an adopted threshold) is not viable for the City of Los Alamitos.

Second, lead agencies may elect to conclude that the significance of GHG emissions under *CEQA* is too speculative. However, the City has determined that this option is not viable due to the important focus on global climate change created by the various regulatory schemes and scientific determinations cited in this section.

Third, lead agencies may elect to use a zero-based threshold, such that any emission of GHGs is significant and unavoidable. The City does not endorse this type of threshold because it may indirectly truncate the analysis provided in *CEQA* documents and the mitigation commitments secured from new development. Moreover, no state or regional agency with expertise in global climate change has endorsed a zero-based threshold, which would likely result in the preparation of extensive environmental documentation for even the smallest of projects, thereby inundating lead agencies and creating an administrative burden. Moreover, because the GHG analysis is a cumulative analysis, a zero based threshold would be inconsistent with *CEQA Guidelines* Section 15130(a)(3), which requires that cumulatively significant impacts, such as GHG emissions, be “cumulatively considerable”, as defined by Section 15065(a)(3).

Fourth, lead agencies may elect to utilize their own significance criteria, so long as such criteria are informed and supported by substantial evidence. Here, the City has elected to identify its own significance criterion until such time as a state or regional threshold is adopted by a competent authority (e.g., CARB or SCAQMD). Recent amendments to the *CEQA Guidelines*, and specifically the addition of *CEQA Guidelines* Section 15064.4, subdivision (b), informed the City's selection of a significance criterion:

A lead agency should consider the following factors, among others, when assessing the significance of impacts from greenhouse gas emissions on the environment:

- (1) The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting;*
- (2) Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project;*
- (3) The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions. Such requirements must be adopted by the relevant public agency through a public review process and must*

¹² Of note, in December 2009, the San Joaquin Valley Unified Air Pollution Control District adopted guidance for use by lead agencies in the valley, in assessing the significance of a project's GHG emissions under *CEQA*. The guidance relies on the use of performance-based standards, and requires that projects demonstrate a 29 percent reduction in GHG emissions, from business-as-usual, to determine that a project would have a less than significant impact. The guidance is for valley land use agencies and not applicable to areas outside the district. The Bay Area Air Quality Management District adopted its own GHG thresholds of significance on June 2, 2010. The threshold is based on quantitative standards including a per capita emission standard and project emission standard as well as a qualitative standard based on compliance with a qualified GHG reduction strategy. The BAAQMD thresholds are based on an analysis of local inventories of GHG emissions and local reduction programs; therefore, they would not be an appropriate basis for a GHG significance threshold in the City of Los Alamitos.



reduce or mitigate the project's incremental contribution of greenhouse gas emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared for the project.

CEQA Guidelines Appendix G also has been revised to provide some guidance regarding the criteria that may be used to assess whether a project's impacts on global climate change are significant. The Appendix G environmental checklist form asks whether a project would: (i) generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; or (ii) conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs.

Based on the above factors (and particularly the adopted addition of *CEQA Guidelines* Section 15064.4, subdivisions (b)(2) and (b)(3)), the City of Los Alamitos (the lead agency for the proposed project) has determined it is appropriate to rely on AB 32 implementation guidance (such as the CARB Scoping Plan) as a benchmark for purposes of this EIR and use the statute to inform their judgment as to whether the proposed project's GHG emissions would result in a significant impact. (See *CEQA Guidelines* Section 15064, subdivision (f)(1)). Accordingly, the following significance criterion is used to assess impacts:

Will the project's GHG emissions impede compliance with the GHG emissions reductions mandated in AB 32?

The GHG emission levels will be analyzed to determine whether project approval would impede compliance with the GHG emissions reduction mandate established by the AB 32, which requires that California's GHG emissions limit be reduced to 1990 levels by 2020. As noted in the Scoping Plan,¹³ a reduction of 28.5 percent below the "business as usual" scenario is required to meet the goals of AB 32. Therefore, should the project reduce its GHG emissions by 28.5 percent or greater, impacts would be less than significant.

5.4.4 PROJECT IMPACTS AND MITIGATION MEASURES

SHORT-TERM CONSTRUCTION EMISSIONS

- ◆ **DEVELOPMENT ASSOCIATED WITH IMPLEMENTATION OF THE PROPOSED PROJECT COULD GENERATE DUST AND EQUIPMENT EMISSIONS DURING CONSTRUCTION.**

Level of Significance Before Mitigation: Potentially Significant Impact.

Impact Analysis: The proposed project would result in the construction of one new medical office building, two new hospital buildings, one new central plant, and two new parking structures. The proposed project would be constructed in three phases. Phase 1 involves the construction of a new three-story medical office building (MOB A) along Katella Avenue and a parking structure to the

¹³ California Air Resources Board, *Climate Change Proposed Scoping Plan: A Framework for Change*, adopted December 2008.



north of MOB A. Phase 2 includes the demolition of an existing medical office building (MOB 1), demolition of an existing administration/warehouse building, and construction of the new four-story Hospital Building 1 in the central portion of the project site. Phase 3 involves the construction of the four-story Hospital Building 2, a central plant, and another parking structure in the northern portion of the project site. Construction activities for each of the three phases include demolition, grading, trenching, paving, building, and architectural coating.

Fugitive Dust

Construction activities result in fugitive dust (PM_{10} and $PM_{2.5}$) emissions that may have a substantial, temporary impact on local air quality. Fugitive dust emissions vary substantially from day to day, depending on the level of activity, specific operations and weather conditions. Dust (PM_{10}) poses a serious health hazard alone or in combination with other pollutants. Fine Particulate Matter ($PM_{2.5}$) is mostly derived from combustion sources, such as automobiles, trucks, and other vehicle exhaust, as well as from stationary sources. These particles are either directly emitted or are formed in the atmosphere from the combustion of gasses such as NO_x and SO_x combining with ammonia. $PM_{2.5}$ components from material in the earth's crust, such as dust, are also present, with the amount varying in different locations.

Exhaust

Exhaust emissions would be generated by the operation of vehicles and equipment on the construction site, such as tractors, dozers, backhoes, cranes, and trucks. The majority of construction equipment and vehicles would be diesel powered, which tends to be more efficient than gasoline-powered equipment. Diesel-powered equipment produces lower carbon monoxide and hydrocarbon emissions than gasoline equipment, but produced greater amounts of NO_x , SO_x , and particulates per hour of activity. The transportation of equipment and materials to and from the site, as well as construction workers traveling to and from the site, would also generate vehicle emissions during construction.

Grading/Hauling

In order to create a suitable building pad, future development facilitated by the proposed project would require the export of fill material. Although these activities may create additional dust and PM_{10} and $PM_{2.5}$ (as well as truck-related emissions), they would be mitigated to less than significant levels through implementation of standard dust control practices required as part of the grading permit (periodic site watering, covering laden trucks with tarps, and periodic street sweeping).

Table 5.4-4, Construction Air Emissions, provides a summary of construction emissions from the proposed project.



Table 5.4-4
Construction Air Emissions

Emissions Source	Pollutant (pounds/day) ^{1, 2}					
	ROG	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
PHASE 1						
2011						
Mitigated Emissions	6.36	52.09	32.97	0.01	6.02	2.70
SCAQMD Thresholds	75	100	550	150	150	55
Is Threshold Exceeded?	No	No	No	No	No	No
2012						
Mitigated Emissions	38.27	33.09	22.81	0.01	2.07	1.87
SCAQMD Thresholds	75	100	550	150	150	55
Is Threshold Exceeded?	No	No	No	No	No	No
PHASE 2						
2013						
Mitigated Emissions	2.63	21.28	12.20	0.00	4.40	1.64
SCAQMD Thresholds	75	100	550	150	150	55
Is Threshold Exceeded?	No	No	No	No	No	No
2015						
Mitigated Emissions	0.97	6.70	8.30	0.01	0.42	0.36
SCAQMD Thresholds	75	100	550	150	150	55
Is Threshold Exceeded?	No	No	No	No	No	No
2016						
Mitigated Emissions	0.90	6.07	7.98	0.01	0.36	0.31
SCAQMD Thresholds	75	100	550	150	150	55
Is Threshold Exceeded?	No	No	No	No	No	No
2017						
Mitigated Emissions	34.75	5.50	7.97	0.01	0.33	0.28
SCAQMD Thresholds	75	100	550	150	150	55
Is Threshold Exceeded?	No	No	No	No	No	No
PHASE 3						
2032						
Mitigated Emissions	1.73	11.66	9.62	0.00	4.25	1.18
SCAQMD Thresholds	75	100	550	150	150	55
Is Threshold Exceeded?	No	No	No	No	No	No



Table 5.4-4 (continued)
Construction Air Emissions

Emissions Source	Pollutant (pounds/day) ^{1, 2}					
	ROG	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
2033						
Mitigated Emissions	1.73	11.66	11.16	0.01	3.90	1.18
SCAQMD Thresholds	75	100	550	150	150	55
Is Threshold Exceeded?	No	No	No	No	No	No
2034						
Mitigated Emissions	1.55	8.88	11.16	0.01	0.50	0.43
SCAQMD Thresholds	75	100	550	150	150	55
Is Threshold Exceeded?	No	No	No	No	No	No
2035						
Mitigated Emissions	54.31	8.89	11.32	0.02	0.51	0.43
SCAQMD Thresholds	75	100	550	150	150	55
Is Threshold Exceeded?	No	No	No	No	No	No
ROG = reactive organic gases; NO _x = nitrogen oxides; CO = carbon monoxide; SO ₂ = sulfur dioxide; PM ₁₀ = particulate matter less than 10 microns; PM _{2.5} = particulate matter less than 2.5 microns.						
Notes: 1. Emissions were calculated using the URBEMIS 2007 version 9.2.4 Computer Model, as recommended by the SCAQMD. 2. Refer to Appendix E, Air Quality Data, for assumptions used in this analysis.						

Construction-related air quality impacts would be temporary, lasting only as long as each of the individual construction phases for the proposed project. The duration of construction activities for Phase 1 (construction of new MOB A and Parking Structure 1) is estimated to span over 12 months, during 2011 and 2012. Phase 1 activities would take place in the southeastern quadrant of the project site.

Construction of Phase 2 (demolition of two buildings, construction of new Hospital Building 1) is estimated to occur over approximately 48 months between 2013 and 2017, and would take place in the central portion of the project site.

Phase 3 construction (construction of new Hospital Building 2, central plant, and Parking Structure 2) is anticipated to occur over approximately 36 months between 2033 and 2035, and would take place in the northern portion of the project site.

As noted above, construction activities would occur in the different locations on the project site at different times; thus, not affecting the same sensitive receptors for significant periods of time. Nonetheless, construction impacts have the potential to violate Federal and State ambient air quality standards and may harm nearby sensitive receptors. However, as depicted in *Table 5.4-4*, construction emissions would not exceed the established SCAQMD thresholds for criteria pollutants. Also, implementation of Mitigation Measures AQ-1 through AQ-4 would lessen construction-related impacts by requiring measures to reduce air pollutant emissions from construction activities. These measures call for the maintenance of construction equipment, the use



of non-polluting and non-toxic building equipment, and the minimization of fugitive dust. With implementation of Mitigation Measures AQ-1 through AQ-4, construction emissions would be below SCAQMD thresholds, and a less than significant impact would result.

Asbestos

It is possible that asbestos-containing materials may exist within existing buildings that would be demolished. Therefore, the possibility exists that asbestos fibers may be released into the air should no asbestos assessment or removal (if needed) take place prior to demolition. Standard practice would be to conduct an asbestos assessment for candidate buildings to determine the presence of asbestos. If identified, an asbestos abatement contractor would be retained to develop an abatement plan and remove the asbestos containing materials, in accordance with local, State, and Federal requirements. After removal, demolition may proceed without significant concern to the release of asbestos fibers into the air. With implementation of Mitigation Measure AQ-5, as applicable, a less than significant impact would result.

Localized Significance Thresholds

Appendix B of the *Final Localized Significance Threshold Methodology* (revised October 2009) provides look-up table references for projects of different sizes for distances to sensitive receptors of 25, 50, 100, 200, and 500 meters. Grading activities would disturb a maximum of 0.11 acres per day in Phase 1, 0.12 acres per day in Phase 2, and 0.13 acres per day in Phase 3. The closest sensitive uses to the project site are the existing hospital uses located on the project site. The distances to sensitive receptors for each phase vary as follows:

- Phase 1: 30 meters to the TotalCare Pavilion;
- Phase 2: 37 meters to the Main Hospital Building; and
- Phase 3: 45 meters to the Main Hospital Building.

Thus, the localized significance threshold values were linearly interpolated for a one-acre site. *Table 5.4-5, Summary of Localized Significance of Construction Emissions*, shows the construction-related emissions of NO_x, CO, PM₁₀, and PM_{2.5} compared to the SCAQMD look-up values for Central Orange County (Source Receptor Area 17).

As shown in *Table 5.4-5*, construction emissions would not exceed the SCAQMD localized thresholds during each respective phase of project construction. Additionally, compliance with Mitigation Measures AQ-1 through AQ-4 would be required. As a result, the closest sensitive receptors would not be exposed to criteria pollutant concentrations that would exceed the SCAQMD localized significance thresholds, resulting in a less than significant impact.



Table 5.4-5
Summary of Localized Construction Emissions

Construction Phase ^{1,2}	Emission Ranges (lbs/day)			
	NO _x	CO	PM ₁₀	PM _{2.5}
PHASE 1				
2011				
Mitigated Emissions	52.09	32.97	6.02	2.70
Localized Significance Threshold	81.40	538.60	5.60	3.20
Is Threshold Exceeded?	No	No	No	No
2012				
Mitigated Emissions	33.09	22.81	2.07	1.87
Localized Significance Threshold	81.40	538.60	5.60	3.20
Is Threshold Exceeded?	No	No	No	No
PHASE 2				
2013				
Mitigated Emissions	21.28	12.20	4.40	1.64
Localized Significance Threshold	81.96	613.64	7.84	3.48
Is Threshold Exceeded?	No	No	No	No
2015				
Mitigated Emissions	6.70	8.30	0.42	0.36
Localized Significance Threshold	81.96	613.64	7.84	3.48
Is Threshold Exceeded?	No	No	No	No
2016				
Mitigated Emissions	6.07	7.98	0.36	0.31
Localized Significance Threshold	81.96	613.64	7.84	3.48
Is Threshold Exceeded?	No	No	No	No
2017				
Mitigated Emissions	5.50	7.97	0.33	0.28
Localized Significance Threshold	81.96	613.64	7.84	3.48
Is Threshold Exceeded?	No	No	No	No
PHASE 3				
2032				
Mitigated Emissions	11.66	9.62	0.33	0.28
Localized Significance Threshold	82.60	699.40	10.40	3.80
Is Threshold Exceeded?	No	No	No	No
2033				
Mitigated Emissions	11.66	11.16	3.90	1.18
Localized Significance Threshold	82.60	699.40	10.40	3.80
Is Threshold Exceeded?	No	No	No	No



Table 5.4-5 (continued)
Summary of Localized Construction Emissions

Construction Phase ^{1,2}	Emission Ranges (lbs/day)			
	NO _x	CO	PM ₁₀	PM _{2.5}
2034				
Mitigated Emissions	8.88	11.16	0.50	0.43
Localized Significance Threshold	82.60	699.40	10.40	3.80
Is Threshold Exceeded?	No	No	No	No
2035				
Mitigated Emissions	8.89	11.32	0.51	0.43
Localized Significance Threshold	82.60	699.40	10.40	3.80
Is Threshold Exceeded?	No	No	No	No
1. The LST was determined using Appendix C of the SCAQMD Final Localized Significant Threshold Methodology guidance document for pollutants NO _x , CO, and PM ₁₀ . 2. PM _{2.5} thresholds are based on the guidance document, Final – Methodology to Calculate Particulate Matter (PM) 2.5 and PM _{2.5} Significance Thresholds (revised October 2009).				

Mitigation Measures:

AQ-1 Prior to issuance of any Grading Permit, the Director of Public Works and the Building Official shall confirm that the Grading Plan specifications stipulate that, in compliance with SCAQMD Rule 403, excessive fugitive dust emissions shall be controlled by regular watering or other dust prevention measures, as specified in the SCAQMD's Rules and Regulations. In addition, SCAQMD Rule 402 requires implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off-site. Implementation of the following measures would reduce short-term fugitive dust impacts on nearby sensitive receptors:

- All active portions of the construction site shall be watered twice daily to prevent excessive amounts of dust;
- On-site vehicle speed shall be limited to 15 miles per hour;
- All on-site roads shall be paved as soon as feasible, watered twice daily, or chemically stabilized;
- Visible dust beyond the property line which emanates from the project shall be prevented to the maximum extent feasible;
- All material transported off-site shall be either sufficiently watered or securely covered to prevent excessive amounts of dust prior to departing the job site;
- Track-out devices shall be used at all construction site access points; and
- All delivery truck tires shall be watered down and/or scraped down prior to departing the job site.



- AQ-2 All trucks that are to haul excavated or graded material on-site shall comply with State Vehicle Code Section 23114 (Spilling Loads on Highways), with special attention to Sections 23114(b)(F), (e)(4) as amended, regarding the prevention of such material spilling onto public streets and roads. Prior to the issuance of grading permits, the project applicant shall demonstrate to the City of Los Alamitos how the project operations subject to that specification during hauling activities shall comply with the provisions set forth in Sections 23114(b)(F), (e)(4).
- AQ-3 The following measures shall be implemented to reduce ROG emissions resulting from application of architectural coatings:
- Contractors shall use high-pressure-low-volume (HPLV) paint applicators with a minimum transfer efficiency of at least 50 percent;
 - Use required coatings and solvents with a ROG content lower than required under Rule 1113;
 - Construct/build with materials that do not require painting; and
 - Use pre-painted construction materials.
- AQ-4 Prior to issuance of any Grading Permit, the Director of Public Works and the Building Official shall confirm that the Grading Plan stipulates that, in compliance with SCAQMD Rule 403, ozone precursor emissions from construction equipment vehicles shall be controlled by maintaining equipment engines in good condition and in proper tune per manufacturer's specifications, to the satisfaction of the City Engineer. Maintenance records shall be provided to the City. The City Inspector shall be responsible for ensuring that contractors comply with this measure during construction.
- AQ-5 The project applicant shall comply with South Coast Air Quality Management District Rule 1403, Asbestos Emissions From Demolition/Renovation Activities, as applicable, which specifies work practice requirements to limit asbestos emissions from building demolition and renovation activities, including the removal and associated disturbance of asbestos-containing materials. The requirements for demolition and renovation activities include asbestos surveying, notification, asbestos containing materials removal procedures and time schedules, asbestos-containing materials handling and clean-up procedures, and storage, disposal, and landfilling requirements for asbestos-containing waste materials. All operators are required to maintain records, including waste shipment records, and are required to use appropriate warning labels, signs, and markings.

Level of Significance After Mitigation: Less Than Significant Impact.



LONG-TERM MOBILE AND STATIONARY SOURCE EMISSIONS

- ◆ **DEVELOPMENT ASSOCIATED WITH IMPLEMENTATION OF THE PROPOSED PROJECT COULD RESULT IN AN OVERALL INCREASE IN MOBILE AND STATIONARY SOURCE EMISSIONS.**

Level of Significance Before Mitigation: Less Than Significant Impact.

Impact Analysis: Implementation of the proposed project would result in the construction of one new medical office building (MOB A), two new hospital buildings (Hospital Buildings 1 and 2), one new central plant, and two new parking structures. These new uses would introduce new stationary and mobile source air emissions into the project area.

Implementation of the proposed project would result in changes in land use and intensity within project site. *Table 5.4-6, Operational Emissions*, summarizes the emissions based on the maximum development potential for the proposed project.

**Table 5.4-6
Operational Emissions**

Source ²	Estimated Annual Average Emissions (pounds/day) ¹					
	ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Area Sources	1.69	2.10	6.36	0.00	0.02	0.02
Mobile Sources	27.40	39.09	349.30	0.39	63.86	12.42
Total Emissions	29.09	41.19	355.66	0.39	63.88	12.44
SCAQMD Threshold	55	55	550	150	150	55
Is Threshold Exceeded? (Significant Impact)	No	No	No	No	No	No
Notes:						
1. Emissions estimates calculated using URBEMIS 2007 (version 9.2.4).						
2. Emissions estimates calculated using the land use categories/intensities depicted in <u>Section 2.0, Project Description</u> .						
Refer to Appendix D, Air Quality Data, for detailed model input/output data.						

Area Source Emissions

Stationary source emissions are sources of air pollutants that individually emit relatively small quantities of air pollutants, but which cumulatively may emit large quantities of emissions. Stationary source emissions would result from the use of natural gas, landscape maintenance equipment, and the use of consumer products, such as aerosol sprays.

The thresholds of significance recommended by the SCAQMD were established for individual development projects. They do not apply to cumulative development or multiple projects. Air quality impacts would be regional and not confined to the City limits. Future development under the proposed project would be required to comply with SCAQMD regulations and permitting



requirements. As presented in *Table 5.4-6*, emissions resulting from stationary sources would be less than significant.

Mobile Source Emissions

Mobile source emissions are emissions from vehicle trips that are generated by the operation of a project. Mobile source emissions include tailpipe and evaporative emissions. Depending upon the pollutant being discussed, the potential air quality impact may be of either regional or local concern. For example, VOCs, NO_x, SO_x and PM₁₀ are all pollutants of regional concern; (NO_x and VOCs react with sunlight to form O₃ [photochemical smog], and wind currents readily transport SO_x and PM₁₀). However, CO tends to be a localized pollutant, dispersing rapidly at the source.

Based on the *Los Alamitos Medical Center Specific Plan Traffic Impact Analysis*, the proposed project would generate 3,881 net daily trips above existing conditions upon buildout of all three phases. As presented in *Table 5.4-6*, mobile sources would be the largest contributor to the annual average air pollutant levels. As seen in *Table 5.4-6*, operational emissions from the proposed project would not result in the exceedance of established operational SCAQMD thresholds. Additionally, the proposed project would implement SCAQMD Rule 2202 to further reduce mobile source emissions. Rule 2202 requires employers with 250 or more employees to reduce the emissions generated by employees traveling to work between the peak window of 6:00 AM to 10:00 AM. Rule 2202 can be implemented through the purchase of emission credits, investing in the SCAQMD's Air Quality Investment Program, or implementing an employee commute reduction program.

Health Effects

The project site is located in the City of Los Alamitos, approximately 0.80 miles west of I-605 freeway. The proximity to the I-605 freeway poses a concern for potential exposure of future development in the City to toxic air contaminants from these sources. The Multiple Air Toxics Exposure Study III (MATES III) is a monitoring and evaluation study conducted by the SCAQMD. The MATES III study consists of a monitoring program, an updated emissions inventory of toxic air contaminants, and a modeling effort to characterize risk throughout the Basin. The study concentrates on the carcinogenic risk from exposure to air toxics. Ten monitoring locations measured toxic air contaminants (over 30 air pollutants) once every three days for two years.

The carcinogenic risk from air toxics in the Basin, based on average concentrations at the fixed monitoring locations, is about 1,200 per million. This risk refers to the expected number of additional cancers in a population of one million individuals that are exposed over a 70-year lifetime. Under the MATES III methodology, approximately 94 percent of the risk is attributed to mobile source emissions, and approximately six percent is attributed to stationary sources. The Anaheim-Pampas Lane Monitoring Station (nearest monitoring station to the project site) reported moderate levels of risk. However, the MATES III Study found a decreasing risk for air toxics exposure compared to previous MATES studies. Additionally, the MATES III study found an estimated Basin-wide population-weighted risk reduced by eight percent from the MATES II Study, which includes the City of Los Alamitos. Although the City is located in an area of the Basin with some of the moderately higher concentrations of air toxics, these concentrations are declining and conditions are continuing to improve. Additionally, the ambient air toxics data from the ten fixed monitoring sites demonstrated a reduction in air toxic levels and risks.



Localized Operational Emissions

Localized operational emissions represent the maximum emissions from a project that would not cause or contribute to an exceedance of the most stringent applicable Federal or State ambient air quality standard, and are developed based on the ambient concentrations of that pollutant for each source receptor area.

Localized operational emissions at the project site are compared only to area source emissions since the SCAQMD methodology does not account for mobile source emissions. Rather, performing a carbon monoxide hotspots analysis assesses localized mobile source impacts. The smallest distance (25 meters) between a proposed building and the existing sensitive on-site hospital uses was utilized for the localized operational analysis. Also, this analysis conservatively utilizes the LST threshold values for a one-acre site. As indicated in *Table 5.4-7, Summary of Localized Significance of Operational Emissions*, the localized area source emissions from the proposed project would not exceed the SCAQMD thresholds. Therefore, localized emissions from the proposed project would be less than significant.

Table 5.4-7
Summary of Localized Significance of Operational Emissions

Emissions Source	Pollutant (pounds/day) ¹			
	NO _x	CO	PM ₁₀	PM _{2.5}
Area Source Emissions	2.10	6.36	0.02	0.02
Localized Significance Threshold ²	81	485	1	1
Is Threshold Exceeded?	No	No	No	No
Notes: 1. Emissions calculated using the URBEMIS 2007 Version 9.2.4 Computer Model as recommended by the SCAQMD. 2. The Local Significance Threshold was determined using Appendix C of the SCAQMD Final Localized Significant Threshold Methodology guidance document for pollutants NO _x , CO, PM ₁₀ , and PM _{2.5} . The Localized Significance Threshold is based on the developed project acreage, the source receptor area (SRA 17), and distance to nearest sensitive receptor (30 meters).				

Mitigation Measures: No mitigation measures are required.

Level of Significance After Mitigation: Not Applicable.

CARBON MONOXIDE HOTSPOTS

- ◆ **DEVELOPMENT ASSOCIATED WITH IMPLEMENTATION OF THE PROPOSED PROJECT COULD RESULT IN AN OVERALL INCREASE IN CARBON MONOXIDE HOTSPOT EMISSIONS WITHIN THE CITY.**

Level of Significance Before Mitigation: Less Than Significant Impact.

Impact Analysis: Carbon monoxide (CO) emissions are a function of vehicle idling time, meteorological conditions and traffic flow. Under certain extreme meteorological conditions, CO



concentrations near a congested roadway or intersection may reach unhealthful levels (i.e., adversely affect residents, school children, hospital patients, the elderly, etc.). The SCAQMD requires a quantified assessment of CO hotspots when a project increases the volume-to-capacity ratio (also called the intersection capacity utilization) by 0.02 (two percent) for any intersection with an existing level of service LOS D or worse. Because traffic congestion is highest at intersections where vehicles queue and are subject to reduced speeds, these hot spots are typically produced at intersections. Table 5.4-8, Project Buildout Carbon Monoxide Concentrations, provides the list of intersections within the project area that required a CO hotspot analysis.

Table 5.4-8
Project Buildout Carbon Monoxide Concentrations

Intersection	1-Hour CO (ppm) ¹		8-Hour CO (ppm) ¹	
	1-Hour Standard	Future + Project	8-Hour Standard	Future + Project
Norwalk Boulevard/Wardlow Road	20 ppm	3.40	9 ppm	2.89
Los Alamitos Boulevard/Cerritos Avenue	20 ppm	3.50	9 ppm	2.98
Los Alamitos Boulevard/Catalina Street South	20 ppm	3.50	9 ppm	2.98
Seal Beach Boulevard/I-405 SB Ramps-Beverly Manor Drive	20 ppm	3.60	9 ppm	3.06
Reagan Street/Katella Avenue	20 ppm	3.40	9 ppm	2.89
Kaylor Street/Katella Avenue	20 ppm	3.40	9 ppm	2.89
Notes: 1. As measured at a distance of 10 feet from the corner of the intersection predicting the highest value. Presented 1 hour CO concentrations include a background concentration of 3.2 ppm. Eight-hour concentrations are based on a persistence of 0.85 of the 1-hour concentration.				

The projected traffic volumes were modeled using the BREEZE ROADS dispersion model. The resultant values were then added to an ambient concentration. A receptor height of 1.8 meters was used in accordance with the EPA's recommendations. The calculations assume a meteorological condition of almost no wind (0.5 meters/second), a flat topological condition between the source and the receptor and a mixing height of 1,000 meters. A standard deviation of five degrees was used for the deviation of wind direction. The suburban land classification was used for the aerodynamic roughness coefficient. This follows the BREEZE ROADS user's manual definition of suburban as "regular coverage with large obstacles, open spaces roughly equal to obstacle heights, villages, mature forests." All of the above parameters are based on the standards stated in the *Transportation Project-Level Carbon Monoxide (CO Protocol)*, December 1997.

For the purposes of this analysis, the ambient concentration used in the modeling was the highest one-hour measurement from 2009 (the latest year data was available) of SCAQMD monitoring data at the Anaheim-Pampas Lane Monitoring Station. Actual future ambient CO levels may be lower due to emissions control strategies that would be implemented between now and the proposed project buildout date. Due to changing meteorological conditions over an eight-hour period which diffuses the local CO concentrations, the eight-hour CO level concentrations have been found to be typically proportional and lower than the one-hour concentrations, where it is possible to have stable atmospheric conditions last for the entire hour. Therefore, eight-hour CO levels were calculated



using the locally derived persistence factor as stated in the CO Protocol. The local persistence factor is derived by calculating the highest ratio of eight-hour to one-hour maximum locally measured CO concentrations from the most recent three years of data. Table 5.4-2 shows that of the most recent three years of data, year 2009 has the highest eight-hour to one-hour ratio of 0.85.

The intersections in the study area currently operate at an LOS ranging from LOS A to LOS F for PM peak hour activities. At proposed project buildout, six of these intersections would operate at LOS D or worse in an unmitigated condition, requiring CO hotspot analyses. As indicated in Table 5.4-8, CO concentrations would be well below the State and Federal standards. The modeling results are compared to the CAAQS for CO of 9 ppm on an eight-hour average and 20 ppm on a one-hour average. Neither the one-hour average nor the eight-hour average would be equaled or exceeded. Impacts in regards to CO hotspots would be less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance After Mitigation: Not Applicable.

CONSISTENCY WITH AIR QUALITY MANAGEMENT PLAN

◆ IMPLEMENTATION OF THE PROPOSED PROJECT COULD CONFLICT WITH THE AIR QUALITY MANAGEMENT PLAN.

Level of Significance Before Mitigation: Potentially Significant Impact.

Impact Analysis: Consistency with the 2007 *Air Quality Management Plan for the South Coast Air Basin* (2007 AQMP) means that a project is consistent with the goals, objectives, and assumptions in the respective plan to achieve the Federal and State air quality standards. According to the SCAQMD's *CEQA Air Quality Handbook*, project analysis in consideration of the following criteria is required, in order to determine consistency with SCAQMD and SCAG policies:

1. Would the project result in any of the following:
 - An increase in the frequency or severity of existing air quality violations; or
 - Cause or contribute to new air quality violations; or
 - Delay timely attainment of air quality standards or the interim emissions reductions specified in the AQMP.
2. Would the project exceed the assumptions utilized in preparing the AQMP?
 - Consistency with the population, housing, and employment growth projections;
 - Project mitigation measures; and
 - Appropriate incorporation of AQMP land use planning strategies.

With respect to the first criterion, SCAQMD methodologies require that an air quality analysis for a project include forecasts of project emissions in a regional context. All future buildings associated with implementation of the proposed project would be required to comply with existing SCAQMD regulations and permitting requirements. Compliance with regulations and permit requirements



would ensure that new uses reduce emissions to the extent feasible. As stated above, proposed project construction emissions would be below the SCAQMD thresholds with implementation of Mitigation Measures AQ-1 through AQ-4. Also, proposed project operational emissions would be below the SCAQMD thresholds for each of the criteria air pollutants. Therefore, the proposed project would not impact on the region's ability to meet State and Federal air quality Standards. As a result, the proposed project would not conflict with the 2007 AQMP as it would meet the first consistency criterion.

With respect to the second criterion for determining consistency with SCAQMD and SCAG air quality policies, it is important to recognize that air quality planning within the Basin focuses on attainment of ambient air quality standards at the earliest feasible date. Projections for achieving air quality goals are based on assumptions regarding population, housing, and growth trends in a City's General Plan. Thus, the SCAQMD's second criterion for determining project consistency focuses on whether or not the proposed project exceeds the assumptions utilized in preparing the forecasts presented in the AQMP.

Implementation of the proposed project would facilitate the development of new uses on-site. The project site is currently developed and occupied by the Los Alamitos Medical Center campus. The Medical Center campus is located within three *General Plan* Land Use Designations: Community and Institutional, Planned Industrial, and Professional Office. Approval of the proposed *Los Alamitos Medical Center Specific Plan* would be preceded by a General Plan Amendment, which would create a new Specific Plan land use designation over the entire Medical Center campus ("Specific Plan"). Implementation of the proposed project would not conflict with any applicable goals, or policies of the City's *General Plan*, as concluded in Section 5.1, Land Use and Planning. Buildout of the proposed project would be consistent with the buildout projections identified in the *General Plan*, as the new Specific Plan designation would not change the types of land uses in the Specific Plan area. Given that the City's *General Plan* buildout projections for population and housing growth were utilized in forecasts presented in the 2007 AQMP, and that the proposed Specific Plan would not exceed the *General Plan*'s assumptions regarding employment, population, and housing growth, the emissions from the future development associated with the proposed Specific Plan have been considered in the forecasts presented in the 2007 AQMP. As a result, the proposed project would not conflict with the 2007 AQMP, as it would meet the second consistency criterion.

In conclusion, the proposed Specific Plan would not conflict with the AQMP as it would meet the first and second consistency criterion. A less than significant impact would occur in this regard.

Mitigation Measures: Refer to Mitigation Measures AQ-1 through AQ-4. No additional mitigation measures are required.

Level of Significance After Mitigation: Less Than Significant Impact.



GREENHOUSE GAS EMISSIONS

◆ DEVELOPMENT ASSOCIATED WITH IMPLEMENTATION OF THE PROPOSED PROJECT COULD GENERATE GREENHOUSE GAS EMISSIONS THAT COULD HAVE A SIGNIFICANT IMPACT ON THE ENVIRONMENT.

Level of Significance Before Mitigation: Potentially Significant Impact.

Impact Analysis: Currently, there is no adopted threshold of significance for determining the cumulative significance of a project's GHG emissions on global climate change. However, the available scientific evidence suggests that even without a net increase in GHG emissions, effects would remain significant due to past and existing emissions levels. In the most recent Intergovernmental Panel on Climate Change (IPCC) assessment report (2007), the IPCC acknowledges that anthropogenic climate change and sea level rise would continue for centuries due to the time scales associated with climate processes and feedbacks even if GHG concentrations were to be stabilized.¹⁴ The IPCC further found that both past and future anthropogenic CO₂ emissions would continue to contribute to climate change and sea level rise for more than a millennium, due to the time scales required for the removal of this gas from the atmosphere.¹⁵ Further, the IPCC assessment noted that defining what is dangerous anthropogenic interference with the climate system and, consequently, the limits to be set for policy purposes are complex tasks that can only be partially based on science, as such definitions inherently involve normative judgments.¹⁶

The IPCC constructed several emission trajectories of GHGs needed to stabilize global temperatures and climate change impacts. It concluded that a stabilization of GHGs at 400 to 450 parts per million (ppm) carbon dioxide-equivalent concentration is required to keep global mean warming below two degrees Celsius, which in turn is assumed to be necessary to avoid dangerous climate change.

California Governor Arnold Schwarzenegger issued Executive Order S-3-05 in June 2005, which established the following GHG emission reduction targets:

- 2010: Reduce GHG emissions to 2000 levels;
- 2020: Reduce GHG emissions to 1990 levels; and,
- 2050: Reduce GHG emissions to 80 percent below 1990 levels.

Assembly Bill 32 requires that CARB determine what the statewide GHG emissions level was in 1990, and approve a statewide GHG emissions limit that is equivalent to that level, to be achieved by 2020. CARB has approved a 2020 emissions limit of 427 million metric tons of CO₂ equivalent (MTCO₂eq).

Due to the nature of global climate change, it is not anticipated that any single development project would have a substantial effect on global climate change. It is difficult to deem a single development

¹⁴ Intergovernmental Panel on Climate Change, Climate Change 2007: Synthesis Report. Contribution of Working Groups I, II and III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, 2007.

¹⁵ Ibid.

¹⁶ Ibid.



as individually responsible for a global temperature increase. In actuality, GHG emissions from the proposed project would combine with emissions emitted across California, the United States, and the world to cumulatively contribute to global climate change.

Effects of Climate Change on the Proposed Project

The primary effect of global climate change has been a rise in average global tropospheric temperature of 0.2 degrees Celsius per decade, determined from meteorological measurements worldwide between 1990 and 2005.¹⁷ Climate change modeling using year 2000 emission rates shows that further warming would occur, which would include further changes in the global climate system during the current century.¹⁸ Changes to the global climate system and ecosystems and to California would include, but would not be limited to:

- The loss of sea ice and mountain snow pack resulting in higher sea levels and higher sea surface evaporation rates with a corresponding increase in tropospheric water vapor due to the atmosphere's ability to hold more water vapor at higher temperatures;¹⁹
- Rise in global average sea level primarily due to thermal expansion and melting of glaciers and ice caps and the Greenland and Antarctic ice sheets;²⁰
- Changes in weather that include widespread changes in precipitation, ocean salinity, and wind patterns, and more energetic extreme weather including droughts, heavy precipitation, heat waves, extreme cold, and the intensity of tropical cyclones;²¹
- Decline of the Sierra snow pack (which accounts for approximately half of the surface water storage in California) by 70 percent to as much as 90 percent over the next 100 years;²²
- Increase in the number of days conducive to ozone formation by 25 to 85 percent (depending on the future temperature scenario) in high ozone areas of Los Angeles and the San Joaquin Valley by the end of the 21st century;²³ and
- High potential for erosion of California's coastlines and sea water intrusion into the Delta and levee systems due to the rise in sea level.²⁴

While there is broad agreement on the causative role of GHGs to climate change, there is considerably less information or consensus on how climate change would affect any particular location, operation, or activity. The IPCC has published numerous reports on potential impacts of climate change on the human environment. These reports provide a comprehensive and up-to-date assessment of the current state of knowledge on climate change. Despite the extensive peer review of reports and literature on the impacts of global climate change, the IPCC notes the fact that there

¹⁷ Ibid.

¹⁸ Ibid.

¹⁹ Ibid.

²⁰ Ibid.

²¹ Ibid.

²² California Environmental Protection Agency, *Climate Action Team, Climate Action Team Report to Governor Schwarzenegger and the Legislature (Executive Summary)*, March, 2006.

²³ Ibid.

²⁴ Ibid.



is little consensus as to the ultimate impact of human interference with the climate system and its causal connection to global warming trends.

The following climate change effects could affect the proposed project. However, the type and degree of the impacts that climate change would have on humans and the environment is difficult to predict at the local scale.

- Sea Level Rise. According to the IPCC, climate change is expected to raise sea levels by up to four feet. The project area is approximately five miles from the Pacific Ocean and approximately 25 feet above mean sea level. Therefore, sea level rise of this magnitude would be unlikely to inundate the project area. Additionally, the effects related to sea level rise are speculative at this time. If determined to be a significant threat, protective measures such as levees would likely be installed by regional and local governments to protect urbanized areas.
- Natural Disasters. Climate change could result in increased flooding and weather-related disasters. The project site is located approximately five miles from the Pacific Ocean and would not be exposed to intense coastal storms. The frequency of large floods on rivers and streams could also increase. The proposed project would not impede flood flows or be susceptible to increased flooding; thus, flood-related impacts would be less than significant even under an intensified flooding scenario.
- Wildfires. Climate change could result in increased occurrences and duration of wildfire events. The project site is located within an urbanized area, and is surrounded by development on all sides. The project site is not located adjacent to wildlands that may increase the risk of wildland fires. The warming climate could cause more frequent wildfires of great intensity. However, as the project site is not considered susceptible to wildland fires, wildfire risks as a result of global climate change would be less than significant.
- Air Quality. Climate change would compound negative air quality impacts in the Basin, resulting in respiratory health impacts.²⁵ However, this would be a regional, not a project-specific effect.

Other predicted physical and environmental impacts associated with climate change include heat waves, alteration of disease vectors, biome shifts, impacts on agriculture and the food supply, reduced reliability in the water supply, and strain on the existing capacity of sanitation and water-treatment facilities. While these issues are a concern for society at large, none of these impacts would have a disproportionate effect on the implementation of the proposed project.

Greenhouse Gas Emissions

Direct Project Related Sources of Greenhouse Gases

Direct project-related GHG emissions include emissions from construction activities, area sources, and mobile sources. *Table 5.4-2, Estimated Greenhouse Gas Emissions*, estimates the CO₂, N₂O, and CH₄ emissions of the proposed project. The proposed project is not anticipated to generate other

²⁵ California Environmental Protection Agency, *AB 1493 Briefing Package*, 2008.



forms of GHG emissions in quantities that would facilitate a meaningful analysis. Therefore, this analysis focuses on these three forms of GHG emissions.

As seen in *Table 5.4-9*, GHGs associated with area sources and mobile sources would be 714.72 MTCO₂eq/year, and 9,502.96 MTCO₂eq/year, respectively. GHG emissions from construction are typically annualized over the lifetime of the proposed project (25 years) and later added to the total operational emissions.²⁶ Total project-related direct operational emissions would result in 10,217.68 MTCO₂eq/year (without annualized construction emissions).

Indirect Project Related Sources of Greenhouse Gases

Electricity Consumption. Energy Consumption rates for the proposed project were obtained from Section 5.14, *Electricity and Natural Gas*. The proposed project would result in a net increase of 4,911 MWh of electricity consumption per year. As a result, potential development associated with implementation of the proposed project would indirectly result in 1,726.14 MTCO₂eq/year due to electricity usage; refer to *Table 5.4-9*.

Water Supply. Water demand for the proposed uses would be approximately 808 acre-feet per year, based on typical water demand for office and industrial uses. Based on energy usage factors for water conveyance from the California Energy Commission, water transport from the State Water Project consumes approximately 1,666 kilowatt hours [kWh] per acre-foot.²⁷ Emissions from indirect energy impacts due to water supply would result in 473.33 MTCO₂eq/year.

**Table 5.4-9
Estimated Greenhouse Gas Emissions**

Source	CO ₂	N ₂ O		CH ₄		Total Metric Tons of CO ₂ eq/yr ⁶
	Metric tons/yr	Metric tons/yr	Metric Tons of CO ₂ eq/yr ⁶	Metric tons/yr	Metric Tons of CO ₂ eq/yr ⁶	
Construction Emissions						
Phase 1						
2011	191.25	0.00	0.10	0.02	7.10	198.45
2012	167.85	0.00	0.09	0.02	6.11	174.05
Phase 2						
2013	229.20	0.01	0.12	0.03	8.62	237.94
2015	203.81	0.00	0.07	0.02	4.87	208.75
2016	203.81	0.00	0.07	0.02	4.87	208.75
2017	101.91	0.00	0.03	0.01	2.44	104.38
Phase 3						
2032	77.80	0.00	0.04	0.01	3.04	80.88
2033	256.57	0.01	0.14	0.03	9.69	266.40
2034	152.86	0.00	0.08	0.02	5.72	158.66
2035	152.86	0.00	0.08	0.02	5.72	158.66

²⁶ The project lifetime is based on the standard 30 year assumption of the South Coast Air Quality Management District (<http://www.aqmd.gov/hb/2008/December/081231a.htm>).

²⁷ California Energy Commission, Water Energy Use in California, Accessed October 2009. <http://www.energy.ca.gov/research/iaw/industry/water.html>



Los Alamitos Medical Center Specific Plan Program Environmental Impact Report

**Table 5.4-9 (continued)
Estimated Greenhouse Gas Emissions**

Source	CO ₂	N ₂ O		CH ₄		Total Metric Tons of CO ₂ eq/yr ⁶
	Metric tons/yr	Metric tons/yr	Metric Tons of CO ₂ eq/yr ⁶	Metric tons/yr	Metric Tons of CO ₂ eq/yr ⁶	
Total Construction Emissions	1,737.92	0.02	0.82	0.2	58.18	1,796.92
Annualized Construction Emissions (30 years)	57.93	0.00	0.03	0.01	1.94	59.9
Operational Emissions						
Direct Emissions						
• Area Source ²	710.39	0.01	4.04	0.01	0.29	714.72
• Mobile Source ^{2, 3}	9,303.36	0.60	187.40	0.58	12.20	9,502.96
Total Direct Emissions ⁷	10,013.75	0.61	191.44	0.59	12.49	10,217.68
Indirect Emissions						
• Electricity Consumption ⁴	1,719.70	0.01	4.55	0.09	1.89	1,726.14
• Water Supply ⁵	471.38	0.00	1.38	0.02	0.57	473.33
Total Indirect Emissions ⁷	1,801.96	0.01	4.79	0.09	1.99	2,199.47
Annualized Construction Emissions	59.9 MTCO ₂ eq/yr					
Total Project-Related Operational Emissions <u>WITHOUT</u> Reductions	12,477 MTCO ₂ eq/yr					
Total Project-Related Operational Emissions <u>WITH</u> 30% Reductions	8,734 MTCO ₂ eq/yr ⁷					
Notes:						
1. Emissions calculated using CARB's Construction Equipment Emissions Table and the URBEMIS 2007 computer model.						
2. Emissions calculated using URBEMIS 2007 computer model for CO ₂ and the SCAQMD's CEQA Handbook for N ₂ O and CH ₄ (note that SCAQMD has the most comprehensive demand factors available).						
3. Emissions calculated using URBEMIS 2007 computer model and EMFAC2007, <i>Highest (Most Conservative) Emission Factors for On-Road Passenger Vehicles and Delivery Trucks</i> .						
4. Electricity Consumption emissions calculated using the SCAQMD's CEQA Handbook (note that SCAQMD has the most comprehensive demand factors available) and updated with factors from the California Energy Commission, <i>Reference Appendices for the 2008 Building Energy Efficiency Standards for Residential and Nonresidential Buildings</i> , revised June 2009.						
5. Water usage based on <u>Section 5.11, Water</u> . Emissions are based on energy usage factors for water conveyance from the California Energy Commission, <i>Water Energy Use in California</i> , accessed June 2010. http://www.energy.ca.gov/research/iaw/industry/water.html						
6. CO ₂ Equivalent values calculated using the U.S. Environmental Protection Agency Website, <i>Greenhouse Gas Equivalencies Calculator</i> , http://www.epa.gov/cleanenergy/energy-resources/calculator.html , accessed June 2010.						
7. Totals may be slightly off due to rounding.						
Refer to Appendix D, Air Quality Data, for detailed model input/output data.						

Total project-related business as usual operational emissions (direct and indirect) would result in 12,477 MTCO₂eq/year without incorporation of project design features (reduction measures). An analysis of the reduction measures is included below.

Consistency With the California Attorney General's Mitigation Measures

The proposed project would incorporate several design features that are consistent with the California Office of the Attorney General's recommended measures to reduce GHG emissions. A list of the Attorney General's recommended measures and the proposed project's compliance with each applicable measure are listed in *Table 5.4-10, Proposed Project Consistency with the Attorney General's Recommendations*. The proposed project would incorporate sustainable practices which include water, energy, solid waste, land use, and transportation efficiency measures.



Table 5.4-10
Proposed Project Consistency With the Attorney General's Recommendations

Attorney General's Recommended Measures	Project Compliance	Percent Reduction ¹
Smart growth, jobs/housing balance, transit-oriented development, and infill development through land use designations, incentives and fees, zoning, and public-private partnerships.	Compliant. The proposed project is considered to be an infill project, as it would facilitate development on a previously disturbed site in the City. Also, the proposed project is considering parking fees for the proposed on-site parking structures. The proposed project would be an expansion of an existing facility, and is consistent with the local Zoning Ordinance. The existing Medical Center provides medical care to over 100,000 patients per year, with over 88 percent of admissions from within an eight-mile radius. Therefore, the facility is locally-serving and reduces patient travel to other regional facilities. Additionally, the proposed project would be developed adjacent to existing transit (bus) stops (along Katella Avenue). Therefore, the proposed project would reduce vehicle trips and VMT due to the proximity to public transit. VMT and mobile source emissions would be further reduced with implementation of SCAQMD Rule 2202.	14
Create transit, bicycle, and pedestrian connections through planning, funding, development requirements, incentives and regional cooperation; create disincentives for auto use.	Compliant. The project site is located within a ¼-mile of Class I bicycle facilities. The proposed project would provide adequate bicycle parking near building entrances. Pedestrian connections to the surrounding circulation system would be provided via internal sidewalks. Bus stops are located adjacent to the project site, and proposed parking fees would discourage private auto travel to the project site; refer to the response above.	7
Energy- and water-efficient buildings and landscaping through ordinances, development fees, incentives, project timing prioritization, and other implementing tools.	Compliant. Buildings constructed under the proposed project would comply with energy efficiency requirements of <i>Title 24</i> . Cool roofs and pavements and strategically placed shade trees would be provided throughout the project site. According to the <i>Draft Los Alamitos Medical Center Specific Plan</i> , parking lot trees would be spaced in a manner to reduce the heat-island effect. Also, buildings would be oriented in order to take advantage of passive solar design. Buildings would be equipped with energy efficient heating and cooling systems, appliances and equipment, and control systems. The proposed project would supply information on energy efficiency. The <i>Draft Los Alamitos Medical Center Specific Plan</i> proposes to incorporate water-efficient buildings and landscapes into the project design. Buildings would include water-efficient fixtures and appliances. Watering methods would be restricted and runoff would be controlled. If available, the proposed project would also incorporate the use of reclaimed water for irrigation. The <i>Draft Los Alamitos Medical Center Specific Plan</i> incorporates requirements for drought tolerant and sustainable landscaping throughout the project site. Also, the <i>Draft Los Alamitos Medical Center Specific Plan</i> would be required to comply with <i>Municipal Code Chapter 13.04, Water Conservation</i> , and <i>Chapter 13.05, Water Efficient Landscaping</i> .	6



Table 5.4-10 (continued)
Proposed Project Consistency With the Attorney General's Recommendations

Attorney General's Recommended Measures	Project Compliance	Percent Reduction ¹
Waste diversion, recycling, water efficiency, energy efficiency and energy recovery in cooperation with public services districts and private entities.	Compliant. The project proposes to reuse and recycle construction and demolition waste. Also, the proposed project would use sustainable materials and local resources in the construction of proposed buildings. Additionally, the proposed project would provide interior and exterior storage areas for recyclables in public areas. General Plan Policy 2-3.1 and Implementation Measure 2-3.3.1 encourage recycling and waste reduction in accordance with the Source Reduction and Recycling, Nondisposal Facility, and Household Hazardous Waste Elements of the adopted Integrated Waste Management Plan.	2
Urban and rural forestry through tree planting requirements and programs; preservation of agricultural land and resources that sequester carbon; heat island reduction programs.	Compliant. As stated above, the <i>Draft Los Alamitos Medical Center Specific Plan</i> would plant shade trees throughout the project site. Also, the proposed project would be required to comply with <i>Municipal Code</i> Chapter 12.24, which contains requirements pertaining to the City's tree master plan, tree planting, and tree removal.	1
Regional cooperation to find cross-regional efficiencies in GHG reduction investments and to plan for regional transit, energy generation, and waste recovery facilities.	Compliant. Refer to responses above.	-
Total Reduction Percentage:		30
Source: California Office of the Attorney General, <i>Sustainability and General Plans: Examples of Policies to Address Climate Change</i> , updated January 22, 2010.		
Notes:		
1. Emissions Reductions obtained from Appendix B of the <i>CEQA and Climate Change white paper</i> , prepared by CAPCOA (January 2008).		

In addition to being compliant with many of the Attorney General's recommended design features, the proposed project is also consistent with the California Environmental Protection Agency Climate Action Team proposed early action measures to mitigate climate change. These early action measures are designed to ensure that projects meet the Governor's climate reduction targets, and are documented in the *Climate Action Team Report to Governor Schwarzenegger at the Legislature*, March 2006. The early action measures are also included in the CARB Scoping Plan and are mandated under AB 32.

Consistency With the CARB Scoping Plan

A complete list of CARB Scoping Plan Measures/Recommended Actions needed to obtain AB 32 goals, as well as the Governor's Executive Order, are referenced in *Table 5.4-11, Recommended Actions for Climate Change Proposed Scoping Plan*. Of the 39 measures identified, those that would be considered to be applicable to the proposed project would primarily be those actions related to electricity and natural gas use and water conservation. Consistency of the proposed project with these measures is evaluated by each source-type measure below. *Table 5.4-11* identifies which CARB



Los Alamitos Medical Center Specific Plan Program Environmental Impact Report

Recommended Actions applies to the proposed Specific Plan, and of those, whether the proposed project is consistent therewith.

AB 32 requires California to reduce its GHG emissions by approximately 28.5 percent below business as usual. CARB identified reduction measures to achieve this goal as set forth in the CARB Scoping Plan. The proposed project would facilitate development that would directly generate GHG emissions. Potential indirect GHG emissions could also be generated by incremental electricity consumption and waste generation. A detailed discussion of each applicable measure and if the proposed project conflicts with its implementation is provided below.

**Table 5.4-11
Recommended Actions for Climate Change Proposed Scoping Plan**

ID #	Sector	Strategy Name	Applicable to Project?	Will Project Conflict With Implementation?
T-1	Transportation	Pavley I and II – Light-Duty Vehicle GHG Standards	No	No
T-2	Transportation	Low Carbon Fuel Standard (Discrete Early Action)	No	No
T-3	Transportation	Regional Transportation-Related GHG Targets	Yes	No
T-4	Transportation	Vehicle Efficiency Measures	No	No
T-5	Transportation	Ship Electrification at Ports (Discrete Early Action)	No	No
T-6	Transportation	Goods-movement Efficiency Measures	Yes	No
T-7	Transportation	Heavy Duty Vehicle Greenhouse Gas Emission Reduction Measure – Aerodynamic Efficiency (Discrete Early Action)	No	No
T-8	Transportation	Medium and Heavy-Duty Vehicle Hybridization	No	No
T-9	Transportation	High Speed Rail	No	No
E-1	Electricity and Natural Gas	Increased Utility Energy efficiency programs More stringent Building and Appliance Standards	Yes	No
E-2	Electricity and Natural Gas	Increase Combined Heat and Power Use by 30,000GWh	No	No
E-3	Electricity and Natural Gas	Renewable Portfolio Standard	No	No
E-4	Electricity and Natural Gas	Million Solar Roofs	No	No
CR-1	Electricity and Natural Gas	Energy Efficiency	Yes	No
CR-2	Electricity and Natural Gas	Solar Water Heating	No	No
GB-1	Green Buildings	Green Buildings	Yes	No
W-1	Water	Water Use Efficiency	Yes	No
W-2	Water	Water Recycling	Yes	No
W-3	Water	Water System Energy Efficiency	No	No
W-4	Water	Reuse Urban Runoff	No	No
W-5	Water	Increase Renewable Energy Production	No	No
W-6	Water	Public Goods Charge (Water)	No	No
I-1	Industry	Energy Efficiency and Co-benefits Audits for Large Industrial Sources	No	No
I-2	Industry	Oil and Gas Extraction GHG Emission Reduction	No	No
I-3	Industry	GHG Leak Reduction from Oil and Gas Transmission	No	No
I-4	Industry	Refinery Flare Recovery Process Improvements	No	No



Table 5.4-11 (continued)
Recommended Actions for Climate Change Proposed Scoping Plan

ID #	Sector	Strategy Name	Applicable to Project?	Will Project Conflict With Implementation?
I-5	Industry	Removal of Methane Exemption from Existing Refinery Regulations	No	No
RW-1	Recycling and Waste Management	Landfill Methane Control (Discrete Early Action)	No	No
RW-2	Recycling and Waste Management	Additional Reductions in Landfill Methane – Capture Improvements	No	No
RW-3	Recycling and Waste Management	High Recycling/Zero Waste	Yes	No
F-1	Forestry	Sustainable Forest Target	No	No
H-1	High Global Warming Potential Gases	Motor Vehicle Air Conditioning Systems (Discrete Early Action)	No	No
H-2	High Global Warming Potential Gases	SF ₆ Limits in Non-Utility and Non-Semiconductor Applications (Discrete Early Action)	No	No
H-3	High Global Warming Potential Gases	Reduction in Perfluorocarbons in Semiconductor Manufacturing (Discrete Early Action)	No	No
H-4	High Global Warming Potential Gases	Limit High GWP Use in Consumer Products (Discrete Early Action, Adopted June 2008)	No	No
H-5	High Global Warming Potential Gases	High GWP Reductions from Mobile Sources	No	No
H-6	High Global Warming Potential Gases	High GWP Reductions from Stationary Sources	No	No
H-7	High Global Warming Potential Gases	Mitigation Fee on High GWP Gases	No	No
A-1	Agriculture	Methane Capture at Large Dairies	No	No

Source: California Air Resources Board, *Assembly Bill 32 Scoping Plan*, 2008.

Transportation

Action T-3 is based on the requirements of SB 375, which establishes mechanisms for the development of regional targets for reducing passenger vehicle GHG emissions. Through the SB 375 process, regions will work to integrate development patterns and the transportation network in a way that achieves the reduction of GHG emission while meeting housing needs and other regional planning objectives. SB 375 requires CARB to develop, in consultation with SCAG, passenger vehicle GHG emissions reduction targets for 2020 and 2035 by September 30, 2010. As the City of Los Alamitos is within the SCAG area, development associated with implementation of the proposed project would be consistent with Recommended Action T-3.

Action T-6 refers to the improvement of efficiency in goods movement activities. T-6 mainly addresses ports, but also includes a discussion on trucks and related facilities. The project site is located adjacent to an existing bus stop along Katella Avenue, which provides employees and visitors the opportunity to utilize alternative modes of transportation which reduces VMTs. Additionally, the project site is located within ¼-mile of bicycle routes and provides pedestrian connectivity to the surrounding circulation system. These features would ensure efficient movement



of goods and helps reduce vehicular trips associated with the proposed project. Therefore, the proposed project would be consistent with Recommended Action T-6.

Electricity and Natural Gas

Action E-1 aims to reduce electricity demand by increased efficiency of Utility Energy Programs and adoption of more stringent building and appliance standards. The proposed project would incorporate cool roofs and pavements, shade trees, and energy efficient heating and cooling systems, appliances and equipment, and control systems. As a result, it is anticipated that development associated with implementation of the proposed project would incorporate energy efficient features into future projects. Therefore, the proposed project would help implement and would not conflict with Recommended Action E-1.

Recommended Action CR-1 refers to energy efficiency. Key energy efficiency strategies would include codes and standards, existing buildings, improved utility programs, solar water heating, and combined heat and power, among others. As stated above, the *Draft Los Alamitos Medical Center Specific Plan* Design Guidelines require buildings to be oriented to take advantage of passive solar design. Also, the Design Guidelines specify the use of cool roofs and pavements, shade trees, and energy efficient heating and cooling systems, appliances and equipment, and control systems. Therefore, the proposed project would not obstruct implementation of Recommended Action CR-1.

Green Buildings

Recommended Action GB-1 expands the use of green building practices to reduce the carbon footprint of California's new and existing inventory of buildings. According to the *Draft Los Alamitos Medical Center Specific Plan*, sustainable materials and local resources would be used in the construction of buildings. The *Draft Los Alamitos Medical Center Specific Plan* also promotes the use of green roofing materials, although it is not required in new buildings. The *Draft Los Alamitos Medical Center Specific Plan* also encourages energy efficiency (i.e., cool roofs and pavements, shade trees, passive solar design, etc.) in buildings and requires the compliance with *Title 24* of the *California Administrative Code*. Therefore, the proposed project would not obstruct implementation of Recommended Action GB-1.

Water Use

Recommended Action W-1 pertains to implementation of water use efficiency measures. The *Draft Los Alamitos Medical Center Specific Plan* proposes to incorporate water-efficient buildings and landscapes into the project design. Project buildings would include water-efficient fixtures and appliances. The *Draft Los Alamitos Medical Center Specific Plan* incorporates requirements for drought tolerant and sustainable landscaping throughout the project site to reduce water consumption. On-site watering methods would be restricted and runoff would be controlled. Also, the proposed project would be required to comply with *Municipal Code* Chapter 13.04, Water Conservation, and Chapter 13.05, Water Efficient Landscaping. The proposed project is consistent with and would not obstruct Recommended Action W-1.



Action W-2 water recycling is part of the water use efficiency measures intended to reduce water usage and energy consumption. If available, the project would also incorporate the use of reclaimed water for irrigation. The proposed project would not obstruct Recommended Action W-2.

Recycling and Waste Management

Recommended Action RW-3 relates to high recycling/zero waste and would apply to the proposed project. The project proposes to reuse and recycle construction and demolition waste. Also, the proposed project would use sustainable materials and local resources in the construction of buildings. Additionally, the proposed project would provide interior and exterior storage areas for recyclables in public areas. Further, General Plan Policy 2-3.1 and Implementation Measure 2-3.3.1 encourage recycling and waste reduction in accordance with the Source Reduction and Recycling, Nondisposal Facility, and Household Hazardous Waste Elements of the adopted Integrated Waste Management Plan. The proposed project would also participate in City established waste diversion and recycling programs. The proposed project would comply with Recommended Action RW-3.

Consistency With Applicable GHG Plans Policies or Regulations

The City does not currently have an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. Therefore, the proposed project would not conflict with an adopted plan, policy, or regulation pertaining to GHGs. Also, with reductions identified above, the proposed project would result in 8,734 MTCO₂eq/year (after a 30 percent reduction) of GHG emissions, which exceeds the reduction goals of AB 32. Therefore, the proposed project would not hinder the State's GHG reduction goals established by AB 32. A less than significant impact would occur in this regard.

Conclusion

The proposed project would result in the construction of a new medical office building, two new hospital buildings, a central plant, and two new parking structures. As shown in [Table 5.4-9](#), the proposed project would result 12,477 MTCO₂eq/year of operational-related emissions without reductions from project design features, required by Mitigation Measure AQ-6. To quantify GHG emissions reductions resulting from project operations, CAPCOA has identified the percent reduction associated with such GHG mitigation measures (found in Appendix B of CAPCOA's *CEQA and Climate Change White Paper*). With implementation of Mitigation Measure AQ-6, the proposed project would be required to incorporate sustainable practices which include water, energy, solid waste, and transportation efficiency measures that are summarized in [Table 5.4-10](#). Based on the reduction measures in [Table 5.4-10](#), the proposed project would reduce its GHG emissions 30 percent below the "business as usual" scenario. Implementation of Mitigation Measure AQ-6 would reduce the project's operational GHG emissions to 8,734 MTCO₂eq/year. AB 32 requires the reduction of GHG emissions to 1990 levels, which would require a minimum 28.5 percent reduction in "business as usual" GHG emissions for the entire State. Therefore, the proposed project would be considered to be consistent with the reduction goals of AB 32.

In general, with implementation of project design reduction features within Mitigation Measure AQ-6, implementation of the proposed project would have a less than significant impact with regards to GHG emissions. The measures may be updated, expanded, and refined when applied to future



buildings based on project specific design and changes in existing conditions, and local, State, and Federal laws. The proposed project would result in a 30 percent GHG emissions with implementation of Mitigation Measure AQ-6. The CARB Scoping Plan analysis above demonstrates “that projected emissions will be equal to or less than 1990 emissions.”²⁸ As stated above, reducing GHG emissions to 1990 levels would require a 28.5 percent reduction in “business as usual” GHG emissions for the entire State. As the proposed project would reduce its GHG emissions by 30 percent with implementation of Mitigation Measure AQ-6, it would be consistent with the goals established in AB 32. Therefore, a less than significant impact would occur.

Mitigation Measures:

AQ-6 The Specific Plan shall include, but not be limited to, the following list of potential design features, as determined feasible by the project applicant in consultation with the Community Development Director. These features shall be incorporated into the Specific Plan and future buildings to ensure consistency with adopted statewide plans and programs. The project applicant shall demonstrate the incorporation of project design features prior to the issuance of building permits.

Energy Efficiency

- Design buildings to be energy efficient, above Title 24 requirements.
- Install light colored “cool” roofs and cool pavements, and strategically placed shade trees.
- Provide information on energy management services for large energy users.
- Install energy efficient heating and cooling systems, appliances and equipment, and control systems.
- Provide education on energy efficiency.

Water Conservation and Efficiency

- Create water-efficient landscapes.
- Use reclaimed water for landscape irrigation in new developments if available. Install the infrastructure to deliver and use reclaimed water.
- Restrict watering methods (e.g., prohibit systems that apply water to nonvegetated surfaces) and control runoff.
- Restrict the use of water for cleaning outdoor surfaces and vehicles.
- Implement low-impact development practices that maintain the existing hydrologic character of the site to manage storm water and protect the environment. (Retaining storm water runoff on-site can drastically reduce the need for energy-intensive imported water at the site).

²⁸ California Air Pollution Control Officers Association, *CEQA and Climate Change*, January 2008.



Solid Waste Measures

- Reuse and recycle construction and demolition waste (including, but not limited to, soil, vegetation, concrete, lumber, metal, and cardboard).
- Provide interior and exterior storage areas for recyclables and green waste and adequate recycling containers located in public areas.

Transportation and Motor Vehicles

- Limit idling time for commercial vehicles, including delivery and construction vehicles.
- Promote ride sharing programs (e.g., by designating a certain percentage of parking spaces for ride sharing vehicles, designating adequate passenger loading and unloading and waiting areas for ride sharing vehicles, and providing a web site or message board for coordinating rides).
- Increase the cost of driving and parking private vehicles (e.g., imposing parking fees).
- Provide adequate bicycle parking near building entrances to promote cyclist safety, security, and convenience. Provide facilities that encourage bicycle commuting (e.g., locked bicycle storage or covered or indoor bicycle parking).
- Create bicycle lanes and walking paths directed to the location of schools, parks and other destination points.
- Provide information on all options for individuals and businesses to reduce transportation-related emissions. Provide education and information about public transportation.

Level of Significance After Mitigation: Less Than Significant Impact.

5.4.5 CUMULATIVE IMPACTS AND MITIGATION MEASURES

- ◆ **AIR QUALITY EMISSIONS RESULTING FROM IMPLEMENTATION OF THE PROPOSED PROJECT AND OTHER RELATED CUMULATIVE PROJECTS COULD IMPACT REGIONAL AIR QUALITY LEVELS ON A CUMULATIVELY CONSIDERABLE BASIS.**

Level of Significance Before Mitigation: Potentially Significant Impact.

Impact Analysis: The SCAQMD neither recommends quantified analyses of cumulative construction or operational emissions, nor does it provide separate methodologies or thresholds of significance to be used to assess cumulative construction impacts. Instead, the SCAQMD recommends that a project's potential contribution to cumulative impacts should be assessed using the same significance criteria as those for project-specific impacts. Therefore, individual development projects that



generate construction-related or operational emissions that exceed the SCAQMD recommended daily thresholds for project-specific impacts would also cause a cumulatively considerable increase in emissions for those pollutants for which the Basin is nonattainment.

Short-Term Construction Emissions

Based on the construction emissions analysis above, construction-related emissions associated with the proposed project would be less than significant with implementation of the recommended mitigation measures. Construction of future buildings and infrastructure would be required to comply with the applicable SCAQMD rules and regulations. These measures call for the maintenance of construction equipment, the use of non-polluting and non-toxic building equipment, and minimizing fugitive dust. Therefore, construction impacts would not be considered “cumulatively considerable.”

Long-Term Operational Emissions

New development under the proposed project, combined with other anticipated cumulative development in the region would contribute to a cumulative annual increase in regional air pollutant emissions. *Table 5.4-6* depicts the estimated mobile and stationary source emissions associated with the potential development in the project area. As shown in *Table 5.4-6*, the emissions from development of the project area would not exceed the SCAQMD thresholds for criteria pollutants. In accordance with SCAQMD methodology, any project that cannot be mitigated to a level of less than significant is also significant on a cumulative basis. Therefore, the cumulative operational emissions associated with the proposed project are less than significant.

Greenhouse Gas Emissions

As previously stated, the proposed project would result in a less than significant impact regarding GHG emissions, and would result in a 30 percent reduction in GHGs with implementation of Mitigation Measure AQ-6. However, the project-generated GHGs in combination with GHG emissions from other known and reasonably foreseeable projects would result in a much greater amount of GHG emissions. Although implementation of Mitigation Measure AQ-6 would reduce the proposed project’s GHG emissions to a level that is consistent with AB 32, such project-specific mitigation cannot be imposed upon cumulative projects. The amount of cumulative GHG emissions would be cumulatively considerable, and would potentially hinder the intent and statewide reduction goals of AB 32. Impacts in this regard would be significant and unavoidable.

Mitigation Measures: Refer to Mitigation Measures AQ-1 through AQ-6. No additional mitigation measures are required.

Level of Significance After Mitigation: Significant Unavoidable Impact.



5.4.6 SIGNIFICANT UNAVOIDABLE IMPACTS

Implementation of the proposed project would result in a significant and unavoidable impact for the following areas:

- Cumulative Greenhouse Gas Emissions Impacts – Although the project-related GHG emissions would be consistent with the goals of AB 32 with implementation of Mitigation Measure AQ-6, cumulative GHG impacts would be significant and unavoidable, as cumulative GHG emissions could hinder the statewide GHG reduction goals of AB 32. Refer to analysis in Section 5.4.5 above.

All other project and cumulative impacts for short-term construction and long-term operational (mobile and stationary source) impacts are either at less than significant levels or can be mitigated to less than significant levels. Refer to Section 5.4.4 above.

If the City of Los Alamitos approves the proposed Los Alamitos Medical Center Specific Plan, the City shall be required to cite their findings in accordance with *CEQA Guidelines* Section 15091 and prepare a Statement of Overriding Considerations in accordance with *CEQA Guidelines* Section 15093.

5.4.7 SOURCES CITED

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Los Alamitos Medical Center Specific Plan Program Environmental Impact Report

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Los Alamitos Medical Center Specific Plan Program Environmental Impact Report

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5.5 Noise



5.5 NOISE

The analysis presented in this section addresses construction and operational noise impacts related to the proposed *Los Alamitos Medical Center Specific Plan*. Information in this section was obtained from the *City of Los Alamitos 2010 General Plan (General Plan)*; *City of Los Alamitos 2010 General Plan Background Technical Reports (GP BTR)*; *City of Los Alamitos 2010 General Plan Initial Study/Negative Declaration (IS/ND)*; *Los Alamitos Municipal Code (LAMC)*; *Los Alamitos Zoning Code (LAZC)*; and the *Draft Los Alamitos Medical Center Specific Plan (Specific Plan or proposed project)*.

5.5.1 REGULATORY SETTING

Sound is described in terms of the loudness (amplitude) of the sound and frequency (pitch) of the sound. The standard unit of measurement of the loudness of sound is the decibel (dB). Since the human ear is not equally sensitive to sound at all frequencies, a special frequency-dependent rating scale has been devised to relate noise to human sensitivity. The A-weighted decibel scale (dBA) performs this compensation by discriminating against frequencies in a manner approximating the sensitivity of the human ear.

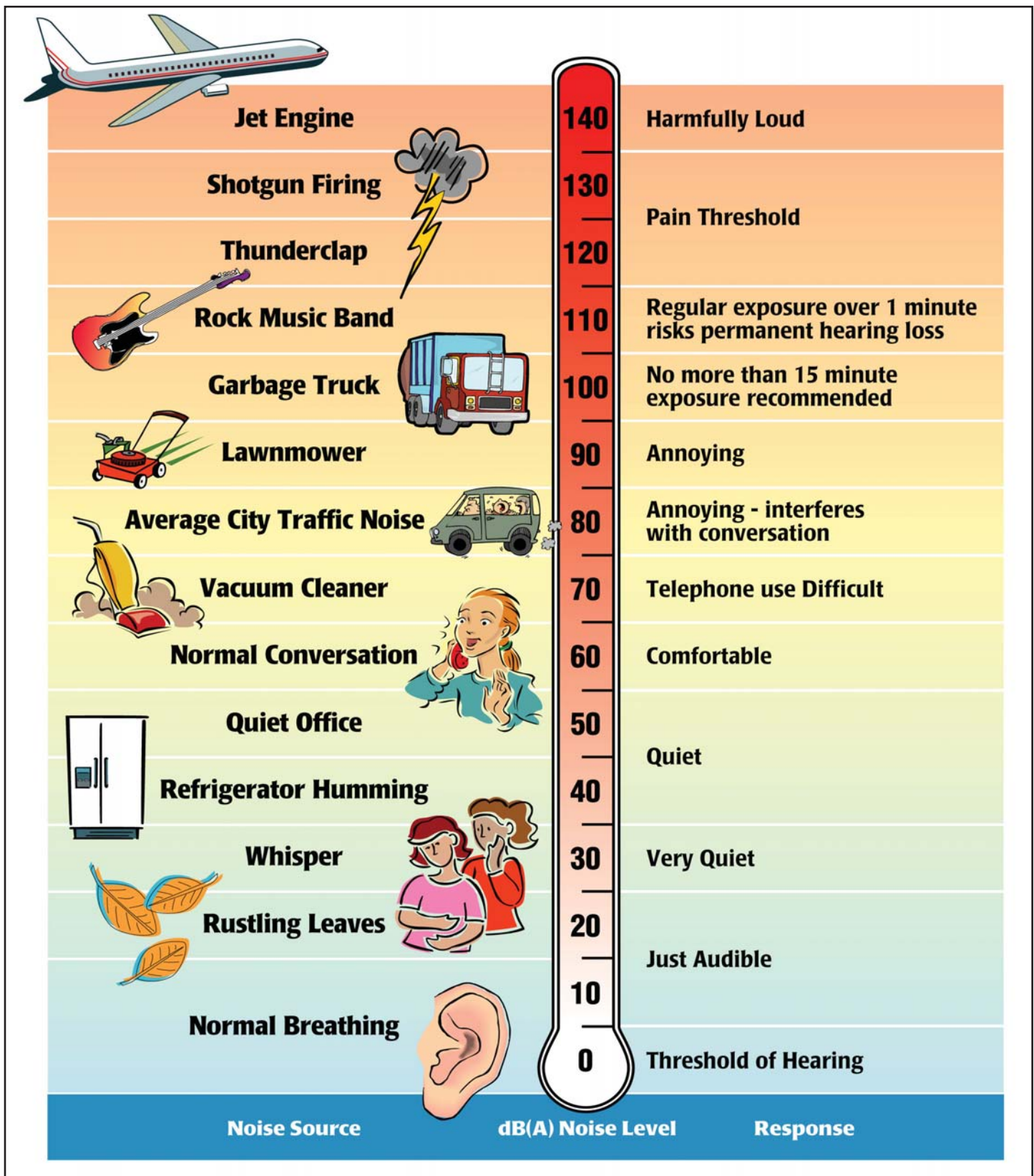
The perceived loudness of sound is dependent upon many factors, including sound pressure level and frequency content. However, within the usual range of environmental noise levels, perception of loudness is relatively predictable, and should be approximated by the A-weighted sound levels (expressed as dBA) and the way the human ear perceives noise. For this reason, the A-weighted sound level has become the standard tool of environmental noise assessment.

Community noise is commonly described in terms of the “ambient” noise level, which is defined as the all-encompassing noise level associated with a given noise environment. A common statistical tool to measure the ambient noise level is the average, or equivalent, sound level (Leq), which corresponds to a steady-state A-weighted sound level containing the same total energy as a time-varying signal over a given time period (usually one hour). The Leq is the foundation of the composite noise descriptor, Ldn, and shows very good correlation with community response to noise.

Decibels are based on the logarithmic scale. The logarithmic scale compresses the wide range in sound pressure levels to a more usable range of numbers in a manner similar to the Richter scale used to measure earthquakes. In terms of human response to noise, a sound 10 dBA higher than another is judged to be twice as loud and 20 dBA higher four times as loud, and so forth. Everyday sounds normally range from 30 dBA (very quiet) to 100 dBA (very loud). Examples of various sound levels in different environments are illustrated on Exhibit 5.5-1, Sound Levels and Human Response.

Many methods have been developed for evaluating community noise to account for, among other things:

- The variation of noise levels over time;
- The influence of periodic individual loud events; and
- The community response to changes in the community noise environment.



Source: Melville C. Branch and R. Dale Beland, *Outdoor Noise in the Metropolitan Environment*, 1970.
 Environmental Protection Agency, *Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety* (EPA/ONAC 550/9-74-004), March 1974.



Numerous methods have been developed to measure sound over a period of time; refer to *Table 5.5-1, Noise Descriptors*.

**Table 5.5-1
Noise Descriptors**

Term	Definition
Decibel (dB)	The unit for measuring the volume of sound equal to 10 times the logarithm (base 10) of the ratio of the pressure of a measured sound to a reference pressure (20 micropascals).
A-Weighted Decibel (dBA)	A sound measurement scale that adjusts the pressure of individual frequencies according to human sensitivities. The scale accounts for the fact that the region of highest sensitivity for the human ear is between 2,000 and 4,000 cycles per second (hertz).
Equivalent Sound Level (L_{eq})	The sound level containing the same total energy as a time varying signal over a given time period. The L_{eq} is the value that expresses the time averaged total energy of a fluctuating sound level.
Maximum Sound Level (L_{max})	The highest individual sound level (dBA) occurring over a given time period.
Minimum Sound Level (L_{min})	The lowest individual sound level (dBA) occurring over a given time period.
Community Noise Equivalent Level (CNEL)	A rating of community noise exposure to all sources of sound that differentiates between daytime, evening, and nighttime noise exposure. These adjustments are +5 dBA for the evening, 7:00 PM to 10:00 PM, and +10 dBA for the night, 10:00 PM to 7:00 AM.
Day/Night Average (L_{dn})	The L_{dn} is a measure of the 24-hour average noise level at a given location. It was adopted by the U.S. Environmental Protection Agency (EPA) for developing criteria for the evaluation of community noise exposure. It is based on a measure of the average noise level over a given time period called the L_{eq} . The L_{dn} is calculated by averaging the L_{eq} 's for each hour of the day at a given location after penalizing the "sleeping hours" (defined as 10:00 PM to 7:00 AM), by 10 dBA to account for the increased sensitivity of people to noises that occur at night.
Exceedance Level (L_n)	The A-weighted noise levels that are exceeded 1%, 10%, 50%, and 90% (L_{01} , L_{10} , L_{50} , L_{90} , respectively) of the time during the measurement period.
Source: Cyril M. Harris, <i>Handbook of Noise Control</i> , dated 1979.	

It is difficult to specify noise levels that are generally acceptable to everyone; what is annoying to one person may be unnoticed by another. Standards may be based on documented complaints in response to documented noise levels, or based on studies of the ability of people to sleep, talk, or work under various noise conditions. Standards usually address the needs of most of the general population. This section summarizes the laws, ordinances, regulations, and standards that are applicable to the proposed project. Regulatory requirements related to environmental noise are typically promulgated at the local level. However, Federal and State agencies provide standards and guidelines to the local jurisdictions.



STATE OF CALIFORNIA GUIDELINES

The State of California Office of Planning and Research (OPR) *Noise Element Guidelines* include recommended interior and exterior standards for local jurisdictions to identify and prevent the creation of incompatible land uses due to noise. The *OPR Guidelines* describe the compatibility of various land uses with a range of environmental noise levels in terms of dBA CNEL.

A noise environment of 50 dBA CNEL to 60 dBA CNEL is considered to be “normally acceptable” for residential uses. The State indicates that locating residential units, parks, and institutions (i.e., churches, schools, libraries, and hospitals) in areas where exterior ambient noise levels exceed 65 dBA CNEL is undesirable. The OPR recommendations also note that, under certain conditions, more restrictive standards than the maximum levels cited may be appropriate. As an example, the standards for quiet suburban and rural communities may be reduced by 5 to 10 dB to reflect their lower existing outdoor noise levels in comparison with urban environments.

In addition, *Title 25, Section 1092* of the *California Code of Regulations*, sets forth requirements for the insulation of multiple-family residential dwelling units from excessive and potentially harmful noise. Whenever multiple-family residential dwelling units are proposed in areas with excessive noise exposure, the developer must incorporate features into the building’s design that reduce interior noise levels to 45 dBA CNEL.

Table 5.5-2, Noise and Land Use Compatibility Matrix, illustrates the State guidelines established by the State Department of Health Services for acceptable noise levels for each county and city. These standards and criteria are incorporated into the land use planning process to reduce future noise and land use incompatibilities. This table is the primary tool that allows the City to ensure integrated planning for compatibility between land uses and outdoor noise.

Table 5.5-2
Noise and Land Use Compatibility Matrix

Land Use Category	Community Noise Exposure (L_{dn} or CNEL, dBA)			
	Normally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable
Residential - Low Density, Single-Family, Duplex, Mobile Homes	50 - 60	55 - 70	70-75	75-85
Residential - Multiple Family	50 - 65	60 - 70	70 - 75	70 – 85
Transient Lodging - Motel, Hotels	50 - 65	60 - 70	70 - 80	80 – 85
Schools, Libraries, Churches, Hospitals, Nursing Homes	50 - 70	60 - 70	70 - 80	80 – 85
Auditoriums, Concert Halls, Amphitheaters	NA	50 - 70	NA	65 – 85
Sports Arenas, Outdoor Spectator Sports	NA	50 - 75	NA	70 – 85
Playgrounds, Neighborhood Parks	50 - 70	NA	67.5 - 75	72.5 – 85
Golf Courses, Riding Stables, Water Recreation, Cemeteries	50 - 70	NA	70 - 80	80 – 85



Table 5.5-2 (continued)
Noise and Land Use Compatibility Matrix

Land Use Category	Community Noise Exposure (L_{dn} or CNEL, dBA)			
	Normally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable
Office Buildings, Business Commercial and Professional	50 - 70	67.5 - 77.5	75 - 85	NA
Industrial, Manufacturing, Utilities, Agriculture	50 - 75	70 - 80	75 - 85	NA
NA: Not Applicable				
Source: Office of Planning and Research, California, <i>General Plan Guidelines</i> , October 2003.				
Normally Acceptable – Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.				
Conditionally Acceptable – New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning, will normally suffice.				
Normally Unacceptable – New construction or development should be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.				
Clearly Unacceptable – New construction or development should generally not be undertaken.				

CALIFORNIA GOVERNMENT CODE

California Government Code Section 65302(f) mandates that the legislative body of each county and city adopt a noise element as part of their comprehensive general plan. The local noise element must recognize the land use compatibility guidelines established by the State Department of Health Services.

The guidelines rank noise land use compatibility in terms of “normally acceptable,” “conditionally acceptable,” “normally unacceptable,” and “clearly unacceptable” noise levels for various land use types. Single-family homes are “normally acceptable” in exterior noise environments up to 60 CNEL and “conditionally acceptable” up to 70 CNEL. Multiple-family residential uses are “normally acceptable” up to 65 CNEL and “conditionally acceptable” up to 70 CNEL. Schools, libraries, and churches are “normally acceptable” up to 70 CNEL, as are office buildings and business, commercial, and professional uses.

LOCAL GUIDELINES

City of Los Alamitos General Plan

Chapter 6, Noise Element, of the *General Plan* includes the following goals, issues, and policies:

- Goal One: Protect noise sensitive land uses, including residences, schools, hospitals, libraries, churches, and convalescent homes from high noise levels from both existing and future noise sources.
 - Issue One: The City of Los Alamitos will experience additional transportation-related noise impacts as new development occurs throughout the City and in the surrounding region.



Los Alamitos Medical Center Specific Plan Program Environmental Impact Report

- Policy 6-1.1: Noise mitigation measures for future development should comply with the standards included in the City of Los Alamitos Noise Element.
- Issue Two: In an urban setting, stationary source noise impacts such as air compressors, generators and outdoor loudspeakers may impact noise sensitive areas.
 - Policy 6-2.1: Potential noise impacts due to stationary sources should be mitigated in the planning stage.

The *Noise Element* includes a Background Technical Report (BTR) which presents the technical analysis of the noise environment for the City of Los Alamitos General Plan program. The purpose of the BTR noise assessment is to: (1) review the existing noise documents and analysis procedures; (2) identify potential noise source; (3) model existing noise impacts; (4) model future noise impacts based on the general plan daily traffic volumes contained in the Circulation Element Traffic Study; (5) provide additional discussion of noise standards, traffic noise and other impacts; and (6) produce the City of Los Alamitos noise contour maps for both the existing and future noise environments.

City of Los Alamitos Municipal Code

The City of Los Alamitos has a noise ordinance that provides noise guidelines and standards for significant noise generators. Noise standards from the City's *Municipal Code, Title 17 (Zoning)*, Chapter 17.24 (*Noise*) are presented in *Table 5.5-3, City of Los Alamitos Noise Exterior Standards* and *Table 5.5-4, City of Los Alamitos Interior Noise Standards*.

Table 5.5-3
City of Los Alamitos Exterior Noise Standards

Noise Zone	Noise Level	Time Period
1 (day)	55 dBA	7:00 AM – 10:00 PM
1 (night)	50 dBA	10:00 PM – 7:00 AM
2	55 dBA	Anytime
3	60 dBA	Anytime
4	70 dBA	Anytime
Notes: Noise Zone 1: All residential properties; Noise Zone 2: All professional office and public institutional properties; Noise Zone 3: All commercial properties with the exception of professional office properties; and Noise Zone 4: All industrial properties. Source: Title 17 (<i>Zoning</i>), Chapter 17.24 (<i>Noise</i>), Section 17.24.050 (<i>Exterior Noise Standards</i>) of the <i>Municipal Code</i> .		



Table 5.5-4
City of Los Alamitos Interior Noise Standards

Noise Zone	Noise Level	Time Period
1	55 dBA	7:00 AM – 10:00 PM
	45 dBA	10:00 PM – 7:00 AM
2, 3, 4	55 dBA	Anytime
Notes: Noise Zone 1: All residential properties; Noise Zone 2: All professional office and public institutional properties; Noise Zone 3: All commercial properties with the exception of professional office properties; and Noise Zone 4: All industrial properties. Source: Title 17 (Zoning), Chapter 17.24 (Noise), Section 17.24.070 (Interior Noise Standards) of the Municipal Code.		

Section 17.24.090 (Special provisions – Schools, hospitals, and religious institutions) addresses the following special provisions:

It is unlawful for a person to create noise that causes the noise level at a school, hospital, or religious institution while the facility is in use, to exceed the noise limits specified for exterior noise in this chapter, or which noise level unreasonably interferes with the use of the facility or which unreasonably disturbs or annoys patients in a hospital, provided conspicuous signs are displayed in three separate locations within one-tenth of a mile of the institution indicating the presence of a school, hospital, or religious institution.

Section 17.24.020 (Exemptions) addresses the following construction exemptions:

D. Noise sources associated with construction, repair, remodeling or grading of any real property, provided a permit has been obtained from the city; and provided the activities do not take place between the hours of eight p.m. and seven a.m. on weekdays, including Saturday, or at any time on Sunday or federal holiday.

5.5.2 ENVIRONMENTAL SETTING

HEALTH EFFECTS OF NOISE

Human response to sound is highly individualized. Annoyance is the most common issue regarding community noise. The percentage of people claiming to be annoyed by noise generally increases with the environmental sound level. However, many factors also influence people's response to noise. The factors can include the character of the noise, the variability of the sound level, the presence of tones or impulses, and the time of day of the occurrence. Additionally, non-acoustical factors, such as the person's opinion of the noise source, the ability to adapt to the noise, the attitude towards the source and those associated with it, and the predictability of the noise, all influence people's response. As such, response to noise varies widely from one person to another and with any particular noise, individual responses will range from "not annoyed" to "highly annoyed."



When the noise level of an activity rises above 70 dBA, the chance of receiving a complaint is possible, and as the noise level rises, dissatisfaction among the public steadily increases. However, an individual's reaction to a particular noise depends on many factors, such as the source of the sound, its loudness relative to the background noise, and the time of day. The reaction to noise can also be highly subjective; the perceived effect of a particular noise can vary widely among individuals in a community.

The effects of noise are often only transitory, but adverse effects can be cumulative with prolonged or repeated exposure. The effects of noise on the community can be organized into six broad categories:

- Noise-Induced Hearing Loss
- Interference with Communication
- Effects of Noise on Sleep
- Effects on Performance and Behavior
- Extra-Auditory Health Effects
- Annoyance

Although it often causes discomfort and sometimes pain, noise-induced hearing loss usually takes years to develop. Noise-induced hearing loss can impair the quality of life through a reduction in the ability to hear important sounds and to communicate with family and friends. Hearing loss is one of the most obvious and easily quantified effects of excessive exposure to noise. While the loss may be temporary at first, it could become permanent after continued exposure. When combined with hearing loss associated with aging, the amount of hearing loss directly caused by the environment is difficult to quantify. Although the major cause of noise-induced hearing loss is occupational, substantial damage can be caused by non-occupational sources.

According to the United States Public Health Service, nearly ten million of the estimated 21 million Americans with hearing impairments owe their losses to noise exposure. Noise can mask important sounds and disrupt communication between individuals in a variety of settings. This process can cause anything from a slight irritation to a serious safety hazard, depending on the circumstance. Noise can disrupt face-to-face communication and telephone communication, and the enjoyment of music and television in the home. It can also disrupt effective communication between teachers and pupils in schools, and can cause fatigue and vocal strain in those who need to communicate in spite of the noise.

Interference with communication has proved to be one of the most important components of noise-related annoyance. Noise-induced sleep interference is one of the critical components of community annoyance. Sound level, frequency distribution, duration, repetition, and variability can make it difficult to fall asleep and may cause momentary shifts in the natural sleep pattern, or level of sleep. It can produce short-term adverse effects on mood changes and job performance, with the possibility of more serious effects on health if it continues over long periods. Noise can cause adverse effects on task performance and behavior at work, and non-occupational and social settings. These effects are the subject of some controversy, since the presence and degree of effects depends on a variety of intervening variables. Most research in this area has focused mainly on occupational



settings, where noise levels must be sufficiently high and the task sufficiently complex for effects on performance to occur.

Recent research indicates that more moderate noise levels can produce disruptive after-effects, commonly manifested as a reduced tolerance for frustration, increased anxiety, decreased incidence of “helping” behavior, and increased incidence of “hostile” behavior. Noise has been implicated in the development or exacerbation of a variety of health problems, ranging from hypertension to psychosis. As with other categories, quantifying these effects is difficult due to the amount of variables that need to be considered in each situation. As a biological stressor, noise can influence the entire physiological system. Most effects seem to be transitory, but with continued exposure some effects have been shown to be chronic in laboratory animals.

Annoyance can be viewed as the expression of negative feelings resulting from interference with activities, as well as the disruption of one’s peace of mind and the enjoyment of one’s environment. Field evaluations of community annoyance are useful for predicting the consequences of planned actions involving highways, airports, road traffic, railroads, or other noise sources. The consequences of noise-induced annoyance are privately held dissatisfaction, publicly expressed complaints to authorities, and potential adverse health effects, as discussed above. In a study conducted by the United States Department of Transportation, the effects of annoyance to the community were quantified. In areas where noise levels were consistently above 60 dBA CNEL, approximately nine percent of the community is highly annoyed. When levels exceed 65 dBA CNEL, that percentage rises to 15 percent. Although evidence for the various effects of noise have differing levels of certainty, it is clear that noise can affect human health. Most of the effects are, to a varying degree, stress related.

SENSITIVE RECEPTORS

Human response to noise varies widely depending on the type of noise, time of day, and sensitivity of the receptor. The effects of noise on humans can range from temporary or permanent hearing loss to mild stress and annoyance due to such things as speech interference and sleep deprivation. Prolonged stress, regardless of the cause, is known to contribute to a variety of health disorders. Noise, or the lack thereof, is a factor in the aesthetic perception of some settings, particularly those with religious or cultural significance. Certain land uses are particularly sensitive to noise including schools, hospitals, rest homes, long-term medical and mental care facilities, and parks and recreation areas. Residential areas are also considered noise sensitive, especially during the nighttime hours.

Existing sensitive receptors located in the vicinity of the project site include single- and multi-family residential homes, schools, parks, and the on-site existing Los Alamitos Medical Center Campus. Sensitive receptors can be seen below in Table 5.5-5, Sensitive Receptors. The distances are measured from the exterior project boundary only and not from individual construction projects/areas within the interior of the project site. In several instances, the sensitive receptors located in the project vicinity are shielded from the construction areas by existing on-and off-site buildings.



**Table 5.5-5
Sensitive Receptors**

Type	Name	Distance from Project Site (feet) ¹	Direction from Project Site
Residential	Residential Uses	1,788	North
		132	Northwest
		140	South
Schools	Los Alamitos High School	2,070	Northwest
	McAuliffe Middle School	1,464	East
	Los Alamitos Elementary School	314	East
Parks	Laurel Park	78	East
	Little Cottonwood Park	1,412	South
	Rossmoor Park	2,525	Southwest
	Oak Academy Park	3,088	East
Hospitals	Los Alamitos Medical Center	On-site	On-site
Note: 1 – Distances are measured from the exterior project boundary only and not from individual construction projects/areas within the interior of the project site. Source: RBF Consulting field reconnaissance, June 2010, and Google Earth 2010.			

AMBIENT NOISE MEASUREMENTS

In order to quantify existing ambient noise levels in the project area, RBF Consulting conducted noise measurements on June 9, 2010; refer to *Table 5.5-6, Noise Measurements*. The noise measurement sites were representative of typical existing noise exposure within and immediately adjacent to the project site; refer to *Exhibit 5.5-2, Noise Measurement Locations*.

Ten-minute measurements were taken at each site, between 10:00 AM and 12:00 PM. Meteorological conditions were clear skies, warm, with light wind speeds (0 to 5 miles per hour), and low humidity.

**Table 5.5-6
Noise Measurements**

Site No.	Location	Leq (dBA)	Time
1	Kaylor Street between the Administration/Warehouse Building and surface parking lot.	64.7	10:18 AM
2	Doctors' surface parking lot in the center of the project site adjacent to Main Hospital Building.	60.7	10:32 AM
3	Hospital surface parking lot in the center of the project site north of MOB 2.	59.6	10:47 AM
4	Hospital courtyard between the Main Hospital Building and MOB 3.	60.3	11:05 AM
5	Off-site; along Cherry Street and north of Florista Street, in front of residential uses located northwest of project site.	59.6	11:17 AM
Notes: RBF Consulting site visit, June 9, 2010.			



● - Noise Monitoring Location

NOT TO SCALE

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ENVIRONMENTAL IMPACT REPORT
LOS ALAMITOS MEDICAL CENTER SPECIFIC PLAN

Noise Measurement Locations

Exhibit 5.5-2



Noise monitoring equipment used for the ambient noise survey consisted of a Brüel & Kjær Hand-held Analyzer Type 2250 equipped with a 4189 pre-polarized microphone. The monitoring equipment complies with applicable requirements of the American National Standards Institute for Type I (precision) sound level meters. The results of the field measurements are indicated in Appendix F, Noise Data.

MOBILE SOURCES

In order to assess the potential for mobile source noise impacts, it is necessary to determine the noise currently generated by vehicles traveling through the project area. The existing roadway noise levels in the vicinity of the project site were projected. Noise models were run using the Federal Highway Administration's Highway Noise Prediction Model (FHWA RD-77-108) together with several roadway and site parameters. These parameters determine the projected impact of vehicular traffic noise and include the roadway cross-section (such as the number of lanes), roadway width, average daily traffic (ADT), vehicle travel speed, percentages of auto and truck traffic, roadway grade, angle-of-view, and site conditions ("hard" or "soft"). The model does not account for ambient noise levels (i.e., noise from adjacent land uses) or topographical differences between the roadway and adjacent land uses. Noise projections are based on modeled vehicular traffic as derived from traffic information dated June 2010, prepared by RBF Consulting.

A 25- to 45-mile per hour (mph) average vehicle speed was assumed for existing conditions based on empirical observations and posted maximum speeds along the adjacent roadways. The Average Daily Traffic (ADT) estimates were obtained from data included in the *Los Alamitos Medical Center Specific Plan Traffic Impact Analysis*, prepared by RBF Consulting on June 18, 2010 (refer to Appendix D, Traffic Impact Analysis). Existing modeled traffic noise levels are depicted in *Table 5.5-7, Existing Traffic Noise Levels*. As shown in *Table 5.5-7*, noise within the project area due to traffic noise ranges from 52.4 dBA to 68.9 dBA, with the highest levels occurring on Katella Avenue and Los Alamitos Boulevard.

**Table 5.5-7
Existing Traffic Noise Levels**

Roadway Segment	Existing Conditions				
	ADT	dBA @ 100 Feet from Roadway Centerline	Distance from Roadway Centerline to: (Feet)		
			60 CNEL Noise Contour	65 CNEL Noise Contour	70 CNEL Noise Contour
Los Alamitos Boulevard					
Between Wardlow Road and Cerritos Avenue	19,020	64.4	328	104	33
Between Cerritos Avenue and Sausalitos Street	27,050	65.9	466	147	47
Between Sausalitos Street and Catalina Street	25,310	65.6	436	138	44
Between Catalina Street and Florista Street	24,290	65.4	419	132	42
Between Florista Street and Katella Avenue	23,770	65.3	410	130	41
Between Katella Avenue and Farquhar Avenue	29,900	67.7	701	222	70
Between Farquhar Avenue and Orangewood Avenue	31,270	67.8	732	232	73
Between Orangewood Avenue and Rossmoor Center Drive	31,450	67.9	737	233	74



Table 5.5-7 (continued)
Existing Traffic Noise Levels

Roadway Segment	Existing Conditions				
	ADT	dBA @ 100 Feet from Roadway Centerline	Distance from Roadway Centerline to: (Feet)		
			60 CNEL Noise Contour	65 CNEL Noise Contour	70 CNEL Noise Contour
Reagan Street					
Between Sausalito Street and Catalina Street	3,740	56.3	46	15	5
Between Catalina Street and Florista Street	2,400	54.2	30	9	3
Between Florista Street and Katella Avenue	1,580	52.4	19	6	2
Cherry Street					
Between Catalina Street and Florista Street	2,670	54.6	33	10	3
Between Florista Street and Katella Avenue	2,780	54.8	34	11	3
Cerritos Avenue					
Between Interstate 605 and Los Alamitos Boulevard	25,750	65.7	444	140	44
Between Los Alamitos Boulevard and Bloomfield Street	28,190	66.1	487	154	49
Between Bloomfield Street and Lexington Drive	25,080	67.0	588	186	59
Catalina Street					
Between Los Alamitos Boulevard and Reagan Street	1,750	53.0	22	7	2
Between Reagan Street and Cherry Street	3,700	56.3	46	14	5
Between Cherry Street and Kaylor Street	2,480	54.5	31	10	3
Between Kaylor Street and Bloomfield Street	2,260	52.5	19	6	2
Florista Street					
Between Los Alamitos Boulevard and Reagan Street	3,500	55.9	43	14	4
Between Reagan Street and Cherry Street	2,500	54.5	31	10	3
Katella Avenue					
Between Interstate 605 and Los Alamitos Boulevard	40,370	68.9	946	299	95
Between Los Alamitos Boulevard and Reagan Street	33,990	68.2	797	252	80
Between Reagan Street and Cherry Street	32,570	68.0	763	241	76
Between Cherry Street and Kaylor Street	32,800	68.0	769	243	77
Between Kaylor Street and Bloomfield Street	31,730	67.9	744	235	74
Between Bloomfield Street and Lexington Drive	29,580	67.5	694	219	69
Bloomfield Street					
Between Ball Road and Cerritos Avenue	12,650	64.1	296	94	30
Between Cerritos Avenue and Catalina Street	13,480	63.1	232	73	23
Between Catalina Street and Katella Avenue	14,120	63.3	243	77	24
Notes: ADT = average daily trips; dBA = A-weighted decibels; CNEL = community noise equivalent level.					
Source: RBF Consulting, Los Alamitos Medical Center Specific Plan Traffic Impact Analysis, June 18, 2010.					

Aircraft Noise

The Los Alamitos Army Airfield (LAAAF) is an instrumented, military airfield (KSLI) operated by the California Army National Guard (CA-ARNG) on the 1400 acre Joint Forces Training Base (JFTB) located approximately 0.5 miles southeast of the project site. Approximately 30 helicopters of the 40th Aviation Brigade are assigned to the Los Alamitos Army Aviation Support Facility. Several United States Army Reserve C-12 airplanes are also assigned, and the United States



Department of Agriculture (USDA)/California Department of Food and Agriculture (CDFA) as well. The airfield includes a fully staffed Army Air Traffic Control Tower, crash rescue/fire department, 200,000 gallon aviation refueling system, and a Weather Office. Over 700 military, civilian and contract personnel are assigned at Los Alamitos on a full time basis to support training, services, and operations. Approximately 3,000 traditional guardsmen and reservists conduct training at the Air Force Reserve Command (AFRC) as well.¹

The project site is located within the Federal Aviation Regulation (FAR) Part 77 Notification Area for the JFTB. The project site is located outside of the 60 dBA and 65 dBA CNEL noise contours for the JFTB and would not be subject to any special noise reduction requirements.² Furthermore, according to *General Plan* Exhibit E, Existing Noise Contour Map, the proposed project is located outside of the JFTB impact zones.

Helicopter Noise

There is no existing heliport located on the Los Alamitos Medical Center Campus. Furthermore, the proposed Specific Plan does not propose a heliport.

STATIONARY NOISE SOURCES

The project site and surrounding area consists of a mix of residential, commercial/retail, office, industrial, hospital and parking uses served by a grid system of arterial and collector streets. The primary sources of stationary noise in the project vicinity are urban-related activities (e.g., mechanical equipment, parking lot activities, conversations, and recreational areas) and noises associated with delivery truck loading/unloading and truck movements on driveways. The noise associated with these sources may represent a single-event or a continuous occurrence.

5.5.3 SIGNIFICANCE THRESHOLD CRITERIA

The environmental analysis in this section is patterned after the Initial Study Checklist recommended by the *CEQA Guidelines*, as amended, and used by the City of Los Alamitos in its environmental review process, and is contained in Appendix A of this EIR. The Initial Study Checklist includes questions relating to noise. The issues presented in the Initial Study Checklist have been utilized as thresholds of significance in this section. Accordingly, a project may create a significant environmental impact if it causes one or more of the following to occur:

- Expose persons to, or generate, noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.
- Expose persons to or generate excessive ground borne vibration or ground borne noise levels.

¹ The California National Guard website, <http://www.calguard.ca.gov/sli/Pages/History.aspx>, accessed June 28, 2010.

² Airport Land Use Commission Letter correspondence, Kari A. Rigoni, Executive Officer, dated May 27, 2010.



- Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.
- Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.
- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, expose people residing or working in the project area to excessive noise levels (refer to Section 8.0, Effects Found Not To Be Significant).
- For a project within the vicinity of a private airstrip, expose people residing or working in the project area to excessive noise levels (refer to Section 8.0, Effects Found Not To Be Significant).

SIGNIFICANCE OF CHANGES IN TRAFFIC NOISE LEVELS

If the ambient noise environment is quiet and the new noise source greatly increases the noise exposure, an impact may occur even though a criterion level might not be exceeded. The project would create a significant impact for traffic noise levels when the following occurs:

- An increase of the existing ambient noise levels by 5 dB or more, where the existing ambient level is less than 60 dB CNEL;
- An increase of the existing ambient noise level by 3 dB or more, where the existing ambient level is 60 to 65 dB CNEL; or
- An increase of the existing ambient noise level by 1.5 dB or more, where the existing ambient level is greater than 65 dB CNEL.

SIGNIFICANCE OF CHANGES IN CUMULATIVE TRAFFIC NOISE LEVELS

The project's contribution to a cumulative traffic noise increase would be considered significant when the combined effect exceeds perception level (i.e., auditory level increase) threshold. The combined effect compares the "cumulative with project" condition to "existing" conditions." This comparison accounts for the traffic noise increase from the project generated in combination with traffic generated by projects in the cumulative projects list. The following criteria have been utilized to evaluate the combined effect of the cumulative noise increase.

Combined Effects: The cumulative with project noise level ("Long Term With Project") causes the following:



- An increase of the existing noise level by 5 dB or more, where the existing level is less than 60 dB CNEL;
- An increase of the existing noise level by 3 dB or more, where the existing level is 60 to 65 CNEL; or
- An increase of the existing noise level by 1.5 dB or more, where the existing level is greater than 65 dB CNEL.

Although there may be a significant noise increase due to the proposed project in combination with other related projects (combined effects), it must also be demonstrated that the project has an incremental effect. In other words, a significant portion of the noise increase must be due to the proposed project. The following criteria have been utilized to evaluate the incremental effect of the cumulative noise increase.

Incremental Effects: The “Long Term With Project” causes a 1 dBA increase in noise over the “Long Term Without Project” noise level.

A significant impact would result only if both the combined and incremental effects criteria have been exceeded.

Based on these standards, the effects of the proposed project have been categorized as either a “less than significant impact” or a “potentially significant impact.” Mitigation measures are recommended for potentially significant impacts. If a potentially significant impact cannot be reduced to a less than significant level through the application of mitigation, it is categorized as a significant unavoidable impact.

5.5.4 PROJECT IMPACTS AND MITIGATION MEASURES

CONSTRUCTION NOISE IMPACTS

- ◆ **DEVELOPMENT ASSOCIATED WITH IMPLEMENTATION OF THE PROPOSED PROJECT COULD RESULT IN POTENTIALLY SIGNIFICANT ADVERSE NOISE IMPACTS ON SURROUNDING SENSITIVE RECEPTORS DURING CONSTRUCTION.**

Level of Significance Before Mitigation: Potentially Significant Impact.

Impact Analysis:

Phase 1

Phase 1 of the proposed project includes the following elements:



- Vacation of the right-of-way for Kaylor Street. Parking would be provided in a district setting, with spaces provided throughout the site. Kaylor Street would function as a private street during Phase 1, but would not be reconfigured.
- Construction of a new 3-story medical office building (MOB A) on the Katella Avenue project frontage, totaling 75,100 gross square feet.
- Construction of a new parking structure north of MOB A.

Short-term noise impacts would be associated with demolition, mass grading, fine grading, trenching, paving, and building construction. Construction-related short-term noise levels would be higher than existing ambient noise levels in the project area today, but would no longer occur once construction of the Phase 1 components are completed.

Construction crew commutes and the transport of construction equipment and materials to the site would incrementally increase noise levels on access roads leading to the site. There would be a relatively high single-event noise exposure potential at a maximum level of 80 dBA L_{max} with trucks passing at 50 feet. However, the projected construction traffic would be small when compared to the existing traffic volumes on Katella Avenue, Cherry Street, Catalina Street, and Bloomfield Street. Therefore, short-term construction-related worker commutes and equipment transport noise impacts associated with Phase 1 development would not be significant.

Construction is performed in discrete steps, each of which has its own mix of equipment and, consequently, its own noise characteristics. These various sequential phases would change the character of the noise generated on-site. Therefore, the noise levels vary as construction progresses. Despite the variety in the type and size of construction equipment, similarities in the dominant noise sources and patterns of operation allow construction-related noise to be categorized by work phase. *Table 5.5-8, Maximum Noise Levels Generated by Construction Equipment*, indicates the anticipated noise levels of construction equipment based on a distance of 50 feet between the equipment and noise receptor. The site preparation phase, which includes grading of the site, tends to generate the highest noise levels. Earthmoving and compacting equipment includes excavating machinery such as backfillers, bulldozers, draglines, front loaders, compactors, scrapers, and graders. Operating cycles for these types of construction equipment may involve one or two minutes of full power operation followed by three or four minutes at lower power settings. The average noise levels presented in *Table 5.5-8*, are based on the quantity, type, and Acoustical Use Factor for each type of equipment that is anticipated to be used.



Table 5.5-8
Maximum Noise Levels Generated by Construction Equipment

Type of Equipment	Acoustical Use Factor ¹	L _{max} at 50 Feet (dBA)
Cement/Mortar Mixer	40	79
Concrete/Industrial Saw	20	90
Crane	16	81
Dozer	40	82
Excavator	40	81
Forklift	40	79
Generator	50	81
Grader	40	85
Other Equipment (greater than five horse power)	50	85
Paver	50	77
Roller	20	80
Tractor	40	84
Truck	40	80
Welder	40	73
Note: 1 – Acoustical use factor (percent): Estimates the fraction of time each piece of construction equipment is operating at full power (i.e., its loudest condition) during a construction operation.		
Source: Federal Highway Administration, <i>Roadway Construction Noise Model (FHWA-HEP-05-054)</i> , dated January 2006. Refer to Appendix F, Noise Data.		

The closest existing sensitive receptors in the vicinity of the project site (distances are measured from the exterior project boundary only and not from individual construction projects/areas within the interior of the project site) are residences located 132 feet to the northwest and 140 feet to the south; the Los Alamitos Elementary School located 314 feet to the east; and Laurel Park located 78 feet to the east. The sensitive receptors would not be exposed to continuous close-range construction noise.

Construction would occur throughout the project site and would not be concentrated or confined in the area directly adjacent to these receptors. Normally, construction activities occur in small construction zones with noise emanating from the various points in the area. In several instances, the sensitive receptors located in the project vicinity are shielded from the construction areas by existing on- and off-site buildings. For construction conducted during Phase 1, the residences located to the northwest would be shielded by the existing Administration/Warehouse Building, as well as off-site storage tanks and the Trend Offset Printing building. The Los Alamitos Elementary School and Laurel Park would be shielded by the TotalCare Pavilion and the buildings to the north.

Phase 1 construction is anticipated to commence October 2011 and scheduled to be completed by December 2012. Pursuant to the City's *Municipal Code* Section 17.24.020 (D), noise related construction activities are exempt from code requirements between 7:00 AM and 8:00 PM on weekdays and Saturday. Furthermore, vehicular traffic on Katella Avenue, Cherry Street, Catalina Street, and Bloomfield Street would mask a majority of the construction noise that would be perceived by the nearby sensitive receptors.



Adherence to *General Plan* goals and policies, *Municipal Code* Section 17.24.020 (D) requirements, and compliance with the recommended Mitigation Measures N-1 and N-2 would minimize any impacts from construction noise during Phase 1, and would ensure that impacts are reduced to a less than significant level.

Phase 2

Phase 2 of the proposed project includes the following elements:

- Demolition of an existing 24,000-square foot Medical Office Building (MOB 1) located at the northwest corner of Kaylor Street and Katella Avenue to allow for reconfiguration of surface parking areas. As part of Phase 2, Kaylor Street south of the Main Hospital Building would be reconfigured as a driveway and parking area.
- Demolition of an existing 15,099-square foot administrative/warehouse building along Catalina/Kaylor Street and construction of surface parking.
- Construction of a new four-story Hospital Building (Hospital Building 1) totaling 92 beds.
- Reconfiguration of the existing hospital's beds count and relocation of the existing emergency room to Hospital Building 1.

During Phase 2 construction, the residences located to the northwest would be shielded by the existing off-site storage tanks and Trend Offset Printing building, while the residences located to the south would be shielded by MOB 2. The Los Alamitos Elementary School and Laurel Park would be shielded by Parking Structure 1, MOB A, the TotalCare Pavilion, and the buildings to the north. Phase 2 is anticipated to commence in May 2013 and be completed by June 2017. Construction activities including during Phase 2 would similar to those described in Phase 1. Noise levels would be masked by intervening structures and traffic along adjacent streets.

Adherence to *General Plan* goals and policies, *Municipal Code* Section 17.24.020 (D) requirements, and compliance with the recommended Mitigation Measures N-1 and N-2 would minimize any impacts from construction noise associated with Phase 2, and would ensure that impacts are reduced to a less than significant level.

Phase 3

Phase 3 of the proposed project includes the following elements:

- Construction of a second four-story bed Hospital Building (Hospital Building 2) totaling 126 beds to the north of Hospital Building 1. An elevated corridor would connect the two Hospital Buildings.
- Construction of a Central Plant to service the new and existing hospital buildings.
- Construction of second parking structure to meet parking standards.



For Phase 3/buildout construction, the residences located to the northwest would be shielded by the existing off-site storage tanks and Trend Offset Printing building, while the residences to the south would be shielded by Hospital Building 1, and MOB 2. The Los Alamitos Elementary School and Laurel Park would be shielded by the buildings to the east, Parking Structure 1, MOB A, and the TotalCare Pavilion. Phase 3 is anticipated to commence in October 2032 and be completed by December 2035. Construction activities conducted during Phase 3 would be similar to those described in Phase 1 and 2. Noise levels would be masked by intervening structures and traffic along adjacent streets. Adherence to *General Plan* goals and policies, *Municipal Code* Section 17.24.020 (D) requirements, and compliance with the recommended Mitigation Measures NOI-1 and NOI-2 would minimize any impacts from construction noise associated with Phase 3, and would ensure that impacts are reduced to a less than significant level.

Mitigation Measures:

NOI-1 To reduce noise impacts due to construction, the project applicant shall require construction contractors to implement the following measures which shall be ongoing through demolition, grading, and/or construction:

- Equipment and trucks used for project construction shall utilize the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures, and acoustically-attenuating shields or shrouds, wherever feasible).
- Impact tools (e.g., jack hammers, pavement breakers, and rock drills) used for project construction shall be hydraulically or electronically powered wherever possible to avoid noise associated with compressed air exhaust from pneumatically powered tools. However, where use of pneumatic tools is unavoidable, an exhaust muffler shall be used; this muffler can lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves shall be used where feasible, and this could achieve a reduction of 5 dBA. Quieter procedures shall be used, such as drills rather than impact equipment, whenever feasible.
- Stationary noise sources shall be located as far from adjacent receptors as possible, and they shall be muffled and enclosed within temporary sheds, incorporated insulation barriers, or other measures to the extent feasible.

NOI-2 Prior to the issuance of each grading permit, the project applicant shall submit to the City Building and Safety Department a list of measures to respond to and track complaints pertaining to construction noise, ongoing throughout demolition, grading, and/or construction. These measures shall include the following:

- A procedure and phone numbers for notifying the City Building and Safety Department staff and Los Alamitos Police Department (during regular construction hours and off-hours);



- A sign large enough to be visible by moving traffic posted on-site pertaining to the permitted construction days and hours and complaint procedures and who to notify in the event of a problem. The sign shall also include a listing of both the City and construction contractor's telephone numbers (during regular construction hours and off-hours);
- The designation of an on-site construction complaint and enforcement manager for the project. The manager shall act as a liaison between the project and its neighbors. The manager's responsibilities and authority shall include the following:
 - An active role in monitoring project compliance with respect to noise;
 - Ability to reschedule noisy construction activities to reduce effects on surrounding noise sensitive receivers;
 - Site supervision of all potential sources of noise (e.g., material delivery, shouting, debris box pick-up and delivery) for all trades; and
 - Intervening or discussing mitigation options with contractors.
- Notification of adjacent property owners and occupants at least 30 days in advance of construction activities about the estimated duration of the activity; and
- A preconstruction meeting shall be held with the job inspectors and the general contractor/on-site project manager to confirm that noise measures and practices (including construction hours, neighborhood notification, posted signs, etc.) are completed.

Level of Significance After Mitigation: Less Than Significant Impact.

CONSTRUCTION-RELATED VIBRATION IMPACTS

- ◆ **DEVELOPMENT ASSOCIATED WITH IMPLEMENTATION OF THE PROPOSED PROJECT COULD RESULT IN TEMPORARY VIBRATION IMPACTS TO NEARBY SENSITIVE RECEPTORS DURING GRADING AND CONSTRUCTION ACTIVITIES.**

Level of Significance Before Mitigation: Less Than Significant Impact.

Impact Analysis: Construction activities can generate varying degrees of groundborne vibration, depending on the construction procedure and the construction equipment used. Operation of construction equipment generates vibrations that spread through the ground and diminish in amplitude with distance from the source. The effect on buildings located in the vicinity of a construction site often varies depending on soil type, ground strata, and construction characteristics of the receiver building(s). Groundborne vibrations from construction activities rarely reach levels that damage structures.



The types of construction vibration impacts include human annoyance and building damage. Human annoyance occurs when construction vibration rises significantly above the threshold of human perception for extended periods of time. Ordinary buildings that are not particularly fragile would not experience any cosmetic damage (e.g., plaster cracks) at distances beyond 25 feet. This distance can vary substantially depending on the soil composition and underground geological layer between vibration source and receiver. In addition, not all buildings respond similarly to vibration generated by construction equipment. *Table 5.5-9, Typical Vibration Levels for Construction Equipment*, identifies various vibration velocity levels for types of construction equipment that would operate during construction.

Table 5.5-9
Typical Vibration Levels for Construction Equipment

Equipment	Approximate Ground Velocity in Decibels at 25 feet (inches/second)	Approximate Ground Velocity in Decibels at 50 feet (inches/second)
Pile Driver (impact)	104	98
Large Bulldozer	87	81
Loaded Trucks	86	80
Jackhammer	79	73
Small Bulldozer	58	52
Source: Federal Transit Administration, <i>Transit Noise and Vibration Impact Assessment Guidelines</i> , May 2006.		
Notes: Root mean square amplitude ground velocity in decibels (VdB) referenced to 1 micro-inch/second.		

Groundborne vibration would attenuate at a rate of approximately 6 VdB per doubling of distance. The groundborne vibration generated during construction activities would primarily impact existing sensitive uses that are located adjacent to or within the vicinity of specific projects. Based upon the information provided in *Table 5.5-9*, vibration levels could reach up to 87 VdB for typical construction activities (and up to 104 VdB if pile driving activities were to occur) at sensitive uses located within 25 feet of construction. However, no pile driving activities would take place during project construction. Therefore, impacts to the generation and/or exposure of persons or structures to excessive groundborne vibration would be less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance After Mitigation: Not Applicable.



MOBILE NOISE IMPACTS

- ♦ **TRAFFIC GENERATED BY THE PROPOSED PROJECT COULD CONTRIBUTE TO EXISTING TRAFFIC NOISE IN THE AREA OR EXCEED THE CITY'S ESTABLISHED STANDARDS.**

Level of Significance Before Mitigation: Less Than Significant Impact.

Impact Analysis:

Near-Term Off-Site Noise Conditions

Near-term development within the project area would result in additional traffic on adjacent roadways, thereby increasing the vehicular noise in the vicinity of the existing and proposed land uses. The “Near-Term Without Project” and “Near-Term With Project” were compared.

As previously discussed, an increase of five dBA or greater in noise levels occurring from project-related activities would be significant when the “Without Project” noise level is below 60 dBA CNEL. An increase of three dBA or greater in noise levels occurring from project-related activities would be significant when the “Without Project” noise level is between 60 to 65 dBA CNEL. Finally, an increase of 1.5 dBA or greater would be significant if the “Without Project” noise level is above 65 dBA CNEL.

In *Table 5.5-10, Near-Term Noise Scenarios*, the noise level (dBA at 100 feet from centerline) depicts what would typically be heard 100 feet perpendicular to the roadway centerline.

As indicated in *Table 5.5-10* under the “Near-Term Without Project” scenario, noise levels at a distance of 100 feet from the centerline would range from approximately 52.5 dBA to 69.0 dBA. The highest noise levels under “Near-Term Without Project” would occur along Katella Avenue (between I-605 freeway and Los Alamitos Boulevard).

Under “Near-Term With Project” scenario noise levels at a distance of 100 feet from the centerline would range from approximately 53.1 dBA to 69.1 dBA. The highest noise levels under “Near-Term With Project” would occur along the same roadway segments as the “Near-Term Without Project” scenario.



**Los Alamitos Medical Center Specific Plan
Program Environmental Impact Report**

**Table 5.5-10
Near-Term Noise Scenarios**

Roadway Segment	Near-Term Without Project		Near-Term With Project		Difference in dBA @ 100 feet from Roadway	Potentially Significant Impact
	ADT	dBA @ 100 Feet from Roadway Centerline	ADT	dBA @ 100 Feet from Roadway Centerline		
Los Alamitos Boulevard						
Between Wardlow Road and Cerritos Avenue	19,600	64.5	19,740	64.5	0	No
Between Cerritos Avenue and Sausalitos Street	27,880	66.0	28,280	66.1	0.1	No
Between Sausalitos Street and Catalina Street	26,110	65.7	26,500	65.8	0.1	No
Between Catalina Street and Florista Street	25,080	65.6	25,330	65.6	0	No
Between Florista Street and Katella Avenue	24,480	65.5	24,670	65.5	0	No
Between Katella Avenue and Farquhar Avenue	30,780	67.8	31,560	67.9	0.1	No
Between Farquhar Avenue and Orangewood Avenue	32,210	68.0	32,990	68.1	0.1	No
Between Orangewood Avenue and Rossmoor Center Drive	32,390	68.0	33,170	68.1	0.1	No
Reagan Street						
Between Sausalito Street and Catalina Street	3,840	56.4	3,840	56.4	0	No
Between Catalina Street and Florista Street	2,470	54.3	2,470	54.3	0	No
Between Florista Street and Katella Avenue	1,620	52.5	2,370	54.1	1.6	No
Cherry Street						
Between Catalina Street and Florista Street	2,740	54.8	3,030	55.2	0.4	No
Between Florista Street and Katella Avenue	2,860	55.0	3,340	55.6	0.6	No
Cerritos Avenue						
Between Intestate 605 and Los Alamitos Boulevard	30,560	66.5	26,750	65.9	-0.6	No
Between Los Alamitos Boulevard and Bloomfield Street	28,910	66.3	28,910	66.3	0	No
Between Bloomfield Street and Lexington Drive	25,730	67.1	25,990	67.1	0	No



**Los Alamitos Medical Center Specific Plan
Program Environmental Impact Report**

**Table 5.5-10 (continued)
Near-Term Noise Scenarios**

Roadway Segment	Near-Term Without Project		Near-Term With Project		Difference in dBA @ 100 feet from Roadway	Potentially Significant Impact
	ADT	dBA @ 100 Feet from Roadway Centerline	ADT	dBA @ 100 Feet from Roadway Centerline		
Catalina Street						
Between Los Alamitos Boulevard and Reagan Street	1,800	53.1	1,940	53.5	0.4	No
Between Reagan Street and Cherry Street	3,800	56.4	3,940	56.5	0.1	No
Between Cherry Street and Kaylor Street	2,540	54.6	2,960	55.3	0.7	No
Between Kaylor Street and Bloomfield Street	2,310	52.6	2,570	53.1	0.5	No
Florista Street						
Between Los Alamitos Boulevard and Reagan Street	3,590	56.0	3,650	56.1	0.1	No
Between Reagan Street and Cherry Street	2,550	54.6	2,610	54.7	0.1	No
Katella Avenue						
Between Interstate 605 and Los Alamitos Boulevard	41,570	69.0	42,350	69.1	0.1	No
Between Los Alamitos Boulevard and Reagan Street	35,240	68.3	36,990	68.5	0.2	No
Between Reagan Street and Cherry Street	33,800	68.2	33,760	68.2	0	No
Between Cherry Street and Kaylor Street	34,200	68.2	35,580	68.4	0.2	No
Between Kaylor Street and Bloomfield Street	32,930	68.0	33,330	68.1	0.1	No
Between Bloomfield Street and Lexington Drive	30,690	67.7	31,080	67.7	0	No
Bloomfield Street						
Between Ball Road and Cerritos Avenue	12,780	64.1	13,020	64.2	0.1	No
Between Cerritos Avenue and Catalina Street	13,780	63.2	14,130	63.3	0.1	No
Between Catalina Street and Katella Avenue	14,520	63.4	14,860	63.5	0.1	No
Notes: ADT = average daily trips; dBA = A-weighted decibels; CNEL = community noise equivalent level						
Source: RBF Consulting. Los Alamitos Medical Center Specific Plan Traffic Impact Analysis. June 18, 2010.						



Table 5.5-10 also compares the “Near-Term Without Project” scenario to the “Near-Term With Project” scenario. The proposed project would increase noise levels on the surrounding roadways by a maximum of 1.6 dBA along Reagan Street (between Florista Street and Katella Avenue) with noise levels below 60 dBA CNEL. Thus, as stated under the *Significance Threshold Criteria*, when the baseline noise level is below 60 dBA CNEL, an increase in noise levels less than five dBA is considered less than significant.

Long-Term Off-Site Noise Conditions

In *Table 5.5-11, Long-Term Noise Scenarios*, the noise level (dBA at 100 feet from centerline) depicts what would typically be heard 100 feet perpendicular to the roadway centerline.

As indicated in *Table 5.5-11* under the “Long-Term Without Project” scenario, noise levels at a distance of 100 feet from the centerline would range from approximately 52.5 dBA to 69.8 dBA. Similar to the near-term condition, the highest noise levels under “Long-Term Without Project” would occur along Katella Avenue (between I-605 freeway and Los Alamitos Boulevard).

Under “Long-Term With Project” scenario noise levels at a distance of 100 feet from the centerline would range from approximately 52.5 dBA to 69.9 dBA. The highest noise levels under “Long-Term With Project” would occur along the same roadway segments as the “Long-Term Without Project” scenario.

The proposed project would increase noise levels on the surrounding roadways by a maximum of 1.0 dBA along Cherry Street (between Florista Street and Katella Avenue) and Catalina Street (between Cherry Street and Kaylor Street), resulting in a less than significant impact.

**Table 5.5-11
Long-Term Noise Scenarios**

Roadway Segment	Long-Term Without Project		Long-Term With Project		Difference in dBA @ 100 feet from Roadway	Potentially Significant Impact
	ADT	dBA @ 100 Feet from Roadway Centerline	ADT	dBA @ 100 Feet from Roadway Centerline		
Los Alamitos Boulevard						
Between Wardlow Road and Cerritos Avenue	23,020	65.2	23,230	65.2	0	No
Between Cerritos Avenue and Sausalitos Street	29,450	66.3	30,060	66.3	0	No
Between Sausalitos Street and Catalina Street	29,110	66.2	29,710	66.3	0.1	No
Between Catalina Street and Florista Street	28,350	66.1	28,730	66.1	0	No
Between Florista Street and Katella Avenue	25,620	65.6	25,910	65.7	0.1	No



Table 5.5-11 (continued)
Long-Term Noise Scenarios

Roadway Segment	Long-Term Without Project		Long-Term With Project		Difference in dBA @ 100 feet from Roadway	Potentially Significant Impact
	ADT	dBA @ 100 Feet from Roadway Centerline	ADT	dBA @ 100 Feet from Roadway Centerline		
Between Katella Avenue and Farquhar Avenue	32,150	68.0	33,360	68.1	0.1	No
Between Farquhar Avenue and Orangewood Avenue	33,060	68.1	34,280	68.2	0.1	No
Between Orangewood Avenue and Rossmoor Center Drive	32,880	68.1	34,100	68.2	0.1	No
Reagan Street						
Between Sausalito Street and Catalina Street	3,580	56.1	3,580	56.1	0	No
Between Catalina Street and Florista Street	2,550	54.4	2,550	54.4	0	No
Between Florista Street and Katella Avenue	1,610	52.5	1,610	52.5	0	No
Cherry Street						
Between Catalina Street and Florista Street	2,830	54.9	3,280	55.5	0.6	No
Between Florista Street and Katella Avenue	2,770	54.8	3,500	55.8	1.0	No
Cerritos Avenue						
Between Interstate 605 and Los Alamitos Boulevard	30,340	66.5	30,750	66.5	0	No
Between Los Alamitos Boulevard and Bloomfield Street	31,580	66.6	31,580	66.6	0	No
Between Bloomfield Street and Lexington Drive	28,520	67.5	28,930	67.6	0.1	No
Catalina Street						
Between Los Alamitos Boulevard and Reagan Street	1,800	53.1	2,020	53.6	0.5	No
Between Reagan Street and Cherry Street	3,850	56.4	4,070	56.7	0.3	No
Between Cherry Street and Kaylor Street	2,800	55.0	3,470	56.0	1.0	No
Between Kaylor Street and Bloomfield Street	2,490	52.9	2,870	53.6	0.7	No
Florista Street						
Between Los Alamitos Boulevard and Reagan Street	3,550	56.0	3,640	56.1	0.1	No



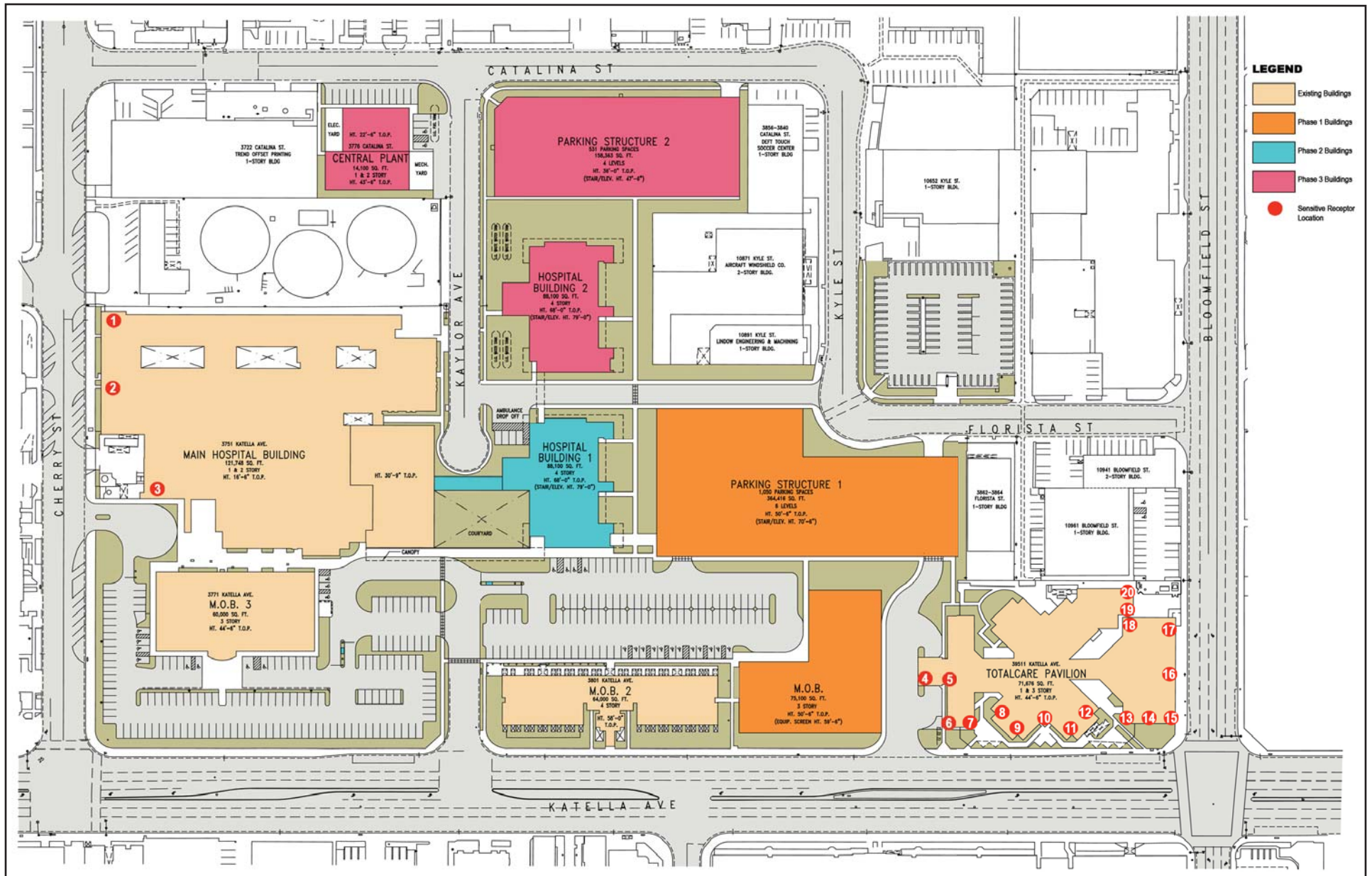
Table 5.5-11 (continued)
Long-Term Noise Scenarios

Roadway Segment	Long-Term Without Project		Long-Term With Project		Difference in dBA @ 100 feet from Roadway	Potentially Significant Impact
	ADT	dBA @ 100 Feet from Roadway Centerline	ADT	dBA @ 100 Feet from Roadway Centerline		
Between Reagan Street and Cherry Street	2,690	54.8	2,780	54.9	0.1	No
Katella Avenue						
Between Interstate 605 and Los Alamitos Boulevard	50,550	69.8	51,770	69.9	0.1	No
Between Los Alamitos Boulevard and Reagan Street	42,420	69.1	45,150	69.4	0.3	No
Between Reagan Street and Cherry Street	41,090	69.0	43,820	69.3	0.3	No
Between Cherry Street and Kaylor Street	41,520	69.0	43,700	69.3	0.3	No
Between Kaylor Street and Bloomfield Street	40,270	68.9	40,880	69.0	0.1	No
Between Bloomfield Street and Lexington Drive	38,810	68.7	39,420	68.8	0.1	No
Bloomfield Street						
Between Ball Road and Cerritos Avenue	13,960	64.5	13,960	64.5	0	No
Between Cerritos Avenue and Catalina Street	16,620	64.0	17,030	64.1	0.1	No
Between Catalina Street and Katella Avenue	17,670	64.3	18,190	64.4	0.1	No
Notes: ADT = average daily trips; dBA = A-weighted decibels; CNEL = community noise equivalent level						
Source: RBF Consulting, Los Alamitos Medical Center Specific Plan Traffic Impact Analysis, June 18, 2010.						

On-Site Noise Conditions

Potential long-term on-site noise impacts associated with implementation of the proposed project would occur from traffic noise. The FHWA TNM 2.5 model was used to evaluate the future with project traffic noise. Specifically, the proposed project buildout scenario (Phases 1, 2, and 3) with project conditions were modeled using computer assisted drafting and design (CADD) plans.

Traffic volumes in Phase 3 would range from 40,880 ADT to 43,700 ADT on Katella Avenue, 3,280 ADT to 3,500 on Cherry Street, and 17,030 ADT to 18,190 ADT on Bloomfield Street. Each sensitive receptor located immediately adjacent to Katella Avenue, Cherry Street, and Bloomfield Street was modeled using TNM 2.5. *Exhibit 5.5-3, On-Site Noise Sensitive Receptors*, indicates the receptor locations selected to determine noise levels within the project site. *Table 5.5-12, On-Site Noise Levels*, illustrates the anticipated noise levels at each on-site sensitive receptor.



Source: Nu Architecture.

NOT TO SCALE



09/10 • JN 10-107031

ENVIRONMENTAL IMPACT REPORT
LOS ALAMITOS MEDICAL CENTER SPECIFIC PLAN
On-Site Sensitive Receptors

Exhibit 5.5-3



Table 5.5-12
On-Site Noise Levels

Location Number	Exterior Noise Level (dBA CNEL)	Interior Noise Level (dBA CNEL)
1	40.7	20.7
2	41.1	21.1
3	41.4	21.4
4	45.8	25.8
5	45.8	25.8
6	50.1	30.1
7	50.0	30.0
8	49.6	29.6
9	52.6	32.6
10	49.8	29.8
11	52.9	32.9
12	49.4	29.4
13	49.7	29.7
14	50.0	30.0
15	52.1	32.1
16	51.2	31.2
17	51.2	31.2
18	45.4	25.4
19	45.7	25.7
20	45.4	25.4

Notes: Refer to Appendix F for a depiction of each sensitive receptor.

As indicated in *Table 5.5-12*, on-site noise levels would not exceed 52.9 dBA. The higher noise levels are located on Katella Avenue. Therefore, noise levels would be consistent with the established noise standards of 55 dBA at daytime for Noise Zone 1 (all residential properties) at exterior living areas. Standard building construction practices typically results in approximately 20 dBA of noise attenuation with windows closed. Therefore, impacts associated with on-site noise sources would be less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance After Mitigation: Not Applicable.



OPERATIONAL STATIONARY SOURCE NOISE IMPACTS

- ◆ **DEVELOPMENT ASSOCIATED WITH IMPLEMENTATION OF THE PROPOSED PROJECT COULD RESULT IN STATIONARY-SOURCE NOISE IMPACTS ON NEARBY SENSITIVE RECEPTORS.**

Level of Significance Before Mitigation: Less Than Significant Impact.

Impact Analysis: There would be stationary noise sources associated with the all phases of the proposed project, such as noise associated with delivery truck loading and unloading, truck movements on driveways, parking lot activities, and the Central Plant. Such isolated peak noises are measured in dBA L_{max} , as the volume or frequency of such events is not critical, and the noises are not an averaged calculation, such as CNEL.

The proposed Central Plant's purpose is to provide power, hot water, and heating/air conditioning to the existing hospital and new Hospital Buildings. During Phase 2, the Central Plant facilities would be located on top of Hospital Building 1 in a mechanical penthouse. With the buildout of Phase 3, the Central Plant would be re-located to the corner of Kaylor Street and Catalina Street, where it would remain permanently. The proposed structure would consist of a one- and two-story structure and associated cooling tower.

The Central Plant is located approximately 386 feet northwest of the nearest sensitive receptors. Furthermore, the off-site buildings, Catalina Street, and street trees and vegetation would serve as a buffer between the project site and these residential uses. Therefore, noise associated with on-site stationary sources would have a less than significant impact on nearby sensitive receptors.

Mitigation Measures: No mitigation measures are required.

Level of Significance After Mitigation: Not Applicable.

5.5.5 CUMULATIVE IMPACTS AND MITIGATION MEASURES

- ◆ **IMPLEMENTATION OF THE PROPOSED PROJECT AND OTHER RELATED CUMULATIVE PROJECTS COULD RESULT IN CUMULATIVELY CONSIDERABLE CONSTRUCTION NOISE IMPACTS.**

Level of Significance Before Mitigation: Less Than Significant Impact.

Impact Analysis:

Cumulative Operational Noise

The proposed project would introduce the use of stationary equipment that would increase noise levels within the project area. Based on the operational stationary source noise impacts analysis, impacts would be less than significant. Additionally, the proposed project would not result in



stationary long-term equipment that would significantly affect surrounding sensitive receptors. Furthermore, future development proposals within the Cities of Los Alamitos, Cypress, and Seal Beach would require separate discretionary approval and CEQA assessment, which would address potential noise impacts and identify necessary attenuation measures, where appropriate. Thus, cumulative noise exposure for long-term operations would result in a less than significant impact.

Cumulative Mobile Noise

The cumulative mobile noise analysis is conducted in a two-step process. First, the combined effects from both the proposed project and other projects are compared. Second, for combined effects that are determined to be cumulatively significant, the proposed project's incremental effects then are analyzed. The proposed project's contribution to a cumulative traffic noise increase would be considered significant when the combined effect exceeds perception level (i.e., auditory level increase) threshold. The combined effect compares the "Long-Term With Project" condition to "existing" conditions. This comparison accounts for the traffic noise increase from the project generated in combination with traffic generated by projects in the cumulative projects list. The following criteria have been utilized to evaluate the combined effect of the cumulative noise increase.

Combined Effects: The cumulative with project noise level ("Long-Term With Project") causes the following:

- An increase of the existing noise level by 5 dBA or more, where the existing level is less than 60 dBA CNEL;
- An increase of the existing noise level by 3 dBA or more, where the existing level is 60 to 65 dBA CNEL; or
- An increase of the existing noise level by 1.5 dBA or more, where the existing level is greater than 65 dBA CNEL.

Although there may be a significant noise increase due to the proposed project in combination with other related projects (combined effects), it must also be demonstrated that the proposed project has an incremental effect. In other words, a significant portion of the noise increase must be due to the proposed project. The following criteria have been utilized to evaluate the incremental effect of the cumulative noise increase.

Incremental Effects: The "Long-Term With Project" causes a 1 dBA increase in noise over the "Long-Term Without Project" noise level.

A significant impact would result only if both the combined and incremental effects criteria have been exceeded. Noise by definition is a localized phenomenon, and drastically reduces as distance from the source increases. Consequently, only proposed projects and growth anticipated to occur in the general vicinity of the proposed Specific Plan Area would contribute to cumulative noise impacts. *Table 5.5-13, Cumulative Noise Scenario*, lists the traffic noise effects along roadway segments in the project vicinity for "Existing Without Project", "Long-Term Without Project," and "Long-Term With Project," including incremental and net cumulative impacts.



Los Alamitos Medical Center Specific Plan Program Environmental Impact Report

First, it must be determined whether the *Combined Effects* criterion is exceeded. Per *Table 5.5-13*, the criterion is not exceeded along any of the area roadways studied. Per *Table 5.5-13*, *Incremental Effects* criterion is also not exceeded along any of the area roadways studied. Thus, the proposed project would not result in long-term mobile noise impacts based on project generated traffic or cumulative and incremental noise levels. Therefore, less than significant impacts would occur in this regard.

**Table 5.5-13
Cumulative Noise Scenario**

Roadway Segment	Existing Without Project	Long-Term Without Project	Long-Term With Project	Combined Effects	Incremental Effects	Cumulatively Significant Impact
	dBA @ 100 Feet from Roadway Centerline	dBA @ 100 Feet from Roadway Centerline	dBA @ 100 Feet from Roadway Centerline	Difference In dBA Between Existing Without Project and Long-Term With Project	Difference in dBA between Long-Term With Project and Long-Term Without Project	
Los Alamitos Boulevard						
Between Wardlow Road and Cerritos Avenue	64.4	65.2	65.2	0.8	0	No
Between Cerritos Avenue and Sausalitos Street	65.9	66.3	66.3	0.4	0	No
Between Sausalitos Street and Catalina Street	65.6	66.2	66.3	0.7	0.1	No
Between Catalina Street and Florista Street	65.4	66.1	66.1	0.7	0	No
Between Florista Street and Katella Avenue	65.3	65.6	65.7	0.4	0.1	No
Between Katella Avenue and Farquhar Avenue	67.7	68.0	68.1	0.4	0.1	No
Between Farquhar Avenue and Orangewood Avenue	67.8	68.1	68.2	0.4	0.1	No
Between Orangewood Avenue and Rossmoor Center Drive	67.9	68.1	68.2	0.3	0.1	No
Reagan Street						
Between Sausalito Street and Catalina Street	56.3	56.1	56.1	-0.2	0	No



Table 5.5-13 (continued)
Cumulative Noise Scenario

Roadway Segment	Existing Without Project	Long-Term Without Project	Long-Term With Project	Combined Effects	Incremental Effects	Cumulatively Significant Impact
	dBA @ 100 Feet from Roadway Centerline	dBA @ 100 Feet from Roadway Centerline	dBA @ 100 Feet from Roadway Centerline	Difference In dBA Between Existing Without Project and Long-Term With Project	Difference in dBA between Long-Term With Project and Long-Term Without Project	
Between Catalina Street and Florista Street	54.2	54.4	54.4	0.2	0	No
Between Florista Street and Katella Avenue	52.4	52.5	52.5	0.1	0	No
Cherry Street						
Between Catalina Street and Florista Street	54.6	54.9	55.5	0.9	0.6	No
Between Florista Street and Katella Avenue	54.8	54.8	55.8	1.0	1.0	No
Cerritos Avenue						
Between Interstate 605 and Los Alamitos Boulevard	65.7	66.5	66.5	0.8	0	No
Between Los Alamitos Boulevard and Bloomfield Street	66.1	66.6	66.6	0.5	0	No
Between Bloomfield Street and Lexington Drive	67.0	67.5	67.6	0.6	0.1	No
Catalina Street						
Between Los Alamitos Boulevard and Reagan Street	53.0	53.1	53.6	0.6	0.5	No
Between Reagan Street and Cherry Street	56.3	56.4	56.7	0.4	0.3	No
Between Cherry Street and Kaylor Street	54.5	55.0	56.0	1.5	1.0	No
Between Kaylor Street and Bloomfield Street	52.5	52.9	53.6	1.1	0.7	No



Los Alamitos Medical Center Specific Plan
Program Environmental Impact Report

**Table 5.5-13 (continued)
Cumulative Noise Scenario**

Roadway Segment	Existing Without Project	Long-Term Without Project	Long-Term With Project	Combined Effects	Incremental Effects	Cumulatively Significant Impact
	dBA @ 100 Feet from Roadway Centerline	dBA @ 100 Feet from Roadway Centerline	dBA @ 100 Feet from Roadway Centerline	Difference In dBA Between Existing Without Project and Long- Term With Project	Difference in dBA between Long- Term With Project and Long- Term Without Project	
Florista Street						
Between Los Alamitos Boulevard and Reagan Street	55.9	56.0	56.1	0.2	0.1	No
Between Reagan Street and Cherry Street	54.5	54.8	54.9	0.4	0.1	No
Katella Avenue						
Between Interstate 605 and Los Alamitos Boulevard	68.9	69.8	69.9	1.0	0.1	No
Between Los Alamitos Boulevard and Reagan Street	68.2	69.1	69.4	1.2	0.3	No
Between Reagan Street and Cherry Street	68.0	69.0	69.3	1.3	0.3	No
Between Cherry Street and Kaylor Street	68.0	69.0	69.3	1.3	0.3	No
Between Kaylor Street and Bloomfield Street	67.9	68.9	69.0	1.1	0.1	No
Between Bloomfield Street and Lexington Drive	67.5	68.7	68.8	1.3	0.1	No
Bloomfield Street						
Between Ball Road and Cerritos Avenue	64.1	64.5	64.5	0.4	0	No
Between Cerritos Avenue and Catalina Street	63.1	64.0	64.1	1.0	0.1	No
Between Catalina Street and Katella Avenue	63.3	64.3	64.4	1.1	0.1	No
Notes: ADT = average daily trips; dBA = A-weighted decibels; CNEL = community noise equivalent level						
Source: RBF Consulting, Los Alamitos Medical Center Specific Plan Traffic Impact Analysis, June 18, 2010.						



Mitigation Measures: No mitigation measures are required.

Level of Significance After Mitigation: Not Applicable.

5.5.6 SIGNIFICANT UNAVOIDABLE IMPACTS

With imposition of the required mitigation measures, implementation of the proposed project would result in less than significant project impacts related to construction noise. All other identified impacts were concluded to be at less than significant levels, and did not require mitigation. As such, no significant unavoidable impacts would result from the implementation of the Los Alamitos Medical Center Specific Plan.

5.5.7 SOURCES CITED

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5.6 Geology and Seismic Hazards



5.6 GEOLOGY AND SEISMIC HAZARDS

This section evaluates the geologic and seismic conditions within the City of Los Alamitos and evaluates the potential for geologic and seismic hazard impacts associated with implementation of the proposed project. Information in this section is based on the *Los Alamitos General Plan Safety Element*, the *Los Alamitos Emergency Operations Plan*, and various California and Governmental websites.

5.6.1 REGULATORY SETTING

FEDERAL SOIL PROTECTION ACT

The purpose of the Federal Soil Protection Act is to protect or restore the functions of the soil on a permanent sustainable basis. Protection and restoration activities include prevention of harmful soil changes, rehabilitation of the soil of contaminated sites and of water contaminated by such sites, and precautions against negative soil impacts. If impacts are made on the soil, disruptions of its natural functions as an archive of natural and cultural history should be avoided, as far as practicable. In addition, the requirements of the Federal Water Pollution Control Act (also referred to as the Clean Water Act [CWA]) through the National Pollution Discharge Elimination System (NPDES) permit provide guidance for protection of geologic and soil resources.

ALQUIST-PRIOLO EARTHQUAKE FAULT ZONING ACT

The Alquist-Priolo Earthquake Fault Zoning Act was passed in 1972 to mitigate the hazard of surface faulting to structures for human occupancy. This State law was a direct result of the 1971 San Fernando Earthquake, which was associated with extensive surface fault ruptures that damaged numerous homes, commercial buildings, and other structures. The Act's main purpose is to prevent the construction of buildings used for human occupancy on the surface trace of active faults. The Act only addresses the hazard of surface fault rupture and is not directed toward other earthquake hazards.

The Act requires the State Geologist to establish regulatory zones, known as "Earthquake Fault Zones," around the surface traces of active faults and to issue appropriate maps. Earthquake Fault Zones were called "Special Studies Zones" prior to January 1, 1994. Local agencies must regulate most development projects within these zones. Before a project can be permitted, cities and counties must require a geologic investigation to demonstrate that proposed buildings would not be constructed across active faults. An evaluation and written report of a specific area must be prepared by a licensed geologist. If an active fault is found, a structure for human occupancy cannot be placed over the trace of the fault and must be set back from the fault (typically 50 feet set backs are required).

Effective June 1, 1998, the Natural Hazards Disclosure Act requires that sellers of real property and their agents provide prospective buyers with a "Natural Hazard Disclosure Statement" when the property that is being sold lies within one or more State-mapped hazard areas, including Earthquake Fault Zones.



SEISMIC HAZARDS MAPPING ACT

The Seismic Hazards Mapping Act (S-H Act) of 1990 provides a statewide seismic hazard mapping and technical advisory program to assist cities and counties in fulfilling their responsibilities for protecting the public health and safety from the effects of strong ground shaking, liquefaction, landslides, or other ground failure, and other seismic hazards caused by earthquakes. Mapping and other information generated pursuant to the S-H Act is to be made available to local governments for planning and development purposes. The State requires (1) local governments to incorporate site-specific geotechnical hazard investigations and associated hazard mitigation, as part of the local construction permit approval process; and (2) the agent for a property seller or the seller if acting without an agent, must disclose to any prospective buyer if the property is located within a Seismic Hazard Zone. The State Geologist is responsible for compiling seismic hazard zone maps. The S-H Act specifies that the lead agency of a project may withhold development permits until geologic or soils investigations are conducted for specific sites and mitigation measures are incorporated into plans to reduce hazards associated with seismicity and unstable soils.

UNIFORM BUILDING CODE

Development standards require projects to comply with appropriate seismic design criteria in the *Uniform Building Code (UBC)*, adequate drainage facility design, and preconstruction soils and grading studies. Seismic design standards have been established to reduce many of the structural problems occurring because of major earthquakes. In 1998, the UBC was revised as follows.

- Upgrade the level of ground motion used in the seismic design of buildings;
- Add site amplification factors based on local soils conditions; and
- Improve the way ground motion is applied in detailed design.

CALIFORNIA BUILDING CODE

California building standards are published in the *California Code of Regulations, Title 24*, known as the *California Building Code (2007 CBC)*. The 2007 CBC applies to all applications for residential building permits. The 2007 CBC consists of 11 parts that contain administrative regulations for the California Building Standards Commission and for all State agencies that implement or enforce building standards. Local agencies must ensure that development complies with the guidelines contained in the 2007 CBC. Cities and counties have the ability to adopt additional building standards beyond the 2007 CBC.

CITY OF LOS ALAMITOS

Building Code

The “Building Code of the City of Los Alamitos” (*Building Code*) is codified in *Title 15, Buildings and Construction*, of the City’s *Municipal Code*. The *Building Code* adopted the 2007 CBC (*California Code of Regulations, Title 24, Part 2*) based on the 2006 *International Building Code*, including Appendix Chapter 1, Administration, and Appendix 1, Patio Covers, 2007 Edition, as published by the International



Code Council. The purpose of the *Building Code* is to provide minimum standards to safeguard life or limb, health, property and public welfare by regulating and controlling the design, construction, quality of materials, use and occupancy, location and maintenance of all buildings and structures within the City of Los Alamitos.

Los Alamitos General Plan Safety Element

The *General Plan* Safety Element addresses natural and man-made hazards presents in the City of Los Alamitos. Potential risks to Los Alamitos residents and the local environment associated with identified hazards are considered. This Element specifically addresses the way in which the City will prepare and respond to fires, earthquakes, and floods. The Safety Element provides background information related to each issue and identifies hazard locations within the City, risk-reduction strategies, and hazard abatement measures that can ultimately be used by decision-makers in their review of projects. Refer to [Section 5.9, Hazards and Hazardous Materials](#), for a discussion of hazardous materials/waste.

Emergency Operations Plan

The City of Los Alamitos *Emergency Operations Plan* (EOP) details the functional responsibilities and interactions of the federal, state, and local governmental agencies as well as private organizations in the event of natural and human-related disasters. Included within the natural disaster category are geologic hazards, earthquakes, floods, and fires. Potential human-related disasters include air crashes, civil unrest, national security emergencies, and acts of terrorism, tsunamis, and major fires. Within the *Emergency Operations Plan*, potential hazards are described, with the possible effects delineated and recommended mitigations discussed where applicable. The Plan seeks to mitigate the effects of hazards, prepare for measures to be taken which will preserve life and minimize damage, enhance response during emergencies and provide necessary assistance, and establish a recovery system in order to return the City of its normal state of affairs.

5.6.2 ENVIRONMENTAL SETTING

GEOLOGY

Los Alamitos is composed of quaternary deposits of alluvium and colluvium. Alluvium results from sediments deposited from running water and colluvium forms as rock fragments and soil materials accumulate at the base of steep slopes.

Los Alamitos' geologic structure does not include any active or potentially active faults. The City is, however, located in a seismically active region. The following five faults lie within close proximity to Los Alamitos: Norwalk, El Modena, Whittier, Elsinore, Elysian, and Newport-Inglewood. In addition to these faults, the San Andreas fault is situated approximately 46 miles north of Los Alamitos. The San Andreas Fault is anticipated to deliver up to an 8.3 earthquake in the next 20 years.



SOILS

The following discussion is based on information contained in the Soil Survey of Orange County and Western Part of Riverside County conducted by the U.S. Soil Conservation Service. The U.S. Soil Conservation Service identifies a number of Soils in Los Alamitos. These soils include Drained Bolsa Silt Loam, Drained Bolsa Silty Loam, Drained Hueneme Fine Sandy Loam, Metz Loamy Sand, San Emigdio Fine Sandy Loam, and San Emigdio Moderately Fine Sandy Loam, which are all suitable for urban development.

The Los Alamitos Medical Center project site is located on Drained Bolsa Silt Loam.¹ The Bolsa Series consists of somewhat poorly drained soils on alluvial fans. These soils are situated in western Los Alamitos, in the northeast corner of the I-405/I-605 Freeway intersection.

MINERAL RESOURCES

The State Division of Mines and Geology identifies mineral resource areas throughout the State. According to the Geologic Map of Orange County showing Mines and Mineral Deposits, Los Alamitos does not contain any past or present mines or mineral resources.

SEISMIC HAZARDS

The following section describes the presence and characteristics of seismic hazards in Los Alamitos, including earthquake faults, surface rupture, ground shaking, liquefaction, hazardous buildings, and seismic response.

Earthquake Faults

The entire Southern California region is considered to be seismically active. According to the 2010 Fault Activity Map of California, there are several faults within the vicinity of the project site, including the Los Alamitos Fault, which are described in full detail below (refer to *Exhibit 5.6-1, Regional Fault Map*). Other faults capable of affecting Los Alamitos include the Newport-Inglewood Fault, the Norwalk Fault, the El Modena Fault, the Whittier-Elsinore Fault, the Santa Monica-Raymond Hill Fault, the Christianitos Fault, the Peralta Uplift, and the Elysian Park Fault. The San Andreas and San Jacinto Faults are located further from Los Alamitos than these faults, but have the potential to deliver larger magnitude earthquakes. All larger-scale faults which may have the capability to impact the project site are discussed below.

Los Alamitos Fault. The Los Alamitos Fault is approximately seven miles long and runs in a northwest-southeast direction less than one mile from the project site. It is a quaternary fault, and may even extend under the I-405 and I-605 freeways. This fault is not classified as an active fault, and the Quaternary Classification of the fault indicates that it is around 700,000 years old.

¹ Official U.S. Department of Agriculture Natural Resource Conservation Website, Web Soil Survey, found online at <http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>; accessed June 16, 2010



1 Alamo thrust	21 Helendale fault	41 Redondo Canyon fault
2 Arrowhead fault	22 Hollywood fault	42 San Andreas Fault
3 Bailey fault	23 Holser fault	43 San Antonio fault
4 Big Mountain fault	24 Lion Canyon fault	44 San Cayetano fault
5 Big Pine fault	25 Llano fault	45 San Fernando fault zone
6 Blake Ranch fault	26 Los Alamitos fault	46 San Gabriel fault zone
7 Cabrillo fault	27 Malibu Coast fault	47 San Jacinto fault
8 Chatsworth fault	28 Mint Canyon fault	48 San Jose fault
9 Chino fault	29 Mirage Valley fault zone	49 Santa Cruz-Santa Catalina Ridge f.z.
10 Clamshell-Sawpit fault	30 Mission Hills fault	50 Santa Monica fault
11 Clearwater fault	31 Newport Inglewood fault zone	51 Santa Ynez fault
12 Cleghorn fault	32 North Frontal fault zone	52 Santa Susana fault zone
13 Crafton Hills fault zone	33 Northridge Hills fault	53 Sierra Madre fault zone
14 Cucamonga fault zone	34 Oak Ridge fault	54 Simi fault
15 Dry Creek	35 Palos Verdes fault zone	55 Soledad Canyon fault
16 Eagle Rock fault	36 Pelona fault	56 Stoddard Canyon fault
17 El Modeno	37 Peralta Hills fault	57 Tunnel Ridge fault
18 Frazier Mountain thrust	38 Pine Mountain fault	58 Verdugo fault
19 Garlock fault zone	39 Raymond fault	59 Waterman Canyon fault
20 Grass Valley fault	40 Red Hill (Etiwanda Ave) fault	60 Whittier fault

Source: Lisa Wald, U.S. Geological Survey (modified from SCEC).



Newport-Inglewood Fault. The Newport-Inglewood Fault is considered the second most active fault in Southern California and consists of a series of echelon northwest-trending and vertically-dipping faults extending from the southern edge of the Santa Monica Mountains southeastward to the offshore area near Newport Beach. From north to south, the fault segments are:

- Charnock Fault
- Overland Avenue Fault
- Inglewood Fault
- Potrero Fault
- Avalon-Compton Fault
- Cherry Hill Fault; and
- Seal Beach Fault

Numerous shocks of 4.0 magnitude or greater, as well as the historic 6.3 magnitude Long Beach Earthquake in March 1933, have been generated within this fault zone and suggest an active seismic history. Although there has been no observed ground displacement associated with associated with the Newport-Inglewood Fault Zone, there may have been subsurface fault displacement of approximately seven inches associated with the October 21, 1941 and June 18, 1944 earthquakes. This fault zone could generate a 7.6-plus magnitude maximum credible earthquake.

Norwalk Fault. The Norwalk Fault is approximately 16 miles long and lies approximately six miles north of Los Alamitos. Seismic activity has occurred along this fault.

El Modena Fault. The El Modena Fault is a north trending fault located approximately 11 miles north of Los Alamitos. Evidence suggests that the fault was active at one time; however, the fault is now thought to be inactive.

Whittier-Elsinore Fault. The Whittier-Elsinore Fault is situated approximately 12 to 13 miles north of Los Alamitos. There have been several minor earthquakes along this fault. Seismic history reveals that the fault is able to produce a seismic event of magnitude 6.0 or greater.

Santa Monica-Raymond Hill Fault. This fault trends in an east direction from Santa Monica to Pasadena for approximately 16 miles. Probable Magnitudes are 6.0-7.0 on the Richter Scale, and at least eight surface rupturing events have occurred along this fault in the past 36,000 years.

Elysian Park Fault. The Elysian Park Fault is located approximately 20 miles north of Los Alamitos in the Montebello and Monterey Park areas. The Elysian Park Fault produced the 1987 Whittier Narrows 5.9 magnitude earthquake.

San Andreas Fault. The San Andreas Fault extends over 600 miles, encompassing virtually the entire length of California. The fault is divided into segments that have somewhat distinctive behavior patterns. The southern segment is over 300 miles long and occasionally delivers large earthquakes. The San Andreas is located approximately 70 miles east of the City of Los Alamitos.



The last great earthquake was the 1857 Fort Tejon earthquake that is believed to have caused a rupture extending 200 miles. Several other earthquakes have been attributed to the San Andreas Fault; the last one to affect Southern California was a 6.7 magnitude quake in 1899. It is estimated by geologists that this fault may have the potential to generate an earthquake of magnitude 8.5 on the Richter scale, which is designated as the maximum credible earthquake.

San Jacinto Fault. The San Jacinto Fault branches from the San Andreas Fault on the north side of the San Gabriel Mountains and parallels the San Andreas to the Mexico-California border. This fault is located approximately 40 miles north of Los Alamitos. The San Jacinto Fault has been very active and damaging earthquakes have occurred along its entire length. The last earthquake on this fault exceeding 6.0 occurred in 1968. Ten damaging earthquakes have been attributed to this fault since the 1800s, ranging from 5.4 to 6.8 on the Richter scale.

Surface Rupture and Ground Shaking

Surface rupture resulting from earthquakes is unlikely to occur in Los Alamitos, as no active faults have been identified within City boundaries. The Los Alamitos Fault has not had documented activity since 1769, according to the Southern California Earthquake Data Center. The nearest active faults, the El Modena and Norwalk Faults, lie approximately five to ten miles north of Los Alamitos. Other faults located outside the Los Alamitos area include the Newport Inglewood, Whittier-Elsinore, Elysian Park, San Jacinto, and San Andreas.

The future impact of earthquakes on Los Alamitos depends on several factors. The particular fault, fault location, distance from the City, and magnitude of the earthquake all determine the degree of shaking that will occur in the City. In addition, the soil and geologic underlying Los Alamitos influences the amount of damage that the City may experience. The soils underlying Los Alamitos include Drained Bolsa Silt Loam, Drained Bolsa Silty Loam, Drained Hueneme Fine Sandy Loam, Metz Loamy Sand, San Emigdio Fine Sandy Loam, and San Emigdio Moderately Fine Sandy Loam, which are all suitable for typical urban development. However, Los Alamitos is located on an alluvial flood plain and, for the most part, has a high potential for shaking intensity.

The Newport-Inglewood Fault is anticipated to generate the most destructive ground shaking in Los Alamitos. The El Modena and Norwalk Faults, though closer to the City, are predicted to generate smaller magnitude earthquakes. The San Jacinto Fault is very active and has historically produced 6.0 to 7.0 earthquakes. However, as Los Alamitos lies approximately 45 miles to the south, the distance between the City and this fault would alleviate ground shaking impact.

Liquefaction Hazards

Liquefaction is a subsidiary hazard associated with intense ground shaking. During seismic events, the earth accelerates and soils can destabilize. When sufficient water is present in soil, the destabilized soil and water can mix, resulting in liquefaction. Liquefaction is generally associated with shallow ground water conditions and the presence of loose or sandy soils or alluvial deposits. According to the Los Alamitos Emergency Operations Plan, the City is located within the highest possible seismic risk Zone (Zone 4) per the *Uniform Building Code*. Because the City is located on an alluvial flood plain, it has a high potential for liquefaction damage.



Landslides

The City of Los Alamitos lacks any significant topographical features. According to the California Geological Survey, Landslide Inventory Map for the Los Alamitos Quadrangle, no landslides have been recorded within City boundaries and none are anticipated based on the flat terrain of the area.

SEISMIC RESPONSE

The City of Los Alamitos adopted an *Emergency Operations Plan (EOP)* in 2009, which outlines the City's actions during emergency situations such as seismic events. The Plan specifies operations during an emergency, provides organization and assigns responsibilities, coordinates instructions, provides an explanation of how the plan is to be administered, contains procedures identifying responsible personnel, includes methods to request aid/support from other local communities, and identifies procedures for recovery after emergency situations. The *EOP* involves a number of agencies including the police department, fire department, medical facilities, public health officials, corner, and care and shelter operations.

HAZARDOUS BUILDINGS

During a seismic event, Los Alamitos may be subjected to high levels of ground shaking. As a result, buildings within the community could sustain substantial damage. Tilt-up structures, unreinforced masonry buildings, older buildings, buildings over four stories, and mobile homes are particularly susceptible to earthquake damage. Concrete tilt-ups built prior to 1974 may be particularly susceptible to damage. There is one mobile home park within the City which contains 110 mobile homes.

Other structures in Los Alamitos are vulnerable to earthquake damage. The danger associated with earthquake damage increases with the number of individuals that congregate within a specific area.

5.6.3 SIGNIFICANCE THRESHOLD CRITERIA

The environmental analysis in this section is patterned after the Initial Study Checklist recommended by the *CEQA Guidelines*, as amended, and used by the City of Los Alamitos in its environmental review process, and is contained in Appendix A of this EIR. The Initial Study Checklist includes questions relating to geology and seismic hazards. The issues presented in the Initial Study Checklist have been utilized as thresholds of significance in this section. Accordingly, a project may create a significant environmental impact if it causes one or more of the following to occur:

- Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
 - Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and



Geology Special Publication 42 (refer to Section 8.0, Effects Found Not To Be Significant).

- Strong seismic ground shaking.
- Seismic-related ground failure, including liquefaction.
- Landslides (refer to Section 8.0, Effects Found Not To Be Significant).
- Result in substantial soil erosion or the loss of topsoil (refer to Section 8.0, Effects Found Not To Be Significant).
- Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on-or off-site landslide, lateral spreading, subsidence, liquefaction or collapse.
- Be located on expansive soil, as defined in Table 18-1-B of the California Building Code (2004), creating substantial risks to life or property.
- Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water (refer to Section 8.0, Effects Found Not To Be Significant).

Based on these standards, the effects of the proposed project have been categorized as either a “less than significant impact” or a “potentially significant impact.” Mitigation measures are recommended for potentially significant impacts. If a potentially significant impact cannot be reduced to a less than significant level through the application of mitigation, it is categorized as a significant unavoidable impact.

5.6.4 PROJECT IMPACTS AND MITIGATION MEASURES

SEISMIC GROUNDSHAKING

- ◆ **DEVELOPMENT ASSOCIATED WITH IMPLEMENTATION OF THE PROPOSED PROJECT COULD BE SUBJECT TO HIGH LEVELS OF GROUNDSHAKING DURING A SEISMIC EVENT, WHICH COULD RESULT IN SUBSTANTIAL DAMAGE TO ON-SITE BUILDINGS.**

Level of Significance Before Mitigation: Potentially Significant Impact.

Impact Analysis: Groundshaking accompanying earthquakes on nearby faults is anticipated to be felt within the Los Alamitos Medical Center Specific Plan site. The greatest amount of groundshaking at the project site would be expected to accompany large earthquakes on the Los Alamitos, Newport-Inglewood, Norwalk, El Modena, Whittier-Elsinore, Santa Monica-Raymond Hill, and Elysian Park faults; however, other faults in the southern California region may also generate groundshaking impacts at the project site.



The intensity of groundshaking would depend upon the magnitude of the earthquake, distance to the epicenter and the geology of the area between the epicenter and the City. The proposed project includes the expansion of medical office and hospital facilities with the proposed Specific Plan Area, which would induce employment growth. This in turn would potentially expose more patients and employees to the effects of ground shaking from locally- and regionally-generated earthquakes.

Strong seismic groundshaking could result in substantial damage to some new buildings associated with the proposed project. The effects of groundshaking would be sufficiently mitigated for buildings designed, engineered, and constructed in conformance to meet all applicable local and state seismic safety requirements, current building codes, and engineering standards.

Implementation of the proposed project could expose people or structures to potential substantial adverse effects as a result of strong seismic groundshaking. Impacts associated with seismically induced groundshaking would be considered significant, unless mitigated. Mitigation has been recommended in order to reduce impacts associated with seismically induced groundshaking to less than significant levels. The mitigation involves compliance with the recommendations detailed in site-specific Geotechnical Studies conducted for future buildings. Also, numerous controls would be imposed on future buildings through the permitting process that would further lessen impacts associated with seismically-induced groundshaking. Additionally, the *General Plan* Safety Element includes goals and policies to protect the community from risks associated with seismic hazards. The following *General Plan* Safety Element Policies and Implementation Measures are applicable to the proposed project:

- 3-2.1: Take all necessary steps to be prepared for a major earthquake.
- 3-2.2.1: Require all new development to comply with seismic safety standards incorporated in current building codes.
- 3-2.2.2: Work with the Fire Authority to include earthquake preparedness considerations in all regular inspections.
- 3-2.2.3: Require new or substantially remodeled development to be properly designed and constructed for earthquake safety.
- 3-2.2.4: Work with the owners of buried utilities lines and petroleum and natural gas pipelines so that lines are protected from corrosion and are equipped with automatic shut-off valves.

It should be noted that in the event of a major event or emergency, such as an earthquake, the *Los Alamitos Emergency Operations Plan* (referenced above) would come into effect. In addition, the Medical Center also has an adopted Emergency Operations Plan, which serves to plan for, and respond to, emergencies in six critical areas: communications, resources and assets, safety and security, staff responsibilities, utilities management, and patient clinical and support activities. All on-site development associated with implementation of the proposed project would be subject to compliance with applicable building codes (i.e., *City Building Code*, *Uniform Building Code*, *California Building Code*), *General Plan* goals and policies, and Mitigation Measures GEO-1 through GEO-3,



which would lessen potential impacts associated with strong seismic groundshaking to less than significant levels.

Mitigation Measures:

- GEO-1 The project applicant shall have a geologist registered by the State of California prepare a HAZUS Analysis prior to issuance of grading permits for the Hospital Buildings. Any recommendations in the study are applicable to the Hospital Buildings, if required by OSHPD, and shall be implemented during site grading and construction.
- GEO-2 Prior to issuance of a grading permit for each building, a registered geologist or soils engineer shall prepare an area-specific Geologic Study, which shall be submitted to the Community Development Department (Building and Safety) for approval. The Geologic Study shall specify the measures necessary to mitigate impacts related to liquefaction, expansion, and other geologic and seismic hazards, if any. All recommendations in the Geologic Study shall be implemented during area preparation, grading, and construction.
- GEO-3 Prior to issuance of any grading permit for each building, the project applicant shall comply with each of the recommendations detailed in the Geotechnical Study, and other such measure(s) as the City deems necessary to adequately mitigate potential seismic and geotechnical hazards.

Level of Significance After Mitigation: Less Than Significant Impact.

LIQUEFACTION

- ◆ **DEVELOPMENT ASSOCIATED WITH IMPLEMENTATION OF THE PROPOSED PROJECT COULD BE SUBJECT TO LIQUEFACTION IMPACTS RESULTING FROM GROUNDSHAKING.**

Level of Significance Before Mitigation: Potentially Significant Impact.

Impact Analysis: Liquefaction is a secondary hazard associated with intense groundshaking. When the earth accelerates as a result of groundshaking, soils may destabilize. If sufficient water is present in the soil, soil and water could mix, resulting in ground failure. Liquefaction is generally associated with shallow ground water conditions, the presence of loose or sandy soils, or alluvial deposits. The *General Plan* Safety Element Technical Study states that Los Alamitos has all three conditions in which liquefaction can occur.

Therefore, implementation of the proposed project could expose people or structures to potential substantial adverse effects involving liquefaction. This impact is considered significant unless mitigated. All on-site development associated with implementation of the proposed project would be subject to compliance with applicable building codes (i.e., *City Building Code*, *Uniform Building Code*, *California Building Code*), *General Plan* goals and policies (discussed previously for Seismic Ground



Shaking impacts,) and Mitigation Measures GEO-1 through GEO-2, which would lessen potential impacts associated with liquefaction to less than significant levels.

Mitigation Measures: Refer to Mitigation Measures GEO-1 and GEO-2. No additional mitigation measures are required.

Level of Significance After Mitigation: Less Than Significant Impact.

EXPANSIVE SOILS

◆ DEVELOPMENT ASSOCIATED WITH IMPLEMENTATION OF THE PROPOSED PROJECT COULD BE LOCATED ON EXPANSIVE SOILS CREATING POTENTIAL RISK TO LIFE OR PROPERTY.

Level of Significance Before Mitigation: Potentially Significant Impact.

Impact Analysis: As stated in Section 5.6.2, the soils present within the Los Alamitos City limits include clays, silts, and sand that were laid down as alluvial/floodplain deposits from the San Gabriel River. The soils include: Drained Bolsa Silt Loam, Drained Bolsa Silty Loam, Drained Hueneme Fine Sandy Loam, Metz Loamy Sand, San Emigdio Fine Sandy Loam, and San Emigdio Moderately Fine Sandy Loam. Specifically, the project site is located on Drained Bolsa Silt Loam². The Bolsa Series consists of somewhat poorly drained soils on alluvial fans. All of these soils types are considered suitable for urban development. Soils with a percentage of clay have the potential to expand when water is added and shrink when water is lost, resulting in what is called expansive soils. Expansive soils can result in damage to overlying structures and infrastructure. The soil types present on the project site have a low shrink-swell potential and limited susceptible to expansivity. However, to ensure that potential impacts associated with expansive soils are reduced to less than significant levels, the proposed project would be required to comply with applicable building codes (i.e., *City Building Code*, *Uniform Building Code*, and *California Building Code*) and Mitigation Measures GEO-1 through GEO-4.

Mitigation Measures: Refer to Mitigation Measures GEO-1 through GEO-3. In addition, the following mitigation measure is required.

GEO-4 If potentially expansive units (i.e., clay soils) are encountered during construction, they shall be evaluated by the Project Geotechnical Engineer. Special foundation designs and reinforcement shall be utilized to mitigate expansive material as specified by the Project Geotechnical Engineer and to the satisfaction of the City. Specifically, if clay soils are exposed at the deeper subgrade level, the Construction Contractor shall employ dewatering techniques, as the clay soils shall not be allowed to dry out.

Level of Significance After Mitigation: Less Than Significant Impact.

² Official U.S. Department of Agriculture Natural Resource Conservation Website, Web Soil Survey, found online at <http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>; accessed June 16, 2010



5.6.5 CUMULATIVE IMPACTS AND MITIGATION MEASURES

- ◆ **IMPLEMENTATION OF THE PROPOSED PROJECT AND OTHER RELATED CUMULATIVE PROJECTS COULD RESULT IN CUMULATIVELY CONSIDERABLE IMPACTS RELATED TO GEOLOGIC SOILS, AND SEISMIC HAZARDS.**

Level of Significance Before Mitigation: Less Than Significant Impact.

Impact Analysis: The proposed project would result in less than significant impacts related to geology, soils, and seismicity, with implementation of applicable mitigation measures.

Unsafe geologic, soils, and seismic conditions exist throughout southern California and new development in such areas would be considered significant. These potential impacts are evaluated on a project-by-project basis in accordance with *CEQA*. If a specific site were determined to create a significant impact that could not be feasibly mitigated the site would not be appropriate for development. Development of cumulative projects would incrementally increase the number of people and structures potentially subject to a seismic event. However, such exposure would be minimized through strict engineering guidelines for development at each respective area. Future development projects would be subject to compliance with the respective jurisdiction's *Building Code*, *California Building Code*, and *Uniform Building Code*. Additionally, site-specific mitigation would be incorporated on a project-by-project basis to reduce cumulative geology and soil impacts to a less than significant level.

As concluded above, implementation of the proposed project would be less than significant with adherence to the *General Plan* goals and policies, compliance with the City's *Building Code*, *California Building Code*, and *Uniform Building Code*, and recommended mitigation measures. Therefore, implementation of the proposed project would not result in cumulatively considerable geology and seismic hazards impacts.

Mitigation Measures: No mitigation measures are required.

Level of Significance After Mitigation: Not Applicable.

5.6.6 SIGNIFICANT UNAVOIDABLE IMPACTS

With the imposition of the mitigation measures, implementation of the proposed project would result in less than significant project impacts related to geology and seismic hazards materials. Cumulative impacts were concluded to be at less than significant levels, and did not require mitigation. As such, no significant unavoidable impacts would result from implementation of the Los Alamitos Medical Center Specific Plan.



5.6.7 SOURCES CITED

Los Alamitos 2010 General Plan, Chapter 3, Safety Element, approved August 1999

Los Alamitos General Plan 2010 Mitigated Negative Declaration, Section III, prepared by the City of Los Alamitos, adopted August 1999

Official United States Department of Agriculture Soils Maps, found online at <http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>, accessed May 27, 2010

Official USGS Mineral Resources Online Spatial Data, <http://mrdata.usgs.gov/mineral-resources/mrds-us.html>, accessed May 27, 2010

California 2010 Fault Activity Map, found online at <http://quake.ca.gov/gmaps/FAM/faultactivitymap.html>, accessed May 28, 2010

Southern California Earthquake Data Center Webpage, www.data.scec.org, accessed May 28, 2010

California Geological Survey Website and Landslide Maps, found on line at http://www.conservation.ca.gov/cgs/rghm/landslides/Pages/ls_index.aspx, accessed May 28, 2010

City of Cypress General Plan EIR, Certified September 10, 2001, prepared by RBF Consulting for the City of Cypress.

City of Los Alamitos Emergency Operating Procedures Plan, updated 2009, prepared for the City of Los Alamitos



5.7 Hazards and Hazardous Materials



5.7 HAZARDS AND HAZARDOUS MATERIALS

This section discloses the potential for environmental safety issues that could occur at the project site due to existence of hazardous materials and to analyze potential hazards. This section incorporates information from the *Los Alamitos General Plan Initial Study/Negative Declaration*, the *Los Alamitos Municipal Code*, the Los Alamitos Medical Center Environment of Code Care Management Plans, and various technical reports prepared for the Los Alamitos Medical Center and Safety-Kleen Systems, which are contained in Appendices I1 through K5.

5.7.1 REGULATORY SETTING

DEFINITION OF HAZARDOUS MATERIALS

The definition of “Hazardous Material” is different for different regulatory programs. For purposes of this EIR, the definition is similar to that in the *California Health and Safety Code*, Section 25501:

“Hazardous materials that, because of their quantity, concentration, or physical or chemical characteristics, pose a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment.”

“Hazardous Waste” is a subset of hazardous materials. For the purposes of this EIR, the definition of hazardous waste is essentially the same as that in the *California Health and Safety Code*, Section 25517, and in the *California Code of Regulations*, Title 22, Section 66261.2:

“Hazardous wastes are wastes that, because of their quantity, concentration, or physical chemical, or infectious characteristics, may either cause, or significantly contribute to, an increase in mortality or an increase in serious illness, or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.”

Hazardous materials can be categorized as non-radioactive chemical materials, radioactive materials, and biohazardous materials. For hazardous chemicals, the above definitions are typically adequate; radioactive and biohazardous materials are further defined below:

- Radioactive materials contain atoms with unstable nuclei that spontaneously emit ionizing radiation to increase their stability.
- Radioactive wastes are radioactive materials that are discarded (including wastes in storage) or abandoned.
- Biohazardous materials are materials containing certain infectious agents (microorganisms, bacteria, molds, parasites, viruses) that normally cause or significantly contribute to increased human mortality, or organisms capable for being communicated by invading and multiplying in body tissues.



- Medical waste includes both biohazardous wastes (byproducts of biohazardous materials) and sharps (devices capable of cutting, piercing, such as hypodermic needles, razor blades, and broken glass) resulting from the diagnosis, treatment, or immunization of human beings, or research pertaining to these activities.

FEDERAL AND STATE REGULATIONS

Hazardous materials handling and hazardous waste management are subject to laws and regulations at all levels of government, as well as within the healthcare industry. The Los Alamitos Medical Center complies with these laws and regulations, by implementing a series of in-house plans, policies, and procedures. Laws and regulations are described below, followed by all plans, policies, and procedures currently being implemented by the Los Alamitos Medical Center.

Hazardous Materials Management and Emergency Planning

Federal and State laws require detailed planning to ensure that hazardous materials are properly handled, used, stored, and disposed of, and, if such materials are accidentally released, to prevent or to mitigate injury to health and or the environment. California's Hazardous Materials Release Response Plans and Inventory Law, sometimes called the "Business Plan Act," aims to minimize the potential for accidents involving hazardous materials and to facilitate an appropriate response to possible hazardous materials emergencies. The law requires businesses that use hazardous materials to provide inventories of those materials to designated emergency response agencies, to illustrate on a diagram where the materials are stored on-site, to prepare an Emergency Response Plan, and to train employees to use the materials safely.

Building and Fire Safety

Hospitals, unlike other buildings, must not only be safe for patients but also be able to provide care to the community in the event of a major disaster, including earthquakes. In order to ensure that hospitals in California conform to high construction standards, the Alfred E. Alquist Hospital Facilities Seismic Act (HSSA) was passed in 1973. The intent of the HSSA is to assure that hospitals are reasonably capable of providing services to the public after a disaster. In 1983, the HSSA (*Health and Safety Code*, Section 129675) was significantly amended and ultimately preempted local building departments from all hospital construction plan review responsibility and transferred it to the Office of Statewide Health Planning and Development (OSHPD), and the Division of the State Architect (DSA). This essentially created a building department within OSHPD, called Facilities Development Division (FDD).

FDD reviews and approves the plans and specifications for the construction, alteration, and addition to hospital buildings and skilled nursing homes, and observes construction activities to ensure compliance with the provisions of the *California Building Standards Code, Title 24, California Code of Regulations*. This includes plan review of the design details of the architectural, structural, mechanical, plumbing, and electrical systems.



In 1991, recognizing the need to consolidate health facility review and construction observation functions, the Legislature established a single point of accountability and authority for plan review and construction observation activities relating to hospitals by transferring all duties and functions to OSHPD's FDD. Now the hospital design and construction industry has a single enforcement agency to provide all services and technical guidance with regard to the construction of health facility projects. FDD is also one of the regulatory agencies authorized to develop building standards adopted in the *California Building Standards Code* for hospitals and skilled nursing facilities, as well as correctional treatment centers and licensed clinics.

The City of Los Alamitos Building Department locally enforces the *California Building Code* (as amended), while the Orange County Fire Authority (OCFA) enforces the *California Uniform Fire Code* (as amended), for development projects within the City. These laws specify management practices for flammable materials, including some packaging and containment requirements. They also set forth appropriate construction standards (e.g., fire separations and fire suppression systems), depending on building occupancy classifications. For all buildings that do not require review by the California Office of Statewide Health Planning and Development (OSHPD) the City's Building Division reviews proposed building design plans to ensure compliance with *California Building Code* requirements. For the proposed project, these include the medical office building, the two parking structures, and the central plant.

Worker, Patient, and Visitor Safety

Federal and State Laws set occupational safety standards to minimize worker safety risks from both physical and chemical hazards in the workplace. The California Division of Occupational Safety and Health (Cal/OSHA) is responsible for developing and enforcing workplace safety standards and assuring worker safety in the handling and use of hazardous materials. Among other requirements, Cal/OSHA obligates many businesses to prepare Injury and Illness Prevention Plans and Chemical Hygiene Plans. The Hazard Communication Standard requires that workers be informed of the hazards associated with the materials they handle. For example, manufacturers are to appropriately label containers, Material Safety Data Sheets are to be available in the workplace, and employers are to properly train workers. The U.S. Occupational Safety and Health Administration's Bloodborne Pathogens Standard requires the use of Universal Precautions (handling all human blood and certain body fluids as if they were infectious agents) in the workplace.

Hazardous Waste Handling

The U.S. Environmental Protection Agency (U.S. EPA) has authorized the California Department of Toxic Substances Control (DTSC) to enforce hazardous waste laws and regulations in California. Requirements place "cradle-to-grave" responsibility for hazardous waste disposal on the shoulders of hazardous waste generators. Generators must ensure that their wastes are disposed of properly, and legal requirements dictate the disposal requirements for many waste streams (e.g. banning many types of hazardous wastes from landfills). Many hazardous waste generators are required to prepare Hazardous Waste Minimization Plans pursuant to the California Hazardous Waste source Reduction and Management Review Act. All hazardous waste generators must certify that, at a minimum, they make a good faith effort to minimize their waste and to select the best waste management method available.



Radioactive Materials Management

The Radiologic Health Branch of the California Department of Health Services administers the Federal and State radiation safety laws that govern the storage, use, and transportation of radioactive materials and the disposal of radioactive wastes. The Radiologic Health Branch licenses institutions that use radioactive materials and radiation-producing equipment, such as x-ray equipment. To maintain a radioactive materials license, an institution must meet training and radiation safety requirements and be subject to routine inspections. Radioactive waste is classified into three classifications (A, B, C) for near surface disposal, as defined in the *Nuclear Regulatory Commission Regulations* (10NRC) Section 61.55 Waste Classification.

Medical Waste Handling

The California Department of Health Services Medical Waste Management Program enforces the California Medical Waste Management Act and related regulations. Medical waste includes biohazardous pharmaceutical waste and is generally regulated in the same manner as hazardous waste, except that special provisions apply to storage, disinfection, containment, and transportation. The law imposes a cradle-to-grave tracking system and a calibration and monitoring system for on-site treatment. Facilities that treat medical wastes must obtain permits to do so and are subject to annual audits. The Los Alamitos Medical Center does not treat or incinerate medical waste on-site, but contains and labels as regulated for disposal by a licensed transporting company. A manifesto is kept for tracking purposes. Medical waste is to be stored and closed in red bags marked "biohazard" and, when transported for disposal, placed inside hard-walled containers with lids.

Hazardous Materials Transportation

The U.S. Department of Transportation (DOT) has developed regulations pertaining to the transport of hazardous materials and hazardous wastes by all modes of transportation. U.S. DOT regulations specify packaging requirements for different types of materials. The U.S. Postal Service (USPS) has developed additional regulations for the transport of hazardous materials by mail. EPA has also promulgated regulations for the transport of hazardous wastes. These more stringent requirements include tracking shipments with manifests to ensure that wastes are delivered to their intended destinations. In California, the California Highway Patrol, the California DOT (Caltrans), and the DTSC play a role in enforcing hazardous materials transportation requirements.

LOS ALAMITOS MEDICAL CENTER – ENVIRONMENT OF CODE CARE MANAGEMENT PLANS

The Los Alamitos Medical Center has several plans, all updated in 2010, that regulate the management of hazardous materials, the management of medical equipment, management of security, management for utility equipment, management for safety, management for fire prevention in emergency situations. The Los Alamitos Medical Center also has an adopted Emergency Operations Plan.

All plans were prepared in compliance with Elements of Performance set forth by the Joint Commission on Accreditation of Healthcare Organizations. The Joint Commission (TJC) is an



organization that sets standards for healthcare organizations and issues accreditation to organizations that meet those standards. TJC conducts periodic yearly on-site surveys to verify that *"an accredited organization substantially complies with Joint Commission standards and continuously makes efforts to improve the care and services it provides."*¹ If an organization is found to be in substantial non-compliance, then funding re-imbursements for medical expenditures on-site cannot be obtained from state and federal funding sources. Standards set forth by TJC are commonly referred to as the Environment of Care Code Standards. All Los Alamitos Medical Center Management Plans discussed below are in compliance with various sections of the Environment of Care Codes established by TJC.

Management Plan for Hazardous Materials and Waste Management

The objective of the Management Plan for Hazardous Materials and Waste Management is to emphasize safety within the premises and off-site areas. The hazardous materials and waste management program is designed to minimize the risks associated with exposures to hazardous materials and waste, recommend appropriate corrective action, and evaluate implemented corrective action. This is accomplished through the inventory and control of hazardous materials and waste, including but not limited to substances that are flammable, corrosive, chemically reactive, radioactive, bloodborne pathogens, or toxic substances.

Management Plan for Medical Equipment

The Management Plan for Medical Equipment serves to manage effective, safe, and reliable operations of medical equipment used in the delivery of patient care. Inherent in medical equipment processes are operational reliability of medical equipment, the development of a concurrent medical equipment inventory and program, and an inspection and maintenance program designed to minimize risks to patients. Specific goals of the medical equipment management plan include the following:

- The medical center has equipment available which is appropriate for the clinical services that it provides;
- Those items of equipment that could create hazards for the patients or staff are working properly and safely, and are maintained in this condition at all times that they are in use;
- The services related to this equipment remain in full compliance with the basic regulatory requirements promulgated by the relevant local, state, and national authorities having jurisdiction, and
- This program of vital support services is provided to the facility as cost effectively as possible.

Management Plan for Security

The Management Plan for Security is intended to provide a safe environment wherein intentional risks for harm or loss can be minimized. The Plan identifies risk mitigation strategies for both the

¹ JCHAO Website, www.jointcommission.org, accessed June 15, 2010



grounds and medical center premises. The Plan is an accreditation/standards-based and regulatory driven program, which is assessed for effectiveness during the annual evaluation process.

Management Plan for Utility Equipment

The Management Plan for Utility Equipment serves to manage effective, safe, and reliable operations of utility equipment that provides a controlled physical environment for the patients, employees, physicians, and for visitors who enter the premises. Inherent in utility equipment processes are operational reliability of utility equipment, the development of a utility equipment inventory and program, and an inspection and maintenance program designed to minimize risks to patients, and the physical environment. Specific programs in place to support the objectives of the Utility Equipment Management Plan include:

- Preventative Maintenance Program
- Corrective Maintenance Program
- Annual maintenance on inventoried equipment/systems
- User/maintainer training
- Performance indicators
- Annual evaluation of the Management Plan for Utility Equipment

Management Plan for Safety

The Management Plan for Safety serves to provide a built-environment where in-patient care can be optimized, and to create an environment that minimizes physical harm and hazards for the patient-care population, staff, volunteers, physicians, contracted workers, and visitors. It is an accreditation/standards-based and regulatory driven program, which is assessed for effectiveness during the annual evaluation process. The Plan addresses management risks associated with the building equipment and people who work in or enter the building.

Management Plan for Fire Prevention

The objectives of the Management Plan for Fire Prevention are to provide a built-environment wherein patient care can be safely administered, to provide a safe environment of care to protect patients, personnel, visitors, and property from fire and the products of combustion, and to provide for the safe construction and use of building and grounds in accordance with applicable codes and regulations for the State of California. This includes identifying risks, conducting fire drills and maintaining fire protective equipment and environment.

Emergency Operations Plan

The purpose of the Emergency Operations Plan is to establish a comprehensive, organization-wide Emergency Management System that addresses the medical center's emergency management program and ensures an effective response to a variety of natural or human-made disasters. The Emergency Plan has been developed so that the medical center can effectively plan for, and respond to, emergencies in six critical areas:



- Patient Clinical and Support Activities
- Communications
- Resources and Assets
- Safety and Security
- Staff Responsibilities
- Utilities Management

Additional Hospital Policies and Procedures

In addition to the Management Plans listed above, the Los Alamitos Medical Center also has several other plans, programs and/or policies that contain procedural requirements regarding employee health and disease control.

Aerosol Transmissible Disease Exposure Control Plan

This Administrative/Infection Control Procedural document is designed to have several purposes:

1. Help reduce exposure to occupational air contaminants such as mists, gases, vapors, and microorganisms.
2. Identify infection control measures for aerosol transmissible diseases (ATD) and aerosol transmissible pathogens (ATP).
3. Identify those who are responsible for the implementation of the plan and methods for annual review of the plan with employees with Cal/OSHA *Title 8 CCR* Section 5199.
4. Protect the decontamination team members who use a respirator during an actual event or for decontamination training purposes from exposure to respiratory hazards or other hazards associated with the use of personal protective equipment (PPE).
5. Where feasible, exposure to contaminants will be eliminated by either engineering controls (i.e., general and local exhaust ventilation, enclosure, or isolation), or substitution of a less hazardous process or material.
6. When effective engineering controls or substitution are not feasible, use of personal protective respiratory equipment may be required.

Clinical Safety Policy-Surveillance Prevention and Control Program Plan

The purpose of the Surveillance Prevention and Control Program is to identify infections, as well as prevent the risk of disease acquisition and transmission through the introduction of preventative measures. The aim of the Program is to deliver safe, cost-effective care to patients, staff, visitors, and others in the healthcare environment (with emphasis on populations at high risk of infection). The Program is designed to prevent and reduce hospital-associated infections (HAI) and provide



information and support to all healthcare providers regarding the principles and practices of Infection Control (IC) in order to support the development of a safe environment for all who enter the facility. Goals include recommendation and implementation of risk reduction practices by integrating principles of infection prevention and control into all direct and indirect standards of practice. The Program is designed to provide processes for the infection prevention and control program among all departments and individuals within the hospital organization.

Employee Health Policy and Procedure

The purpose of this policy is to educate employees on the process of reporting completion of pre-placement medical examination, annual health requirements, work-related injuries or infection, blood/body fluid exposures, and return to work processes. The policy is designed to assure that employees are free from symptoms of infectious diseases, and are physically able to fulfill the requirements for their job; the policy specifies an ongoing monitoring of the employee's health.

HAZARDOUS BUILDING COMPONENTS

Structural building components sometimes contain hazardous materials such as asbestos, polychlorinated biphenyls (PCBs), lead, and mercury. During demolition or renovation of any existing building, these hazardous material building components may be disturbed and thus expose workers, the public, and the environment to these hazards. These materials are subject to various regulatory protocols as described below.

Asbestos

Asbestos is regulated both as a hazardous air pollutant and as a potential worker safety hazard. South Coast Air Quality Management District (SCAQMD) and Cal/OSHA regulations restrict asbestos emissions from demolition and renovation activities, and specify safe work practices to minimize the potential for release of asbestos fibers. These regulations prohibit emissions of asbestos from asbestos-related manufacturing, demolition, or construction activities; require medical examinations and monitoring of employees engaged in activities that could disturb asbestos; specify precautions and safe work practices that must be followed to minimize the potential for release of asbestos fibers; and require notice to federal and local government agencies prior to beginning renovation or demolition that could disturb asbestos. California requires licensing of contractors who conduct asbestos abatement activities.

PCBs

DTSC has classified PCBs as a hazardous waste when concentrations exceed 5 parts per million (ppm) in liquids or 50 ppm in nonliquids. Fluorescent light ballasts may contain PCBs; if so, they are regulated as hazardous waste and must be transported and disposed of as hazardous waste. Ballasts manufactured after January 1, 1978, should not contain PCBs and are required to have a label clearly stating that PCBs are not present. PCBs are regulated under the Federal Toxic Control Substances Control Act.



Lead

Cal/OSHA standards establish a maximum safe exposure level for types of construction work where lead exposure may occur, including demolition of structures where materials containing lead are present; removal or encapsulation of materials containing lead; and new construction, alteration, repair, or renovation of structure with materials containing lead. Inspection, testing, and removing lead-containing building materials must be performed by State-certified contractors who are required to comply with applicable health and safety and hazardous materials regulations. Typically, building materials with lead-based paint attached are not considered hazardous waste unless the paint is chemically or physically separated from the building debris. The U.S. Department of Housing and Urban Development has developed Guidelines for Evaluation and Control of Lead-Based Paint Hazards.

Mercury

Spent fluorescent light bulbs, thermostats, and other electrical equipment contain heavy metals that, if disposed of in landfills, can leach into soil or groundwater. Lighting tubes typically contain concentrations of mercury that may exceed regulatory thresholds of hazardous waste and, as such, must be managed in accordance with hazardous waste regulations. Elemental mercury is in many electrical switches, and when disposed of, such mercury is considered hazardous waste. Mercury thermometers are being (or have been) phased out and replaced with digital thermometers.

5.7.2 ENVIRONMENTAL SETTING

HAZARDOUS MATERIALS AND WASTES

Patient care services involve relatively small quantities of hazardous materials, which are primarily in clinical offices, cleaning and sterilizing processes, and pharmacies. The types of hazardous materials found in medical facilities include chemotherapy reagents and other pharmaceuticals; chemicals used to sterilize equipment; formaldehyde for specimen preservation; and solvents, oxidizers, corrosives, and stains used in clinical laboratories. Facilities maintenance activities require various common hazardous materials, including cleaners (which may include solvents and corrosives, in addition to soaps and detergents); paints, pesticides and herbicides; fuels (e.g., diesel) and oils and lubricants. Radioactive materials are utilized at the hospital, which are primarily used to treat certain types of cancer. Radioactive materials generally contain radioactive atoms; however, x-ray equipment (which does not involve any radioactive substances) is also regulated as radioactive material. Biohazardous materials and medical wastes (including pathological specimens, surgical specimens, human tissues, bulk blood and blood products, blood specimens and body fluids) are handled in clinical offices, dialysis units, operating rooms, pathology and radiology departments, and respiratory therapy.

Currently, the Los Alamitos Medical Center uses and stores various amounts and types of hazardous materials, as indicated above. These materials may not be stored on the hospital's premises for more than 90 days. Such materials stored on-site may include but are not limited to: lubricants, solvents, anti-corrosion or corrosion removal agents, oils, paints, cleaners, various alloys and metals, alcohols, adhesives, absorbent materials, sealants, rust removers, insulation, various gases, fuels, and refrigerants.



HAZARDOUS WASTE GENERATION

Use of hazardous materials typically produces hazardous waste. Much of the hazardous material handled at the hospital is consumed through use. Potential waste includes solvents, waste oil and mixed oils, and photography liquids and solids. These wastes are shipped hazardous waste treatment, storage, and disposal facilities off-site in accordance with California Hazardous Waste Control Law. Any hazardous chemical waste is shipped off-site for disposal or recycling.

The hospital generates relatively little radioactive waste for off-site disposal. Most of the radionuclides used to treat patients have half-lives no greater than 52 days, so they are stored on-site until their radioactivity decays to background levels; then disposed of as ordinary non-hazardous solid waste.

PHYSICAL HAZARDS

As with all work environments, various physical safety hazards exist at the project site. Office and clinical activities are associated with various physical hazards from common activities such as lifting, using sharp tools, and performing repetitive motions. Some employees work with equipment that presents special hazards, such as high-voltage electrical equipment, x-ray producing instruments, lasers, and high-intensity magnetic fields. Some hazardous materials have the potential to pose physical safety hazards, (e.g., burns) if not properly managed. Classes of materials that are associated with physical injuries include pressurized liquids and gases, cryogenic (extremely cold) liquids, flammable materials, and corrosive chemicals.

ON-SITE HAZARDS

Safety-Kleen Systems

Safety-Kleen Systems, Inc. (S-K) operated a service center for the distribution of mineral spirits, storage of spent mineral spirits and other spent part-cleaning solvents, spent dry cleaning waste, and automobile paint waste² at 3876-3878 Florista Street in Los Alamitos, California from 1977 to 1991. The service center function was located in the eastern end of the building located on the previously mentioned address.

In April 1996, S-K entered into a Corrective Action Consent Agreement (CACA) with the State of California Environmental Protection Agency/Department of Toxic Substances Control (DTSC) to address closure, assessment, and corrective measures and issues associated with the former S-K facility. S-K has been working with DTSC since 1996 to complete closure/corrective action of its former facility. As part of the requirements in the CACA, S-K has been conducting routine groundwater monitoring on the former facility site since 1997.

A RCRA Facility Investigation (RFI) was conducted from August 1997 to August 1999 to evaluate the extent of subsurface degradation due to former Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs) on-site.

² DTSC Public Profile Summary, http://www.envirostor.dtsc.ca.gov/public/profile_report.asp?global_id=80001452



Activities during the August 1997 RFI included the advancement of two soil borings (DC-1 and DC-2) in the former S-K office and warehouse suites of the building. Soil samples were collected from these borings at depth intervals of 3-4 feet below ground surface (bgs) and 11-12 feet bgs. The samples were analyzed for VOCs and total petroleum hydrocarbons as mineral spirits (TPHms). Chlorobenzene was reported in DC-1 from 3-4 feet bgs at a concentration of 0.013 milligrams per kilogram (mg/kg), and 1,2-Dichlorobenzene and 1,4-Dichlorobenzene was reported in Boring DC-2 from 11-12 feet bgs, at concentrations of 0.027 mg/kg and 0.016 mg/kg, respectively. All other VOCs and TPHms were not reported in Borings DC-1 or DC-2 above laboratory reporting limits (RLs).

The Phase II RFI activities were implemented in August-September 1999. The RFI activities included installing soil borings and eight monitoring wells (MW-1 through MW-8) to determine the extent of groundwater quality impacts. The monitoring wells were installed to approximate depths ranging from 20 to 43 feet below ground surface (ft-bgs).

From December 2002 to August 2004, soil gas and indoor air investigations were also completed. Initial indoor air samples collected in December 2002 were used to characterize possible vapor emissions from the subsurface to the indoor air of the building. It was concluded that reported VOCs in indoor air were present at concentrations similar to those found in ambient air in the area. Soil gas samples were collected in April 2003 in response to increasing VOC concentrations in ground water. Due to relatively elevated concentrations of vinyl chloride in soil gas, the DTSC required additional indoor air sampling. Indoor air monitoring was conducted in August 2004 and the results indicated that vinyl chloride was not detected above laboratory RLs in any sample.

In June 2005, S-K received comments from DTSC regarding the October through December 2004 Quarterly Progress Report. Pursuant to DTSC's request in the June 2005 correspondence, a work plan for discrete-depth groundwater sampling was submitted to DTSC on July 28, 2005. DTSC provided comments regarding the sampling work plan in October 2005, and requested that S-K submit a revised work plan for approval within 30 days from receipt of the letter (by November 10, 2005). Trihydro Corporation (Trihydro) on behalf of S-K submitted an email to DTSC on November 4, 2005 in an effort to discuss project objectives and expedite the approval process and subsequent implementation of the investigation. At DTSC's request, a formal letter was submitted by Trihydro on November 10, 2005 that summarized information provided in the November 4, 2005 email. In a teleconference conducted on November 21, 2005, DTSC indicated they would submit correspondence to S-K conditionally approving the July 28, 2005 work plan.

On December 13, 2005, DTSC verbally requested that S-K submit correspondence summarizing the activities agreed upon during the November 2005 teleconference. A revised work plan was submitted to DTSC on January 19, 2006. On January 25, 2006, DTSC verbally notified S-K that they were transferring regulatory oversight to the Sacramento regional office. In an email dated February 23, 2006, the DTSC Sacramento regional office requested additional information regarding general sampling procedures proposed in the revised work plan. On April 18, 2006, Trihydro, on behalf of S-K, responded via email to the February 2006 request. DTSC issued conditional approval of the January 2006 Revised Discrete Groundwater Sampling Work Plan in correspondence dated June 29, 2006, and requested submittal of a site-specific health and safety plan.



On July 11, 2006, Trihydro submitted a health and safety plan to the DTSC, who provided email comments with an attached memorandum regarding the site-specific health and safety plan to Trihydro and S-K in correspondence dated August 1, 2006. Subsequently, S-K initiated an August 11, 2006 teleconference with the DTSC in an effort to expedite the final approval process of the discrete-depth groundwater activities. Pursuant to DTSC's request, Trihydro submitted a revised health and safety plan to DTSC on August 24, 2006. DTSC provided additional comments regarding the revised site-specific health and safety plan to Trihydro and S-K in an email dated September 12, 2006, and requested a revised plan be submitted by September 15, 2006. Trihydro updated the site-specific health and safety plan and send replacement pages to the DTSC on September 15, 2006. DTSC issued formal approval of the discrete-depth groundwater sampling activities in a letter dated October 18, 2006.

The discrete-depth groundwater sampling activities were conducted in November 2006. Procedures and results were presented in the October through December 2006 Quarterly Progress Report, dated January 15, 2007. In summary, two soil borings were advanced to a depth of 40 feet below ground surface (ft-bgs) and groundwater samples were collected for each boring at discrete depths of approximately 20, 30, and 40 ft-bgs. In general, evaluation of data collected during the November 2006 investigation indicated that groundwater impacts generally decreased at deeper depths. Installation of two monitoring wells (TW-1 and TW-2) was also proposed in the January 2007 report to further investigate potential discrete-depth groundwater impacts.

On March 23, 2007, DTSC requested submittal of a work plan to further investigate potential discrete-depth groundwater impacts. S-K submitted a Work Plan for an Expanded Discrete-Depth Groundwater Investigation on April 27, 2007 and received DTSC comments requesting a revised work plan in a memorandum dated June 12, 2007. S-K submitted a Revised Work Plan for an Expanded Discrete-Depth Groundwater Investigation on July 6, 2007. DTSC formally approved the July 2007 Work Plan in correspondence dated August 9, 2007. S-K conducted expanded discrete-depth groundwater activities during the weeks of September 17 and 24, 2007, which included the installation of two discrete-depth monitoring wells: TW-1 (screened from 35 to 40 ft-bgs) and TW-2 (screened from 45 to 50 ft-bgs). The September 2007 discrete-depth groundwater investigative activity procedures and results were presented in the January 15, 2008 quarterly progress report. S-K complete the fourth consecutive discrete-depth quarterly groundwater monitoring event in May 2008 pursuant to the July 2007 Work Plan.

S-K received DTSC correspondence on October 13, 2008, in which DTSC requested a work plan for additional discrete-depth groundwater monitoring well installation. S-K provided a letter dated November 11, 2008 to address specific DTSC comments. The letter provided multiple lines of evidence that the concern for dissolved non-aqueous phase liquid (DNAPL) at the site is not technically justified and the need for additional discrete-depth monitoring wells was not warranted. The DTSC provided an additional memorandum dated December 12, 2008, and agreed that volatile organic constituent (VOC) concentrations on-site are not indicative of DNAPL. However, the DTSC also indicated that the rationale for requesting additional deep monitoring wells was due to the presence of water supply wells owned by Southern California Water Company located approximately 1,000 feet downgradient from the site. DTSC stated that fully defining relatively low dissolved-phase VOC groundwater impacts on-site would be prudent to determine potential risks. S-K performed a water well record survey and presented the results to DTSC in a letter dated



January 15, 2009. The letter indicated that S-K did not find water supply wells in a downgradient direction (southwest) within 1,000 feet of the site. However, S-K did provide well logs for two former water supply wells located approximately 1,000 feet to the west.

S-K received additional DTSC correspondence on March 9, 2009 (dated February 25, 2009), in which DTSC provided water well identification, Florista Well and Cherry Well Number 3, and contact information for a Golden State Water Company who had knowledge of the locations for the two active supply wells reportedly downgradient (southwest) of the site. S-K contacted the Golden State Water Company and specified the Florista Well and Cherry Well Number 3 locations. These two pumping wells are located west and northwest of the site and are not screened in the water bearing zone immediately below the site. The location and information of these two wells is:

Florista Well

- Approximately 900 feet to the northwest of the former UST location at the site.
- Screened from 300 to 680 ft-bgs.

Cherry Well Number 3

- Approximately 1,200 feet to the west of the former UST location at the site.
- Screened from 346 to 356, 540 to 546, and 573 to 593 ft-bgs.

The groundwater immediately beneath the site is part of the Bellflower Aquiclude, which extends to approximately 86 ft-bgs. The deepest monitoring well at the site (TW-2) is screened to 50 ft-bgs. The top of screen for the Florista Well is at 300 ft-bgs. The uppermost water bearing zones (0 to 376 ft-bgs) directly beneath the site are summarized as follows:³

- 86-foot section of the Bellflower Aquiclude; 0 to 86 ft-bgs. *Note that all of the site wells are screened within the aquiclude, including temporary monitoring wells TW-2, screened from 45 to 50 ft-bgs.*
- 100-foot section of the Artesia Aquifer, 86 to 186 ft-bgs.
- 30-foot section of aquitard and/or confining material; 186 to 216 ft-bgs.
- 60-foot section of the Gage Aquifer; 216 to 276 ft-bgs.
- 54-foot section of aquitard and/or confining material; 276 to 330 ft-bgs. *Florista well screened from 300 to 680 ft-bgs.*
- Hollydale Aquifer: 330 to 376 ft-bgs. *Florista well screened from 300 to 680 ft-bgs; Cherry Well Number 3 screened from 346 to 356, 540 to 546, and 578 to 593 ft-bgs.*

The former on-site USTs were used to store mineral spirits. Mineral spirits are lighter (i.e., less dense) than water and do not tend to migrate vertically within a single aquifer system. VOCs detected in groundwater samples collected from discrete-depth well TW-2 (screened from approximately 45 to 50 ft-bgs) have either been below California maximum contaminant levels

³ California Department of Water Resources, Bulletin 104, Planned Utilization of Ground Water Basins of the Coastal Plain of Los Angeles County, Appendix A Groundwater Geology, June 1961



(MCLs) or only slightly above respective MCLs for cis-1,2-dichloroethene (cis-1,2-DCE) and vinyl chloride during six monitoring events conducted from September 2007 to February 2009.

On April 8, 2009, S-K submitted a Work Plan for Additional Discrete-Depth Groundwater Investigation Activities, which was approved by DTSC on December 2, 2009. The Work Plan was submitted to appease DTSC concerns presented in the February 2009 correspondence and to further investigate deeper depth groundwater quality in an attempt to resolve the issue and move the correction active process forward.

The Work Plan includes the following actions:

- Installation of an additional temporary monitoring well in January 2010 (well TW-3). Temporary monitoring well TW-3 is located approximately 250 feet downgradient of the former on-site UST location. TW-3 will be screened at an approximately level from 45 to 50 ft-bgs. The proposed screening interval is at an equal depth to well TW-2, but is further downgradient of the former on-site UST location.
- Collect soil samples in 2-foot intervals every five feet during well TW-3 installation.
- Temporary monitoring wells TW-1 and TW-2 are no longer beneficial for the objectives to evaluate whether shallow groundwater immediately below the site could affect the quality of groundwater extracted from cross-gradient wells from 300 to 680 ft-bgs. As part of the additional discrete-depth groundwater investigation, S-K will plug and abandon temporary monitoring wells TW-1 and TW-2 in general accordance with Section 3.8 of the April 7, 2004 Revised Standardized Sampling and Analysis Plan, Corrective Action Projects, Safety-Kleen Systems, Inc. (SAP).
- Conduct four consecutive quarterly groundwater monitoring events, approximately three months apart, after the installation of temporary monitoring well TW-3.
- Additional discrete-depth groundwater investigation activities and results will be presented in quarterly progress reports to the DTSC. If analytical results from the samples collected from well TW-3 are below the California Maximum Contaminant Level (MCL) during the proposed monitoring period (four quarterly events), temporary monitoring TW-3 will be plugged and abandoned in accordance with activities proposed in Section 2.2 of the RFI Work Plan. If groundwater quality collected from well TW-3 is above MCLs, S-K will discuss the results with the DTSC to determine appropriate future activities.
- A Risk Assessment Work Plan was submitted on August 9, 2006 and approved by DTSC in a June 12, 2007 letter. As stated in the DTSC approval letter, a risk assessment will be completed once site characterization is complete. If analytical results from the samples collected from well TW-3 are below California MCLs during the proposed monitoring period, S-K intends to proactively move forward with completion of the risk assessment at the site.



Currently, monitoring events are still being performed by S-K on-site. A total of 11 monitoring wells are located on-site, spanning the areas of the former building site area and the asphalt cap or parking lot. Monitoring well TW-3 is located in within the parking lot area, along Katella Avenue, to the east of the Medical Center. All well locations are shown in Figure 2 of Appendix K1 of this EIR. The last quarterly report was dated on April 15, 2010, and the conclusions are provided below. Groundwater impacts at the site are well defined and are generally limited to the area immediately downgradient of the former USTs, in the vicinity of monitoring wells MW-2, MW-3, and MW-4. Several lines of evidence support the conclusion that the groundwater impacts are defined vertically as well as laterally:

- VOCs detected in groundwater samples collected from discrete-depth wells have either been below MCLs or only slightly above their respective MCLs for a limited set of constituents (cis-1,2-DCE, TCE, and vinyl chloride) during eight monitoring events conducted from September 2007 to February 2010. These reported concentrations are significantly lower than historic and current levels reported from groundwater samples collected in shallower screened wells located nearest to the former UST area (MW-2, MW-3, and MW-4).
- The former USTs were used to store mineral spirits. Mineral spirits is lighter than water and does not tend to migrate vertically within a single aquifer system without a hydraulic influence (e.g., vertical hydraulic gradient, pumping well influences). Mineral spirits constituents tend to have an affinity for solution within mineral spirits relative to an aqueous solution; therefore, they are also expected to be concentrated at or near the top of the aquifer.
- S-K and DTSC agree that VOC concentrations onsite are not indicative of dense non-aqueous phase liquid (DNAPL) behavior.

S-K has revised and resubmitted the Risk Assessment Work Plan to be consistent with the approach outlined in the Generalized CSM document. The revised work plan was submitted on August 9, 2006, and approved by DTSC in correspondence dated June 12, 2007. As stated in the DTSC correspondence, a risk assessment will be completed once site characterization is complete. S-K currently intends to perform four consecutive quarterly sampling events on well TW-3 in accordance with the approved April 2009 Work Plan. S-K intends to discuss the results of these events and potentially moving forward with the risk assessment once quarterly sampling activities are complete. The next quarterly monitoring event was scheduled for May 2010. As of the time this EIR was prepared, the report from this Quarterly Progress Report has not been posted to the DTSC website.

Tenet Healthcare/Los Alamitos Medical Center

In March 2002, Tenet HealthCare purchased the former S-K property at 3876-3878 Florista Street. Subsequent to acquiring the property, Tenet HealthCare sought to demolish the building on the property and creating additional parking for the Medical Center on an asphalt surface parking lot.

In December 2005, DTSC requested that Tenet HealthCare submit a work plan to describe the environmental monitoring program and contingent sampling plan for the proposed building demolition. ENVIRON, on behalf of the Los Alamitos Medical Center (LAMC), submitted a Work Plan for the environmental monitoring in May 2006, and DTSC provided comments back to



ENVIRON and LAMC in July 2006 along with requesting soil sampling beneath the building slab in August 2006. ENVIRON submitted a revised Work Plan for Environmental Monitoring in August 2006 and a Soil Sampling Work Plan in September 2006. In response to DTSC comments, ENVIRON submitted revised Soil Sampling Work Plan in November 2006. DTSC approved the Soil Sampling Work Plan on December 12, 2006 and soil sampling activities were conducted on that same day. ENVIRON submitted a report of the soil sampling and analysis data in the Soil Sampling Report dated December 29, 2006. DTSC approved the Soil Sampling Report and requested a revised Work Plan for Environmental Monitoring in March 2007. ENVIRON submitted a revision to DTSC on July 3, 2007 and DTSC requested further revision on September 4, 2007. The Work Plan was submitted with a certification statement by LAMC to the DTSC in a letter dated December 17, 2007.

Demolition of Structure at 3876-3878 Florista Street

In December 2006, ENVIRON conducted a limited subsurface investigation of the S-K portion of the building at the request of the DTSC and in accordance with the Revised Soil Sampling Work Plan dated November 22, 2006. Five soil borings were advanced and soil samples were collected from depths of approximately 3 and 10 feet from each boring. Borings ENV-SB-1 and ENV-SB-4 targeted boring locations from the August 1997 Phase 1 RFI. The remaining borings were located in areas adjacent to SWMU No.1 and AOC No. 2. 1,2-DCB was reported in the 10-foot samples collected from Borings ENV-SB-1 and ENV-SB-2 at concentrations of 6.59 ug/kg and 7.23 ug/kg, respectively. TPHs were not reported in samples at concentrations above the laboratory RL of 100 mg/kg. Reported VOC and TPH concentrations were consistent with the previous subsurface investigation and verified that soil underlying the building had not been impacted by previous S-K hazardous waste handling and storage operations. Details of ENVIRON's subsurface investigation are discussed in the Soil Sampling Report dated December 29, 2006.

The DTSC agreed with ENVIRON's conclusions in a letter dated March 6, 2007 and requested that ENVIRON submit a Work Plan for Environmental Monitoring for the proposed building demolition. A work plan for Environmental Monitoring (Work Plan) was submitted to the DTSC on October 4, 2007 along with an updated Health and Safety Plan (HASP). The DTSC approved the Work Plan in a letter dated December 21, 2007. The Los Alamitos Medical Center contacted ENVIRON in October 2008 to schedule demolition activities and the DTSC was notified two weeks prior to the anticipated start date.

ENVIRON's Work Plan included: 1) Pre-Field Activities and 2) Building Demolition and Environmental Monitoring. Details related to ENVIRON's implementation of the Work Plan (Environmental Monitoring Report) are provided in the following paragraphs.

Removal of the concrete pad and footings began on December 9, 2008 and ended on December 12, 2008. ENVIRON personnel were on-site to observe building demolition and concrete pad monitoring tasks with the demolition contractors, including the need to report any odorous or discolored soil encountered under the concrete pad to ENVIRON.



Within the vicinity of the building, a former underground storage tank (UST) area exists. The former USTs were used to store mineral spirits.⁴ However, this UST area was not part of the 2008 demolition and existing concrete in this area was not removed. Existing monitoring wells in the area of the demolition were marked with fluorescent paint and cones to minimize any potential damage.

In accordance with the Work Plan, a Photoionization Detector (PID; a type of gas detector used by ENVIRON to measure volatile organic compounds) was used to test for the presence of odors or discoloration. A combination of observations were conducted, and readings would be considered indicative of potentially impacted soil if the reading was greater than 10 ppm above the established background reading, which was obtained prior to initiation of the concrete pad removal facilities) were used to identify potential impacted soil.

ENVIRON did not obtain any PID readings indicative of potentially impacted soil and did not encounter odiferous or discolored soil beneath the concrete pad. PID readings from all grids within the building footprint ranged from 0.0 parts per million (ppm) to 1.0 ppm. ENVIRON also used a dust monitor to obtain readings at approximately 15 minute intervals in accordance with the approved HASP. Dust monitor readings did not exceed the action level of 5.0 milligrams per cubic meter (mg/m³). The presence of vinyl chloride was monitored throughout the building footprint, including all eight grids within the former S-K office and warehouse suites of the building, during concrete pad removal using colormetric sorbent tubes with a measuring range of 0.5 to 5.0 ppm. Vinyl chloride was not detected by the sorbent tubes at a concentration above 0.5 ppm at any location.

Soil samples were collected on December 19, 2008 at two locations within the footprint of the former S-K office and warehouse suites to confirm that VOC concentrations were at or below previously detected levels or their respective EPA Region IX Industrial Preliminary Remediation Goals (PRGs). Based on the low PID readings obtained throughout the building footprint, soil sample locations were selected to obtain coverage of the eastern portion of the former S-K suite, which is where the former waste and product drum storage areas were located. One soil sample was collected immediately south of the Former Product Drum Storage Area (AOC No. 2) at a depth interval of approximately 0 to 6 inches. A second soil sample was collected north of AOC No. 2, adjacent to a former trench drain and the location of previous soil sample ENV-SB-4.

Soil sample results indicated that VOCs were not reported above laboratory RLs in either of the two samples. In a letter dated January 7, 2009, the DTSC approved the use of an asphalt cap alone as sufficient and appropriate cover to be used as a new parking lot. The DTSC also acknowledged that soil segregation and staging was not required.

In order to properly prepare the site for asphalt cap or parking lot reconstruction, the site was leveled, and approximately 1,300 cubic yards of excess soil was removed by Crew Grading of Rancho Dominguez, California and transported to the Puente Hills Landfill. The completed site cover consists of approximately 18-inches of compacted soil, a 6-inch gravel base, and a 3-inch asphalt cap.

⁴ S-K RFI Work Plan, prepared by Safety-Kleen for DTSC, April 2009.



In summary, no PID readings or soil samples collected during demolition activities had concentrations of VOCs that exceeded their respective established threshold concentrations. The asphalt cap was approved as appropriate cover for the site and was completed on April 27, 2009. Currently, the asphalt cap is being used as a parking lot on-site.

5.7.3 SIGNIFICANCE THRESHOLD CRITERIA

The environmental analysis in this section is patterned after the Initial Study Checklist recommended by the *CEQA Guidelines*, as amended, and used by the City of Los Alamitos in its environmental review process, and is contained in Appendix A of this EIR. The Initial Study Checklist includes questions relating to hazards and hazardous materials. The issues presented in the Initial Study Checklist have been utilized as thresholds of significance in this section. Accordingly, a project may create a significant environmental impact if it causes one or more of the following to occur:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.
- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment (refer to Section 8.0, Effects Found Not To Be Significant).
- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area.
- For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area.
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.
- Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands (refer to Section 8.0, Effects Found Not To Be Significant).

Based on these significance standards, the effects of the proposed project have been categorized as either “no impact”, a “less than significant impact”, or a “potentially significant impact.” Mitigation measures are recommended for potentially significant impacts. If a potentially significant impact cannot be reduced to a less than significant level through the application of mitigation, it is categorized as a “significant unavoidable impact.”



5.7.4 PROJECT IMPACTS AND MITIGATION MEASURES

CONSTRUCTION-RELATED HAZARDOUS MATERIALS IMPACTS

- ◆ **ACCIDENTAL RELEASE OF HAZARDOUS MATERIALS DURING CONSTRUCTION COULD RESULT IN A RISK TO WORKERS, THE PUBLIC, OR ENVIRONMENT.**

Level of Significance Before Mitigation: Potentially Significant Impact.

Impact Analysis: Project implementation includes the demolition of an existing medical 24,000 square-foot medical office building (MOB 1) and an existing 15,000 square-foot administration/warehouse building. The project site is not included on the list of hazardous materials sites (Cortese List)⁵ compiled pursuant to *Government Code* Section 65962.5. However, building components in structures built prior to 1981 could contain hazardous materials, such as asbestos, PCBs, lead, and mercury.

Asbestos poses health hazards only when inhaled; therefore, friable (easily crumbled) asbestos is potentially hazardous if not encapsulated. Non-friable asbestos or encapsulated asbestos does not pose substantial health risks. Upon building renovation or demolition at the project site, asbestos fibers (if any are present) could be disturbed, released into the air and inhaled by construction workers or the public unless proper precautions are taken.

Building components containing PCBs, lead, or mercury could also be found in areas to be demolished or renovated. In sufficient concentrations, lead and mercury are regulated as hazardous wastes. Applicable health and safety requirements could minimize any risks from handling these materials, unless they fail to be identified adequately prior to demolition or renovation.

The proposed project could involve handling hazardous materials in a manner that poses a hazard to people, animals, or plants, if appropriate hazardous materials surveys and safety precautions are not undertaken. This exposure could constitute a potentially significant impact.

To the extent that the proposed project could remove hazardous materials within existing buildings, it could be beneficial over the long-term. The removal of such materials could reduce potential health threats and prevent individuals on and off-site from encountering such materials in the future. Properly handling and disposing of contaminated materials would protect the environment and prevent potential future adverse health, safety, or environmental effects related to them. As such, potentially significant impacts are expected to occur, since the proposed project would create a health hazard, or expose people to substantial risk from hazardous materials during construction. However, with implementation of the recommended Mitigation Measure HAZ-1, impacts would be reduced to a less than significant level.

⁵ Official DTSC website, http://www.dtsc.ca.gov/SiteCleanup/Cortese_List.cfm, accessed June 16, 2010



The proposed project also involves demolition of an asphalt cap that currently serves as a surface parking lot and was previously approved by DTSC at the former Safety-Kleen Facility to construct a new parking structure (Parking Structure 1).

Currently, groundwater monitoring events are still being performed on-site by Safety-Kleen. The last event was documented on April 15, 2010. According to the Quarterly Progress Report, VOCs detected in groundwater samples collected from discrete-depth wells have either been below MCLs or only slightly above their respective MCLs for a limited set of constituents (cis-1,2-DCE, TCE, and vinyl chloride) during eight monitoring events conducted from September 2007 to February 2010. These reported concentrations are significantly lower than historic and current levels reported from groundwater samples collected in shallower screened wells located nearest to the former UST area (MW-2, MW-3, and MW-4). After monitoring is complete, a risk assessment will also be completed by Safety-Kleen. If analytical results from the samples collected from well TW-3 are below California MCLs during the proposed monitoring period, Safety-Kleen intends to proactively move forward with completion of the Risk Assessment at the site. Thus, Mitigation Measures HAZ-2 and HAZ-3 have been included to ensure that any potential impacts are mitigated to less than significant levels.

Mitigation Measures:

- HAZ-1 Prior to site plan approval for each phase, the project applicant shall retain a qualified environmental specialist (e.g., a Registered Environmental Assessor or similarly qualified individual) to perform pre-construction hazardous materials surveys to inspect existing building areas subject to demolition or renovation for the presence of any unidentified asbestos, PCBs, mercury, lead, or other hazardous materials. If found at levels that require special handling, the project applicant shall manage these materials as required by law and according to federal and state regulations and guidelines, including those of the DTSC, SCAQMD, Cal/OSHA, and any other agency with jurisdiction over these hazardous materials.
- HAZ-2 Following the final Safety-Kleen facility monitoring event as determined by DTSC, a Risk Assessment shall be prepared and implemented by the Safety-Kleen in accordance with all applicable DTSC standards and regulations.
- HAZ-3 The project applicant shall prepare a Work Plan for Environmental Monitoring the Former Safety-Kleen Systems Service Center (3862-3878 Florista Street) for the proposed Parking Structure 1. The Work Plan shall properly analyze potential health hazards associated with the location of a new parking structure over the former Safety-Kleen facility, and shall be reviewed and approved by DTSC prior to demolition or asphalt cap/parking lot removal.

Level of Significance After Mitigation: Less than Significant Impact.



HAZARDOUS MATERIALS USE, STORAGE AND HANDLING

- ◆ **DEVELOPMENT ASSOCIATED WITH IMPLEMENTATION OF THE PROPOSED PROJECT COULD RESULT IN AN INCREASED RISK OF UPSET ASSOCIATED WITH THE ROUTINE USE, GENERATION, AND TRANSPORT OF HAZARDOUS MATERIALS, HAZARDOUS WASTE, OR ACCIDENTAL EMISSION OF HAZARDOUS MATERIALS OR GASES, WHICH MAY POTENTIALLY POSE A HEALTH OR SAFETY HAZARD.**

Level of Significance Before Mitigation: Less than Significant Impact.

Impact Analysis: The proposed project would increase hazardous materials storage and use at the two new hospital buildings (Hospital Buildings 1 and 2), the re-configured Main Hospital Building, and the central plant. As discussed in the Environmental Setting Section, the hazards posed by chemicals, radioactive materials, and infectious agents vary. Some chemicals can pose physical hazards, such as burns, or health hazards, such as poisoning, including potential acute or chronic illness. The properties and health effects of different chemicals are unique to each chemical and depend on the extent to which an individual is exposed. Exposure to excessive levels of radiation, whether from radiation-producing equipment or radioactive materials, can result in headaches, skin burns, or chronic illness, including cancer. Exposure to biohazardous material can cause a range of illnesses, depending on the infectious agent encountered. Some infections can result in short-term discomfort, such as mild symptoms that can easily be treated or go away by themselves, while others can result in disruptions of life functions. Some chronic diseases may or may not be curable and treatable. Some diseases may be contagious. In all cases, the risks posed by hazardous materials depend on the potential for exposure.

Workers and Other Individuals On-Site

The project-related effects of hazardous materials handling and storage would be generally limited to immediate areas where the materials would be located because this is where exposure would be most likely (exposure at more distant locations would require some mechanism to transport the material to the location). For this reason, the individuals most at risk would be the employees at the on-site hospital buildings or the central plant, or others in the immediate vicinity of the hazardous materials. The routes through which these individuals could be exposed include inhalation, ingestion, contact, injection, and other accidents.

The hospital (existing Main Hospital Building) and the proposed two hospital buildings are required to comply with health and safety and environmental protection laws and regulations. To accomplish this, and to otherwise provide a safe and healthy environment, the hospital implements health and safety policies and procedures with its Management Plans. Under each of the Management Plans, the hospital would continue to comply with all applicable laws and regulations.

Community and Environment

It is anticipated that the health and safety procedures that protect workers and other individuals in the immediate vicinity of hazardous materials would also protect the more distant community and



environment. The pathways through which the community or the environment, such as local air quality or biota, could be exposed to hazardous materials include air emissions, transport of hazardous materials to or from the site, waste disposal, human contact, and accidents.

With implementation of the proposed project, there would be an increase of storage of hazardous materials, but the materials would generally be stored in small, individual containers of about five gallons or less (except for fuel storage tanks and compressed gas cylinders). Therefore, the probability of a major hazardous materials incident would be relatively low. Minor incidents would be more likely, but the consequences of such accidents would probably not be severe due to the typically small quantities of materials handled at any particular time and the equipment and training provided to hospital staff. The existing on-site hospital and medical offices presently handle some acutely hazardous materials (materials that can potentially pose serious risks to areas off-site, if handled in sufficient quantities; refer to the *California Code of Regulations Title 8*, Section 5189, for a list of acutely hazardous materials), and the quantity of these materials would be expected to increase. However, it is not anticipated that the quantities of these materials would increase to such levels to result in a significant increase in hazard levels beyond what potential hazard levels already exist.

The Los Alamitos Medical Center maintains a Hazardous Materials Management Plan and an Emergency Management Plan to ensure that staff can respond to possible hazardous materials emergencies. In addition, the OCFA provides response aid to emergency medical and hazardous material situations, and the nearest OCFA Station is located on Green Avenue, less than 0.2 miles from the Medical Center. In addition, the Los Alamitos Police Department is located approximately 0.6 miles from the Medical Center. As the patient total increases beyond existing conditions, the demand for hazardous materials emergency services at the hospital would also increase. Thus, the increase in demand for hazardous materials emergency services at the hospital would be proportional to the projected patient or bed increase. This increase would not substantially affect the availability or response times of emergency responders because the types of hazardous materials used would not change; amounts on-site would be increased.

In addition to accidents possibly occurring on-site, accidents during the transport of hazardous waste to and from the site could expose individuals and the environment to risks at some distance from the project site. However, DOT, USPS, and the California Department of Health Services Radiologic Health Branch and Medical Waste Program (CDHSRHB) all specify packaging requirements for hazardous materials and wastes that limit the potential for packages to fail on impact. These requirements reduce the potential for hazardous materials releases to occur in the unlikely event of an accident.

In summary, although the proposed project would increase the storage and use of hazardous materials on-site, compliance with the Los Alamitos Medical Center's *Management Plan for Hazardous Materials and Waste Management*, would minimize the potential for exposure to adverse health or safety effects. Therefore, the proposed project would not involve the use of materials in a manner that poses any substantial hazards to people, or to animal or plant populations. Furthermore, the Los Alamitos Medical Center would continue to implement its Emergency Operations Plan and the OCFA would continue to provide emergency response services, as well as continue to serve as the local regulatory for on-site storage of hazardous materials in Los Alamitos. These plans and



regulations would reduce proposed project impacts associated with the use, storage, and transport of hazardous materials to a less than significant level, and no mitigation would be required.

Mitigation Measures: No mitigation measures are required.

Level of Significance After Mitigation: Not Applicable.

HAZARDOUS WASTE GENERATION

- ◆ **DEVELOPMENT ASSOCIATED WITH IMPLEMENTATION OF THE PROPOSED PROJECT COULD INCREASE HAZARDOUS WASTE GENERATION BY THE HOSPITAL AND MEDICAL OFFICE USES, WHICH COULD SUBSTANTIALLY INCREASE RISKS OF ENVIRONMENTAL EXPOSURE.**

Level of Significance Before Mitigation: Less Than Significant Impact.

Impact Analysis: The number of patient visits is projected to increase with the implementation of the proposed project. This increase would be expected to increase hazardous materials use on-site proportionately. The increased use of hazardous materials would, in turn, result in increased hazardous waste generation, including hazardous chemical, radioactive, and medical waste generation. Proper hazardous waste disposal, regardless of the method selected, often affects the environment. Hazardous waste landfills generally leak at some point and occasionally fail. Waste incinerators release toxic air contaminants to the atmosphere and result in ash that contains unburnable hazardous constituents (such as metals). Most other treatment and recycling methods also result in hazardous residuals that must be disposed of as hazardous waste. These residuals are usually either incinerated or landfilled. For this reason, the generation and disposal of hazardous waste is considered to be a form of pollution, and current hazardous waste management policies designate hazardous waste disposal as the least desirable management approach. Waste management strategies that seek to prevent pollution by reducing waste generation at its source are considered the most desirable approach. Pollution prevention is a national objective established by the Pollution Prevention Act of 1990.

Hazardous Chemical Waste

The proposed project would incrementally contribute to the volume of hazardous chemical waste generated in the City of Los Alamitos. The increased hazardous chemical waste generation would increase the volume of waste managed at hazardous waste facilities inside and outside California. The increased demand for waste treatment and disposal would incrementally contribute to the demand for new hazardous waste treatment, recycling, and disposal facilities. The likely effects of hazardous waste disposal would probably occur far from the project site.

California's hazardous chemical waste generators rely heavily on out-of-state treatment and disposal facilities to meet their disposal needs. For example, no hazardous chemical waste incinerators in California accept waste from third-party generators, such as the Los Alamitos Medical Center.



Radioactive Waste

As the number of patient visits increases, the demand for low-level, typically short-lived radioactive materials (radioactive materials whose half-lives are less than 90 days) for therapeutic purposes would also increase. The need for sealed sources with longer half-lives (greater than 90 days) would not necessarily increase because sealed sources serve long-term uses and are not routinely discarded as radioactive waste.

The Radiologic Health Branch of the California Department of Health Services issues permits that allow radioactive materials users to hold short-lived radioactive waste for decay. Dry long-lived radioactive waste is to be disposed of at a low-level radioactive waste landfill. California belongs to the Southwestern Low-Level Radioactive Waste Disposal Compact, a group of four states (California, Arizona, North Dakota, and South Dakota) that, together, are responsible for disposing of their low-level radioactive waste. The Compact operates under the authority of the Southwestern Low-Level Radioactive Commission, which was established under *Public Law 100-712*. Since no regional facility has been constructed within the four states of the Compact, California must rely on out-of-state licensed low-level radioactive waste facilities to accept its low-level radioactive waste. There are three existing low-level waste disposal facilities in the United States that accept various types of low-level waste: Barnwell, South Carolina; Clive, Utah; and Richland, Washington. However, radioactive waste from California is accepted only at the Clive, Utah and Richland, Washington Facilities. The Clive Treatment and disposal facility is operated by Energy Solutions. The facility has been in operation since 1988 and is licensed to accept Class A low-level waste only. The Washington Low-Level Radioactive Waste (LLRW) site in Richland has been operated by US Ecology for over 30 years. This facility is licensed to accept Class A, B, and C low-level waste. Generators of radioactive waste must comply with *California Health and Safety Code* Section 115000.1, which requires providing information included in the Nuclear Regulatory Commission (NRC) Forms 540, 541, and 542. There is sufficient capacity at the Clive, Utah, and Richland, Washington Facilities to accept radioactive waste; therefore less than significant impacts would occur in this regard.

Medical Waste

Project-related medical waste could be shipped off-site for disposal by an authorized hauler. Medical waste treatment facilities have been sited in this region with success. As with most hazardous waste disposal technologies, incineration involves potentially hazardous air emissions, including dioxins, and residuals must be landfilled. Project-related medical waste would be shipped to off-site disposal facilities.

Impact Conclusion

In summary, the proposed project would increase the generation of hazardous waste, along with its demand for hazardous waste disposal services. This increase in demand would, by itself, have little observable effect on the levels of existing hazards that waste disposal poses to people, or to animal or plant populations on-site or in the vicinity of the medical center. As such, the proposed project would not create a hazard or potential hazard to the public through the use, disposal, or transport of



hazardous materials. Thus, the impact of the proposed project would be less than significant, and no mitigation would be required.

Mitigation Measures: No mitigation measures are required.

Level of Significance After Mitigation: Not Applicable.

HAZARDOUS MATERIALS EXPOSURE

- ◆ **IMPLEMENTATION OF THE PROPOSED PROJECT COULD INCREASE THE NUMBER OF INDIVIDUALS EXPOSED TO, BUT NOT THE NATURE OF, PHYSICAL SAFETY HAZARDS AT THE LOS ALAMITOS MEDICAL CENTER.**

Level of Significance Before Mitigation: Less Than Significant Impact.

Impact Analysis: With implementation of the proposed project, potential physical safety hazards would exist at the Los Alamitos Medical Center, just as they do currently. These hazards would include, among others, electrical shock hazards from high voltage equipment, safety risks posed by compressed gas cylinders (including those filled with inert gases) radiation hazards from x-ray equipment (regulated as radioactive material), and exposure to magnetic fields, intense lights, or lasers. Other more common hazards would include slips, falls, and overexertion. Workers engaged in activities that present special hazards, such as those mentioned above, are to be adequately trained in accordance with the Los Alamitos Medical Center's applicable Management Plans (as required by the Joint Commission of the Accreditation of Healthcare Organizations). Although more individuals would be exposed to physical safety hazards with the project, compliance with occupational safety regulatory requirements would minimize the potential risks that physical hazards could pose to people. As such, the proposed project would not result in a risk of accidental explosion or release of hazardous substances. Therefore, the potential impact would be considered less than significant, and mitigation would not be required.

Mitigation Measures: No mitigation measures are required.

Level of Significance After Mitigation: Not Applicable.

5.7.5 CUMULATIVE IMPACTS AND MITIGATION MEASURES

- ◆ **IMPLEMENTATION OF THE PROPOSED PROJECT AND OTHER RELATED CUMULATIVE PROJECTS COULD RESULT IN CUMULATIVELY CONSIDERABLE HAZARDS AND HAZARDOUS MATERIALS IMPACTS.**

Level of Significance Before Mitigation: Less Than Significant Impact.

Impact Analysis: The health and safety hazards posed by most hazardous materials are typically local in nature. They generally do not combine in any cumulative sense with the hazards of other



projects. Possible exceptions, however, include transportation of hazardous materials and waste disposal. The need to respond to hazardous materials emergencies could also increase as a result of cumulative development.

Transportation

Hazardous materials are transported on virtually all public roads, particularly since all motor vehicles contain hazardous materials (e.g., fuel) in addition to any hazardous cargo that may be on board. The project would contribute little to transportation hazards. The cumulative effects of transporting hazardous materials would continue to be addressed by regulatory requirements. Packaging requirements for hazardous materials and wastes established by DOT, USPS, and EPA minimize the potential consequences of possible accidents during transport. For these reasons, the cumulative impact of potential transportation-related accidents would be less than significant.

Emergency Response

The proposed project and future development in the Cities of Los Alamitos, Cypress, and Seal Beach could cumulatively increase demands for hazardous materials emergency response services. The increase would not be sufficiently large because it is not likely that more than one major hazardous materials incident would occur simultaneously. Furthermore, cumulative development would not be expected to interfere with the Los Alamitos Medical Center's Management Plans or any City's Emergency Operations Plan. Hazardous materials emergency plans would remain unchanged.

With or without cumulative development, a major disaster could generate demand for emergency services in excess of available resources, and in Los Alamitos and the surrounding cities, the potential for a major earthquake poses realistic concerns. During an earthquake, structures containing hazardous materials could be damaged. Non-structural seismic safety, such as the potential for falling containers and shelves holding hazardous materials, would be of particular concern. Chemical spills and splashes could harm individuals working in the vicinity of the hazardous materials. Safety requirements are enforced by local, State, and Federal laws, and are also included in the Los Alamitos Medical Center's Management Plans, enforced by the Joint Commission of the Accreditation of Healthcare Organizations. Isolated hazardous materials incidents would likely pose limited threats because the Los Alamitos Medical Center operations typically involve relatively small quantities of materials. New construction proposed as part of the project, built to current code requirements, would be expected to perform at least as well as, or better than, existing on-site medical facilities on-site. In this way, the proposed project would likely be an asset to the community following a disaster. The proposed project's contribution would not be cumulatively considerable. Thus, this cumulative impact would be less than significant.

Hazardous Waste Disposal

As cumulative development occurs in Los Alamitos, in surrounding cities, and at the state and regional levels, more hazardous wastes would be generated. Project-related hazardous waste generation would contribute to cumulative increases in hazardous waste generation. The incremental environmental effects of expected increases in hazardous waste generation and off-site



hazardous waste recycling, treatment, and disposal would also contribute to cumulative effects. Hazardous waste disposal affects the environment by releasing contaminants to land, air, and/or water. Cumulative increases in waste generation could also contribute to the potential for some wastes to be mismanaged at any point in the disposal process in a manner that poses potential hazards to people, or to animal and plant populations. Unless specifically exempted, hazardous waste transporters must comply with the California Highway Patrol Regulations, the California State Fire Marshal Regulations, and the United States Department of Transportation Regulations. In addition, hazardous waste transporters must comply with all applicable codes and standards administered by the DTSC, as well as any other applicable local, state, and Federal regulations. All of these regulations are designed to minimize the danger of hazardous materials being released and causing a significant hazard to the public or environment. The proposed project would comply with existing regulations on the project's contribution to this cumulative impact would be minimal in relation to cumulative impacts. Thus, the proposed project's contribution would be less than cumulatively considerable, and therefore less than significant and no mitigation measures would be required.

Mitigation Measures: No mitigation measures are required.

Level of Significance After Mitigation: Not Applicable.

5.7.6 SIGNIFICANT UNAVOIDABLE IMPACTS

With the imposition of the mitigation measures, implementation of the proposed project would result in less than significant construction-related hazardous materials impacts. All other identified impacts were concluded to be at less than significant levels, and did not require mitigation. As such, no significant unavoidable impacts would result from implementation of the Los Alamitos Medical Center Specific Plan.

5.7.7 SOURCES CITED

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Los Alamitos 2010 General Plan, Chapter 5, Circulation and Transportation Element, approved August 1999

Los Alamitos General Plan 2010 Mitigated Negative Declaration, Section IX, prepared by the City of Los Alamitos, adopted August 1999

California Department of Toxic Substances Control Official Website, http://www.dtsc.ca.gov/SiteCleanup/Cortese_List.cfm, accessed June 16, 2010

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Safety Kleen RFI Work Plan, prepared by Safety-Kleen for DTSC, April 8, 2009.

Los Alamitos Medical Center Management Plan for Hazardous Materials and Waste Management 2010, prepared for the Los Alamitos Medical Center, 2010

Los Alamitos Medical Center Emergency Operations Plan 2010, prepared for the Los Alamitos Medical Center, 2010

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Los Alamitos Medical Center Management Plan for Safety 2010, prepared for the Los Alamitos Medical Center, 2010

Los Alamitos Medical Center Management Plan for Fire Prevention 2010, prepared for the Los Alamitos Medical Center, 2010

Los Alamitos Medical Center Aerosol Transmissible Disease Exposure Control Plan, prepared for the Los Alamitos Medical Center, January 2010

Los Alamitos Medical Center Surveillance Prevention & Control Program Plan, prepared for the Los Alamitos Medical Center, April 2010

Henry Mayo Newhall Memorial Hospital EIR, prepared by RBF Consulting for the City of Santa Clarita, certified September 2008



5.8 Hydrology, Drainage, and Water Quality



5.8 HYDROLOGY, DRAINAGE, WATER QUALITY

This section evaluates the hydrology, drainage, and water quality conditions for the project site and evaluates for impacts associated with implementation of the proposed project. Information in this section is based on the *Preliminary Hydrology Report in Support of Los Alamitos Medical Center Specific Plan* and *Preliminary Water Quality Management Plan*, prepared by Kimley-Horn and Associates, and the both prepared by Kimley-Horn and Associates and dated June 2010. These reports are included in their entirety as Appendix G and H, respectively.

5.8.1 REGULATORY SETTING

CLEAN WATER ACT

The principal law governing pollution of the nation's surface waters is the Clean Water Act (CWA), formerly known as the Federal Water Pollution Control Act. Originally enacted in 1948, it has been amended several times since. As amended in 1977, the law became commonly known as the CWA. The CWA is a Federal law that protects the nation's surface waters, including lakes, rivers, coastal wetlands, and "waters of the United States." The CWA includes provisions that authorize federal financial assistance for municipal sewage treatment plants and the regulatory requirements that apply to industrial and municipal dischargers. The law gave the authority to set effluent standards on an industry basis. In addition, the CWA requires states to adopt water quality standards that "consist of the designated uses of the navigable waters involved and the water quality criteria for such waters based upon such uses."

The CWA specifies that discharges to waters are illegal, unless authorized by an appropriate permit. The permits regulate the discharge of dredged and fill materials, construction-related stormwater discharges, and activities that may result in discharges of pollutants to waters of the U.S. Section 404 of the CWA establishes a permit program for the discharge of dredge or fill materials into waters of the U.S. This permit program is administered by the U.S. Army Corps of Engineers (USACE). If waters of the U.S. are located on or downstream of a project site, the project may discharge to them, and if impacts on them are anticipated, the project must obtain a CWA Section 401 Water Quality Certification. Section 402 of the CWA establishes the National Pollutant Discharge Elimination System (NPDES), a permitting system for the discharge of any pollutant (except for dredge or fill material) into waters of the U.S. This permitting program is administered by the Regional Water Quality Control Boards. In addition, Section 303 and 304 of the CWA provide for water quality standards, criteria, and guidelines.

PORTER-COLOGNE WATER QUALITY CONTROL ACT

The Porter-Cologne Water Quality Control Act acts in cooperation with the CWA to establish the State Water Resources Control Board (SWRCB). The SWRCB and nine Regional Water Quality Control Boards (RWQCB) are responsible for protecting California's surface waters and groundwater supplies. This act establishes Water Quality Control Plans (Basin Plans) for each of the nine regions overseen by the RWQCB that designate the beneficial uses of California's rivers and groundwater basins. The Santa Ana River Basin Plan gives direction on the beneficial uses of the



state waters within Region 8, describes the water quality that must be maintained to support such uses, and provides programs, projects, and other actions necessary to achieve the standards established in the Basin Plan. The Santa Ana River RWQCB implements the Basin Plan by issuing and enforcing waste discharge requirements to persons, such as individuals, communities, or businesses whose waste discharges may affect water quality. These requirements are state Waste Discharge Requirements for discharge to land, or federally delegated NPDES permits for discharges to surface water. The Porter-Cologne Water Quality Control Act is also responsible for implementing CWA Sections 401-402 and 303(d) to SWRCB and RWQCBs.

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

As authorized by the CWA, the NPDES permit program controls water pollution by regulating point sources that discharge pollutants into waters of the United States. Point sources are discrete conveyances such as pipes or man-made ditches. Individual homes that are connected to a municipal system, use a septic system, or do not have a surface discharge do not need an NPDES permit; however, industrial, municipal and other facilities must obtain permits if their discharges go directly to surface waters.

The NPDES program is administered by the U.S. EPA, which delegates oversight in California to the RWQCBs. The NPDES program provides general permits and individual permits. The general permits include requirements for construction projects that disturb more than one acre of land. The general permit requires the applicant to discharge stormwater and to prepare and implement a Storm Water Pollution Prevention Plan (SWPPP) and Water Quality Management Plan (WQMP). The project applicant shall enroll electronically through the State's Stormwater Multiple Application and Report Tracking System (SMARTS). The SMARTS program regulates storm water discharges from locations such as construction sites, industrial facilities, and small linear projects. The program is also responsible for updating, processing, reviewing, terminating Notices of Intent, annual reports, and maintaining the billing status of each discharger. SMARTS has been developed to provide an online tool to assist dischargers in submitting their notice of intents, no exposure certifications, notice of determinations, and annual reports. SMARTS also assists dischargers in viewing and printing receipt letters, monitoring the status of submitted documents, and viewing their applications and renewal fee statements. The system also allows the Regional Board and State Board staff to process and track the discharge submitted documents. A SWPPP includes a site map, description of proposed activities, demonstration of compliance with applicable ordinances and regulations, and a description of Best Management Practices (BMPs) that would be implemented to reduce erosion and discharge of construction-related pollutants. A WQMP is a plan for managing the storm water or runoff that flows from a developed site after construction is completed. A WQMP describes both Structural and Non-Structural BMPs that will be implemented and maintained throughout the life of a project and is used by facility operators, facility employees and maintenance employees, etc. to prevent and minimize water pollution that can be caused by storm water or urban runoff from the developed project.

Point source dischargers of pollutants into surface waters are required to obtain an NPDES permit. The Municipal Storm Water Permitting Program regulates storm water discharges from municipal separate storm sewer systems (MS4s). MS4 permits are issued through two phases. The current NPDES (Phase I) stormwater program requires municipalities serving greater than 100,000 persons



to obtain a NPDES storm water permit for construction projects greater than five acres in size. The current NPDES storm water regulations (Phase II) expanded this existing national program to smaller municipalities with populations of 10,000 persons or more and construction sites that disturb one to five acres. Other dischargers, such as those affecting groundwater or from non-point sources are required to file a Report of Waste Discharge with the appropriate RWQCB. For specified situations, some permits may be waived and some discharge activities may be handled through enrollment in an existing general permit.

STATE REGIONAL WATER QUALITY CONTROL BOARD

While the U.S. EPA allows two permitting options to meet NPDES requirements (individual permits and general permits), the State Water Resources Control Board (SWRCB) has elected to adopt one statewide General Permit for California that applies to all construction-related storm water discharges except for those on tribal lands, in the Lake Tahoe Hydrologic Unit and those performed by the Department of Transportation (Caltrans).

Construction activity subject to this General Permit includes clearing, grading, stockpiling, and excavation that result in soil disturbances of at least one-acre of total land area. Construction activities disturbing less than one-acre may still be subject to this permit if the activity is part of a large common plan of development or if significant water quality impairment will result from the activity.

The General Permit requires all dischargers whose construction activity disturbs one-acre or more to:

- Develop and implement a SWPPP with specific BMPs to prevent all construction pollutants from contacting storm water and with the intent of keeping all products of erosion from moving off-site into receiving waters;
- Eliminate or reduce non-storm water discharge to storm sewer systems and other waters of the United States; and
- Perform inspections of all BMPs.

SANTA ANA & LOS ANGELES REGIONAL WATER QUALITY CONTROL BOARDS

The City of Los Alamitos is within the jurisdiction of the Santa Ana Regional Water Quality Control Board (SARWQCB), which works in coordination with the State Water Resources Control Board (SWRCB) to administer the National Pollutant Discharge Elimination System (NPDES) program to control direct stormwater discharges. Coyote Creek drains into the San Gabriel River, only a portion of which is within the Santa Ana Regional Board's jurisdiction. The river empties into the San Gabriel River Estuary at the boundary between the Santa Ana Region (Region 8) and the Los Angeles Region (Region 4). Most discharges to the San Gabriel River are regulated by the Los Angeles Regional Water Quality Control Board (LARWQCB).



Dischargers whose projects disturb one or more acres of soil or whose projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit, 99-08-DWQ). Construction activity subject to this permit includes clearing, grading, and disturbances to the ground such as stockpiling, or excavation. The Construction General Permit requires development and implementation of a SWPPP. The SWPPP must list all BMPs that the discharger would use to protect storm water runoff and the placement of those BMPs. Section A of the Construction General Permit describes the elements that must be contained in a SWPPP. The Construction General Permit requirements must be satisfied prior to beginning construction.

The Municipal Storm Water Permitting Program regulates storm water discharges from municipal separate storm sewer systems (MS4s). MS4 permits were issued in two phases: Under Phase I, for medium (serving between 100,000 and 250,000 people) and large (serving 250,000 people) municipalities, and Phase II, for smaller municipalities. Under Phase I, the RWQCB has adopted NPDES storm water permits for medium and large municipalities, most of which are issued to a group of co-permittees encompassing an entire metropolitan area. The MS4 permits require the discharger to develop and implement a WQMP with the goal of reducing the discharge of pollutants to the maximum extent practicable (MEP). MEP is the performance standard specified in Section 402(p) of the Clean Water Act. The management programs specify what BMPs would be used to address certain program areas. In 2009, the Santa Ana RWQCB issued a municipal storm water NPDES (MS4) permit (Order No. R8-2009-0030) to the County of Orange and the 25 incorporated cities within the Santa Ana region, including the City of Los Alamitos.

The purpose of the Orange County Drainage Area Management Plan (DAMP) is to satisfy NPDES permit conditions for creating and implementing a WQMP to reduce pollutant discharges to the MEP. The DAMP contains guidelines on structural and nonstructural BMPs for meeting the NPDES goals. The DAMP identifies activities required to implement the minimum control measures required under the Municipal Permit. In order to ensure that construction sites implement the appropriate pollution control measures, the 2003 DAMP details recommended BMPs to be applied to new development and significant redevelopment.

FEDERAL EMERGENCY MANAGEMENT AGENCY/U.S. DEPARTMENT OF HOMELAND SECURITY

On March 1, 2003, the Federal Emergency Management Agency (FEMA) became part of the U.S. Department of Homeland Security (DHS). FEMA's primary mission is to reduce the loss of life and property and protect the Nation from all hazards, including flooding, among others.

CITY OF LOS ALAMITOS MUNICIPAL CODE

Chapter 8.44, Stormwater and Urban Runoff Pollution Control, of the *Municipal Code* regulates the treatment of stormwater runoff from development projects in the City. Section 8.44.050 addresses the control of urban runoff for new development or significant redevelopment projects. This section requires the preparation of a water quality management plan. Section 8.44.060 details the process and procedures for the monitoring and implementation of Best Management Practices.



Also refer to Section 5.11, Water, which describes *Municipal Code*, Chapter 13.04, Water Conservation, and Chapter 13.05, Water Efficient Landscaping.

5.8.2 ENVIRONMENTAL SETTING

HYDROLOGY

Watershed

The City of Los Alamitos is located within the Westminster Watershed, as identified by the Watershed and Coastal Resources Division of Orange County. The Westminster Watershed covers 74.1 square miles in the southwestern corner of Orange County. In addition to Los Alamitos, the watershed includes portions of the Cities of Anaheim, Cypress, Fountain Valley, Garden Grove, Huntington Beach, Los Alamitos, Santa Ana, Seal Beach, Stanton, and Westminster. Three main tributaries drain this watershed. The Los Alamitos Channel drains into the San Gabriel River; the Bolsa Chica Channel empties into the Anaheim Bay-Huntington Harbour complex; and the East Garden Grove-Wintersburg Channel drains through Bolsa Bay into Huntington Harbour.

Groundwater

The Orange County Basin is located in north and central Orange County within the lower Santa Ana River Watershed. The Basin is bounded by the Coyote and Chino Hills on the north, the Santa Ana Mountains on the northeast, the San Joaquin Hills on the south, and the Pacific Ocean and the Newport-Inglewood fault zone on the southwest and has a surface area of approximately 224,000 acres (350 square miles). The Orange County Basin has been divided into three subbasins: Yorba Linda, Main, and Irvine.

The hydrogeology of the Orange County Basin is characterized by a deep structural alluvial basin containing a thick accumulation of interbedded sand, silt, and clay. The Orange County Basin contains three defined aquifer units: the Upper, Principal, (or Middle) and Lower aquifers. The total estimated volume of fresh groundwater, capable of being stored in the Orange County Basin when it is completely full, is estimated to be approximately 66 million acre feet by the Orange County Water District (OCWD) (2004). OCWD estimates that between 400,000 and 500,000 acre-feet of the total basin storage is actually usable in terms of emptying and filling operations.

DAM INUNDATION

The City of Los Alamitos is located within the dam inundation area of the Prado Dam. Prado Dam is a flood control and water conservation project constructed and operated by the U.S. Army Corps of Engineers, Los Angeles District. The dam provides flood control and water conservation storage for Orange County. The dam is located approximately 25 miles northeast of Los Alamitos, on the Santa Ana River, west of the City of Corona. According to the U.S. Army Corps of Engineers dam inundation maps, in the event of dam failure the flood wave would reach Los Alamitos in approximately 6.5 hours and would be approximately four feet deep.



STORMWATER QUALITY

Stormwater quality is a significant concern in Southern California. This section discusses typical pollutants found in stormwater runoff and discusses the types of contaminants that may be found in existing stormwater runoff.

Point Source Pollutants

Historically, point-source pollutants have consisted of industrial operations with discrete discharges to receiving waters. Over the past several decades, many industrial operations have been identified as potential sources of pollutant discharges. For this reason, many types of industrial operations require coverage under the State of California's General Industrial Permit. This permit regulates the operation of industrial facilities and monitors and reports mechanisms to ensure compliance with water quality objectives. State regulations require industrial operations to comply with California's General Industrial Permit, which significantly lessens impacts on the receiving waters' water quality. However, industrial operations that are not covered under the General Industrial Permit's jurisdiction may still have the potential to affect the water quality of receiving waters. These industrial operations would be considered non-point-source pollutants.

Non-Point Source Pollutants in Stormwater

Effects of urbanization most often result in an increase in pollutant export from the urban area. An important consideration in evaluating storm water quality within a City is to evaluate whether it impairs the beneficial use to the receiving waters. Non-point source pollutants have been characterized by the following major parameters to assist in determining and using the pertinent data. Receiving waters can assimilate a limited quantity of various constituent elements; however, there are thresholds beyond which the measured amount becomes a pollutant and results in an undesirable impact. The following background information on these standard water quality parameters provides an understanding of typical urbanization impacts.

Sediment

Sediment is made up of tiny soil particles that are washed or blown into surface waters. It is the major pollutant by volume in surface water. Suspended soil particles can cause the water to look cloudy or turbid. The fine sediment particles also act as a vehicle to transport other pollutants, including nutrients, trace metals, and hydrocarbons. Construction sites are typically the largest source of sediment for urban areas under development.

Nutrients

Nutrients (especially phosphorous and nitrogen) are a major concern for surface water quality because they can cause algal blooms and excessive vegetative growth. Of the two, phosphorus is usually the limiting nutrient that controls the growth of algae in lakes.



The orthophosphorous form of phosphorus is readily available for plant growth. The ammonium form of nitrogen can also have severe effects on surface water quality. The ammonium is converted to nitrate and nitrite forms nitrogen in a process called nitrification. The process consumes large amounts of oxygen, which can impair the dissolved oxygen levels in water. The nitrate form of nitrogen is very soluble and is found naturally at low levels in water. When nitrogen fertilizer is applied to lawns or other areas in excess of plant needs, nitrates can leach below the root zone, eventually reaching groundwater. Orthophosphate from auto emissions also contributes phosphorus in areas with heavy automobile traffic. Other problems resulting from excess nutrients are surface algal scums, water discolorations, odors, toxic releases, and overgrowth of plants. Common measures for nutrients are total nitrogen, organic nitrogen, total Kjeldahl Nitrogen (TKN), nitrate, ammonia, total phosphate, and total organic carbon (TOC). As a general rule of thumb, nutrient export is greatest from development sites with the most impervious areas.

Trace Metals

Trace metals are primarily a concern because of their toxic effects on aquatic life and their potential to contaminate drinking water supplies. The most common trace metals found in urban runoff are lead, zinc, and copper. Fallout from automobile emissions is also a major source of lead in urban areas. A large fraction of the trace metals in urban runoff are attached to sediment and this effectively reduces the amount that is immediately available for biological uptake and subsequent bioaccumulation. Metals associated with the sediment settle out rapidly and accumulate in the soils. Also, urban runoff events typically occur over a shorter duration, which reduces the aquatic environment's amount of exposure to toxics. The toxicity of trace metals in runoff varies with the hardness of the receiving water. As total hardness of the water increases, the threshold concentration levels for adverse effects increases.

Oxygen-Demanding Substances

Aquatic life is dependent on the dissolved oxygen (DO) in the water, and when organic matter is consumed by microorganisms, DO is consumed in the process. A rainfall event can deposit large quantities of oxygen-demanding substances in lakes and streams. The biochemical oxygen demand (BOD) of typical urban runoff is on the same order of magnitude as the effluent from an effective secondary wastewater treatment plant. A problem from low DO results when the rate of oxygen-demanding material exceeds the rate of replenishment. Oxygen demand is estimated by direct measure of DO and indirect measures such as BOD, chemical oxygen demand (COD), oils and greases and TOC.

Bacteria

Bacteria levels in undiluted urban runoff exceed public health standards for water contact recreation almost without exception. Studies have found that total coliform counts exceeded U.S. EPA water quality criteria at almost every site and almost every time it rained. The coliform bacteria that are detected may not be a health risk in themselves, but are often associated with human pathogens.



Oil and Grease

Oil and grease contain a wide variety of hydrocarbons, some of which could be toxic to aquatic life in low concentrations. These materials initially float on water and create the familiar rainbow-colored film. Hydrocarbons have a strong affinity for sediment and quickly become absorbed to it. The major source of hydrocarbons in urban runoff is crankcase oil and other lubricating agents that leak from automobiles. Hydrocarbon levels are highest in the runoff from parking lots, roads, and service stations. Residential land uses generate less hydrocarbons export, although illegal disposal of waste oil into stormwaters can be a local problem.

Priority pollutants are generally related to hazardous wastes or toxic chemicals and can sometimes be detected in storm water. Priority pollutant scans have been conducted in previous studies of urban runoff, which evaluated the presence of over 120 toxic chemicals and compounds. The scans rarely revealed toxins that exceeded the current safety criteria. The urban runoff scans were primarily conducted in suburban areas not expected to have many sources of toxic pollutants (with the possible exception of illegally disposed or applied household hazardous wastes). Priority pollutants in stormwater are: phthalate (plasticizer compound), phenols and creosols (wood preservatives), pesticides and herbicides, oils and greases, and metals.

Physical Characteristics of Stormwater

Standard parameters assess the quality of stormwater and provide a method of measuring impairment. The quantity of a material in the environment and its characteristics determine the degree of availability as a pollutant in surface runoff. In an urban environment, the quantity of certain pollutants in the environment is a function of the intensity of the land use. For instance, a high density of automobile traffic makes a number of potential pollutants (such as lead and hydrocarbons) more available. The availability of a material, such as a fertilizer, is a function of the quantity and the manner in which it is applied. Applying fertilizer in quantities that exceed plant needs leaves the excess nutrients available for loss to surface or groundwater.

The physical properties and chemical constituents of water traditionally have served as the primary means of monitoring and evaluating water quality. The water quality parameters for stormwater are numerous and are classified in several ways. In many cases, the concentration of an urban pollutant rather than the annual load of that pollutant is needed to assess a water quality problem. Common physical, chemical, and biological characteristics that evaluate the quality of the surface runoff are outlined below.

Dissolved Oxygen (DO)

Dissolved oxygen (DO) in the water has a pronounced effect on the aquatic organisms and the chemical reactions that occur. It is one of the most important biological water quality characteristics in the aquatic environment. The DO concentration of a water body is determined by the solubility of oxygen, which is inversely related to water temperature, pressure, and biological activity. DO is a transient property that can fluctuate rapidly in time and space, and therefore, represents the status of the water system at a particular point and time of sampling. The decomposition of organic debris in water is a slow process and the responding changes in oxygen status are also slow.



Oxygen Demand

The oxygen demand is an indication of the pollutant load and includes measurements of biochemical oxygen demand or chemical oxygen demand.

The biochemical oxygen demand (BOD) is an index of the oxygen-demanding properties of the biodegradable material in the water. Samples are taken from the field and incubated in the laboratory at 20 degrees Celsius, after which the residual dissolved oxygen is measured. The BOD values are useful in assessing stream pollution loads and for comparison purposes.

The chemical oxygen demand (COD) is a measure of the pollutant loading in terms of complete chemical oxidation using strong oxidizing agents. It can be determined quickly because it does not rely on slow bacteriological actions, as does BOD. COD does not necessarily provide a good index of oxygen-demanding properties in natural waters.

Total Dissolved Solids (TDS)

Total dissolved solids concentration is determined by evaporation of a filtered sample to obtain residue whose weight is divided by the sample volume. The TDS of natural waters varies widely. TDS is an important indicator of water quality for several reasons:

- Dissolved solids affect the ionic bonding strength related to other pollutants such as metals in the water;
- TDS is a major determinant of aquatic habitat;
- TDS affects the saturation concentration of dissolved oxygen and influences the ability of a water body to assimilate wastes; and
- Eutrophication rates depend on TDS.

pH

The pH of water is the negative log, base 10, of the hydrogen ion (H^+) activity. A pH of 7 is neutral; a pH greater than 7 indicates alkaline water; a pH less than 7 represents acidic water. In natural water, carbon dioxide (CO_2) reactions are some of the most important in establishing pH. The pH at any one time is an indication of the balance of chemical equilibrium in water and affects the availability of certain chemicals or nutrients in water for uptake by plants. The pH of water directly affects fish and other aquatic life; generally, toxic limits are pH values of less than 4.8 and greater than 9.2.

Alkalinity

Alkalinity is the opposite of acidity, representing the capability of water to neutralize acid. Alkalinity is also linked to pH and is caused by the presence of carbonate, bicarbonate, and hydroxide, which are formed when carbon dioxide is dissolved. A high alkalinity is associated with a high pH and excessive solids. Most streams have alkalinities of less than 200 milligrams per liter (mg/l) and alkalinity ranges of 100 – 200 mg/l seem to support well-diversified aquatic life.



Specific Conductivity

The specific conductivity of water (its ability to conduct an electric current) is related to its total dissolved ionic solids. Long-term monitoring of a project's waters can develop a relationship between specific conductivity and TDS. Its measurement is quick and inexpensive and can be used to approximate TDS. Specific conductivities in excess of 2,000 micro-ohms per centimeter ($\mu\text{ohms/cm}$) indicate a TDS level that is too high for most freshwater fish.

Turbidity

Turbidity is an indicator of the property of water that causes light to become scattered or absorbed. Suspended clays and other organic particles cause turbidity. The clarity of water is an important indicator of water quality that relates to the ability of photosynthetic light to penetrate. Turbidity can be used as an indicator of certain water quality constituents, such as predicting the sediment concentrations.

Nitrogen (N)

Sources of nitrogen in stormwater are from the additions of organic matter to water bodies or chemical additions. Ammonia and nitrate are important nutrients for the growth of algae and other plants. Excessive nitrogen can lead to eutrophication, because nitrification consumes dissolved oxygen in the water. Nitrogen occurs in many forms. Organic nitrogen breaks down into ammonia, which eventually becomes oxidized to nitrate-nitrogen, a form available for plants. High concentrations of nitrate-nitrogen (N/N) in water can stimulate growth of algae and other aquatic plants, but if phosphorus (P) is present, only about 0.30 mg/l of nitrate-nitrogen is needed for algal blooms. Some fish life can be affected when nitrate-nitrogen exceeds 4.2 mg/l. There are a number of ways to measure the various forms of aquatic nitrogen. Typical measurements of nitrogen are Kjeldahl nitrogen (organic nitrogen plus ammonia); ammonia; nitrite plus nitrate; nitrite; and nitrogen in plants. The principal water quality criteria for nitrogen focus on nitrate and ammonia.

Phosphorus (P)

Phosphorus is an important component of organic matter. In many water bodies, phosphorus is the limiting nutrient that prevents additional biological activity from occurring. The origin of this constituent in urban stormwater discharge is generally from fertilizers and other industrial products. Orthophosphate is soluble and is considered to be the only biologically available form of phosphorus. Because phosphorus strongly associates with solid particles and is a significant part of organic material, sediments influence concentration in water and are an important component of the phosphorus cycle in streams. The primary methods of measurement are detecting orthophosphate and total phosphorus.

EXISTING SITE CONDITIONS

Soils and Topography

The project site is located in northwestern Orange County. Soils within the project area are classified by Hydrologic Soil Group C, which is characterized as having slow infiltration rates when



thoroughly wetted and consisting chiefly of silty-loam soils with a layer that impedes downward movement of water, or soils with moderately fine to fine texture. These soils have a slow rate of water transmission.

As the project site is developed and located within an urbanized area, the site is relatively flat with minimum topographic relief. The area generally slopes towards the south (Katella Avenue) and west (Cherry Street) of the site.

Hydrology

Methodology

The total on-site drainage area for the subject property is 22 acres. The Rational Method as outlined in the *Orange County Hydrology Manual* (OCHM) was utilized to determine the 10-year and 100-year runoff from the site. There is an existing storm drain in Kaylor Street that bisects the project site. The storm drain discharges into the existing storm drain in Katella Avenue. The Kaylor Street storm drain was included in the calculations. Information for the storm drain was determined from as-built plans. See Appendix G for a copy of the plans. At all other discharge locations runoff flows into the street, or is minor local flow. In these locations the runoff was quantified using Figure D-1, Time of Concentration Nomograph for Initial Subarea, from the OCHM.

Development Type and Pervious Area

The project site is 100 percent Commercial development. Commercial development has a 90 percent impervious area and 10 percent pervious according to Figure D-1 of the OCHM. For this analysis, pervious areas were delineated for each subbasin (refer to *Exhibit 5.8-1, Pervious Areas by Subbasin – Existing Conditions*). As previously noted, the minimum pervious area used was 10 percent, to be consistent with Figure D-1 of the OCHM. Refer to *Table 5.8-1, Summary of Pervious Area for Existing Conditions*.

Table 5.8-1
Summary of Pervious Area for Existing Conditions

Project Site Subbasin Designation	Area [ac]	Pervious Area [%]
A	0.4	10%
B	0.1	21%
C	1.6	10%
D	1.6	13%
E	2.9	10%
F	1.0	13%
G	1.5	10%
H	0.9	13%
I	0.5	12%
J	0.3	10%
K	1.7	10%



Table 5.8-1 (continued)
Summary of Pervious Area for Existing Conditions

Project Site Subbasin Designation	Area [ac]	Pervious Area [%]
L	0.9	10%
M	1.3	13%
N	0.9	13%
O	0.9	10%
P	1.3	13%
Q	0.8	20%
R	0.4	11%
S	0.7	10%
T	1.2	10%
U	0.5	10%
V	0.6	10%
W	0.6	12%
Total Site	22.3	9%

Stormwater

Per the *Water Quality Control Plan for the Santa Ana Basin (Basin Plan)*, the City of Los Alamitos is located in Hydrologic Subarea (HSA) 845.61, "Anaheim HSA Split." As mentioned previously, runoff from the site ultimately discharges to Coyote Creek and Reach 1 of the San Gabriel River. The LARWQCB has listed Coyote Creek as an impaired waterbody for copper, lead, selenium, and zinc. In 2006, the LARWQCB adopted a Total Maximum Daily Load (TMDL) for metals and selenium for the San Gabriel River; however, because of the SWRCB's inability to meet the deadline for approval, the Environmental Protection Agency (EPA) established a separate TMDL for metals in the San Gabriel River which is now the effective TMDL. This effective TMDL includes a wet-weather TMDL for copper, lead, and zinc for Coyote Creek as well as a wet-weather TMDL for the San Gabriel River Estuary for copper.

Potential Stormwater Pollutants

According to Table 7.II-1 of the *Orange County Drainage Area Management Plan (DAMP)*, the proposed project is in the Priority Project Category of Commercial/Industrial Development.

Anticipated stormwater pollutants consist of the following:

- Oil and Grease (petroleum products, vehicles)
- Trash and Debris (trash and biodegradable organic matter)

Potential stormwater pollutants may consist of the following:



Source: Kimley-Horn and Associates, Inc.

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09/10 • JN 10-107031

ENVIRONMENTAL IMPACT REPORT LOS ALAMITOS MEDICAL CENTER SPECIFIC PLAN Pervious Areas by Subbasin - Existing Conditions

Exhibit 5.8-1



- Suspended Solid/Sediments (from landscaping)
- Nutrients (from landscaping)
- Heavy Metals (if outdoor storage or metal roofs are affected)
- Pathogens (if food preparation or eating areas are affected)
- Pesticides (from landscaping)
- Organic compounds (from pesticides, solvents and cleaning compounds)

ESA and ASBS

The project site does not include any known Environmentally Sensitive Areas (ESAs) or Areas of Special Biological Significance (ASBS).

Stormwater Runoff

Stormwater runoff on the project site is conveyed through the parking lot via surface flow to concrete parking lot drainage swales, which convey flow to existing storm drain inlets in Kaylor Street and Katella Avenue. The storm drain in Kaylor Street ties into the Katella Avenue storm drain, which extends from Winners Circle on the east to Los Alamitos Boulevard on the west and outlets to the Orange County Flood Control District's Katella Storm Channel (Facility No. C01S05). The channel extends west to the Rossmoor Retarding Basin (Facility No. C01B02). Runoff from the retarding basin, which has a 635-acre drainage area, is pumped to Coyote Creek by the Rossmoor Pump Station (Facility No. C01PS2).

5.8.3 SIGNIFICANCE THRESHOLD CRITERIA

The environmental analysis in this section is patterned after the Initial Study Checklist recommended by the *CEQA Guidelines*, as amended, and used by the City of Los Alamitos in its environmental review process, and is contained in Appendix A of the EIR. The Initial Study includes questions relating to hydrology, drainage, and water quality. The issues presented in the Initial Study Checklist have been utilized as thresholds of significance in this section. Accordingly, a project may create a significant environmental impact if it causes one or more of the following to occur:

- Violate any water quality standards or waste discharge requirements.
- Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g. the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted (refer to Section 5.11, Water).



- Substantially alter the existing drainage pattern on the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site.
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site.
- Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.
- Otherwise substantially degrade water quality.
- Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map (refer to Section 8.0, Effects Found Not To Be Significant).
- Place within a 100-year flood hazard area structures which would impede or redirect flood flows (refer to Section 8.0, Effects Found Not To Be Significant).
- Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam.
- Inundation by seiche, tsunami, or mudflow (refer to Section 8.0, Effects Found Not To Be Significant).

Based on these significance standards, the effects of the proposed project have been categorized as either “no impact”, a “less than significant impact”, or a “potentially significant impact.” Mitigation measures are recommended for potentially significant impacts. If a potentially significant impact cannot be reduced to a less than significant level through the application of mitigation, it is categorized as a “significant unavoidable impact.”

5.8.4 PROJECT IMPACTS AND MITIGATION MEASURES

OVERVIEW OF LOS ALAMITOS MEDICAL CENTER SPECIFIC PLAN (PROPOSED PROJECT)

Section 3.C.2 of the proposed *Los Alamitos Medical Center Specific Plan* describes the storm drain system for the proposed project. Currently, storm drains are present in Katella Avenue and Kaylor Street, which convey storm water flows to facilities downstream. Concrete storm drain facilities are also present in Catalina, Kyle, and Florista Streets. Existing easements would be retained and/or new easements dedicated to meet City and/or Orange County Flood Control District standards.



Project drainage would be conveyed through the parking lot(s) via surface flow to concrete parking lot drainage swales. From there, storm water runoff would be conveyed to existing inlets on Kaylor Street and Katella Avenue.

DRAINAGE SYSTEM CAPACITY

- ◆ **DEVELOPMENT ASSOCIATED WITH IMPLEMENTATION OF THE PROPOSED PROJECT COULD CREATE OR CONTRIBUTE TO RUNOFF WATER WHICH COULD EXCEED THE CAPACITY OF EXISTING OR PLANNED STORM WATER DRAINAGE SYSTEMS OR PROVIDE SUBSTANTIAL ADDITIONAL SOURCES OF POLLUTED RUNOFF.**

Level of Significance Before Mitigation: Potentially Significant Impact.

Impact Analysis: The proposed project includes the construction of two new Hospital Buildings, one new Medical Office Building (MOB A), two parking structures, and a Central Plant on the Los Alamitos Medical Center campus. The existing and proposed facilities are summarized in Table 5.8-2, Anticipated Development Footprint by Phase.

**Table 5.8-2
Anticipated Building Footprint by Phase**

	Cumulative Area			Net Increase Each Phase		
	(sf)	(ac)	% of site	(sf)	(ac)	% of site
Total Site		18.3	100.0%	-	-	-
Existing Facilities	356,523	8.2	44.7%	-	-	-
Phase 1 Facilities	431,623	9.9	54.1%	75,100	1.7	9%
Phase 2 Facilities	480,624	11.0	60.3%	49,001	1.1	6%
Phase 3 Facilities	582,824	13.4	73.1%	102,200	2.3	13%
Total Net Increase Over Existing				226,301	5.2	

Table 5.8-3, Summary of Impervious Area by Phase, summarizes the percent imperviousness of the site during the various phases of the proposed project. As shown in Table 5.8-3, the imperviousness of the site actually decreases with each subsequent phase due to increased landscaping and open space areas. Exhibits 5.8-2 through 5.8-4 illustrate the amount of pervious surface on-site for the three phases.



Source: Kimley-Horn and Associates, Inc.

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ENVIRONMENTAL IMPACT REPORT LOS ALAMITOS MEDICAL CENTER SPECIFIC PLAN Pervious Areas by Subbasin - Phase 1 Conditions

Exhibit 5.8-2



Source: Kimley-Horn and Associates, Inc.

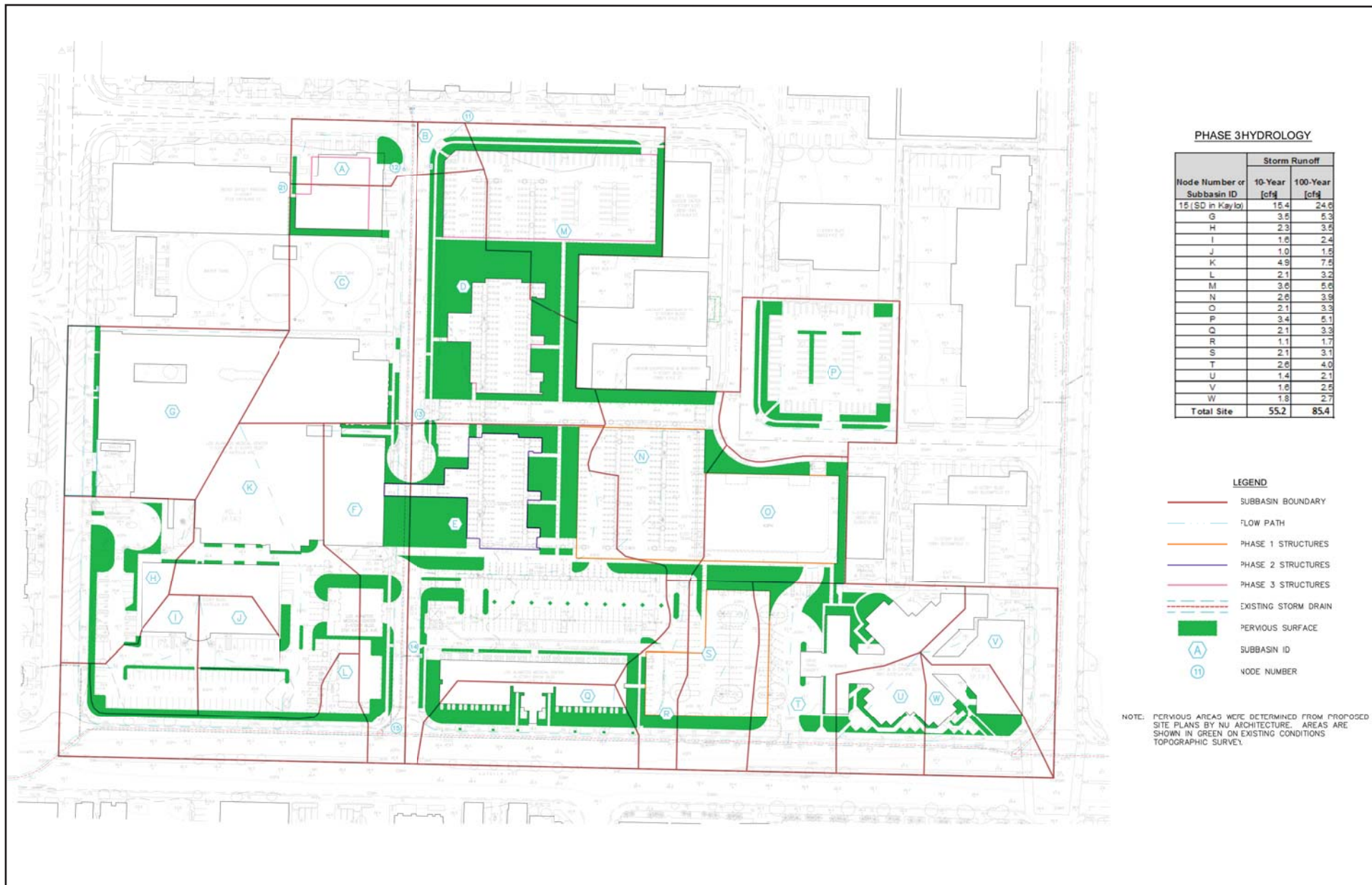
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09/10 • JN 10-107031

ENVIRONMENTAL IMPACT REPORT LOS ALAMITOS MEDICAL CENTER SPECIFIC PLAN **Pervious Areas by Subbasin - Phase 2 Conditions**

Exhibit 5.8-3



Source: Kimley-Horn and Associates, Inc.

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ENVIRONMENTAL IMPACT REPORT LOS ALAMITOS MEDICAL CENTER SPECIFIC PLAN **Pervious Areas by Subbasin - Phase 3 Conditions**

Exhibit 5.8-4



Table 5-8-3
Summary of Impervious Area by Phase

Condition	Total Drainage Area (ac)*	Pervious Area (ac)	Impervious Area (ac)	Percent Impervious
Existing	22.3	2.1	20.2	91%
Phase 1	22.3	2.2	20.0	90%
Phase 2	22.3	2.9	19.4	87%
Phase 3 (Buildout)	22.3	3.4	18.8	85%
Notes: Drainage area consists of the 18.3-acre project site and an additional 4 acres of off-site contributing drainage area.				

The percentage of pervious and impervious areas on the project site was further defined by the subbasins described earlier in the Environmental Setting. As shown in *Table 5.8-4, Summary of Pervious Area for Existing and Phased Conditions*, several subbasins have an increase in pervious area as indicated by the **bold text** in *Table 5.8-4*. In some instances this resulted in a decrease of runoff from the site. Subbasins B and N have less pervious area at some phases of the proposed project, as illustrated by the *italicized, underlined text* in *Table 5.8-4*.

Table 5.8-4
Summary of Pervious Area for Existing and Phased Conditions

New Subbasin Designation	Area [ac]	Existing	Phase 1	Phase 2	Phase 3
		Pervious Area [%]	Pervious Area [%]	Pervious Area [%]	Pervious Area [%]
A	0.4	10%	10%	13%	10%
B	0.1	21%	21%	21%	<u>20%</u>
C	1.6	10%	10%	10%	10%
D	1.6	13%	13%	16%	39%
E	2.9	10%	10%	22%	22%
F	1.0	13%	13%	18%	18%
G	1.5	10%	10%	10%	10%
H	0.9	13%	13%	15%	16%
I	0.5	12%	12%	12%	12%
J	0.3	10%	10%	10%	10%
K	1.7	10%	10%	10%	10%
L	0.9	10%	10%	10%	10%
M	1.3	13%	13%	13%	26%
N	0.9	13%	<u>10%</u>	<u>10%</u>	13%
O	0.9	10%	23%	23%	23%
P	1.3	13%	13%	13%	13%
Q	0.8	20%	20%	20%	20%



Table 5.8-4 (continued)
Summary of Pervious Area for Existing and Phased Conditions

New Subbasin Designation	Area [ac]	Existing	Phase 1	Phase 2	Phase 3
		Pervious Area [%]	Pervious Area [%]	Pervious Area [%]	Pervious Area [%]
R	0.4	11%	19%	20%	20%
S	0.7	10%	11%	12%	12%
T	1.2	10%	13%	14%	14%
U	0.5	10%	10%	10%	10%
V	0.6	10%	10%	10%	10%
W	0.6	12%	12%	12%	12%
Total Site	22.3	9%	10%	13%	15%

Subbasin B contributes to the Kaylor Street storm drain. A one percent decrease in pervious area was determined to have no impact at the downstream end of the storm drain where it connects to the Katella Avenue storm drain. Subbasin N is a small area, with a low percent impervious. There was no resulting change in runoff amount due to the temporary decrease in pervious area.

Because of the way the Rational Method is applied, the overall change in runoff is very small. *Table 5.8-5, Summary of Runoff for Existing and Phased Conditions*, provides a summary of changes in runoff from existing conditions and across the three phases. Decrease in runoff from existing conditions is indicated in ***bold, italicized text***. As shown in *Table 5.8-5*, there are no increases in discharge associated with the proposed project.

Table 5.8-5
Summary of Runoff for Existing and Phased Conditions

Node Number or Subbasin ID	10-year Storm Runoff				100-year Storm Runoff			
	Existing [cfs]	Phase 1 [cfs]	Phase 2 [cfs]	Phase 3 [cfs]	Existing [cfs]	Phase 1 [cfs]	Phase 2 [cfs]	Phase 3 [cfs]
15 (SD in Kaylor)	15.6	15.6	<i>15.4</i>	<i>15.4</i>	24.6	24.6	<i>24.4</i>	24.6
G	3.5	3.5	3.5	3.5	5.3	5.3	5.3	5.3
H	2.3	2.3	2.3	2.3	3.6	3.6	<i>3.5</i>	<i>3.5</i>
I	1.6	1.6	1.6	1.6	2.4	2.4	2.4	2.4
J	1.0	1.0	1.0	1.0	1.5	1.5	1.5	1.5
K	4.9	4.9	4.9	4.9	7.5	7.5	7.5	7.5
L	2.1	2.1	2.1	2.1	3.2	3.2	3.2	3.2
M	3.8	3.8	3.8	3.6	5.8	5.8	5.8	<i>5.6</i>
N	2.6	2.6	2.6	2.6	4.0	4.0	4.0	<i>3.9</i>
O	2.3	<i>2.1</i>	<i>2.1</i>	<i>2.1</i>	3.3	3.3	3.3	3.3
P	3.4	3.4	3.4	3.4	5.1	5.1	5.1	5.1



Table 5.8-5 (continued)
Summary of Runoff for Existing and Phased Conditions

Node Number or Subbasin ID	10-year Storm Runoff				100-year Storm Runoff			
	Existing [cfs]	Phase 1 [cfs]	Phase 2 [cfs]	Phase 3 [cfs]	Existing [cfs]	Phase 1 [cfs]	Phase 2 [cfs]	Phase 3 [cfs]
Q	2.1	2.1	2.1	2.1	3.3	3.3	3.3	3.3
R	1.2	1.2	1.1	1.1	1.8	1.8	1.7	1.7
S	2.1	2.1	2.1	2.1	3.1	3.1	3.1	3.1
T	2.6	2.6	2.6	2.6	4.0	4.0	4.0	4.0
U	1.4	1.4	1.4	1.4	2.1	2.1	2.1	2.1
V	1.6	1.6	1.6	1.6	2.5	2.5	2.5	2.5
W	1.8	1.8	1.8	1.8	2.7	2.7	2.7	2.7
Total Site	55.8	55.5	55.4	55.2	85.8	85.8	85.5	85.4

The project proposes three phases of development, and includes both the demolition of existing structures and the construction of new buildings, parking structures, and surface parking. An integral part of the proposed *Los Alamitos Medical Center Specific Plan* is an increase in on-site open space and landscaping. This additional pervious area ranges from one percent in Phase 1 to six percent in Phase 3. The additional area results in a small decrease in runoff in both the 10-year and 100-year storms, as shown in *Table 5.8-5*.

In conclusion, each phase of the proposed project results in a decrease of impervious area compared to existing conditions due to increased landscaped and open space areas. As a result, each subsequent phase of the proposed project would result in a reduction of the amount of runoff leaving the site. Thus, there are no adverse impacts to the existing storm drain facilities adjacent to the site during any of the three phases; however, Mitigation Measure HYD-1 has been included to ensure that impacts remain at less than significant levels.

Mitigation Measures:

HYD-1 Concurrent with Site Plan Review or issuance of a grading permit, whichever comes first, a hydrology review shall be conducted by a Registered Civil Engineer for each development phase to ensure that runoff values for each phase remain at or below the runoff values shown in Table 5.8-5.

Level of Significance After Mitigation: Less Than Significant Impact.



WATER QUALITY

◆ CONSTRUCTION AND OPERATION OF THE PROPOSED PROJECT COULD RESULT IN ADVERSE WATER QUALITY IMPACTS.

Level of Significance Before Mitigation: Potentially Significant Impact.

Impact Analysis:

Short-Term Impacts

Short-term water quality impacts could occur during the construction phase of the proposed project. As the site is currently developed with a hospital, medical office buildings, and surface parking, some of the existing on-site uses would be removed in preparation of grading and construction for the proposed project. This could expose loose soil to potential wind and water erosion. If not controlled, the transport of these materials to local waterways would temporarily increase suspended sediment concentrations and release pollutants attached to sediment particles into local waterways.

Since the proposed project site is greater than one acre in size, coverage under the Construction Activities General Permit would be required. This General Permit would require the preparation of a SWPPP prior to construction of the proposed project. The SWPPP would identify sources of sediments and pollutants that would affect storm water quality, designate use of appropriate BMPs at the project site, and implement storm water pollution prevention measures that would reduce water pollution associated with construction activities. There are many BMPs available for achieving the best possible water quality. Common BMPs include structural controls, as well as non-structural controls. Site-specific BMPs would not be established until the proposed project is reviewed by the City of Los Alamitos Public Works Department. Increased surface water runoff and storm drainage discharge associated with construction activities would be considered a less than significant impact with implementation of the required mitigation measures.

Long-Term Impacts

Anticipated pollutants associated with commercial development and parking lots include heavy metals, organic compounds, trash and debris, and oil and grease. In addition, potential pollutants include bacteria, virus, nutrients, pesticides, and oxygen demanding substances.

Currently, impervious surface covers approximately 91 percent of the site with approximately 9 percent consisting of urban landscaping. After completion of the proposed improvements, approximately 15 percent of the site would consist of landscaping, and additional permeable paving within the proposed parking areas would be constructed throughout the site to create less reflection and glare for motorists and to allow additional percolation of runoff and storm water into the ground permitting natural filtration. Upon completion of Phase 3, approximately 85 percent of the site would be impervious under proposed conditions, which is a six percent reduction over existing conditions.



A Preliminary Water Quality Management Plan (WQMP) has been prepared for the proposed project to meet, at a minimum, the measures specified in the Countywide NPDES DAMP and City of Los Alamitos *Local Implementation Plan* (LIP), the assignment of long-term maintenance responsibilities (specifying the developer, parcel, owner, maintenance association, leases, etc.), and the location(s) of all structural BMPs. The Preliminary WQMP prepared for the proposed project identifies pollutant sources associated with the addition of business operations that may affect the quality of discharges of stormwater from the site.

Water Quality Design Flows and Volumes

Table 5.8-6, Preliminary Water Quality Design Flows, and *Table 5.8-7, Preliminary Water Quality Design Volumes*, summarize the preliminary water quality design flows and volumes based on the municipal separate storm sewer system (MS4) permit (Order No. R8-2009-0030) for the Santa Ana Region of Orange County. These flows and volumes are based on a conceptual layout of the proposed project. The WQMP would need to be updated to reflect more detailed site planning and design during subsequent stages of the proposed project.

**Table 5.8-6
Preliminary Water Quality Design Flows**

Condition	Total Drainage Area, A (ac)	Runoff Coefficient, C _A	Rainfall Intensity, I, for 85 th percentile, 24-hour storm (in/hr) ^B	Stormwater Quality Design Flow, Q _{P,SQDF} (cfs) ^C
Phase 1	22.3	0.83	0.2	3.7
Phase 2	22.3	0.81	0.2	3.6
Phase 3 (Buildout)	22.3	0.79	0.2	3.5
Notes A. Runoff coefficient from Table A-1 of Exhibit 7.II Model Water Quality Management Plan. B. Rainfall intensity per Order R8-2009-0030. C. Stormwater Quality Design Flow based on $Q = C \times I \times A$				

**Table 5.8-7
Preliminary Water Quality Design Volumes**

Condition	Total Drainage Area (ac)	Runoff Coefficient, C _A	Rainfall Depth, D, for 85 th percentile, 24-hour storm (in) ^B	Stormwater Quality Design Volume, V _{SQDV} (ac-ft) ^C
Phase 1	22.3	0.83	0.69	1.1
Phase 2	22.3	0.81	0.69	1.0
Phase 3 (Buildout)	22.3	0.79	0.69	1.0
Notes A. Runoff coefficient from Table A-1 of Exhibit 7.II Model Water Quality Management Plan. B. Rainfall depth from Figure A-1 of Exhibit 7.II Model Water Quality Management Plan C. Stormwater Quality Design Volume based on $V = C \times D/12 \times A$				



Best Management Practices Options

The stormwater pollutants anticipated for the proposed project consist of oil and grease, as well as trash and debris. Potential stormwater pollutants may consist of suspended solids and sediments, nutrients, heavy metals, pathogens, pesticides, and organic compounds.

The proposed project would incorporate appropriate site design, source control and, if necessary, treatment control Best Management Practices (BMP). The following tables summarize potential BMPs that would be considered during the planning and design process. Selection of specific BMPs would be completed as part of subsequent updates to this WQMP. Fact sheets for these potential BMPs are provided in Appendix H.

Table 5.8-8, Site Design BMPs describes the site design BMPs considered for this proposed project. Careful consideration of site design is a critical first step in stormwater pollution prevention from new developments and redevelopments.

Per the Preliminary WQMP prepared for the proposed project, *Table 5.8-9, Routine Source Control Non-Structural BMPs* and *Table 5.8-10, Routine Source Control Structural BMPs*, show source control BMPs (routine non-structural and routine structural) included in the proposed project and those that were not included.

Table 5.8-11, Treatment Control BMPs, is a summary of potential treatment control BMPs that may be incorporated into the proposed project. However, as the proposed percent imperviousness of the site is expected to decrease, site design and source control BMPs may be sufficient to reduce and control stormwater pollutants. As a result, treatment control BMPs may not be necessary.

Best Management Practices are intended to provide measures that minimize or eliminate the introduction of pollutants into the storm water system. Structural BMPs, which are economical, practicable, small-scale measures intended to minimize pollutant runoff, are to be constructed in new developments as appropriate. Non-structural BMPs include education, cleanup, and facility maintenance to prevent pollutants from entering the stormwater system. A detailed description of these BMPs is located in Appendix 2 of the Preliminary WQMP, which has been included as Appendix H of this EIR. It should be noted that per the California Stormwater Quality Association (CASQA), vegetated swales, vegetated buffers, and bioretention have been found to have medium to high effectiveness in treating metals.



**Table 5.8-8
Site Design BMPs**

Technique	Considered for Project?		If not applicable, state justification
	Yes	No	
Minimize Directly Connected Impervious Areas (DCIAs) (C-Factor Reduction)	X		
Create Reduced or "Zero Discharge" Areas (Runoff Volume Reduction)	X		
Minimize Impervious Area/Maximize Permeability (C-Factor Reduction)	X		
Conserve Natural Areas (C-Factor Reduction)		X	Existing condition does not have any natural areas for conservation

**Table 5.8-9
Routine Source Control Non-Structural BMPs**

BMP No.	Technique	Considered for Project?		If not applicable, state justification
		Yes	No	
N1	Education for Property Owners, Tenants and Occupants	X		
N2	Activity Restrictions	X		
N3	Common Area Landscape Maintenance	X		
N4	BMP Maintenance	X		
N5	Title 22 CCR Compliance	X		
N6	Local Water Quality Permit Compliance		X	The City of Los Alamitos does not issue water quality permits.
N7	Spill Contingency Plan	X		
N8	Underground Storage Tank Compliance	X		
N9	Hazardous Materials Disclosure Compliance	X		
N10	Uniform Fire Code Implementation	X		
N11	Common Area Litter Control	X		
N12	Employee Training	X		
N13	Housekeeping of Loading Docks	X		
N14	Common Area Catch Basin Inspection	X		
N15	Street Sweeping Private Streets and Parking Lots	X		
N17	Retail Gasoline Outlets		X	Project does not include retail gasoline outlets



Table 5.8-10
Routine Source Control Structural BMPs

Name	Considered for Project?		If not applicable, state justification
	Yes	No	
Provide storm drain system stenciling and signage	X		
Design and construct outdoor material storage areas to reduce pollution introduction	X		Only if proposed project will include outdoor material storage areas.
Design and construct trash and waste storage areas to reduce pollution introduction	X		
Use efficient irrigation systems and landscape design	X		
Protect slopes and channels and provide energy dissipation		X	No slopes or channels are anticipated at this time.
Incorporate requirements applicable to individual project features			
a. Dock areas	X		Only if project will include dock areas.
b. Maintenance bays	X		Only if project will include maintenance bays.
c. Vehicle wash areas	X		Only if project will include vehicle wash areas.
d. Outdoor processing areas		X	No outdoor processing areas are anticipated at this time.
e. Equipment wash areas	X		Only if project will include equipment wash areas.
f. Fueling areas	X		Only if project will include fueling areas.
g. Hillside landscaping		X	No hillside landscaping is anticipated at this time.
h. Wash water control for food preparation areas	X		Only if project will include food preparation areas.
i. Community car wash racks		X	No community car wash racks are anticipated at this time.

Table 5.8-11
Treatment Control BMPs

Name	Considered for Project?		If not applicable, state justification
	Yes	No	
Vegetated (Grass) Strips	X		
Vegetated (Grass) Swales	X		
Bioretention	X		
Proprietary Control Measures (such as Vortex Separator, Drain Inserts)	X		
Dry Detention Basin		X	BMP footprint too large for project site.
Wet Detention Basin		X	BMP footprint too large for project site.
Constructed Wetland		X	BMP footprint too large for project site.



Table 5.8-11 (continued)
Treatment Control BMPs

Name	Considered for Project?		If not applicable, state justification
	Yes	No	
Detention Basin / Sand Filter		X	BMP footprint too large for project site.
Porous Pavement Detention	X		
Porous Landscape Detention	X		
Infiltration Basin		X	BMP footprint too large for project site.
Infiltration Trench		X	Not appropriate for hydrologic soil Type C.

In conclusion, compliance with the aforementioned standards and implementation of the Best Management Practices that have been set forth in the Preliminary WQMP would reduce potential impacts to a less than significant impact in this regard. It should be noted that post-construction BMPs are not listed above because the new General Permit is generally applicable to stormwater runoff/sediment control for construction activities. While there is a section that refers to post-construction BMPs, that section would not be applicable to the project site because it falls under the jurisdiction of the MS4 permit for the Santa Ana Region of Orange County. In addition, Mitigation Measures HYD-2 through HYD-4 are included to ensure that impacts remain at less than significant levels.

Mitigation Measures:

- HYD-2 Prior to issuance of any Grading Permit, a Final Water Quality Management Plan, which includes both Structural and Non-Structural BMPs in order to comply with the requirements of the current DAMP and NPDES, shall be prepared for each development phase and/or building, as appropriate, to the satisfaction of the Los Alamitos Director of Public Works and the City Engineer.
- HYD-3 The project applicant shall implement the Best Management Practices identified in the Final Water Quality Management Plan.
- HYD-4 Prior to issuance of any Grading or Building Permit, and as part of the future development's compliance with the NPDES requirements, the project applicant shall enroll electronically through the SMARTS program to comply with the State of California General Construction Permit. Proof of enrollment must be submitted to the City of Los Alamitos before issuance of grading or building permits. Also, a Stormwater Pollution Prevention Plan (SWPPP) shall be reviewed and approved by the Director of Public Works and the City Engineer for water quality construction activities on-site. A copy of the SWPPP shall be available and implemented at the construction site at all times. The SWPPP shall outline the source control and/or treatment control BMPs to avoid or mitigate runoff pollutants at the construction site to the "maximum extent practicable."

Level of Significance After Mitigation: Less Than Significant Impact.



EROSION AND SILTATION

- ◆ **DEVELOPMENT ASSOCIATED WITH IMPLEMENTATION OF THE PROPOSED PROJECT COULD SUBSTANTIALLY ALTER THE EXISTING DRAINAGE PATTERN OF THE SITE OR AREA, INCLUDING THROUGH THE ALTERATION OF THE COURSE OF A STREAM OR RIVER, IN A MANNER WHICH COULD RESULT IN SUBSTANTIAL EROSION OR SILTATION ON- OR OFF-SITE.**

Level of Significance Before Mitigation: Potentially Significant Impact.

Impact Analysis: Any site development or construction of new facilities has the potential to alter existing drainage patterns, primarily due to runoff from construction activities, increase in impervious surfaces, and vegetation removal. Naturally and artificially induced changes to the characteristics of a drainage basin or floodplain of a stream or river can affect the extent and severity of events that result in erosion and/or siltation. As previously discussed, the proposed project would not significantly alter existing drainage patterns.

Implementation of BMPs would prevent or minimize impacts to drainage due to runoff and ensure that discharges during the construction and post-construction phase would not cause or contribute to any exceedances of water quality standards in the receiving waters. Preparation and approval of a project-specific SWPPP is also included as mitigation to address construction-related drainage impacts. Any potential runoff impacts associated with the proposed project would be mitigated with implementation of Mitigation Measures HYD-2 and HYD-4, which would reduce potential impacts to a less than significant level.

Mitigation Measures: Refer to Mitigation Measures HYD-2 and HYD-4. No additional mitigation measures are required.

Level of Significance After Mitigation: Less Than Significant Impact.

DAM INUNDATION

- ◆ **DEVELOPMENT ASSOCIATED WITH IMPLEMENTATION OF THE PROPOSED PROJECT COULD RESULT IN URBAN USES BEING LOCATED ON-SITE, WHICH ARE IN DAM INUNDATION AREAS OF THE CITY.**

Level of Significance Before Mitigation: Less Than Significant Impact.

Impact Analysis: The City of Los Alamitos is located within the dam inundation area of the Prado Dam. Additionally, a seiche is an oscillation of a body of water in an enclosed or semi-enclosed basin, such as a reservoir, harbor, lake, or storage tank. Therefore, the Prado Dam creates a potential impact related to seiche. Although, the failure of these dams is considered unlikely, failure of these dams would cause a major disaster in the City. Should the Prado Dam fail, the entire City would be in the inundation path. Waters would reach the City in approximately 6.5 hours after dam failure and waters are anticipated to be approximately four feet deep.



The proposed project would add 245 new jobs to the City over existing conditions, along with two new Hospital Buildings, one new Medical Office Building (MOB A), two parking structures, and a Central Plant. Thus, when compared to existing conditions, a greater number of persons and structures would be exposed to potential risk involving flooding. However, any potential on-site impacts are concluded to be less than significant given the time it would take for flood waters to reach the site after dam failure. In addition, flooding risk for Los Alamitos is addressed in the City's *Emergency Management Plan*. Thus, less than significant impacts are anticipated in this regard.

Mitigation Measures: No mitigation measures are required.

Level of Significance After Mitigation: Not Applicable.

5.8.5 CUMULATIVE IMPACTS AND MITIGATION MEASURES

◆ IMPLEMENTATION OF THE PROPOSED PROJECT AND OTHER RELATED CUMULATIVE PROJECTS COULD CONTRIBUTE TO CUMULATIVE HYDROLOGY AND WATER QUALITY IMPACTS.

Level of Significance Before Mitigation: Potentially Significant Impact.

Impact Analysis:

Hydrology

For this topic, the cumulative impacts are analyzed in terms of impacts within the City of Los Alamitos, along with impacts to the regional drainage facilities under the jurisdiction of the Santa Ana RWQCB.

The proposed project includes two new Hospital Buildings, a new Medical Office Building (MOB A), two parking structures, and a new Central Plant as part of the proposed Specific Plan that allows for development at a greater intensity than currently exists. However, due to the built out and urbanized nature of the City, drainage courses and hydrologic flows would not be significantly impacted and development would help reduce citywide impermeable areas. According to Appendix g, Preliminary Hydrology Report, the proposed project would not increase impervious surfaces. Therefore, regional drainage flows would not be substantially increased.

Future development projects in Orange County or in the City of Los Alamitos be required to mitigate specific hydrologic impacts on a project-by-project basis. Additionally, the City's *Municipal Code* incorporates Federal and State regulations and guidelines pertaining to storm water runoff to reduce or eliminate regional water quality impacts. Impacts associated with future development in the Cities of Los Alamitos, Cypress, and Seal Beach would be addressed at a site-specific level to ensure their cumulative impact would be less than significant. Thus, implementation of the proposed project would not result in cumulatively considerable hydrology, drainage, or water quality impacts.



Water Quality

Implementation of the proposed project and other related cumulative projects could result in the violation of water quality standards or waste discharge requirements during construction activities or post-construction operation. However, the proposed project and other related cumulative projects would each be required to prepare applicable stormwater plans for both construction and operation of the project. A Stormwater Pollution Prevention Plan would be prepared for each project to address construction activities, which incorporates project-specific Best Management Practices to control pollutant discharges, using Best Conventional Pollutant Control Technology to prevent off-site transport. Furthermore, the proposed project and other related cumulative projects would also be required to prepare and receive approval of a project-specific Water Quality Management Plan to address post-construction water quality. The Water Quality Management Plan would include the appropriate post-construction Best Management Practices built into the project design to control water quality impacts from operation of each project. Potential water quality impacts from the proposed project and cumulative projects are expected to be less than significant with preparation and implementation of the Stormwater Pollution Prevention Plan and Water Quality Management Plan for each project.

Given the location of the proposed project and related cumulative projects, it is not anticipated that such development would substantially alter the existing drainage pattern of the cumulative project area, including the alteration of the course of a stream or river. The Westminster Creek Watershed, which includes the City of Los Alamitos, is comprised of mostly urban uses, with most of the remaining open space devoted to parks and other similar uses that are not likely to be developed with impervious surfaces. As such, most of the drainage system in the City's watershed consists of engineered stormwater channels. Given the built out nature of the City of Los Alamitos, it is unlikely that there would be a notable change in the drainage infrastructure or other watercourses in the respective project areas, since the alignment of such drainages are encroached by existing development and the drainage capacity based on surrounding urban uses. Accordingly, the amount of runoff is not expected to increase and therefore significant increases in erosion, siltation, flooding, or exceedances of the stormwater conveyance system. Given compliance with Water Quality Management Plan requirements for construction and operation of the proposed project and related cumulative projects, cumulative impacts would be considered less than significant in this regard.

Mitigation Measures: Refer to Mitigation Measures HYD-2 and HYD-4. No additional mitigation measures are required.

Level of Significance After Mitigation: Less Than Significant Impact.



5.8.6 SIGNIFICANT UNAVOIDABLE IMPACTS

With imposition of the required mitigation measures, implementation of the proposed project would result in less than significant project and cumulative impacts related to hydrology, drainage, and water quality. Impacts related to dam inundation were concluded to be at less than significant levels, and did not require mitigation. As such, no significant unavoidable impacts would result from the implementation of the Los Alamitos Medical Center Specific Plan.

5.8.7 SOURCES CITED

City of Los Alamitos, *City of Los Alamitos 2010 General Plan*, adopted March 1989.

City of Los Alamitos, *City of Los Alamitos 2010 General Plan Background Technical Reports*, adopted March 1989.

City of Los Alamitos, *Los Alamitos Municipal Code*, adopted 1995.

RBF Consulting, *Draft Los Alamitos Medical Center Specific Plan*, February 2010.

Kimley-Horn and Associates, *Preliminary Hydrology Report in Support of Los Alamitos Medical Center Specific Plan*, June 2010

Kimley-Horn and Associates, *Preliminary Water Quality Management Plan*, July 2010



5.9 Fire Protection



5.9 FIRE PROTECTION

This section provides an analysis of fire services, which is based on information provided by the Orange County Fire Authority (OCFA). OCFA maintains ultimate review and approval authority over aspects of the proposed development that relate to fire protection, and may identify further recommendations and/or requirements.

5.9.1 REGULATORY SETTING

FIRE CODE

Section 15.18.10 of the *Los Alamitos Municipal Code* states that the City has adopted the 2007 *California Fire Code*, which is based on the *International Fire Code*, 2006 Edition, with errata, published by International Code Council (ICC), as well as the entire International Fire Code, 2006 Edition, including Appendices Chapter 1, Appendix B, and Appendix C, but excluding Appendix D through Appendix H, for the purpose of prescribing fire regulations. A copy of these codes is on file at City Hall.

5.9.2 ENVIRONMENTAL SETTING

Fire protection is provided to the City of Los Alamitos by the Orange County Fire Authority (OCFA). The level of service provided to areas within the City is determined by OCFA. Nationally recognized response time targets for urban areas are five minutes for a basic life support unit (squad engine) and eight minutes for an advanced life support unit (PAU). The OCFA Authority is currently meeting these standards. The target response from OCFA is 7 minutes and 20 seconds.

The project site is located within Division 1 of the OCFA, and receives fire protection from two stations: Fire Station #2 and Fire Station #17. Fire Station #2 is located at 3642 Green Avenue, which is less than 0.2 miles southwest of the project site. The station supports three personnel and some reserve staff, and maintains a Paramedic Assessment Unit (PAU) engine, a squad engine, and an air utility unit. The response time to the project site is less than 2 minutes. Fire Station #17 is located at 4991 Cerritos Avenue in Cypress. The station supports 9 personnel, and maintains 1 engine, 1 truck, and 1 medic van. The estimated response time to the project site is approximately 4 minutes. Should a significant incident occur, the project site would be served by both fire stations.

OCFA annually updates their Annual Report. This report identifies that in 2008, a total of 3,108 unit responses occurred in Los Alamitos. Funding for fire service within Los Alamitos is provided by tax revenues and a Secured Fire Protection Agreement with the Orange County Fire Authority. The agreement specifies the developer's pro-rata fair share funding of capital improvements necessary to establish adequate fire protection facilities and equipment, and/or personnel. As of April 2010, current development fees within the City of Los Alamitos collected by the Orange County Fire Authority are \$100 per 1,100 square feet of development.¹

¹ Telephone Conversation with Michele Hernandez, OFCA, August 4, 2010



5.9.3 SIGNIFICANCE THRESHOLD CRITERIA

The environmental analysis in this section is patterned after the Initial Study Checklist recommended by the *CEQA Guidelines*, as amended, and used by the City of Los Alamitos in its environmental review process, and is contained in Appendix A of this EIR. The Initial Study Checklist includes questions relating to fire protection services. The issues presented in the Initial Study Checklist have been utilized as thresholds of significance in this section. Accordingly, a project may create a significant environmental impact if it causes one or more of the following to occur:

- Substantial adverse physical impacts associated with the provision of new or physically altered hospital facilities, or result in the need for new or physically altered fire facilities, the construction of which may cause significant environmental impacts in order to maintain acceptable service ratios, response times, or other performance objectives.

Based on these significance standards, the effects of the proposed project have been categorized as either “no impact,” a “less than significant impact,” or a “potentially significant impact.” Mitigation measures are recommended for potentially significant impacts. If a potentially significant impact cannot be reduced to a less than significant level through the application of mitigation, it is categorized as a “significant unavoidable impact.”

5.9.4 PROJECT IMPACTS AND MITIGATION MEASURES

CONSTRUCTION-RELATED FIRE IMPACTS

- ◆ **CONSTRUCTION OF THE PROPOSED PROJECT COULD RESULT IN THE NEED FOR ADDITIONAL FIRE FLOWS AND PROTECTION SERVICES.**

Level of Significance Before Mitigation: Potentially Significant Impact.

Impact Analysis: As discussed in [Section 3.0, Project Description](#), the proposed project is planned to be constructed over a 25-year period. Buildout of the proposed Los Alamitos Medical Center Specific Plan involves the net addition of approximately 226,301 square feet of medical office and hospital uses, which includes demolition of an existing 24,000 square-foot medical office building (MOB 1) and a 15,099 square-foot administration/warehouse building. In addition, the project proposes the development of two new hospital buildings, a new medical office building, (MOB A) and a new central plant building, for a combined total of about 265,400 square feet. Two new parking structures are also proposed to provide approximately 1,580 parking spaces, and an increase of 164 beds are also proposed on-site (totaling 331 beds).

Construction activities have the potential to increase fire hazards on-site. However, the City reviews all development projects and requires standard conditions of approval (COA) to mitigate project-related impacts in this regard. In addition, the Office of Statewide Health Planning and Development (OSHPD) Facilities Development Division (FDD) reviews and approves all plans and specifications for the construction, alteration, and addition to hospital buildings and skilled nursing homes, and observes activities to ensure compliance with the provisions of the California Building



Standards Code (*Title 24, California Code of Regulations*). This includes plan review of the design details of the architectural, structural, mechanical, plumbing, and electrical systems. All projects are required to comply with applicable State, City, and County code and ordinance requirements for fire protection. The OCFA has reviewed the proposed project and site plans to date, and has not recommended any mitigation measures for the construction phase(s). The OCFA will waive fire service impact fees for all new development within the Medical Center expansion, because it serves as a location for them to transport injured citizens in emergency situations. However, OCFD stated that standard planning and development fees would apply.²

The General Plan Safety Element addresses fire protection in the City, and includes the following Implementation Measures, which are applicable to the proposed project:

- 3-4.4.1: Where necessary, upgrade fire flows for adequate fire protection.
- 3-4.4.2: Continue to utilize the fire protection services of the Orange County Fire Authority.
- 3-4.4.3: Continue to utilize a joint services agreement with the Armed Forces Reserve Center Fire Department.
- 3-4.4.4: Promote the use of fire retardant building materials for remodels and new construction.

In addition, implementation of Mitigation Measures FP-1 through FP-3 would reduce impacts to a less than significant level.

Mitigation Measures:

- FP-1 Adequate access to all buildings on the project site shall be provided and properly maintained for emergency vehicles during the building construction process to the satisfaction of the Orange County Fire Authority.
- FP-2 Prior to construction, a will-serve letter from Golden State Water Company shall be obtained by the project applicant, which states that the Water Company can adequately meet water flow requirements.
- FP-3 Prior to the issuance of building permits, the project applicant may be required to enter into a Secured Fire Protection Agreement with the Orange County Fire Authority. The agreement shall specify the project applicant's pro-rata fair share funding of capital improvements necessary to establish adequate fire protection facilities and equipment, and/or personnel. Said agreement shall be reached as early as possible in the planning process, preferably for each phase of the project, rather than on a parcel-by-parcel basis.

Level of Significance After Mitigation: Less Than Significant Impact.

² Telephone Conversation with Michele Hernandez, OFCA, August 4, 2010



OPERATIONAL-RELATED FIRE IMPACTS

◆ OPERATION OF THE PROPOSED PROJECT COULD RESULT IN THE NEED FOR ADDITIONAL FIRE PROTECTION SERVICES.

Level of Significance Before Mitigation: Potentially Significant Impact.

Impact Analysis: According to OCFA, the project site is not located within a Very High Hazard Severity Zone or Special Fire Protection Area. The City of Los Alamitos has an Insurance Service Organization (ISO) rating of 3. The availability of sufficient on-site water pressure is a basic requirement of the OCFA. Based on correspondence with OCFA, the fire flow capacity for hydrants within the project site may require up to 7250 gallons per minute (gpm) for new construction without fire sprinklers, and up to 3,625 gpm for new construction with fire sprinklers. For any hospital building, a flow rate of 2,250 gpm would be required with sprinklers, and up to 4,500 gpm would be required without sprinklers.

Additionally, due to the stations' close proximity to the project site, the response time from Station #2 (Green Avenue) is estimated at less than 2 minutes, and the response time from Station #17 (Cerritos Avenue) is approximately 4 minutes. At this time, there are not any facilities or staffing needs at Station #2. However, Station #17 is scheduled to be replaced and facilities and staff will be added. However, these actions are already scheduled to occur, and are not a result of the proposed project.³ Typically, a project of this nature would be charged a fire service impact fee of approximately \$100 per 1,100 square feet of development. However, OCFA is waiving development fees for the proposed project, as it serves as a location for them to bring injured persons during emergency situations. However, in order to ensure fire protection staffing and service levels are maintained, OCFA has recommended Mitigation Measures FP-4 through FP-10. Implementation of these Mitigation Measures, along with General Plan Safety Element Implementation Measures 3-4.4.1 through 3.4-4-4, would ensure that operational-related fire service impacts are reduced to a less than significant level.

Mitigation Measures:

FS-4	All new structures shall have automatic fire sprinkler systems.
FS-5	A supervised fire alarm system that meets requirements of the California Fire Code shall be placed in an accessible location with an annunciator.
FS-6	Access to and around structures shall meet Orange County Fire Authority and California Fire Code requirements.
FS-7	A water supply system shall be in place to supply fire hydrants and automatic fire sprinkler systems.

³ Ibid.



- FS-8 Roadway medians shall not exceed 1,000 feet without a turnaround. If medians are greater than 1,000 feet, emergency turnaround access for heavy fire equipment shall be provided.
- FS-9 All traffic signals on public access ways shall include the installation of optical preemption devices.
- FS-10 All electric gates within the project shall install emergency opening devices approved by the Orange County Fire Authority.

Level of Significance After Mitigation: Less Than Significant Impact.

5.9.5 CUMULATIVE IMPACTS AND MITIGATION MEASURES

- ◆ **IMPLEMENTATION OF THE PROPOSED PROJECT AND OTHER RELATED CUMULATIVE PROJECTS COULD RESULT IN CUMULATIVELY CONSIDERABLE IMPACTS TO FIRE PROTECTION SERVICES.**

Level of Significance Before Mitigation: Potentially Significant Impact.

Impact Analysis: Future off-site development projects within the City associated with the proposed project and related projects would be required to pay all applicable aforementioned OCFA planning and development impact fees, as deemed appropriate by the OCFA, which would provide necessary revenues for new equipment, staff, and local fire service facilities. OCFA stated that it would only waive fire service impact fees only for all development associated with the Medical Center expansion. However, planning and development fees would still apply to the proposed project, as well as other future development projects. Based on the current OCFA standard developer fee of \$100 per 1,100 square feet of development as of April 2010, which is updated annually, the proposed project and related cumulative projects would contribute to maintain adequate fire service. Furthermore, the proposed project and related cumulative projects are required to meet City/County codes and requirements relative to providing adequate fire protection services to the site during both the construction and operational stages of the project. Additionally, because development projects in Los Alamitos are subject to review and approval by OCFA, all developments must meet OCFA's project fire flows and access requirements to protect developments against structural fire hazards. Consequently, operation of cumulative projects would not diminish the staffing or the response times of Station #2 or Station #17, and would not create a special fire protection problem on the various sites that would result in a decline in existing service levels in the area or pose an unacceptable fire risk to people or structures. Therefore, the payment of fees and/or development of new fire facilities, as required by OCFA, would reduce cumulative fire service impacts to a less than significant level.

Mitigation Measures: Refer to Mitigation Measures FS-1 through FS-10. No additional mitigation measures are required.

Level of Significance After Mitigation: Less Than Significant Impact.



5.9.6 SIGNIFICANT UNAVOIDABLE IMPACTS

With the imposition of the mitigation measures, implementation of the proposed project would result in less than significant project and cumulative impacts related to fire protection services and facilities during both construction and operation. As such, no significant unavoidable impacts would result from implementation of the Los Alamitos Medical Center Specific Plan.

5.9.7 SOURCES CITED

City of Los Alamitos, *City of Los Alamitos 2010 General Plan*, adopted March 1989.

City of Los Alamitos, *City of Los Alamitos 2010 General Plan Background Technical Reports*, adopted March 1989.

City of Los Alamitos, *City of Los Alamitos 2010 General Plan Initial Study/Negative Declaration (IS/ND)*, March 1989.

Orange County Fire Authority, Orange County Fire Authority Annual Report, 2008.

Orange County Fire Authority Website, <http://www.ocfa.org/>, accessed April 27, 2010.

Written correspondence and telephone conversation with Michele Hernandez, Management Analyst, Orange County Fire Authority, dated May 17, 2010.



5.10 Police Protection



5.10 POLICE PROTECTION

This section provides an analysis of police protection and services, as well as emergency services, which is based on information provided by the Los Alamitos Police Department (Police Department), the City of Los Alamitos, and the County of Orange. The Police Department maintains ultimate review and approval authority over aspects of the proposed development that relate to police protection, and has not identified further recommendations/and or requirements at this time.

5.10.1 REGULATORY SETTING

STATE EMERGENCY RESPONSE/EVACUATION PLANS

After the 1993 Oakland Fire, the State of California passed legislation authorizing the State's Office of Emergency Services to prepare a Standard Emergency Management System (SEMS) program, which sets forth measures by which a jurisdiction handles emergency disasters. By December 1996, each jurisdiction was required to show the Office of Emergency Services that it is in compliance with SEMS through a number of measures, including having an up-to-date emergency management plan, which would include an emergency evacuation plan. Non-compliance with SEMS can result in the State withholding disaster relief from the non-complying jurisdiction in the event of an emergency disaster.

The California Office of Emergency Services Coordinates an emergency organizational network of local Emergency Operations Centers (EOC) in the State's cities, regional EOCs within each County, and the California Office of Emergency Services. The regional office of the California Office of Emergency Services is located in Los Alamitos, and the Orange County EOC is located in Silverado, California along East Santiago Canyon Road, west of the Santiago Canyon Reservoir. The Orange County EOC website identifies and describes the four phases of Emergency Management: Mitigation, Preparedness, Response, and Recovery. A County-Wide Emergency Plan, which details emergency protocols in greater detail, is available from the Orange County EOC upon request.

COUNTY EMERGENCY RESPONSE TOOLS

The County of Orange has adopted a program called AlertOC, which delivers critical, time sensitive information to Orange County residents and businesses. AlertOC is a mass notification system designed to keep Orange County residents and businesses informed of emergencies and certain community events. By registering with AlertOC, time-sensitive voice messages from the County or City in which one lives or works may be sent to their home, cell or business phone. Text messages may also be sent to cell phones, e-mail accounts and hearing impaired receiving devices.

CITY EMERGENCY OPERATIONS

The City of Los Alamitos has prepared a Community Emergency Response Team (CERT), which is responsible for educating Los Alamitos citizens about disaster preparedness for hazards that may impact their place of residence or business. The CERT program is a nationally recognized FEMA



training program designed to improve community preparedness in the event of a disaster. In addition, the City of Los Alamitos also has a Disaster Preparedness Team made up of Employees from each City Department as well as volunteers from the community. The Team meets monthly to discuss issues affecting the City.

EMERGENCY OPERATIONS PLAN

The Los Alamitos *General Plan*¹ notes that the City of Los Alamitos has adopted an Emergency Operating Procedures Plan, which is updated every five years. The latest version of the Plan was adopted in 2009 and was developed to provide a comprehensive (multi-use) emergency management program for the City. The Plan seeks to mitigate the effects of hazards, prepare for measures to be taken that will preserve life and minimize damage, enhance response during emergencies and provide necessary assistance, and establish a recovery system in order to return the City of its normal state of affairs. The Plan is based on the principles of the California Standardized Emergency Management Systems (SEMS) and the National Incident Management System (NIMS), which are based on the FIRESCOPE Incident Command System (ICS).

The City Manager is designated as the Director of Emergency Services. Should the director be unavailable or unable to serve, the following alternates are eligible to act as Director of Emergency Services:

First Alternate: Chief of Police

Second Alternate: City Engineer

Third Alternate: Director of Community Development

The City of Los Alamitos is located in Region 1 among Operational Areas that report to the Governor's Office of Emergency Services. Region 1's EOC is located within the City of Los Alamitos. In the event of an emergency, information would be gathered from the field incident command through radio, cellular phone, and face-to-face briefings and shared with the City's EOC. In the event that the primary EOC location is unsafe or not fit to be used, an alternate location has been designated within the City.

5.10.2 ENVIRONMENTAL SETTING

The Los Alamitos Police Department is responsible for providing general law enforcement to the City of Los Alamitos. The Police Department is located at 3201 Katella Avenue, which is approximately 0.6 miles from the project site. Current response time to the project site is two minutes or less. Funding for police services and facilities is provided from the City's General Fund.

5.10.3 SIGNIFICANCE THRESHOLD CRITERIA

The environmental analysis in this section is patterned after the Initial Study Checklist recommended by the *CEQA Guidelines*, as amended, and used by the City of Los Alamitos in its

¹ *General Plan* Safety Element, Implementation Measure 3-1.1.3



environmental review process, and is contained in Appendix A of this EIR. The Initial Study Checklist includes questions relating to police protection. The issues presented in the Initial Study Checklist have been utilized as thresholds of significance in this section. Accordingly, a project may create a significant environmental impact if it causes one or more of the following to occur:

- Substantial adverse physical impacts associated with the provision of new or physically altered hospital facilities, or result in the need for new or physically altered police facilities, the construction of which may cause significant environmental impacts in order to maintain acceptable service levels, response times or other performance objectives.

Based on these significance standards, the effects of the proposed project have been categorized as either “no impact,” a “less than significant impact,” or a “potentially significant impact.” Mitigation measures are recommended for potentially significant impacts. If a potentially significant impact cannot be reduced to a less than significant level through the application of mitigation, it is categorized as a “significant unavoidable impact.”

5.10.4 PROJECT IMPACTS AND MITIGATION MEASURES

CONSTRUCTION-RELATED POLICE IMPACTS

- ◆ **CONSTRUCTION OF THE PROPOSED PROJECT COULD RESULT IN THE NEED FOR ADDITIONAL POLICE PROTECTION FACILITIES AND PERSONNEL.**

Level of Significance Before Mitigation: Potentially Significant Impact.

Impact Analysis: During the construction of the proposed project, police service requirements on the project site have the potential to increase over existing demands as a result of both increased persons and the presence of buildings and equipment on the project site.

The daytime population would increase due to the presence of construction workers on the project site. This increase in daytime population would vary due to the type of construction activities being conducted (i.e., demolition, site preparation, construction of structures, or infrastructure improvements).

There is a potential for increased calls for service to the project site as a result of the increased number of persons at the project site. Due to the presence of building materials, construction and related temporary office buildings, the potential for vandalism and theft is also greater; thereby, increasing the Police Department’s calls for service demands for property protection.

The Police Department has indicated that calls for police service can be accommodated by existing staff levels; thus police staffing levels would remain the same, resulting in less than significant impacts.² To ensure impacts remain at less than significant levels, Mitigation Measure PS-1 has been

² Correspondence with Todd Mattern, Chief of Police, May 11, 2010



included that would require the Los Alamitos Medical Center to secure private on-site security service during construction of the proposed project.

Slow-moving construction related traffic on adjacent roadways could reduce optimal traffic flows and could impact police services by delaying emergency vehicles traveling through the area. However, construction-related traffic would not result in a significant impact on police services or traffic flows. Therefore, construction-related police impacts would not result in an exceedance of the significance threshold criteria identified above.

Mitigation Measures:

PS-1 During construction, private security patrols shall be utilized to protect the construction site during non-construction hours.

Level of Significance After Mitigation: Less Than Significant Impact.

OPERATIONAL-RELATED POLICE IMPACTS

◆ OPERATION OF THE PROPOSED PROJECT COULD RESULT IN THE NEED FOR ADDITIONAL POLICE PROTECTION FACILITIES AND PERSONNEL.

Level of Significance Before Mitigation: Potentially Significant Impact.

Impact Analysis: The Los Alamitos Police Department has the responsibility to provide general law enforcement, including traffic control and enforcement, for the City and to the project site. While the proposed project would not directly induce population growth, buildout of the proposed Los Alamitos Medical Center Specific Plan would generate employment within the City (refer to Section 7.0, Growth Inducing Impacts of the Proposed Action). The population increase anticipated with implementation of the proposed project is consistent with buildout projections, which state that as of January 1997, the City of Los Alamitos was 99.4% built out.³ As service levels needs increase due to increased population or other factors affecting the community, the City would determine whether or not additional police staff is needed. The Police Department has indicated there are no immediate and or confirmed plans for expansion of police facilities or services.⁴ In addition, the Police Department has indicated that based on the long range plans of the proposed project, it is not anticipated that there would be any significant impact to current service levels or that additional personnel or patrol cars are needed.

Potential impacts to police services could arise as a result of project design, landscape materials, and building orientation. However, with the incorporation of safety design techniques into the project design (refer to Mitigation Measures PS-2 through PS-6) and payment of applicable development fees, potentially significant security impacts to persons and property would be reduced to a less than significant level.

³ Los Alamitos 2010 General Plan Mitigated Negative Declaration, Section II.

⁴ Source: Mr. Todd W. Mattern, Chief of Police, written correspondence dated May 11, 2010.



Mitigation Measures:

- PS-2 As final site and building plans are submitted to the City for approval in the future, design requirements which reduce demands for service and ensure adequate public safety (such as those pertaining to site access, site security and lighting) shall be incorporated into building designs.
- PS-3 Project design shall landscape the project site with low-growing groundcover and shade trees, rather than a predominance of shrubs that could conceal potential criminal activity around buildings and parking areas.
- PS-4 Project design shall provide lighting around and throughout the development to enhance crime prevention and enforcement efforts.
- PS-5 Project design shall provide clearly visible (during the day and night) address signs and/or building numbers for easy identification during emergencies.
- PS-6 Project design shall provide visibility of doors and windows from the street and between buildings.

Level of Significance After Mitigation: Less Than Significant Impact.

5.10.5 CUMULATIVE IMPACTS AND MITIGATION MEASURES

- ◆ **IMPLEMENTATION OF THE PROPOSED PROJECT AND OTHER RELATED CUMULATIVE PROJECTS COULD RESULT IN CUMULATIVELY CONSIDERABLE IMPACTS TO POLICE PROTECTION FACILITIES AND PERSONNEL.**

Level of Significance Before Mitigation: Potentially Significant Impact.

Impact Analysis:

Impacts to Los Alamitos Police Department

Cumulative population growth attributable to the proposed project and related projects would decrease the existing level of service of the Police Department in the Cities of Los Alamitos, Cypress, and Seal Beach. However, as the proposed project and related projects are developed, tax revenues from property and sales taxes would be generated and accrued by the Cities of Los Alamitos, Cypress, and Seal Beach, as applicable, to maintain staffing and equipment levels for the Los Alamitos Police Department in response to related demands. Although the proposed project and related projects would increase the demands for police services, these service demands can be met through the allocation of revenues collected from the cumulative project developments using existing sources. Therefore, less than significant impacts are anticipated.



Impacts to Orange County Fire Authority or Los Alamitos Emergency Operations Plan

The resident and daytime populations of the cumulative project sites would increase above current levels upon buildout of the proposed project and related projects. These populations would be subject to potential emergencies (e.g., earthquake, fire, etc.) However, all development projects in the Cities of Los Alamitos, Cypress, and Seal Beach are subject to review and approval by the Orange County Fire Authority, which requires that, among other conditions, adequate access exists for emergency vehicles. In addition, the Los Alamitos Emergency Operations Plan would still contain emergency operating procedures, no matter what type of future development occurred. It is not anticipated that the proposed project would interfere with the intent and policies presented in the Los Alamitos Emergency Operations Plan. In addition, the proposed project and related cumulative projects would be required to provide adequate emergency vehicle access. Thus, cumulative development would not adversely affect or prevent implementation of any response or evacuation plans. In conclusion, cumulative impacts would be less than significant.

Mitigation Measures: Refer to Mitigation Measures PS-1 through PS-6. No additional mitigation measures are required.

Level of Significance After Mitigation: Less Than Significant Impact.

5.10.6 SIGNIFICANT UNAVOIDABLE IMPACTS

With imposition of the required mitigation measures, implementation of the proposed project would result in less than significant project and cumulative impacts related to police protection services, emergency services, and facilities during both construction and operation. As such, no significant unavoidable impacts would result from the implementation of the Los Alamitos Medical Center Specific Plan.

5.10.7 SOURCES CITED

City of Los Alamitos, *City of Los Alamitos 2010 General Plan*, adopted March 1989.

City of Los Alamitos, *City of Los Alamitos 2010 General Plan Background Technical Reports*, adopted March 1989.

City of Los Alamitos, *City of Los Alamitos 2010 General Plan Initial Study/Negative Declaration (IS/ND)*, March 1989.

City of Los Alamitos Emergency Operating Procedures Plan, updated 2009, prepared for the City of Los Alamitos.

City of Los Alamitos Website, <http://www.ci.los-alamitos.ca.us/>, accessed April 29, 2010.

County of Orange Emergency Operations Center Website, <http://egov.ocgov.com/ocgov/Info%20OC/Departments%20&%20Agencies/Emergency%20Operations%20Center/Emergency%20Management>, accessed April 28, 2010.



Los Alamitos Medical Center Specific Plan Program Environmental Impact Report

Los Alamitos Police Department Website, <http://www.losalamitospolice.org/>, accessed April 29, 2010.

Los Alamitos Community Emergency Response Team (CERT) Website, <http://westcountycert.com/>, accessed April 28, 2010.

RBF Consulting, *Henry Mayo Newhall Memorial Hospital Master Plan Environmental Impact Report*, September 2008.

Written Correspondence provided by Todd Mattern, Chief of Police, May 11, 2010.



Los Alamitos Medical Center Specific Plan Program Environmental Impact Report

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5.11 Water



5.11 WATER

This section analyzes projected impacts to water supplies and distribution systems that may result from the implementation of the proposed Specific Plan. The purpose of this analysis is to document and describe the existing water supply, water consumption, and distribution infrastructure in the vicinity of the project, and to evaluate impacts associated with the buildout of the proposed Specific Plan. Information for this section is based on the best available data gathered from the Golden State Water Company Website; the *2005 Urban Water Management Plan - West Orange County*; and wastewater flow projections provided for the proposed project by AECOM for the Rossmoor/Los Alamitos Sewer District.

5.11.1 REGULATORY SETTING

FEDERAL PLANS AND POLICIES

Federal Safe Drinking Water Act of 1974

The Safe Drinking Water Act (SDWA) authorizes the United States Environmental Protection Agency (U.S. EPA) to set national health-based standards for drinking water to protect against both naturally-occurring and man-made contaminants that may be found in drinking water. The U.S. EPA, states, and water systems then work together to make sure that these standards are met. Originally, SDWA focused primarily on treatment as the means of providing safe drinking water at the tap. The 1996 amendments greatly enhanced the existing law by recognizing source water protection, operator training, funding for water system improvements, and public information as important components of safe drinking water. This approach ensures the quality of drinking water by protecting it from source to tap. SDWA applies to every public water system in the United States. There are currently more than 160,000 public water systems providing water to almost all Americans at some time in their lives.

STATE PLANS AND POLICIES

Urban Water Management Plan Act

The Urban Water Management Plan (UWMP) Act was passed in 1983 and codified as *California Water Code* Sections 10610 through 10657. Since its passage in 1983, the Act has been amended on several occasions. In 2004, the UWMP Act was amended to require additional discussion of transfer and exchange opportunities, non-implemented demand management measures, and planned water supply projects. Most recently, in 2005, the UWMP Act was amended to require water use projections (required by *California Water Code* Section 10631) to include projected water use for single-family and multi-family residential housing needed for lower income households. In addition, *Government Code* Section 65589.7 was amended to require local governments to provide a copy of the adopted housing element to water and sewer providers. The UWMP Act requires “every urban water supplier providing water for municipal purposes to more than 3,000 customers or supplying more than 3,000 acre-feet of water annually, to prepare and adopt, in accordance with prescribed requirements, an urban water management plan.” Urban water suppliers must file these plans with



the California Department of Water Resources every five years describing and evaluating reasonable and practical efficient water uses, reclamation, and conservation activities. As required by the Memorandum of Understanding Regarding Urban Water Conservation in California and Assembly Bill 11X (1991), the 2005 UWMP Act, incorporated water conservation initiatives, and a Water Shortage Contingency Plan.

LOCAL PLANS AND POLICIES

2005 Urban Water Management Plan (2005 UWMP) - West Orange County

The *2005 UWMP*, prepared by CH2MHILL for the Golden West Water Company, was adopted in December 2005 and is in compliance with the UWMP Act. The Golden West Water Company's West Orange County System service area includes the Cities of: Cypress, Stanton and Los Alamitos, with a small portion of Seal Beach, Garden Grove and La Palma also included in its service area. The *2005 UWMP* projects the West Orange County System will have a water demand of 19,820 acre-feet (AF) in 2010 and 22,363 AF in 2030.

Metropolitan Water District of Orange County 2005 - Regional Urban Water Management Plan

The *Municipal Water District of Orange County (MWDOC)*'s *2005 - Regional UWMP*, adopted October 12, 2005, was prepared in compliance with the UWMP Act. The MWDOC provides wholesale imported water from the Metropolitan Water District of Southern California (MWD) to 30 Orange County cities and water agencies providing retail water service. MWDOC serves the following member agencies:

- City of Brea
- City of Buena Park
- City of Fountain Valley
- City of Garden Grove
- City of Huntington Beach
- City of La Habra
- City of La Palma
- City of Newport Beach
- City of Orange
- City of San Clemente
- City of San Juan Capistrano
- City of Seal Beach
- City of Tustin
- City of Westminster
- East Orange County Water District
- El Toro Water District
- Emerald Bay Services District
- Irvine Ranch Water District
- Laguna Beach County Water District



- Mesa Consolidated Water District
- Moulton Niguel Water District
- Orange County Water District
- Orange Park Acres Mutual Water Co.
- Santa Margarita Water District
- Santiago County Water District
- Serrano Water District
- South Coast Water District
- Golden State Water Company
- Trabuco Canyon Water District
- Yorba Linda Water District

MWDOC also coordinates and sponsors regional water conservation programs in cooperation with its local retail agencies, and engages in regional water resource and reliability planning in cooperation with other local and regional water, wastewater, and groundwater management agencies.

Current and planned water supplies for the MWDOC service area are projected to be 554,975 AF in 2010 and 599,365 AF in 2030.¹

CITY OF LOS ALAMITOS MUNICIPAL CODE

Chapter 13.04, Water Conservation, of the *Municipal Code*, is applicable to all water users in the City, and outlines water conservation measures; adequate water supply conditions – permanent conditions; stage 1 water restrictions; stage 2 water shortage restrictions, stage 3 water shortage restrictions; and general provisions. Section 13.04.040 states “Water users are deemed to have under control at all times their water distribution systems and facilities and to know the manner and extent of their water use and excess run-off.” Section 13.04.060 lists a number of activities that are prohibited at all times.

Chapter 13.05, Water Efficient Landscaping, of the *Municipal Code*, complies with Assembly Bill 1881 by promoting the benefits of consistent landscape ordinances with neighboring local and regional agencies; promoting the values and benefits of landscapes while recognizing the need to invest water and other resources as efficiently as possible; establishing a structure for planning, designing, installing, and maintaining and managing water efficient landscapes in new construction and rehabilitated projects; establishing provisions for water management practices and water waste prevention for existing landscapes; using water efficiently without waste by setting a maximum applied water allowance as an upper limit for water use and reduce water use to the lowest practical amount; and encouraging the use of economic incentives that promote the efficient use of water, such as implementing a budget-based tiered-rate structure. Section 13.05.020, Applicability, define which planting, irrigation, and landscaping-related improvements are subject to this Chapter. Implementation procedures are defined in Section 13.05.030, while landscape water use standards, are described in Section 13.05.040.

¹ 2005 Urban Water Management Plan - West Orange County, prepared by Golden West Water Company, adopted December 2005.



5.11.2 ENVIRONMENTAL SETTING

WATER SUPPLY AND DISTRIBUTION SYSTEM

The City of Los Alamitos receives water services from the Golden State Water Company (GSWC) via the West Orange County System. GSWC obtains its water supply for the West Orange County System from two primary sources: imported water and GSWC operated groundwater wells. Wells have historically supplied 85 percent of water in the West Orange County System. Imported water is provided by the MWDOC. MWDOC obtains its water supply from the MWD. GSWC operates several groundwater wells within the Orange County Groundwater Basin (Basin). The Basin is managed by the Orange County Water District (OCWD). The OCWD regulates the amount of groundwater pumped from the Basin and sets the Basin Production Percentage (BPP) for all pumps. GSWC pumps groundwater from the Basin for four of its systems including the West Orange County System.

Groundwater

Currently, groundwater is pumped from a total of 16 wells in the Orange County Groundwater Basin. These wells have a current total active capacity of 15,293 acre-feet per year (AF/Y) and between 2000 and 2004, the actual production averaged 11,424 AF/Y.² The Orange County Groundwater System has a planned water supply of 14,085 AF/Y for 2010 for a surface area of approximately 224,000 acres (350 square miles). The Basin is bounded by the Puente and Chino Hills in the north, Santa Ana Mountains on the east, the San Joaquin Hills on the south, and the Pacific Ocean on the west. The water-bearing units within the Orange County Basin are interbedded marine and continental sand, silt, and clay, with the units fining towards the coast.³ Three primary aquifer systems underlie the Orange County Basin: Shallow Aquifer System, Principle Aquifer System, and Deep Aquifer System.

Imported Water

MWDOC provides water to several agencies including GSWC. GSWC obtains water for several systems including the West Orange County System. Water purchased from the MWDOC is delivered to the West Orange County System through the following connections:⁴

- MWDOC OC-26 connection with a capacity of 4,500 gallons per minute (gpm)
- MWDOC OC-55 connection with a capacity of 11,200 gpm
- MWDOC OC-61 connection with a capacity of 9,000 gpm

These connections have a combined active design capacity of 24,700 gpm. All of these connections can be supplied by MWD's Jensen, Weymouth, or Diemer Filtration Plants. In addition, GSWC has three emergency connections:⁵

² Ibid.

³ Ibid.

⁴ Ibid.

⁵ Ibid.



- GSWC's Artesia System connection with a capacity of 1,500 gpm
- City of Garden Grove connection with a capacity of 1,500 gpm
- City of Buena Park connection with a capacity of 1,500 gpm

These emergency connections have a combined design capacity of 4,500 gpm. Three reservoirs with a volume of 4.5 million gallons serve as storage in the West Orange County System.⁶

In the third phase, subsurface water storage tanks would be constructed within the campus (located adjacent to Kaylor Street near the second patient care building) to allow for 72 hour emergency water supply for continued hospital operation in the event of temporary water service interruption for all hospital buildings by the year 2030.

Water Conveyance System

The City receives its water from the GSWC's West Orange County System. The GSWC facilities serving the West Orange County System consist of water pipelines, fire hydrants, domestic and fire services, valves, reservoirs, booster pumps, service connections with MWDOC, emergency connections with adjacent water companies, and ground water extraction wells.

Current Water Demand

The City's individual water demand is not accounted for in the *2005 UWMP - West Orange County System*. Instead the demand for the entire system is analyzed for impacts to water supply and service capacity. Historical and population based trends were used to determine projected increased water demand within the West Orange County System. 2010 projections indicate that the West Orange County System water sales total approximately 19,006 AF/Y. Total projected water demand is for 2010 is 19,820 AF/Y. These demand estimates are based on population-based projections throughout the West Orange County System service area from the time the *2005 UWMP* was prepared.

Reliability of Water Sources

The City's water supply from all sources is considered 100 percent reliable and stable through 2030.⁷ This reliability is backed by the projected stability of MWDOC supplies through MWD and the management practices of the OCWD oversight of extraction practices in the Orange County Water Basin. These combined management efforts will protect the over draft of the current West Orange County System.

Imported Water

MWDOC currently obtains nearly all its imported water from the MWD, directly or indirectly. MWD's plan for resource management is intended to optimize the use of its available resources

⁶ Ibid.

⁷ Ibid.



during surpluses and shortages to minimize the probability of severe shortages and eliminate the possibility of extreme shortages and shortage allocations.

The objective of the 2003 MWD Integrated Resource Plan (IRP) Update was to determine the appropriate combination of water resources to provide 100 percent reliability for full service demands over the next 20 years. With the support of its member agencies, MWD developed a preferred supply mix that included conservation, local supplies (recycled and brackish water desalination), State Water Project (SWP) supplies, Colorado Aqueduct supplies, groundwater banking, and water transfers to meet projected water demands under severe shortage conditions.

Groundwater

The GSWC can pump the BPP annually as set by OCWD. Annually, OCWD evaluates hydrologic conditions in the Basin, including groundwater levels and amount of groundwater in storage, and sets the BPP. MWDOC, with input from OCWD, has completed reliability analyses for each of the 5-year projection periods from 2010 through 2030 for GSWC groundwater supply and projects an average BPP of 70 percent. One of OCWD's water management goals in the Basin is to set the BPP as high as possible, while responsibly managing the groundwater supply. A high BPP reduces the demand on imported water supplies and offers pumpers a less expensive water supply alternative than imported water.⁸

Contingency Planning

In compliance with the UWMP Act, the GSWC has included a Water Shortage Contingency Plan into its *2005 UWMP*. Since GSWC is an investor owned utility, the CPUC has regulatory jurisdiction over its actions, including contingency planning.

GSWC has established a ranking and assessment criteria for measuring the severity of water shortages to its systems, and action-planning steps associated with specific levels of water shortage conditions. The following water shortage supply conditions are used by GSWC to determine contingency action measures required to protect water reserves within the West Orange County System:

<i>Stage No.</i>	<i>Supply Conditions</i>	<i>Shortage Percent</i>
Stage I	Minimum	5%- 10%
Stage II	Moderate	10%-20%
Stage III	Severe	20%-35%
Stage IV	Critical	35%-50%

In order to mitigate the potential impacts from water supply shortages associated with the above reductions in supply conditions, GSWC has implemented the following response actions.

Stage I (5 - 10 Percent Shortage). Water alert conditions are declared and voluntary conservation is encouraged. The drought situation is explained to the public and governmental bodies. GSWC explains the possible subsequent water shortage stages in order to forecast possible future actions

⁸ Ibid.



for the customer base. The activities performed by GSWC during this stage include, but are not limited to:

- Public information campaign consisting of distribution of literature, speaking engagements, bill inserts, and conversation messages printed in local newspapers.
- Educational programs in area schools.
- Conservation Hotline, a toll free number with trained Conservation Representatives to answer customer questions about conservation and water use efficiency.

Stage II (10 - 20 Percent Shortage). Stage II includes actions undertaken in Stage I. In addition, GSWC may propose voluntary conservation allotments and/or require mandatory conservation rules. The severity of actions depends upon the percentage of the shortage. The level of voluntary or mandatory water use reduction requested from the customers is also based on the severity. If necessary, GSWC may also support passage of drought ordinances by appropriate governmental agencies.

Stage III (20 - 35 Percent Shortage). Stage III is a severe shortage that entails or includes allotments and mandatory conservation rules. This phase becomes effective upon notification by the GSWC that water usage is to be reduced by a mandatory percentage. Rate changes are implemented to penalize excess usage. Water use restrictions are put into effect, i.e. prohibited uses can include restrictions of daytime hours for watering, excessive watering resulting in gutter flooding, using a hose without a shutoff device, use of nonrecycling fountains, washing down sidewalks or patios, unrepaired leaks, etc. GSWC monitors production weekly for compliance with necessary reductions. Use of flow restrictors can be implemented, if abusive practices are documented.

Stage IV (35 - 50 Percent Shortage). This is a critical shortage that includes all steps taken in prior stages regarding allotments and mandatory conservation. All activities are intensified and production is monitored daily by GSWC for compliance with necessary reductions.

The outlined contingency actions above can only be implemented by the GSWC after the CPUC has approved the specific water shortage contingency action proposed.

5.11.3 SIGNIFICANCE THRESHOLD CRITERIA

The environmental analysis in this section is patterned after the Initial Study Checklist recommended by the *CEQA Guidelines*, as amended, and used by the City of Los Alamitos in its environmental review process, and is contained in Appendix A of the EIR. The Initial Study includes questions relating to water. The issues presented in the Initial Study Checklist have been utilized as thresholds of significance in this section. Accordingly, a project may create a significant environmental impact if it causes one or more of the following to occur:

- Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g. the production rate of pre-existing nearby wells would drop to a



level which would not support existing land uses or planned uses for which permits have been granted

Based on these significance standards, the effects of the proposed project have been categorized as either “no impact”, a “less than significant impact”, or a “potentially significant impact.” Mitigation measures are recommended for potentially significant impacts. If a potentially significant impact cannot be reduced to a less than significant level through the application of mitigation, it is categorized as a “significant unavoidable impact.”

5.11.4 PROJECT IMPACTS AND MITIGATION MEASURES

◆ **DEVELOPMENT ASSOCIATED WITH IMPLEMENTATION OF THE PROPOSED PROJECT COULD RESULT IN AN INCREASED DEMAND FOR WATER SUPPLIES AND INFRASTRUCTURE WITHIN THE CITY.**

Level of Significance Before Mitigation: Potentially Significant Impact.

Impact Analysis: Implementation of the proposed project includes additional medical office and hospital facilities. These uses would increase the demand for water in the City of Los Alamitos and the GSWC service area. The West Orange County System’s current water supply demand for 2010 is projected to be 19,820 AF/Y, and is anticipated to increase to approximately 22,363 AF/Y for the year 2030.⁹ According to the 2005 UWMP, no new facilities are planned for the West Orange County System. It is anticipated that GSWC would construct new wells, pipelines and treatment systems as needed, as part of its normal maintenance and Capital Investment Program, in order to maintain its supply and meet distribution system requirements.

The City’s individual water demand is not accounted for in the 2005 UWMP. However, historical and population based trends were used to determine projected increased water demand within the West Orange County System.

The proposed project includes an additional 226,301 square feet of hospital and medical office uses that would be constructed in phases through 2035. Currently, the existing water supply for the City is sufficient to meet projected 2010 water demands, which includes the existing on-site hospital and medical office facilities. It is anticipated that the proposed project would be adequately served by GSWC, assuming source and supply capacities remain consistent with current conditions, as well as future projections. Exacerbated drought conditions, climate conditions or impacts to regional water conveyance infrastructure could quickly change these conclusions. It is anticipated that GSWC facilities currently serving the West Orange County System, including the City of Los Alamitos, are adequate to meet anticipated service demands associated with implementation of the proposed project.

As stated earlier, the 2005 UWMP projects the West Orange County System will have a water demand of 19,820 acre-feet (AF) in 2010 and 22,363 AF in 2030. Water projections for the proposed project are calculated using wastewater assumptions, since the 2005 UWMP does not

⁹ Ibid.



include generation factors, and none were provided by GSWC. It is assumed that water supply is 120 percent of wastewater flows.

As stated in Section 5.12 of this EIR, existing wastewater flows generated by the Medical Center are approximately 0.225 cubic feet per second (CFS) during peak flow periods, or approximately 163 AF/Y. Using the generation factors described above, the Medical Center currently requires about 196 AF/Y of water, which is 0.0099 percent of the 2010 projected water supply listed in the 2005 UWMP.

Section 5.12 also identified the wastewater flows associated with the proposed project would total 0.929 CFS, or 673 AF/Y. Therefore, the proposed project would require approximately 808 AF/Y at buildout, which represents approximately 0.0361 percent of the projected water supplied through the West Orange County System in the year 2030.

With each phase of development, GSWC would be notified and construction drawings would be submitted to and reviewed by GSWC to ensure that existing infrastructure is adequate to accommodate each phase of development. Assuming infrastructure facilities remain the same, and are capable of supporting projected 2030 water demands and flows, the only improvements needed to the system throughout project implementation would be the construction of on-site pipelines that would connect to existing water mains to serve new hospital and medical office facilities.

It is not anticipated that the addition of 226,301 square feet of hospital and medical office facilities would adversely impact pipelines or water supply or demand within the West Orange County System, since the proposed project at buildout would only require about 0.0361 percent of the 2030 water supply. Therefore, potential impacts to water demand, water supplies, and infrastructure within the City would be reduced to a less than significant level with compliance with Municipal Code Chapter 13.04, Water Conservation, and Chapter 13.05, Water Efficient Landscaping. In addition, Mitigation Measure WAT-1 has been recommended to ensure that any potential impacts to water demand, supply, and infrastructure are further reduced to a less than significant level.

Mitigation Measures:

WAT-1 Prior to the issuance of building permits, the project applicant shall submit construction drawings to the Golden State Water Company, and, as necessary, shall pay all applicable connection fees and comply with Golden State Water Company permitting and fee requirements.

Level of Significance After Mitigation: Less Than Significant Impact.



5.11.5 CUMULATIVE IMPACTS AND MITIGATION MEASURES

- ◆ **IMPLEMENTATION OF THE PROPOSED PROJECT AND OTHER RELATED CUMULATIVE PROJECTS COULD RESULT IN CUMULATIVELY CONSIDERABLE IMPACTS TO WATER SYSTEMS, INCLUDING INCREASED DEMAND AND INFRASTRUCTURE FACILITIES WITHIN THE CITY.**

Level of Significance Before Mitigation: Potentially Significant Impact

Impact Analysis: An UWMP serves as a source document for cities and counties as they prepare for future development. UWMPs estimated water demand is based on the projections of demographic and economic variables from regional planning agencies, including the Southern California Association of Governments (SCAG). The 2005 UWMP prepared for the GSWC (West Orange County) service area indicates there are sufficient water supplies and water shortage contingency plans to protect existing and future regional water needs.

As stated earlier, the Medical Center requires about 196 AF/Y of water, which is 0.0099 percent of the 2010 water supply in the 2005 UWMP. The proposed project would require approximately 808 AF/Y at buildout, which represents approximately 0.0361 percent of the projected water supplied in year 2030.

Other cumulative projects that may have a potentially significant impact on the West Orange County System include the following:

- Rite-Aid, Seal Beach
- 13-Acre Retail Project, Cypress
- SeaCoast Grace Church Expansion, Cypress
- CVS Pharmacy, Los Alamitos
- Office Building, Los Alamitos Joint Forces Training Base (JFTB), Los Alamitos

However, like the medical center, these projects would also be subject to payment of applicable connection fees and compliance with both GSWC permitting and fee requirements. It is anticipated that adequate capacity would be available on a cumulative basis. To mitigate potential cumulative wastewater impacts to a less than significant level, Mitigation Measure WAT-1 has been incorporated. In conclusion, cumulative impacts would be less than significant.

Mitigation Measures: Refer to Mitigation Measure WAT-1. No additional mitigation measures are required.

Level of Significance After Mitigation: Less Than Significant Impact.



5.11.6 SIGNIFICANT UNAVOIDABLE IMPACTS

With imposition of the required mitigation measure, implementation of the proposed project would result in less than significant project and cumulative impacts related to local and regional wastewater facilities. As such, no significant unavoidable impacts would result from the implementation of the Los Alamitos Medical Center Specific Plan.

5.11.7 SOURCES CITED

City of Los Alamitos, *City of Los Alamitos 2010 General Plan*, adopted March 1989.

City of Los Alamitos, *City of Los Alamitos 2010 General Plan Background Technical Reports*, adopted March 1989.

City of Los Alamitos, *City of Los Alamitos 2010 General Plan Initial Study/Negative Declaration (IS/ND)*, March 1989.

2005 Urban Water Management Plan-West Orange County, prepared by CH2MHILL for Golden State Water Company, December 2005.

Water Volume Conversion Formulas found online at Global Water Instrumentation, Inc. website, www.globalw.com/support/conversions.html#dis, accessed July 30, 2010.



Los Alamitos Medical Center Specific Plan Program Environmental Impact Report

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5.12 Wastewater



5.12 WASTEWATER

This section identifies existing conditions within the City of Los Alamitos and provides an analysis of potential impacts to wastewater that could result from implementation of the proposed project. This section is based on information obtained from the *Los Alamitos Municipal Code*, *Los Alamitos General Plan*, and written correspondence from the Rossmoor/Los Alamitos Sewer District and Orange County Sanitation District.

5.12.1 REGULATORY SETTING

The regulatory oversight for wastewater is governed at both the Federal and State levels of government and includes the following agencies:

- Regional Water Quality Control Board (RWQCB), Santa Ana Region
- County of Orange
- Rossmoor/Los Alamitos Sewer District (RLASD)
- Orange County Sanitation District (OCSO)
- City of Los Alamitos

CITY OF LOS ALAMITOS MUNICIPAL CODE

Section 16.12.90 of the *Los Alamitos Municipal Code* states that all lots intended for development shall be connected to a sanitary sewer system. Furthermore, Section 17.36.110 lists all facility siting and permit requirements for facilities within the City, including facilities that may generate hazardous waste. This criterion is intended to reduce public health and environmental risks and governmental costs associated with development of the facility. Finally, Section 17.52.060 states that for the adoption of a Specific Plan to take place, the design and location of sewer facilities shall be planned for to ensure that the proposed development would not endanger, jeopardize, or otherwise constitute a hazard to the public convenience, health, interest, safety, or welfare.

LOS ALAMITOS GENERAL PLAN

The *General Plan* has the following policy regarding sewer service within Los Alamitos:

Policy 5-7.1: Work with the Rossmoor-Los Alamitos Sewer District so that residents and businesses have adequate and efficient sewage waste disposal services.

5.12.2 ENVIRONMENTAL SETTING

Wastewater service is provided to the project site by the RLASD. The RLASD was founded in 1952 and serves more than 8,000 sewer connections throughout its 54 linear mile system. Funding for the system is provided through property tax revenue, interest on allowed investments, rental income, and permit and plan check fees. The percentage of total County tax receipts allocated to the



District's General Fund is 0.001% of assessed valuations, which has not changed since the District's inception.

Wastewater is collected by RLASD and then is treated by the Orange County Sanitation Districts (OCSD) at one of two treatment plants located in Fountain Valley (Plant #1) and Huntington Beach (Plant #2). Existing sewer lines ranging from 8 to 30 inches are located in Cherry, Catalina, Kaylor, Kyle, Florista, and Bloomfield Streets, and Katella Avenue. Existing easements would be retained and new easements dedicated to meet district requirements. Proposed structures would connect with existing sewer lines via lateral connections to individual buildings. Additionally, subsurface storage tanks would be located within the campus, adjacent to Kaylor Street near the first hospital building to provide for emergency sewage capacity in the case of temporary sewer service interruption per State requirements for hospitals.

According to RLASD, the existing system is in good physical condition, and is operating within or below capacity limitations, and there are no indications of inflow or infiltration occurrences.¹ Existing wastewater generated by the existing Medical Center was provided by RLASD and is shown in *Table 5.12-1, Existing Wastewater Flows*.

**Table 5.12-1
Existing Wastewater Flows**

Building Description	Area (acres)	Land Use Type*	Flow Coefficient (cfs/acre)	Average Flow (cfs)	Peak Flow (cfs)
Existing Main Hospital Building Area	3.0	INST	0.0050	0.015	0.038
Existing MOB 1 & MOB 3 Area	2.7	INST	0.0050	0.014	0.034
Existing MOB 2 Area	1.8	INST	0.0050	0.009	0.024
Existing TotalCare Pavilion Area	1.8	PO	0.0050	0.009	0.024
Subtotal				0.046	0.120
MOB Area	0.8	PO	0.0050	0.004	0.011
Parking Structure Area	1.9	OS/V	0.0	0.011	0.00
Subtotal				0.015	0.011
Hospital Building 1 Area	1.1	PI	0.0060	0.007	0.018
Administration Building Area	0.5	PI	0.0060	0.003	0.009
Parking Structure 2 Area	1.2	OS/V	0.0	0.007	0.0

¹ Source: RLASD website, accessed month, day, year



Table 5.12-1 (continued)
Existing Wastewater Flows

Building Description	Area (acres)	Land Use Type*	Flow Coefficient (cfs/acre)	Average Flow (cfs)	Peak Flow (cfs)
Hospital Building 2 Area	1.2	PI	0.0060	0.007	0.019
Subtotal				0.010	0.027
TOTAL				0.067	0.176
* INST - Institutional, PO - Professional Office, PI - Planned Industrial, OS/V – Open Space/Vacant Land MOB - Medical Office Building CFS=Cubic Feet per Second NOTE: The existing conditions shown in Table 1 are not the same as the existing conditions in Table 2 because the Table 1 land uses were generated from the RLSD Master Plan, which assumed hospital build-out in acreages at the time it was approved. Thus, Table 2 has more accurate square footage information of what is actually on the ground currently. It is not possible to make a direct comparison between the existing conditions in the RLSD Master Plan versus what is present on the hospital site.					

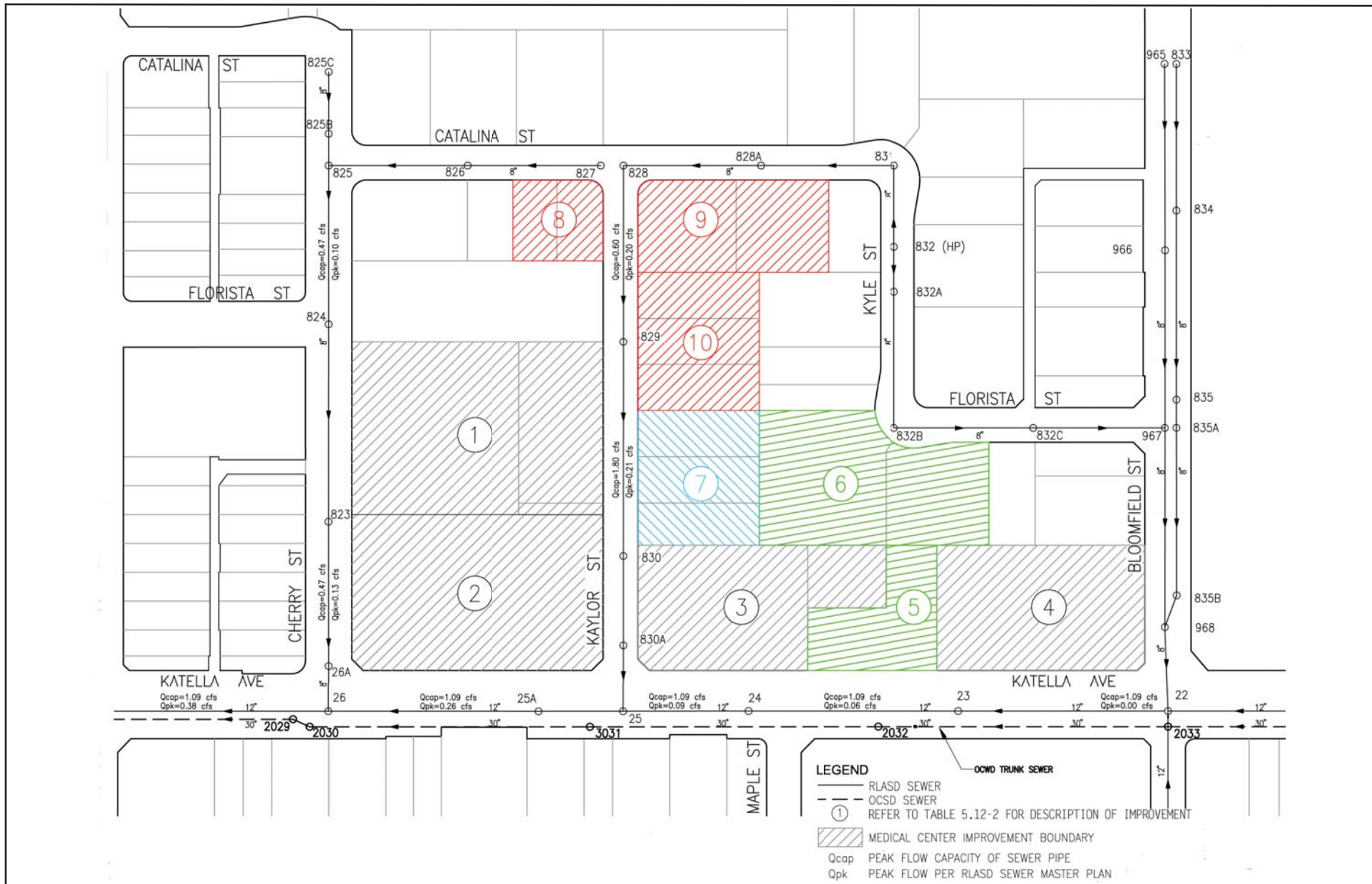
WASTEWATER TREATMENT SYSTEM

Exhibit 5.12-1, Sewer Facilities Map, identifies the sewer facilities that currently serve the Medical Center. These include clay pipes that vary between 8-inches and 12-inches in width and are present in Cherry Street, Kaylor Street, Bloomfield Street, Kyle Street, and Catalina Street. The Orange County Sanitation District confirmed that the pipes operated by RLSD contained within local streets all drain to 30-inch VCP trunk sewer located in Katella Avenue, which is owned by OCSD. The wastewater subsequently flows south through the Westminster Pump Station and the Seal Beach Pump Station before continuing to Plant No. 2, located in Huntington Beach.

5.12.3 SIGNIFICANCE THRESHOLD CRITERIA

The environmental analysis in this section is patterned after the Initial Study Checklist recommended by the CEQA Guidelines, as amended, and used by the City of Los Alamitos in its environmental review process, and is contained in Appendix A of the EIR. The Initial Study includes questions relating to wastewater. The issues presented in the Initial Study Checklist have been utilized as thresholds of significance in this section. Accordingly, a project may create a significant environmental impact if it causes one or more of the following to occur:

- Exceeds wastewater treatment requirements of the Santa Ana Regional Water Quality Control Board.
- Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.



Source: AECOM USA, Inc.

NOT TO SCALE



09/10 • JN 10-107031

ENVIRONMENTAL IMPACT REPORT
LOS ALAMITOS MEDICAL CENTER SPECIFIC PLAN
Sewer Facilities Map

Exhibit 5.12-1



- Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

Based on these significance standards, the effects of the proposed project have been categorized as either "no impact", a "less than significant impact", or a "potentially significant impact." Mitigation measures are recommended for potentially significant impacts. If a potentially significant impact cannot be reduced to a less than significant level through the application of mitigation, it is categorized as a "significant unavoidable impact."

5.12.4 PROJECT IMPACTS AND MITIGATION MEASURES

WASTEWATER CONVEYANCE AND TREATMENT

- ◆ **DEVELOPMENT ASSOCIATED WITH IMPLEMENTATION OF THE PROPOSED PROJECT COULD RESULT IN INCREASED DEMAND FOR WASTEWATER SERVICES AND INFRASTRUCTURE IN THE CITY.**

Level of Significance Before to Mitigation: Potentially Significant Impact

Impact Analysis: New components of the proposed project requiring wastewater service include:

- Medical Office Building A
- Hospital Building 1
- Hospital Building 2
- Central Plant

A total net increase of 226,301 square feet is proposed on-site, including 164 beds, over the next 25 years. According to the RLASD, the proposed project would result in additional wastewater generation (over existing conditions) as shown in *Table 5.12-2, Proposed Project Anticipated Wastewater Flows*. The RLASD anticipates that based on the preliminary analysis, the proposed project would generate about 0.88 Cubic Feet per Second (cfs), which is an increase of approximately 0.70 cfs from what it currently generates. However, RLASD noted that the existing pipes within the local streets on-site would be able to handle additional flows generated by the project.² To mitigate wastewater impacts to a less than significant level, RLASD recommends that Mitigation Measure WW-1 be implemented to ensure adequate flows from buildings to the existing pipes.

The General Plan Circulation Element includes the following policy regarding wastewater treatment and infrastructure within the City, which is applicable to the proposed project:

- 5-7.1 Work with the Rossmoor/Los Alamitos Sewer District so that residents and businesses have adequate and efficient sewage waste disposal services.

² Written and Telephone Correspondence with Jesus Lopez, AECOM, for RLASD, May 2010



**Los Alamitos Medical Center Specific Plan
Program Environmental Impact Report**

**Table 5.12-2
Proposed Project Anticipated Wastewater Flows**

Building	Area (acres)	Building (sq ft)	No. Beds	Average Flow Coefficient	Units	Average Flow (cfs)	Peak Flow (cfs)
Existing Main Hospital Building (1)	-	121,748	167	500	gal/bed/day	0.129	0.282
Existing MOB 3	-	60,000	-	200	gal/1000 sf/day	0.019	0.046
Existing MOB 2	-	64,000	-	200	gal/1000 sf/day	0.020	0.049
Existing TotalCare Pavilion	-	71,676	-	200	gal/1000 sf/day	0.022	0.055
Subtotal						0.190	0.432
Phase 1 –MOB A	-	75,100	-	200	gal/1000 sf/day	0.023	0.057
Phase 1 - Parking Structure	1.9	-	-	0.0030	cfs/acre	0.000	0.0
Subtotal						0.023	0.057
Phase 2 - Hospital Building 1	1.1	88,100	92	500	gal/bed/day	0.071	0.162
Phase 3 - Central Plant	-	14,100	-	200	gal/1000 sf/day	0.004	0.012
Phase 3 - Parking Structure 2	1.2	-	-	0.000	cfs/acre	0.000	0.00
Phase 3 - Hospital Building 2	-	88,100	126	500	gal/bed/day	0.097	0.217
Subtotal						0.102	0.229
Total						0.386	0.880

Note: Numerical reference shown in parentheses after each building refers to the number on Exhibit 5.14-1

In addition, Orange County Sanitation District (OCSD) has indicated that the 30-inch VCP located in Katella Avenue currently has capacity to support the first and second phase of the proposed project; however, OCSD's model indicates that the facility in this area does surcharge under 2030 peak wet weather flow conditions. As individual project phases develop, estimated flow information should be submitted to OCSD for reassessment. OCSD has recommended that Mitigation Measures WW-2 through WW-4 be adhered to during implementation of the proposed project to ensure that impacts are mitigated to less than significant levels.³

Mitigation Measures:

WW-1 New sewer lateral sizes and connections shall be per the RLASD standards and all appropriate connection and inspection fees shall be paid. Plan check processing and permitting shall also be required from the RLASD.

³ Correspondence with Wendy Smith, OCSD, June 9, 2010



- WW-2 An inspection fee shall be collected if a connection directly to an OCSD facility is necessary. The amount of the fee shall be based on the design of the connection. When prepared, a plan of the proposed connection should be submitted for review.
- WW-3 Capital Facility Capacity Charges (CFCCs) shall be collected to pay for additional capacity in the collection and treatment plant in accordance with the latest OCSD Fee Schedule, which is updated every first of July. Fees are based on the use and the square footage of the proposed facilities. A credit for existing uses at current rates shall be calculated and deducted from the total.
- WW-4 After construction has been completed, an annual regional user fee will be collected via the property tax roll for OCSD maintenance of the facilities; this fee shall be paid in accordance with the latest version of the OCSD Fee Schedule.

Level of Significance After Mitigation: Less Than Significant Impact.

5.12.5 CUMULATIVE IMPACTS AND MITIGATION MEASURES

- ◆ **IMPLEMENTATION OF THE PROPOSED PROJECT AND OTHER RELATED CUMULATIVE PROJECTS COULD RESULT IN CUMULATIVELY CONSIDERABLE IMPACTS TO WASTEWATER SYSTEMS, INCLUDING INCREASED DEMAND AND INFRASTRUCTURE FACILITIES WITHIN THE CITY.**

Level of Significance Before Mitigation: Potentially Significant Impact.

Impact Analysis: The existing Medical Center campus generates wastewater flows totaling approximately 0.176 cfs. The proposed project would generate approximately 0.988 cfs, which according to RLASD can be accommodated by the current sewer pipes with local streets surrounding the hospital. OCSD has indicated that the 30-inch main in Katella Avenue would support the increase in wastewater flows associated with the proposed project. In addition, the Huntington Beach/Fountain Valley Treatment Plant has capacity to accommodate projected wastewater flows from the proposed project and cumulative projects, and it is anticipated that other development projects in the area would be subject to the same fees and regulations as the proposed project. Related cumulative projects would generate approximately 50,898 gallons per day/per acre (gpd/acre); refer to Table 5.12-3, Cumulative Projects Wastewater Generation.



Los Alamitos Medical Center Specific Plan Program Environmental Impact Report

**Table 5.12-3
Cumulative Projects Wastewater Generation**

Project/Location	Use	Square Feet / Acres	Generation Rate	Cumulative Generation
Rite-Aid, Seal Beach, CA	Drug Store	17,500 / 0.40	2,868 gpd/acre ^{1.4}	1,147 gpd/acre
13-Acre Retail Project, Cypress, CA	Retail (Major) Retail (Other)/ Restaurant (Quick Serve) Restaurant (Sit Down)	122,556 21,000 <u>9,353</u> 152,909 / 3.51	2,262 gpd/acre ²	30,152 gpd/acre
SeaCoast Grace Church Expansion, Cypress, CA	Auditorium #2	38,031 (2,022 seats) / 0.87	2,715 gpd/acre ³	2,362 gpd/acre
CVS Pharmacy, Los Alamitos, CA	New Drugstore Conversion/Renovations of existing Office Building	11,000 <u>-15,000</u> -4,000 / - 0.09	2,868 gpd/acre ^{1.4}	-258 gpd/acre
Office Building, Los Alamitos, CA	Office	35,549 / 0.82	2,868 gpd/acre ^{1.4}	2,352 gpd/acre
Joint Forces Training Base (JFTB), Los Alamitos, CA	<u>Four New Buildings</u> - CAARNG Headquarters - USAR Headquarters & Facilities - One unheated storage building (USAR) - One OMS (USAR) Subtotal <u>Demolition of three Existing Buildings</u> - Medical Dispensary - Base Chapel - Parking Kiosk Subtotal Total	Phase 1 – 76,350 Phase 2 – 93,000 76,412 6,225 12,516 <u>258,803</u> -26,000 -2,946 <u>-25</u> -28,970 229,833 / 5.28	2,868 gpd/acre ^{1.4}	15,143 gpd/acre
TOTAL		469,822 / 10.79		50,898 gpd/acre

GPD: gallons per day.

- Source: RBF Consulting, *City of Cypress General Plan EIR*, Public Services and Utilities, Table 4.8-6, Projected Daily Sewer Flow, Page 4.8-14, Dated September 10, 2001.
- Source: RBF Consulting, *Initial Study/Mitigated Negative Declaration 13-Acre Retail/Commercial Project NWC Katella Avenue and Winners Circle*, Utilities and Service Systems, Page 4.16-5, Dated April 28, 2008.
- Source: RBF Consulting, *SeaCoast Grace Church Expansion Project Initial Study/Mitigated Negative Declaration*, Utilities and Service Systems, Page 4.16-2, Dated June 8, 2009
- Applied Commercial Generation Factor.

As previously mentioned, the RLASD and Orange County Sanitation District charge building fees, plan check fees, connection fees, and if needed, grease interceptor fees for all commercial development projects. All cumulative projects would also require all applicable sewer permits from RLASD.



It is anticipated that, upon payment of applicable connection fees and compliance with both OCSD and the RLASD permitting and fee requirements, adequate capacity would be available on a cumulative basis. To mitigate potential cumulative wastewater impacts to a less than significant level, Mitigation Measures WW-1 through WW-4 have been incorporated. In conclusion, cumulative impacts would be less than significant.

Mitigation Measures: Refer to Mitigation Measures WW-1 through WW-4. No additional mitigation measures are required.

Level of Significance After Mitigation: Less Than Significant Impact.

5.12.6 SIGNIFICANT UNAVOIDABLE IMPACTS

With imposition of the required mitigation measures, implementation of the proposed project would result in less than significant project and cumulative impacts related to local and regional wastewater facilities. As such, no significant unavoidable impacts would result from the implementation of the Los Alamitos Medical Center Specific Plan.

5.12.7 SOURCES CITED

City of Los Alamitos, *City of Los Alamitos 2010 General Plan*, adopted March 1989.

City of Los Alamitos, *City of Los Alamitos 2010 General Plan Background Technical Reports*, adopted March 1989.

City of Los Alamitos, *City of Los Alamitos 2010 General Plan Initial Study/Negative Declaration (IS/ND)*, March 1989.

Rossmoor/Los Alamitos Sewer District Website, <http://www.rlasd.org/>, accessed May 3, 2010

Telephone conversation with Jesus Lopez, Project Engineer for AECOM (subconsultant for RLASD), May 24, 2010

Telephone conversation with Susan Bell, General Manager for RLASD, May 25, 2010

Written correspondence from Jesus Lopez, Project Engineer for AECOM (subconsultant for RLASD), dated May 17, 2010.

Written Correspondence provided by Wendy Smith, PE, OCSD, June 9, 2010.



Los Alamitos Medical Center Specific Plan Program Environmental Impact Report

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5.13 Solid Waste



5.13 SOLID WASTE

This section analyzes the solid waste impacts of the project and recommends mitigation measures to reduce the amount of solid waste going into landfills. Specifically, this section compares the solid waste generation of the proposed project with the capacity of the existing landfills operating within Orange County that accept waste from municipalities and unincorporated areas within the County.

5.13.1 REGULATORY SETTING

STATE PLANS AND POLICIES FOR WASTE DISPOSAL

California Integrated Waste Management Act

The California Integrated Waste Management Act of 1989 (AB 939) requires every city and county in the state to prepare a Source Reduction and Recycling Element (SRRE) to its Solid Waste Management Plan, that identifies how each jurisdiction will meet the mandatory state waste diversion goals of 25 percent by the year 1995 and 50 percent by the year 2000. The purpose of AB 939 is to “reduce, recycle and re-use solid waste generated in the state to the maximum extent feasible.” Noncompliance with the goals and timelines set forth within AB 939 can result in fines up to \$10,000 per day on jurisdictions (cities and counties) not meeting the recycling and planning goals.

The term “integrated waste management” refers to the use of a variety of waste management practices to safely and effectively handle the municipal solid waste stream with the least adverse impact on human health and the environment. AB 939 established a waste management hierarchy as follows:

- Source Reduction
- Recycling
- Composting
- Transformation
- Disposal

As of May 2010, neither the California Integrated Waste Management Board nor the State Legislature has introduced new legislation to set diversion requirements beyond 2000 requirements.

Subsequent to the Integrated Waste Management, additional legislation was passed to assist local jurisdictions in accomplishing the goals of AB 939. The California Solid Waste Re-Use and Recycling Access Act of 1991 (Sections 42900-42911 of the Public Resources Code) directed the California Integrated Waste Management Board (CIWMB) to draft a “model ordinance” relating to adequate areas for collecting and loading recyclable materials in development projects. If by September 1, 1994, a local agency did not adopt its own ordinance based on the CIWMB model, the CIWMB model took effect for that local agency.



Plans and Policies for Solid Waste Disposal

In response to AB 939, Orange County prepared a Countywide Integrated Waste Management Plan (CIWMP). The document consists of a Siting Element, Summary Plan, Source Reduction and Recycling Element, Nondisposal Facility Elements, and Household Hazardous Waste Elements. A copy of the plan can be obtained from the County upon request.

In 2007, the Regional Landfill Options for Orange County Strategic Plan (Plan) was updated. The Plan specifies three municipal solid waste landfills:

- Olinda Alpha (OAL), located north of Yorba Linda,
- Frank R. Bowerman (FRB) located east of the SR-133/SR-241 split, and
- Prima Desecha (Prima) located east of I-5 between Dana Point and San Clemente.

Northern Orange County, including Los Alamitos, is served by the OAL landfill, which (as of 2007) allowed for 8,000 tons per day (tpd) of solid waste. Between the three landfills, up to 20,500 tpd is permitted. OAL is currently scheduled to close in 2013; however, according to the 2007 Plan, the scheduled closure date will be extended to 2021.

Additionally, in 1992, the City of Los Alamitos prepared a plan to achieve the solid waste reduction goals mandated by AB 939. The City of Los Alamitos Source Reduction and Recycling (SRR) and Household Hazardous Waste (HHW) Elements became part of the Countywide siting element that was submitted to the California Integrated Waste Management Board (CIWMB) for final approval. The Source Reduction and Recycling Element outlines and emphasizes the implementation of all-feasible source reduction, recycling, and composting programs. The Element also identifies the amount of landfill and transformation (incineration) capacity that will be needed for solid waste which cannot be recycled, reduced or composted. A copy of the plan is on file at the City.

5.13.2 ENVIRONMENTAL SETTING

EXISTING WASTE COLLECTION AND DISPOSAL

According to the Jurisdictional Profile for Los Alamitos,¹ the City disposed of 17,881 tons of solid waste in 2008. Landfills used by the City in 2008 included the following:

- Azusa Land Reclamation Co. Landfill
- Bakersfield Metropolitan (Bena) SLF
- Chiquita Canyon Sanitary Landfill
- Cold Canyon Landfill Solid Waste DS
- El Sobrante Landfill
- Frank R. Bowerman Sanitary Landfill
- Lancaster Landfill and Recycling Center

¹ Solid waste Jurisdictional Profile for Los Alamitos located online at <http://www.calrecycle.ca.gov/profiles/Juris/JurProfile2.asp?RG=C&JURID=269&JUR=Los+Alamitos>, accessed June 9, 2010.



- Olinda Alpha Sanitary Landfill
- Prima Desecha Sanitary Landfill
- Puente Hills Landfill
- Simi Valley and Recycling Center

In addition, the Commerce Refuse-To-Energy Facility in Los Angeles was also used.

According to the Jurisdictional Profile for the City of Los Alamitos, landfills used in 2008 by the City of Los Alamitos currently have additional available capacity for solid waste, based on latest available data², as shown in *Table 5-13.1, Landfill Capacity*.

**Table 5.13-1
Landfill Capacity**

Landfill	Permitted Capacity (cubic yards)	Remaining Capacity (cubic yards)	Anticipated Closure Date
Azusa Land Reclamation Co. Landfill	None found	None found	1/1/2025
Bakersfield Metropolitan (BENA) Landfill	53,000,000	34,994,127	12/31/2038
Chiquita Canyon Sanitary Landfill	63,900,000	29,300,000	11/24/2019
Cold Canyon Landfill Solid Waste DS	10,900,000	2,800,000	1/1/2012
El Sobrante Landfill	184,930,000	145,530,000	1/1/2045
Frank R. Bowerman Sanitary Landfill	127,000,000	59,411,872	12/31/2022
Lancaster Landfill and Recycling Center	26,665,000	19,088,739	8/2/2012
Olinda Alpha Sanitary Landfill	74,900,000	38,578,383	12/31/2021
Prima Deshecha Sanitary Landfill	172,900,000	87,384,799	12/31/2067
Puente Hills Landfill	74,000,000	35,200,000	10/31/2013
Simi Valley Landfill and Recycling Center	43,500,000	20,575,377	1/31/2027
Source: All Landfill capacity data is from 2000, and can be found online at http://www.calrecycle.ca.gov/profiles/Juris/JurProfile2.asp?RG=C&JURID=269&JUR=Los+Alamitos , accessed June 9, 2010			

The City of Los Alamitos had a diversion rate of 47 percent in 2002.

² All Landfill capacity data is from 2000, and can be found online at
<http://www.calrecycle.ca.gov/profiles/Juris/JurProfile2.asp?RG=C&JURID=269&JUR=Los+Alamitos>, accessed June 9, 2010



5.13.3 SIGNIFICANCE THRESHOLD CRITERIA

The environmental analysis in this section is patterned after the Initial Study Checklist recommended by the *CEQA Guidelines*, as amended, and used by the City of Los Alamitos in its environmental review process, and is contained in Appendix A of the EIR. The Initial Study includes questions relating to solid waste. The issues presented in the Initial Study Checklist have been utilized as thresholds of significance in this section. Accordingly, a project may create a significant environmental impact if it causes one or more of the following to occur:

- Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs.
- Comply with federal, state, and local statutes and regulations related to solid waste.

Based on these standards, the effects of the proposed project have been categorized as either a “less than significant impact” or a “potentially significant impact.” Mitigation measures are recommended for potentially significant impacts. If a potentially significant impact cannot be reduced to a less than significant level through the application of mitigation, it is categorized as a significant unavoidable impact.

5.13.4 PROJECT IMPACTS AND MITIGATION MEASURES

SOLID WASTE GENERATED DURING PROJECT CONSTRUCTION

- ◆ **DEVELOPMENT ASSOCIATED WITH IMPLEMENTATION OF THE PROPOSED PROJECT COULD POTENTIALLY RESULT IN INCREASED SOLID WASTE GENERATION IN EXCEEDANCE OF LANDFILL CAPACITY DURING CONSTRUCTION.**

Level of Significance Before Mitigation: Potentially Significant Impact.

Impact Analysis: Buildout of the proposed Los Alamitos Medical Center Specific Plan involves a net addition of 226,301 square feet of medical office and hospital uses, which includes demolition of a 24,000 square-foot Medical Office Building, and demolition of an existing 15,099 square-foot administration/warehouse building in Phase 2. Site preparation (vegetation removal and grading activities) and construction activities would generate typical construction debris, including wood, paper, glass, metals, cardboard, and green wastes.

Construction activities could also generate hazardous waste products. The proposed project would be subject to the City's Construction and Demolition Chapter 8.13 of the *Municipal Code*, which requires the project proponent to submit a Waste Management Plan (WMP) for review and approval to the WMP official, which shall consider deconstruction to the maximum extent feasible, thereby making materials generated by deconstruction available for salvage rather than land filled. Elements of a Waste Management Plan shall include the following information, at a minimum:



- Estimated volume or weight of project C & D debris, by material type, to be generated;
- Maximum volume or weight of such materials that can feasibly be diverted via reuse or recycling
- Documentation from the City's franchise waste hauler to collect and receive the material
- Estimated volume or weight of C & D materials that will be land filled
- Special or specific activities that the applicant will use to comply with the provisions of the Municipal Code.

In addition, the *General Plan* Conservation Element lists the following policy with regard to solid waste, which is applicable to the proposed project

- 2-3.1 Encourage recycling and waste reduction in accordance with the Source Reduction and Recycling, Nondisposal Facility, and Household Hazardous Waste Elements of the adopted Integrated Waste Management Plan.

The proposed project would be required to comply with standard Conditions of Approval drafted by the City of Los Alamitos, as well as all other reviewing agencies. Non-salvaged construction and demolition waste would result in an incremental and intermittent increase in solid waste disposal at landfills and other waste disposal facilities utilized by the City. Construction-related solid waste could further impact landfills with insufficient capacity and result in an exceedance of this significant threshold criteria. However, as shown in Table 5.15-1, all landfills utilized by the City of Los Alamitos have sufficient capacity to support a temporary increase in solid waste during construction of the proposed project. With Mitigation Measures SW-1 and SW-2 in place prior to and during construction, it can be anticipated that regional landfill impacts associated with project construction would be mitigated to a less than significant level.

Mitigation Measures:

- SW-1 All demolition and construction shall be done in accordance with Los Alamitos Municipal Code Demolition Chapter 8.13.
- SW-2 Future development projects within the Los Alamitos Medical Center Specific Plan area shall comply with all applicable City, County, State, and Federal regulations and procedures for the use, collection, and disposal of solid and hazardous wastes.

Level of Significance After Mitigation: Less Than Significant Impact.



SOLID WASTE GENERATED DURING PROJECT OPERATION

- ◆ **DEVELOPMENT ASSOCIATED WITH IMPLEMENTATION OF THE PROPOSED PROJECT COULD POTENTIALLY RESULT IN INCREASED SOLID WASTE GENERATION IN EXCEEDANCE OF LANDFILL CAPACITY DURING OPERATION.**

Level of Significance Before Mitigation: Potentially Significant Impact.

Impact Analysis: Buildout of the proposed project would generate approximately 2,444 tons of solid waste³ per year, which represents a 12 percent increase to the amount of solid waste generated by the City in 2008. This quantity represents the solid waste generated for buildout conditions of the proposed project under a worst-case scenario without any recycling activities in place. However, the proposed project would be required to comply with the City's *Municipal Code*, which requires providing adequate areas for collecting and loading recyclable materials in concert with countywide efforts and programs to reduce the volume solid waste entering landfills. In addition, the location of recycling/separation areas is required to comply with all applicable federal, public health, state, or local laws relating to fire, building, access, transportation, circulation, or safety. Compliance with all applicable State and Orange County regulations for the use, collection, and disposal of solid and hazardous wastes is also mandated. It can be assumed that the proposed project would include adequate, accessible and convenient areas for collecting recyclable materials.

In addition, special medical waste is generated by hospitals, doctor offices, laboratories, and research institutions. Special medical wastes include infectious or potentially infectious materials that result from contact with persons or animals suspected or diagnosed as being or having been exposed to contagious disease organisms. Refer to Section 5.9, Hazards and Hazardous Materials, for further discussion regarding the disposal of special medical waste. However, all hazardous medical waste shall be disposed of in accordance with Mitigation Measure SW-2. With the implementation of this mitigation, it is anticipated that that operational solid waste impacts would be reduced to a less than significant level.

Mitigation Measures: Refer to Mitigation Measure SW-2. No additional mitigation measures are required.

Level of Significance After Mitigation: Less Than Significant Impact.

³ Based on Institutional Generation rate of 0.0108 tons/square feet/year, found online at <http://www.calrecycle.ca.gov/wastechar/wastegenrates/Institution.htm>, accessed June 9, 2010



5.13.5 CUMULATIVE IMPACTS AND MITIGATION MEASURES

- ◆ **IMPLEMENTATION OF THE PROPOSED PROJECT AND OTHER RELATED CUMULATIVE PROJECTS COULD RESULT IN CUMULATIVELY CONSIDERABLE IMPACTS RELATED TO SOLID WASTE DISPOSAL SERVICES AND LANDFILL DISPOSAL CAPACITY.**

Level of Significance Before Mitigation: Potentially Significant Impact.

Impact Analysis: The implementation of the proposed project and associated cumulative projects within the local area will have an impact on solid waste collection and disposal services within the project area. Buildout of the proposed project would generate approximately 2,444 tons of solid waste⁴ per year. The cumulative projects' demand for solid waste collection and disposal services would be approximately 2,818 pounds per day (ppd); refer to *Table 5.13-2, Cumulative Projects Solid Waste Generation*. This quantity represents the solid waste generated for buildout conditions of the proposed project and cumulative projects under a worst-case scenario without any recycling activities in place.

**Table 5.13-2
Cumulative Projects Solid Waste Generation**

Project/Location	Use	Square Feet / Acres	Generation Rate	Cumulative Generation
Rite-Aid, Seal Beach, CA	Drug Store	17,500	6 lbs/1,000 sq.ft ¹	105 ppd
13-Acre Retail Project, Cypress, CA	Retail (Major) Retail (Other)/ Restaurant (Quick Serve) Restaurant (Sit Down)	122,556 21,000 <u>9,353</u> 152,909	6 lbs/1,000 sq.ft ²	917 ppd
SeaCoast Grace Church Expansion, Cypress, CA	Auditorium #2	38,031 (2,022 seats)	6 lbs/1,000 sq.ft ³	228 ppd
CVS Pharmacy, Los Alamitos, CA	New Drugstore Conversion/Renovations of existing Office Building	11,000 <u>-15,000</u> -4,000	6 lbs/1,000 sq.ft ¹	-24 ppd
Office Building, Los Alamitos, CA	Office	35,549	6 lbs/1,000 sq.ft ¹	213 ppd
Joint Forces Training Base (JFTB), Los Alamitos, CA	<u>Four New Buildings</u> - CAARNG Headquarters - USAR Headquarters & Facilities - One unheated storage building (USAR) - One OMS (USAR) Subtotal	Phase 1 – 76,350 Phase 2 – 93,000 76,412 6,225 12,516 <u>258,803</u>	6 lbs/1,000 sq.ft ¹	1,379 ppd

⁴ Based on Institutional Generation rate of 0.0108 tons/square feet/year, found online at <http://www.calrecycle.ca.gov/wastechar/wastegenrates/Institution.htm>, accessed June 9, 2010



Table 5.13-2 (continued)
Cumulative Projects Solid Waste Generation

Project/Location	Use	Square Feet / Acres	Generation Rate	Cumulative Generation
	<u>Demolition of three Existing Buildings</u>			
	- Medical Dispensary	-26,000		
	- Base Chapel	-2,946		
	- Parking Kiosk	-25		
	Subtotal	-28,970		
	Total	229,833		
	TOTAL	469,822		2,818 ppd
PPD: Pounds per day. Sq.ft: Square feet. 1. Source: RBF Consulting, <i>City of Cypress General Plan EIR</i> , Public Services and Utilities, Table 4.8-7, Projected Daily Solid Waste Generation, Page 4.8-16, Dated September 10, 2001. 2. Source: RBF Consulting, <i>Initial Study/Mitigated Negative Declaration 13-Acre Retail/Commercial Project NWC Katella Avenue and Winners Circle</i> , Utilities and Service Systems, Page 4.16-5, Dated April 28, 2008. 3. Source: RBF Consulting, <i>SeaCoast Grace Church Expansion Project Initial Study/Mitigated Negative Declaration</i> , Utilities and Service Systems, Page 4.16-5, Dated June 8, 2009. 4. Applied Commercial Generation Factor.				

As previously mentioned above, the proposed project and cumulative projects would be required to comply with the City's *Municipal Code*, which requires providing adequate areas for collecting and loading recyclable materials in concert with countywide efforts and programs to reduce the volume solid waste entering landfills. In addition, the location of recycling/separation areas are required to comply with all applicable federal, public health, state, or local laws relating to fire, building, access, transportation, circulation, or safety. Compliance with all applicable State and Orange County regulations for the use, collection, and disposal of solid and hazardous wastes is also mandated. It can be assumed that the proposed project would include adequate, accessible and convenient areas for collecting recyclable materials. Additionally, special medical waste is generated by hospitals, doctor offices, laboratories, and research institutions. However, all hazardous medical waste shall be disposed of in accordance with Mitigation Measures SW-1 and SW-2. With adherence to City's *Municipal Code*, State and Orange County regulations, and compliance with Mitigation Measures SW-1 and SW-2, the proposed project would not result in significant cumulative impacts in this regard.

Mitigation Measures: Refer to Mitigation Measures SW-1 and SW-2. No additional mitigation measures are required.

Level of Significance After Mitigation: Less Than Significant Impact.



5.13.6 SIGNIFICANT UNAVOIDABLE IMPACTS

With imposition of the required mitigation measures, implementation of the proposed project would result in less than significant project impacts related to landfills and compliance with State, County, and local solid waste regulations. As such, no significant unavoidable impacts would result from the implementation of the Los Alamitos Medical Center Specific Plan.

5.13.7 SOURCES CITED

Cal Recycle Official Website, <http://www.calrecycle.ca.gov>, accessed June 9, 2010.

City of Los Alamitos, *City of Los Alamitos 2010 General Plan*, adopted March 1989.

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Orange County Landfill System Website,
<http://egov.ocgov.com/portal/site/ocgov/menuitem.02b739dec30413a69add603d100000f7/?vgnextoid=b9c856424c63a110VgnVCM1000005b00610aRCRD&vgnextchannel=b6d41414b02f8110VgnVCM1000005b00610aRCRD&vgnextfmt=default>, accessed May 5, 2010

Regional Landfill Options for Orange County Strategic Plan Update 2007, prepared by Integrated Waste Management for Orange County.



Los Alamitos Medical Center Specific Plan Program Environmental Impact Report

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5.14 Electricity and Natural Gas



5.14 ELECTRICITY AND NATURAL GAS

This section addresses the potential impacts of the proposed project with regard to electricity and natural gas consumption during construction and operation. The analysis identifies the utilities that provide electricity and natural gas services to the project site, describes the existing consumption of electricity and natural gas at the site, indicates the nature and location of related infrastructure in the local area, and estimates the electricity demands of the proposed project at buildout.

5.14.1 REGULATORY SETTING

ELECTRICITY

The California Public Utilities Commission (CPUC) regulates investor-owned electric power and natural gas utility companies in the State of California. Assembly Bill 1890, enacted in 1996, deregulated the power generation industry, allowing customers to purchase electricity on the open market. Under deregulation, the production and distribution of power that was under the control of investor-owned utilities (e.g., Southern California Edison) was decoupled.

All new construction in the State of California is subject to the energy conservation standards set forth in *Title 24*, Part 6, Article 2 of the *California Administrative Code*. These are prescriptive standards that establish maximum energy consumption levels for the heating and cooling of new buildings.

The utilization of alternative energy applications in development projects (including the proposed project), while encouraged, is not required as a development condition. Such applications may include installation of photovoltaic solar panels, active solar water heating systems, or integrated pool deck water heating systems, all of which serve to displace consumption of conventional energy sources (i.e., electricity and natural gas). Incentives, primarily in the form of state and federal tax credits, as well as reduced energy bills, provide a favorable basis for individual builders, property owners, and occupants to install such alternative energy systems.

NATURAL GAS

The California Public Utilities Commission (CPUC) regulates natural gas utility service for approximately 10.5 million customers that receive natural gas from Pacific Gas and Electric Company (PG&E), Southern California Gas Company (SCGC), San Diego Gas & Electric Company (SDG&E), Southwest Gas, and several smaller natural gas utilities. Most of California's natural gas customers are residential and small commercial customers (referred to as "core" customers) who accounted for approximately 40 percent of the natural gas delivered by California utilities in 2003. Large consumers, like electric generators and industrial customers (referred to as "non-core" customers) accounted for approximately 60 percent of the natural gas delivered by California utilities in 2003. The CPUC regulates the California utilities' natural gas rates and natural gas services, including in-state transportation over the utilities' transmission and distribution pipeline systems, storage, procurement, metering and billing.



Most of the natural gas used in California comes from out-of-state natural gas basins. In 2003, California customers received 42 percent of their natural gas supply from basins located in the Southwest, 26 percent from Canada, 14 percent from the Rocky Mountains, and 18 percent from basins located within California.

Natural gas from out-of-state production basins is delivered into California via the interstate natural gas pipeline system. The five major interstate pipelines that deliver out-of-state natural gas to California consumers are the Gas Transmission Northwest Pipeline, Kern River Pipeline, Transwestern Pipeline, El Paso Pipeline, and Mojave Pipeline. Another pipeline, the North Baja Pipeline, takes gas off the El Paso Pipeline at the California/Arizona border, and delivers that gas through California into Mexico. While the Federal Energy Regulatory Commission (FERC) regulates the transportation of natural gas on the interstate pipelines, the CPUC often participates in FERC regulatory proceedings to represent the interests of California natural gas consumers.

Most of the natural gas transported via the interstate pipelines, as well as some of the California-produced natural gas, is delivered into the PG&E and SCGC intrastate natural gas transmission pipeline systems (commonly referred to as California's "backbone" natural gas pipeline system). Natural gas on the utilities' backbone pipeline systems is then delivered into the local transmission and distribution pipeline systems, or to natural gas storage fields. Some large non-core customers take natural gas directly off the high-pressure backbone pipeline systems, while core customers and other non-core customers take natural gas off the utilities' distribution pipeline systems. The CPUC has regulatory jurisdiction over 100,000 miles of utility-owned natural gas pipelines, which transported 85 percent of the total amount of natural gas delivered to California's gas consumers in 2003.

Some of the natural gas delivered to California customers may be delivered directly to them without being transported over the regulated utility systems. For example, the Kern River/Mojave pipeline system can deliver natural gas directly to some large customers, "bypassing" the utilities' systems. Much of California-produced natural gas is also delivered directly to consumers.

PG&E and SCGC own and operate several natural gas storage fields that are located in northern and southern California. These storage fields, and two independently owned storage utilities – Lodi Gas Storage and Wild Goose Storage – help meet peak seasonal natural gas demand and allow California natural gas customers to secure natural gas supplies more efficiently.

California's regulated utilities do not own any natural gas production facilities. All of the natural gas sold by these utilities must be purchased from suppliers and/or marketers. The price of natural gas sold by suppliers and marketers was deregulated by the FERC in the mid-1980s and is determined by "market forces." Prior to the late 1980s, California's regulated utilities provided virtually all natural gas services to natural gas customers. Since then, the CPUC has gradually restructured the natural gas industry in order to give customers more options while assuring regulatory protections for those customers that wish to continue receiving utility-provided services. The CPUC decides whether California's utilities have taken reasonable steps in order to minimize the cost of natural gas purchased on behalf of their core customers.



Although most of California's core customers purchase natural gas directly from the regulated utilities, core customers have the option to purchase natural gas from independent natural gas marketers. Most of California's non-core customers, on the other hand, make natural gas supply arrangements directly with producers or purchase natural gas from marketers.

Another option resulting from the natural gas industry's restructuring process occurred in 1993, when the CPUC removed the utilities' storage service responsibility for non-core customers, along with the cost of this storage service from non-core customers' rates. In 1993, the CPUC also adopted specific storage reservation levels for the utilities' core customers.

In a 1997 decision, the CPUC adopted PG&E's "Gas Accord," which unbundled backbone transmission costs from non-core transportation rates, and gave customers and marketers the opportunity to obtain pipeline capacity rights on PG&E's backbone pipeline system. The Gas Accord also required PG&E to set aside a certain amount of pipeline capacity in order to deliver natural gas to its core customers. In Decision (D.) 03-12-061, issued in December 2003, the CPUC modified and extended the initial terms of the Gas Accord.

In December 2001, the CPUC adopted the "Gas Industry Restructuring" decision (D. 01-12-018). This decision adopted a market and regulatory structure for SCGC similar to the Gas Accord structure for PG&E. In D.04-04-015, the CPUC adopted the tariffs to implement restructuring of the SCGC system, but stayed that decision to consider issues in a major Rulemaking, R.04-01-025.

2001 TITLE 24, PART 6 CALIFORNIA'S ENERGY EFFICIENCY STANDARDS FOR RESIDENTIAL AND NON RESIDENTIAL BUILDINGS

The Energy Efficiency Standards for Residential and Nonresidential Buildings were established in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. New standards were adopted by the Commission in 2001 as mandated by Assembly Bill 970 to reduce California's electricity demand. The new standards went into effect on June 1, 2001. The standards (along with standards for energy efficient appliances) have saved more than \$20 billion in electricity and natural gas costs. It is estimated the standards will save \$57 billion by 2011.

5.14.2 ENVIRONMENTAL SETTING

ELECTRICITY

Southern California Edison (SCE), a division of Edison International, currently provides electricity service in the City of Los Alamitos, which includes the project site. Edison facilities include a hydropower and nuclear power facilities and one coal-powered facility: the Big Creek Hydroelectric Plant, the San Onofre Nuclear Generating Station (SONGS), and the Mojave Generating Station. SCE maintains and operates transmission and distribution infrastructure to provide purchased power to end users throughout its service area.



According to Forms 1.1a and 1.2 of the California Energy Demand Forecast for 2010-2020, prepared by the California Energy Commission (CEC), it is projected that the demand for consumption during 2010 will be 99,875 gigawatt-hours (GWh) and SCE will provide a net energy load of 101,508 gigawatt-hours (GWh) to its customers.¹ By 2020, demand will be 112,964 GWh and energy load is forecasted to increase to 114,872 GWh.²

NATURAL GAS

The Southern California Gas Company (SCGC) provides natural gas service to the project site. According to the California Energy Commission (as shown in Form 1.1 of the SCGC Planning Area) SCGC customers will demand roughly 729 billion cubic feet (b.c.f) of natural gas during 2010, and by 2020, it is anticipated that annual natural gas demand to SCGC customers are expected to increase to 782.9 b.c.f. per year. It is anticipated that SCGC will meet this demand.

5.14.3 SIGNIFICANCE THRESHOLD CRITERIA

The environmental analysis in this section is patterned after the Initial Study Checklist recommended by the CEQA Guidelines, as amended, and used by the City of Los Alamitos in its environmental review process, and is contained in Appendix A of the EIR. The Initial Study includes questions relating to electricity and natural gas. The issues presented in the Initial Study Checklist have been utilized as thresholds of significance in this section. Accordingly, a project may create a significant environmental impact if it causes one or more of the following to occur:

- Substantial adverse physical impacts associated with the provision of new or physically altered hospital facilities, or result in the need for new or physically altered hospital facilities, the construction of which may cause significant environmental impacts in order to maintain acceptable service ratios, response times or other performance objectives.

Based on these significance standards, the effects of the proposed project have been categorized as either “no impact”, a “less than significant impact”, or a “potentially significant impact.” Mitigation measures are recommended for potentially significant impacts. If a potentially significant impact cannot be reduced to a less than significant level through the application of mitigation, it is categorized as a “significant unavoidable impact.”

¹ California Energy Commission. *California Energy Demand 2010-2020 Staff Energy Demand Forecast Revised December 2009*. Staff Final Report.. Publication #CEC-200-2009-012-CMF. December 2009.

² *Ibid.*



5.14.4 PROJECT IMPACTS AND MITIGATION MEASURES

ELECTRICITY SUPPLIES AND DISTRIBUTION INFRASTRUCTURE

◆ **DEVELOPMENT ASSOCIATED WITH IMPLEMENTATION OF THE PROPOSED PROJECT COULD INCREASE THE DEMAND FOR ELECTRICITY SERVICES AND FACILITIES.**

Level of Significance Before Mitigation: Less than Significant Impact.

Impact Analysis: Using an electrical consumption rate of 21.7 kilowatt hours per square feet per year (KWh/s.f./year³), the Los Alamitos Medical Center currently requires approximately 2,642 megawatt hours (MWh) of electricity per year. The net increase of the proposed project would require an additional 4,911 MWh of electricity per year. Thus, upon buildout of the proposed project, the electrical demand would total approximately 7,553 MWh of electricity per year.

Additionally, SCE anticipates that approximately 510 kilovolt-amperes (KVA; each KVA equals 1,000 volts) would be needed to serve the proposed project during Phase 1, approximately 590 KVA for Phase 2, and approximately 590 KVA for Phase 3. These amounts are in addition to the amount of power needed to run the new central plant⁴.

SCE has indicated that the SCE facilities that currently serve the site would be able to handle the new load(s) in both time (MWh) and quantity (KVA). However, additional transformation and cabling would have to be installed during construction. SCE also indicated the potential for some facilities to be relocated. SCE concluded that there would be very little or no disruption of service except for the cutover to the new relocated facilities, which would be planned outages.

The *General Plan* Conservation Element addresses utilities and conservation of these resources, and includes the following policies, which are applicable to the proposed project:

- 2-5.1: Promote State energy conservation guidelines, which require the incorporation of energy-saving designs and features into new and refurbished buildings.
- 2-5.2: Encourage residents, businesses, and public employees to follow energy conservation practices designed to reduce energy consumption.

Although the proposed project would create additional demands on electricity and distribution infrastructure, these demands are well within the service capabilities of SCE. Thus, the proposed project would not create additional demands on electricity or infrastructure that exceed the capacity of the utilities serving the site. Therefore, impacts would be less than significant in this regard.

Mitigation Measures: No mitigation measures are required.

Level of Significance After Mitigation: Not Applicable.

³ Consumption Factor from South Coast Air Quality Management District CEQA Air Quality Handbook (April 1993)

⁴ Correspondence with Mark Pearson, SCE, May 6, 2010



NATURAL GAS SUPPLIES AND DISTRIBUTION INFRASTRUCTURE

◆ DEVELOPMENT ASSOCIATED WITH IMPLEMENTATION OF THE PROPOSED PROJECT COULD INCREASE THE DEMAND FOR NATURAL GAS SERVICES AND FACILITIES.

Level of Significance Before Mitigation: Less than Significant Impact.

Impact Analysis: Using a natural gas consumption rate of 4.8 c.f./s.f./month⁵, the Los Alamitos Medical Center currently requires approximately 584 k.c.f./month of natural gas. The net increase of the proposed project would require about an additional 1,087 k.c.f./month of natural gas. Thus, upon buildout of the proposed project, the natural gas demand would total approximately 1,670 k.c.f./month or 20,040 k.c.f./year of natural gas.

Since natural gas demand has not been estimated yet for project buildout year and in order to provide a conservative analysis, total demand for the proposed project has been compared for the SCGC demand estimated for 2020. As previously discussed, annual natural gas demand to SCGC customers is expected to increase to 782.9 b.c.f. per year for the year 2020, which is less than 0.1 percent of the estimated quantity of natural gas to be supplied by SCGC. Thus, it is anticipated that SCGC would meet both the project and other customer demand.

SCGC has gas facilities in the area of the proposed project. Thus, gas service to the proposed project can be provided from existing gas mains in several locations, and the service will be in accordance with the SCGC's policies and extension rules on file with the California Public Utilities Commission when contractual agreements are made.

The *General Plan* Conservation Element addresses utilities and conservation of these resources, and includes the following policies, which are applicable to the proposed project and cumulative projects:

- 2-5.1: Promote State energy conservation guidelines, which require the incorporation of energy-saving designs and features into new and refurbished buildings.
- 2-5.2: Encourage residents, businesses, and public employees to follow energy conservation practices designed to reduce energy consumption.

Although the proposed project would create additional demands on natural gas supplies and distribution infrastructure, these demands are well within the service capabilities of SCGC. Thus, the proposed project would not create additional demands on natural gas supplies and infrastructure that exceed the capacity of the utilities serving the site. Therefore, impacts would be less than significant in this regard.

Mitigation Measures: No mitigation measures are required.

Level of Significance After Mitigation: Not Applicable.

⁵ Industrial Factor from South Coast Air Quality Management District CEQA Air Quality Handbook (April 1993)



5.14.5 CUMULATIVE IMPACTS AND MITIGATION MEASURES

- ◆ **IMPLEMENTATION OF THE PROPOSED PROJECT AND OTHER RELATED CUMULATIVE PROJECTS COULD RESULT IN CUMULATIVELY CONSIDERABLE ELECTRICITY AND NATURAL GAS IMPACTS.**

Level of Significance Before Mitigation: Less Than Significant Impact.

Impact Analysis:

Electricity

Electrical loads of the proposed project and related cumulative projects would increase the demand for electricity service beyond existing conditions. As previously mentioned above, the existing Los Alamitos Medical Center currently requires approximately 2,642 MWh of electricity per year. The net increase of the proposed project would require an additional 4,911 MWh of electricity per year. Additionally, SCE anticipates that approximately 510 kilovolt-amperes would be needed to serve the proposed project during Phase 1, approximately 590 KVA for Phase 2, and approximately 590 KVA for Phase 3. These amounts are in addition to the amount of power needed to run the new central plant⁶. Thus, upon buildout of the proposed project, the electrical demand would total approximately 7,553 MWh of electricity per year. Cumulative projects would result in an increased demand for electricity of approximately 22,652,099 kilowatt hours per day (kwh/day) over existing conditions; refer to *Table 5.14-1, Cumulative Projects Electricity Consumption*.

**Table 5.14-1
Cumulative Projects Electricity Consumption**

Project/Location	Use	Square Feet	Generation Rate ¹	Cumulative Generation
Rite-Aid, Seal Beach, CA	Drug Store	17,500	47 Kwh/day per unit ²	822,500 kwh/day
13-Acre Retail Project, Cypress, CA	Retail (Major) Retail (Other)/ Restaurant (Quick Serve) Restaurant (Sit Down)	122,556 21,000 <u>9,353</u> 152,909	47 Kwh/day per unit ²	7,186,723 kwh/day
SeaCoast Grace Church Expansion, Cypress, CA	Auditorium #2	38,031 (2,022 seats)	62 Kwh/day per unit ³	2,357,922 kwh/day
CVS Pharmacy, Los Alamitos, CA	New Drugstore Conversion/Renovations of existing Office Building	11,000 <u>-15,000</u> -4,000	47 Kwh/day per unit ²	-188,000 kwh/day
Office Building, Los Alamitos, CA	Office	35,549	47 Kwh/day per unit ²	1,670,803 kwh/day

⁶ Correspondence with Mark Pearson, SCE, May 6, 2010



Table 5.14-1 (continued)
Cumulative Projects Electricity Consumption

Project/Location	Use	Square Feet	Generation Rate ¹	Cumulative Generation
Joint Forces Training Base (JFTB), Los Alamitos, CA	<u>Four New Buildings</u>			
	- CAARNG Headquarters	Phase 1 – 76,350 Phase 2 – 93,000		
	- USAR Headquarters & Facilities	76,412		
	- One unheated storage building (USAR)	6,225		
	- One OMS (USAR)	12,516		
	Subtotal	<u>258,803</u>	47 Kwh/day per unit ²	10,802,151 kwh/day
	<u>Demolition of three Existing Buildings</u>			
	- Medical Dispensary	-26,000		
	- Base Chapel	-2,946		
	- Parking Kiosk	-25		
	Subtotal	-28,970		
	Total	229,833		
TOTAL		469,822		22,652,099 kwh/day
Kwh: Kilowatt hours 1 = Source: RBF Consulting, <i>City of Cypress General Plan EIR</i> , Public Services and Utilities, Table 4.8-8, Projected Daily Electrical Demand, Page 4.8-17, Dated September 10, 2001. 2 = Applied Commercial Use Generation Factor. 3 = Applied Public Facilities Generation Factor.				

Although the proposed project and related cumulative projects would create additional demands on electricity supplies and distribution infrastructure, these demands are within the parameters of projected load growth and the service capabilities of SCE. Thus, cumulative impacts would be less than significant.

Natural Gas

Implementation of the proposed project and cumulative projects would result in increased natural gas demand beyond existing conditions. As previously mentioned above, the existing Los Alamitos Medical Center currently requires approximately 584 k.c.f./month of natural gas. The net increase of the proposed project would require about an additional 1,087 k.c.f./month of natural gas. Thus, upon buildout of the proposed project, the natural gas demand would total approximately 1,670 k.c.f./month or 20,040 k.c.f./year of natural gas. Cumulative projects would result in an increased demand for natural gas of approximately 44,633,090 CF/day/unit over existing conditions; refer to *Table 5.14-2, Cumulative Projects Natural Gas Consumption*.



Table 5.14-2
Cumulative Projects Natural Gas Consumption

Project/Location	Use	Square Feet	Generation Rate ¹	Cumulative Generation
Rite-Aid, Seal Beach, CA	Drug Store	17,500	95 CF/day/unit ²	1,662,500 CF/day/unit
13-Acre Retail Project, Cypress, CA	Retail (Major) Retail (Other)/ Restaurant (Quick Serve) Restaurant (Sit Down)	122,556 21,000 <u>9,353</u> 152,909	95 CF/day/unit ²	14,526,355 CF/day/unit
SeaCoast Grace Church Expansion, Cypress, CA	Auditorium #2	38,031 (2,022 seats)	95 CF/day/unit ³	3,612,945 CF/day/unit
CVS Pharmacy, Los Alamitos, CA	New Drugstore Conversion/Renovations of existing Office Building	11,000 <u>-15,000</u> -4,000	95 CF/day/unit ²	-380,000 CF/day/unit
Office Building, Los Alamitos, CA	Office	35,549	95 CF/day/unit ²	3,377,155 CF/day/unit
Joint Forces Training Base (JFTB), Los Alamitos, CA	<u>Four New Buildings</u> - CAARNG Headquarters - USAR Headquarters & Facilities - One unheated storage building (USAR) - One OMS (USAR) Subtotal <u>Demolition of three Existing Buildings</u> - Medical Dispensary - Base Chapel - Parking Kiosk Subtotal Total	Phase 1 – 76,350 Phase 2 – 93,000 76,412 6,225 12,516 <u>258,803</u> -26,000 -2,946 -25 -28,970 229,833	95 CF/day/unit ²	21,834,135
TOTAL		469,822		44,633,090 CF/day/unit
CF: Cubic Feet 1 = Source: RBF Consulting, <i>City of Cypress General Plan EIR</i> , Public Services and Utilities, Table 4.8-9, Projected Daily Natural Gas Demand, Page 4.8-18, Dated September 10, 2001. 2 = Applied Commercial Use Generation Factor. 3 = Applied Public Facilities Generation Factor.				

Although the proposed project and related cumulative projects would create additional demands of natural gas, these demands are within the parameters of projected load growth and the service capabilities of SCGS. Furthermore, SCGS has gas facilities in the area of the proposed project providing service in accordance with the SCGC's policies and extension rules on file with the California Public Utilities Commission when contractual agreements are made. Thus, cumulative impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance After Mitigation: Not Applicable.



5.14.6 SIGNIFICANT UNAVIODABLE IMPACTS

Implementation of the proposed project would result in less than significant project and cumulative electricity and natural gas supply and infrastructure impacts without the imposition of mitigation measures. As such, no significant unavoidable impacts would result from the implementation of the Los Alamitos Medical Center Specific Plan.

5.14.7 SOURCES CITED

Chris Kavalec and Tom Gorin, California Energy Demand 2010-2020, Adopted Forecast, CEC-200-2009-012-CMF

City of Los Alamitos, *City of Los Alamitos 2010 General Plan*, adopted March 1989.

City of Los Alamitos, *City of Los Alamitos 2010 General Plan Background Technical Reports*, adopted March 1989.

City of Los Alamitos, *City of Los Alamitos 2010 General Plan Initial Study/Negative Declaration (IS/ND)*, March 1989.

Letter Correspondence: Paul Simonoff, Technical Services Supervisor, Southern California Gas Company, dated May 6, 2010.

RBF Consulting, *City of Cypress General Plan Environmental Impact Report*, September 10, 2001.

RBF Consulting, *Henry Mayo Newhall Memorial Hospital Master Plan Environmental Impact Report*, September 2008.

Utilities Questionnaire completed and provided by Mark Pearson, Planner for Southern California Edison, dated May 6, 2010.



6.0 Alternatives to the Proposed Project



6.0 ALTERNATIVES TO THE PROPOSED PROJECT

In accordance with *CEQA Guidelines* Section 15126.6, the following section describes a range of reasonable alternatives to the proposed project, which could feasibly attain most of the basic objectives of the proposed project but would avoid or substantially lessen any of the significant effects of the proposed project. The evaluation considers the comparative merits of each alternative. The analysis focuses on alternatives capable of avoiding significant environmental effects or reducing them to less than significant levels, even if these alternatives would impede, to some degree, the attainment of the proposed project objectives.

The alternatives to the proposed project under consideration within this EIR consist of:

- No Project/No Development Alternative
- Alternative One (Relocation of Parking Structure 1 and MOB A)
- Alternative Two (Phases 1 and 2 Only)

Throughout the following analysis, impacts of alternatives are examined for each of the issue areas examined in Section 5.0 of this EIR. In this manner, each alternative can be compared to the proposed project on an issue-by-issue basis. Table 6-1, Comparison of Impacts of Proposed Project and Alternatives, at the end of this section, provides a summary of the alternatives analyzed and a comparison of each alternative's impact in relation to the proposed project along with each alternative's ability to meet the Project Goals and Objectives identified in Section 3.0, Project Description of this EIR. At the conclusion of the alternative analysis is the selection of the "environmentally superior" alternative, which is required by *CEQA*.

Section 5.0 of this EIR found that the proposed project would result in significant and unavoidable impacts in one environmental issue area:

- Air Quality – Cumulative Greenhouse Gas Emissions Impacts

PROJECT GOALS AND OBJECTIVES

The following project objectives identified in Section 3.5, Project Goals and Objectives, in Section 3.0, Project Description, are restated below.

- Comply with the City of Los Alamitos General Plan Goals and Policies.
- Design the project with consideration of the site's circulation, environmental, and physical opportunities and constraints.
- Create project identity through thematically coherent and aesthetically pleasing architecture, landscaped areas, colors, signage, and entry statements.



- Size and phase the medical center development plan to satisfy, and be consistent with, current and anticipated future market demand.
- Encourage a streamlined and predictable discretionary review process for subsequent reviews
- Provide for coordinated land use, urban design, landscape, transportation, and infrastructure planning.
- Create a sustainable development that minimizes short-term and long-term adverse environmental impacts to the fullest extent feasible and adequately addresses consumer needs.
- Improve the local job market by providing a substantial number of permanent new jobs within and available to the local community.

6.1 ALTERNATIVES CONSIDERED BUT REJECTED FROM ANALYSIS

Alternatives to the proposed project that were considered but rejected included 1) relocation of the existing hospital campus to a new location elsewhere in Orange County, plus construction of the proposed Specific Plan; and 2) constructing a second hospital campus with medical office buildings at another location within the City of Los Alamitos or in Orange County. Relocation of the existing hospital facility and development of the proposed Specific Plan and construction of a new hospital and medical office buildings elsewhere in Orange County were determined not to be feasible because the Los Alamitos Medical Center's fundamental purpose is to expand its existing hospital campus to provide expanded services to the growing population of the region. Although it is recognized that healthcare service needs exist elsewhere in the County, the Los Alamitos Medical Center has significant investment in its current location and therefore seeks to fully utilize the capacity of its existing site and infrastructure systems. The site is well suited to serve area residents within the hospital's service area and is accessible from a major freeway and arterial streets that access various points throughout the community. This would not preclude another hospital from being constructed elsewhere in Orange County.

The hospital has been at its current location since 1968. As such, the relocation of the hospital to a new location would require the abandonment of 40 years of investment in the existing hospital campus, and would require a substantial new investment in land and infrastructure for a new site. Given the prohibitive costs associated with relocating the hospital or purchasing land and constructing a second hospital campus in another location, these options were not considered feasible alternatives.



6.2 NO PROJECT/NO DEVELOPMENT ALTERNATIVE

6.2.1 DESCRIPTION OF ALTERNATIVE

The No Project/No Development Alternative assumes the Los Alamitos Medical Center Specific Plan would not be implemented and the proposed land uses and other improvements would not be constructed. The project site would be unaltered and it is anticipated that the existing hospital and medical office facilities would continue to operate within its current capacity. It should be noted that the hospital currently is licensed for 167 beds.

6.2.2 IMPACT COMPARISON TO THE PROPOSED PROJECT

LAND USE

The No Project/No Development Alternative does not involve any development proposals that would affect land use plans or policies of the City of Los Alamitos or other local and regional agencies. The project site would retain its existing City *General Plan* land use and zoning designations. Although land use impacts associated with the proposed project are less than significant, development of the proposed project would ensure better healthcare services for the community. Therefore, for this reason, land use impacts associated with the No Project/No Development Alternative would increase in comparison to the proposed project. Therefore, the No Project/No Development Alternative would be considered environmentally inferior to the proposed project in this regard.

AESTHETICS, LIGHT, AND GLARE

The No Project/No Development Alternative would maintain the current views across the project site from off-site vantage points. The No Project/No Development Alternative would not further obstruct views from Katella Avenue, Cherry Street, Catalina Street, or Bloomfield Street across the project site with development of proposed uses over what currently exists today. Enhanced landscaping along the perimeter of the project site as additional buffering between the hospital campus and the adjacent uses would not occur. Under the No Project/No Development Alternative no new light sources would be created. The No Project/No Development Alternative would be considered environmentally superior to the proposed project.

TRAFFIC

Existing morning and evening peak hour operating conditions were evaluated. The results of the analysis indicate that three of the study area intersections are operating at an unacceptable Level of Service (LOS):

- Los Alamitos Blvd/Catalina St South (AM & PM Peak Hour LOS F)
- Seal Beach Blvd/I-405 SB Ramps-Beverly Manor Dr (PM Peak Hour LOS D)
- Reagan St/Katella Ave (AM & PM Peak Hour LOS F)



It is anticipated that this existing condition would continue with the No Project/No Development Alternative. The projected increase in average daily traffic (ADT) that is expected to occur with buildout of the proposed project (3,881 ADT) would not occur with this Alternative. While several study area intersections are currently operating at an unacceptable, no new trips would be added to the system, thus the No Project/No Development Alternative would be considered environmentally superior to the proposed project in this regard.

AIR QUALITY/GREENHOUSE GAS EMISSIONS

Grading and construction activities associated with the proposed project would not occur with this Alternative. Construction and operational emissions associated with the proposed Specific Plan are considered less than significant; however, without development of the Specific Plan, additional emissions would also not occur. The exception is for cumulative greenhouse gas emissions, which was determined to be a significant unavoidable impact for the proposed project. It is not anticipated that the impact would be eliminated under this Alternative, since it is not possible to determine the project-specific mitigation that would be applied to cumulative projects to reduce greenhouse gas impacts. Implementation of the No Project/No Development Alternative, as does the proposed project, would be consistent with the regional air quality plan. While the cumulative greenhouse gas emission impacts would not be eliminated, the No Project/No Development Alternative would be considered environmentally superior to the proposed project since no project-related construction or additional operational air emissions would occur.

NOISE

Under the No Project/No Development Alternative, no additional hospital or medical office buildings or parking structures would be developed within the project site. Nearby sensitive receptors would not be subjected to noise associated with project-related construction activities, or additional project-generated vehicular activity. New stationary and mobile noise sources would not occur and ambient noise levels would not increase. Thus, the No Project/No Development Alternative would be considered environmentally superior to the proposed project in this regard.

GEOLOGY, SOILS, AND SEISMICITY

Implementation of the No Project/No Development Alternative would not expose additional people and structures to potential adverse effects associated with seismic activity, adverse soils, or geologic conditions. As this Alternative would not involve any construction activities, potential soil erosion impacts would not occur. The No Project/No Development Alternative would be considered environmentally superior to the proposed project in this regard.

HAZARDS AND HAZARDOUS MATERIALS

The No Project/No Development Alternative would not increase the risks to on-site personnel and patients associated with hazardous materials use, handling, and transport, or disposal. The current hazardous materials practices and programs implemented to minimize associated risks would not be modified, and the volume of associated materials and wastes would not notably change. The hazardous materials conditions at the hospital under the proposed project would be essentially the



same as under current conditions, based on cost trends and ever-improving programs intended to minimize the amount of hazardous materials and wastes produced on-site. However, without construction of the hospital and medical office buildings, this Alternative would result in less hazardous materials risk compared to the proposed project. As such, the No Project/No Development Alternative would be considered environmentally superior to the proposed project with regard to hazards and hazardous materials.

HYDROLOGY AND WATER QUALITY

The No Project/No Development Alternative would not result in impacts to water quality associated with demolition, grading, excavation, construction activities, or project operation since development of the proposed additional hospital and medical office uses would not occur. The existing quality and quantity of stormwater and urban runoff would not change. Although hydrology and water quality impacts of the proposed project are considered less than significant on the environment, the No Project/No Development Alternative would be considered environmentally superior to the proposed project since the project site would not be altered from its current condition.

PUBLIC SERVICES AND UTILITIES

An increased demand for public services and utilities would not occur with the No Project/No Development Alternative, as no additional land uses would be developed within the project site. The No Project/No Development Alternative would be considered environmentally superior to the proposed project in this regard.

ABILITY TO MEET PROJECT GOALS AND OBJECTIVES

This Alternative's ability to meet each of the proposed project's goals and objectives are summarized below. The discussion cites the goal/objective, which is shown in italicized text, and if the Alternative meets the intent of the objective.

1. *Comply with the City of Los Alamitos General Plan Goals and Policies.*

This Alternative fails to satisfy this objective, as no new development would occur and thus would not be reviewed against the *General Plan* goals and policies.

2. *Design the project with consideration of the site's circulation, environmental, and physical opportunities and constraints.*

This Alternative fails to satisfy this objective, as no new development would occur that would allow the project applicant to design the project site to address site opportunities and constraints.

3. *Create project identity through thematically coherent and aesthetically pleasing architecture, landscaped areas, colors, signage, and entry statements.*

This Alternative fails to satisfy this objective, as no Specific Plan would be prepared or approved. Without the Specific Plan, which includes Design Guidelines, there is no one set



of regulations that are applicable to address project identity. Past development on the Medical Center campus has been subject to compliance with Conservation Element implementation measure 2-4.4.3 to “require new and substantial refurbished buildings to comply with the City’s architectural guidelines and “mission style” of design.” While the implementation measure cites City architectural guidelines, none were adopted. In addition, the “mission style” of design has been widely interpreted on the Medical Center campus as development has occurred, and has not resulted in the campus having a unifying architectural theme or aesthetically coherent components. The Medical Center campus does not have a unique project identity, and is lacking thematically coherent and aesthetically pleasing architecture, landscaped areas, colors, signage, and entry statements, as no Design Guidelines are in place today for the Medical Center.

4. *Size and phase the medical center development plan to satisfy, and be consistent with, current and anticipated future market demand.*

This Alternative would maintain the operation of the existing Los Alamitos Medical Center and associated medical office buildings at present levels; however, no additional project health care facilities would be constructed on-site. Without construction of the two new Hospital Buildings and one new Medical Office Building (MOB A), the ability to meet the expected growth in demand for health care services and to attract and maintain physician specialists would be reduced, and there would be fewer opportunities to provide patients with personalized care and state of the art technology within the existing Medical Campus. Therefore, this Alternative fails to satisfy this objective.

5. *Encourage a streamlined and predictable discretionary review process for subsequent reviews.*

This Alternative fails to satisfy this objective, as no Specific Plan would be prepared or approved. The Specific Plan outlines a planned, phased expansion of the Los Alamitos Medical Center over a 25-year period. In addition, the Specific Plan includes specifics on subsequent development entitlements to encourage a streamlined and predictable discretionary review process.

6. *Provide for coordinated land use, urban design, landscape, transportation, and infrastructure planning.*

This Alternative fails to satisfy this objective, as no Specific Plan would be prepared or approved. The Specific Plan outlines a planned, phased expansion of the Los Alamitos Medical Center over a 25-year period. In addition, the Specific Plan provides development standards for land use, circulation, and infrastructure, along with design guidelines to address site planning, architecture, orientation, massing, and landscaping.

7. *Create a sustainable development that minimizes short term and long term adverse environmental impacts to the fullest extent feasible and adequately addresses consumer needs.*

This Alternative fails to satisfy this objective, as no long-term plan for the expansion of the existing Los Alamitos Medical Center would be prepared or adopted that would help meet existing or expected growth in demand for health care services. Without the long-term plan,



there is no ability to develop facilities that meet consumer needs, while minimizing short-term and long-term impacts on the environment.

8. *Improve the local job market by providing a substantial number of permanent new jobs within and available to the local community.*

This Alternative fails to satisfy this objective, as no new permanent jobs would be created.

As detailed above, under the No Project/No Development Alternative, the proposed two Hospital Buildings, one Medical Office Building (MOB A) and two parking structures would not be developed. Therefore, none of the project objectives identified in Section 3.5, Project Objectives, would be met under the No Project/No Development Alternative.

6.3 ALTERNATIVE ONE – RELOCATION OF PARKING STRUCTURE 1 AND MOB A

6.3.1 DESCRIPTION OF ALTERNATIVE

Under Alternative One (Relocation of Parking Structure 1 and MOB A), all of the project components as proposed would be constructed:

- New Medical Office Building A
- New Hospital Building 1
- New Hospital Building 2
- New Central Plant
- Parking Structure 1
- Parking Structure

The square footage, number of hospital beds, structure height, and design characteristics, and would be the same as the proposed project. However, the site layout would be modified as follows:

- MOB A would be relocated from its proposed location along Katella Avenue between MOB A and the TotalCare Pavilion. MOB A could be relocated elsewhere on the project site. Possible relocation areas include adjacent to Hospital Building 1 off Florista Street or adjacent to MOB 3.
- Parking Structure 1 would be relocated to provide access directly off Katella Avenue and would be located between MOB 2 and the TotalCare Pavilion and the structure would be reoriented in a north-south direction.

Once complete, the Medical Center campus would include 582,824 square feet of hospital and hospital-related uses, medical office space, support facilities, and parking. At buildout, the Los Alamitos Medical Center campus would include 297,948 square feet of hospital and hospital-related uses; 260,776 square feet of medical office space; and 14,100 square feet of vital support facilities.



The floor area ratio (FAR) would increase from an existing 0.45 FAR to 0.73 FAR once the Medical Center campus is built out.

6.3.2 IMPACT COMPARISON TO THE PROPOSED PROJECT

LAND USE

Under Alternative One, the project would still require approval of a General Plan Amendment and Zone Change to Specific Plan to permit the proposed uses and development standards. This Alternative would result in the same type of land use on the site as the proposed project, except that Parking Structure 1 would be relocated to front directly onto Katella Avenue, and MOB A would be relocated elsewhere on the project site.

Given the similar site design and type of development on-site, it is anticipated that this Alternative would result in similar land use impacts compared to the proposed project and would be consistent with most goals and policies of the City's *General Plan* and *Zoning Code*. Because land use impacts on the environment would be similar under this Alternative, Alternative One would be considered neither environmentally superior nor inferior to the proposed project in this regard.

AESTHETICS, LIGHT, AND GLARE

Under Alternative One, the square footage, structure height, design characteristics, and site layout of Hospital Buildings 1 and 2, the Central Plant, and Parking Structure 2 would be the same as the proposed project. The square footage, structure height, and design characteristics for MOB A and Parking Structure 1 would be the same as the proposed project; however the site layout would be modified such as Parking Structure 1 would front directly onto Katella Avenue between MOB 2 and the TotalCare Pavilion, and MOB A would be relocated either adjacent to MOB 3 or Hospital Building 1.

The short-term impacts associated with construction activities would be similar to the proposed project under this Alternative. The long-term visual impacts from Katella Avenue would also be similar, as MOB A and Parking Structure 1 are both proposed at 50'-6"; thus resulting in similar building mass being visible from Katella Avenue. In addition, light and glare impacts would be similar to the proposed project. Architectural design, landscaping, and other visual relief features of the project would still be provided, as required by the *Los Alamitos Medical Center Specific Plan* or City standards. While the proposed project does not result in significant unavoidable aesthetics, light, or glare impacts, this Alternative would result in a similar change in visual character on the site. Therefore, Alternative One would be considered neither environmentally superior nor inferior to the proposed project in this regard.

TRAFFIC

Given that the land uses are the same as the proposed project, this Alternative would generate the same number of daily trips as the proposed project (3,881 daily trips, which includes approximately 317 AM peak hour trips and approximately 406 PM peak hour trips). However, there is the potential that the distribution of project-related trips would vary slightly from the proposed project



with the direct access to Parking Structure 1 from Katella Avenue and the relocation of MOB A. This is not anticipated to create additional impacts beyond what was identified for the proposed project. In addition, mitigation measures would still be required to reduce impacts to less than significant, as with the proposed project. Thus, Alternative One would be considered neither environmentally superior nor inferior to the proposed project in this regard.

AIR QUALITY/GREENHOUSE GAS EMISSIONS

Short-term construction and long-term operational (mobile and stationary source) impacts would be similar to the proposed project under this Alternative, given that the same amount of development is anticipated. These impacts were identified as less than significant or less than significant with the imposition of mitigation measures for the proposed project. As with the proposed project, this Alternative would result in less than significant impacts in regards to CO “hot spot” impacts. This Alternative would result in less than significant impacts for project greenhouse gas emissions; however, there would be significant unavoidable impacts for cumulative greenhouse gas emissions. While mitigation measures can be applied to the proposed project to reduce its contribution to greenhouse gas emissions, the project-specific mitigation cannot be applied to cumulative projects. Thus, this Alternative does not reduce or eliminate the significant unavoidable impact. Therefore, Alternative One would be considered neither environmentally superior nor inferior to the proposed project in this regard.

NOISE

Short-term construction and long-term operational (mobile and stationary source) impacts would be similar to the proposed project under this Alternative, given that the same amount of development is anticipated. These impacts were identified as less than significant or less than significant with the imposition of mitigation measures for the proposed project. Thus, Alternative One would be considered neither environmentally superior nor inferior to the proposed project in this regard.

GEOLOGY, SOILS, AND SEISMICITY

Implementation of Alternative One would not expose people and/or structures to subsurface fault rupture as no known active or potentially active faults exists within, or project onto, the project site and would a similar number of people to seismic ground shaking. Development of this Alternative would also present similar risks to on-site employees and patients with respect to ground failure and expansive soils, but would still require mitigation measures to reduce impacts to less than significant. All other geology and soils impacts would be less than significant under Alternative One. Therefore, Alternative One would be considered neither environmentally superior nor inferior to the proposed project in this regard.

HAZARDS AND HAZARDOUS MATERIALS

Alternative One would result in similar risks to personnel and patients associated with hazardous materials use, handling, transport, or disposal as the proposed project. The current hazardous materials practices and programs implemented to minimize associated risks would not be modified under this Alternative, similar to the proposed project, and the volume of associated materials and



wastes would be similar, based on the type and intensity of proposed development. The hazardous materials conditions at the hospital under the Alternative would be essentially the same as the proposed project. As such, this Alternative would result in similar risks associated with hazardous materials compared to the proposed project. Thus, Alternative One would be considered neither environmentally superior nor inferior to the proposed project with regard to hazards and hazardous materials.

HYDROLOGY, DRAINAGE, AND WATER QUALITY

This Alternative would result in similar amounts of impervious surface area on-site. As such, impacts regarding drainage, hydrology, floodplains, and water quality are anticipated to be comparable to the proposed project. Therefore, hydrology and drainage impacts would remain less than significant, as under the proposed project, while mitigation measures would still be required to reduce water quality impacts to a less than significant level, in compliance with NPDES permit requirements. Thus, Alternative One would be considered neither environmentally superior nor inferior to the proposed project in this regard.

PUBLIC SERVICES AND UTILITIES

Relative to the proposed project, this Alternative would result in a similar demand for fire and police protection services, water and wastewater facilities, electricity and natural gas, and the amount of solid waste requiring disposal at local and regional landfills. As is the case with the proposed project, all public service and utility impacts would be less than significant with implementation of applicable mitigation measures, including payment of fees to affected agencies. Thus, Alternative One would be considered neither environmentally superior nor inferior to the proposed project in this regard.

ABILITY TO MEET PROJECT OBJECTIVES

This Alternative's ability to meet each of the proposed project's objectives is summarized below. The discussion cites the objective, which is shown in italicized text, and if the Alternative meets the intent of the objective.

1. *Comply with the City of Los Alamitos General Plan Goals and Policies.*

This Alternative would comply with the *City of Los Alamitos General Plan Goals and Policies*. A thorough analysis of *General Plan* goals and policies is provided in Section 5.1, Land Use, which concluded that the proposed project is consistent with the applicable goals and policies. The same goals and policies are applicable to Alternative One, and thus, Alternative One is consistent with applicable General Plan goals and policies. In addition, Appendix A of the *Los Alamitos Medical Center Specific Plan* provides a discussion of consistency with General Plan goals and policies. Alternative One meets this objective.



2. *Design the project with consideration of the site's circulation, environmental, and physical opportunities and constraints.*

This Alternative includes a Specific Plan that would ensure the campus is well-planned and well-designed, and has considered the site's circulation, environmental, and physical opportunities and constraints. The Specific Plan ensures that future development is attractive and promotes quality development consistent with the visual character of the community. Alternative One meets this objective.

3. *Create project identity through thematically coherent and aesthetically pleasing architecture, landscaped areas, colors, signage, and entry statements.*

This Alternative includes a Specific Plan that would ensure that the campus has a unique identity through implementation of the development standards and design guidelines. Alternative One meets this objective.

4. *Size and phase the medical center development plan to satisfy, and be consistent with, current and anticipated future market demand.*

This Alternative includes a Specific Plan that maintains the Los Alamitos Medical Center and associated medical office buildings in its present location, as well as allows for the construction of new hospital and medical office buildings. This in turn allows for the long-term expansion of the existing hospital campus to meet the forecasted demand for health care services. Alternative One meets this objective.

5. *Encourage a streamlined and predictable discretionary review process for subsequent reviews.*

This Alternative includes a Specific Plan that outlines a planned, phased expansion of the Los Alamitos Medical Center over a 25-year period. In addition, the Specific Plan includes specifics on subsequent development entitlements to encourage a streamlined and predictable discretionary review process. Alternative One meets this objective.

6. *Provide for coordinated land use, urban design, landscape, transportation, and infrastructure planning.*

This Alternative includes a Specific Plan that outlines a planned, phased expansion of the Los Alamitos Medical Center over a 25-year period. In addition, the Specific Plan provides development standards for land use, circulation, and infrastructure, along with design guidelines to address site planning, architecture, orientation, massing, and landscaping. Alternative One meets this objective.

7. *Create a sustainable development that minimizes short term and long term adverse environmental impacts to the fullest extent feasible and adequately addresses consumer needs.*

This Alternative includes a Specific Plan, which provides a 25-year plan for the expansion of the existing Los Alamitos Medical Center to meet existing or expected growth in demand for health care services. The Specific Plan ensures the development of facilities to meet



consumer needs, while minimizing short-term and long-term impacts on the environment. The environmental impacts have been reviewed in this EIR. Alternative One meets this objective.

8. *Improve the local job market by providing a substantial number of permanent new jobs within and available to the local community.*

This Alternative includes a Specific Plan, which provides for the expansion of the existing Los Alamitos Medical Center to meet existing or expected health care service demands. The expansion would provide an addition 245 jobs on-site and in the City of Los Alamitos. Alternative One meets this objective.

Alternative One provides for the construction of two Hospital Buildings, one Medical Office Building (MOB A), and supporting facilities, which would expand both medical services and facilities on the existing Los Alamitos Medical Center campus to link inpatient and outpatient services. As detailed above, Alternative One meets all eight of the project objectives and would provide the projected long-term hospital and medical office building demand based on projected growth trends.

6.4 ALTERNATIVE TWO – PHASES 1 AND 2 ONLY

6.4.1 DESCRIPTION OF ALTERNATIVE

Alternative Two (Phases 1 and 2 Only) would include only MOB A, Hospital Building 1, and Parking Structure 1 along with supporting infrastructure (i.e., utilities). Hospital Building 2, Parking Structure 2, and the Central Plant would not be implemented.

The square footage, number of hospital beds, structure height, design characteristics, and site layout of MOB A and Hospital Building 1 would be the same as the proposed project. Consequently, this Alternative would result in a net increase over existing conditions of 88,100 square feet of hospital uses (yielding a net increase of 38 new beds), and 51,100 square feet of medical office building uses. This Alternative would result in a total of 480,624 square feet of hospital and medical office building uses and a total of 205 hospital beds, and a Floor Area Ratio of 0.60 on-site. This Alternative would reduce hospital building and central plant uses by 88,100 and 14,100 square feet, respectively, relative to the proposed project, which is a 17 percent reduction in project development.

Parking associated with this Alternative would also be reduced, due to a reduction in demand from the reduced site density. Under this Alternative, Parking Structure 1 would be constructed, while Parking Structure 2 would be eliminated from the Specific Plan. The need for parking structures would be further reduced by the additional availability for surface parking where Hospital Building 2 was proposed.



6.4.2 IMPACT COMPARISON TO THE PROPOSED PROJECT

LAND USE

Alternative Two would involve only MOB A, Hospital Building 1, and supportive facilities. Hospital Building 2 would not be constructed. Under Alternative Two, the project would still require approval of a General Plan Amendment and Zone Change to Specific Plan to permit the proposed uses and development standards. Given the 17 percent reduction in development, this Alternative would still be consistent with many of the goals and policies of the City's *General Plan* and *Zoning Code*, similar to the proposed project. However, similar to the No Project Alternative, this Alternative would not include construction of additional needed medical office space, impacting the provision of needed healthcare services, and hindering the integrity of the hospital campus as well as the overall positive community character of the City of Los Alamitos by not providing adequate healthcare facilities. In terms of land use and planning impacts, Alternative Two would be considered neither environmentally superior nor inferior to the proposed project.

AESTHETICS, LIGHT, AND GLARE

Alternative Two would result in decreased impacts in regards to aesthetic and visual resources relative to the proposed project, since the only structures that would be constructed would be Hospital Building 1, MOB A, and Parking Structure 1. This Alternative would allow for greater retention of views of and across the project site. The short-term impacts associated with construction activities would be reduced under this Alternative, as it would result in less intensity of construction activities and associated equipment, and possibly a reduced construction schedule. Architectural design, landscaping, and other visual relief features of the proposed project would still be provided, as required by the *Los Alamitos Medical Center Specific Plan* and City standards. While the proposed project does not result in significant unavoidable aesthetics, light, or glare impacts, this Alternative would reduce the change in visual character on the site. Therefore, Alternative Two would be considered environmentally superior to the proposed project in this regard.

TRAFFIC

Development of Alternative Two would result in 88,100 fewer square feet of hospital building uses and 14,100 fewer square feet of supportive uses (central plant) relative to the proposed project. As such, Alternative Two would result in approximately 1,586 fewer vehicle trips than the proposed project. However, mitigation measures would still be required to reduce impacts to the extent feasible, as with the proposed project. Thus, Alternative Two would be considered environmentally superior to the proposed project in this regard.

AIR QUALITY/GREENHOUSE GAS EMISSIONS

Short-term construction impacts would be reduced under this Alternative with the elimination of the Hospital Building 2, Central Plant, and Parking Structure 2. Operational mobile-source (vehicular) emissions would be substantially reduced under this Alternative relative to the proposed project, and impacts would be less than significant. As with the proposed project, this Alternative would result in less than significant impacts in regards to CO "hot spot" impacts. This Alternative would result



in less than significant impacts for project greenhouse gas emissions; however, there would be significant unavoidable impacts for cumulative greenhouse gas emissions. While mitigation measures can be applied to the proposed project to reduce its contribution to greenhouse gas emissions, the project-specific mitigation cannot be applied to cumulative projects. Thus, this Alternative does not reduce or eliminate the significant unavoidable impact. Although significant and unavoidable air quality impacts would occur under this Alternative, Alternative Two would be considered environmentally superior to the proposed project in this regard, due to the reduced project construction and operational emissions.

NOISE

Development of this Alternative would result in a reduction of the length of the construction period due to the elimination of Hospital Building 2, Central Plant, and Parking Structure 2. Mitigation measures would still be required to reduce construction noise impacts to less than significant levels. Similarly, although this Alternative would result in a reduction of operational mobile-source noise levels compared to the proposed project, mitigation measures would be required to reduce these impacts to less than significant. As with the proposed project, stationary noise impacts would be considered less than significant. Overall noise impacts would be reduced; therefore, Alternative Two would be considered environmentally superior to the proposed project.

GEOLOGY AND SEISMIC HAZARDS

Implementation of Alternative Two would not expose people and/or structures to subsurface fault rupture as no known active or potentially active faults exists within, or project onto, the project site and would expose fewer people and structures to seismic ground shaking. Development of this Alternative would also reduce risks on-site with respect to ground failure and expansive soils, but would still require mitigation measures to reduce impacts to less than significant. All other geology and soils impacts would be less than significant under this Alternative. Thus, Alternative Two would be considered environmentally superior to the proposed project in this regard.

HAZARDS AND HAZARDOUS MATERIALS

Alternative Two would reduce risks to personnel and patients associated with hazardous materials use, handling, transport, or disposal without construction of the Hospital Building 2, Central Plant, and Parking Structure 2. The current hazardous materials practices and programs implemented to minimize associated risks would not be modified under this Alternative, and the volume of associated materials and wastes would be reduced due to the reduction in proposed development. The hazardous materials conditions at the hospital under the Alternative would be less than the proposed project. As such, this Alternative would not result in fewer risks associated with hazardous materials compared to the proposed project. Thus, Alternative Two is considered environmentally superior to the proposed project with regard to hazards and hazardous materials.

HYDROLOGY, DRAINAGE, AND WATER QUALITY

Despite the reduced development under this Alternative, impacts regarding drainage, hydrology, floodplain, and water quality would be only slightly reduced, if at all, compared to the proposed



project. As with the proposed project, hydrology and drainage impacts would be less than significant, but mitigation measures would still be required to reduce water quality impacts to a less than significant level. As such, given the similarity in impervious surface area and required water quality control measures, Alternative Two would be considered neither environmentally superior nor inferior to the proposed project.

PUBLIC SERVICES AND UTILITIES

This Alternative would result in an incremental reduction in demand for fire and police protection services, water and wastewater facilities, electricity and natural gas, and the amount of solid waste requiring disposal at local and regional landfills. As is the case with the proposed project, all public service and utility impacts would be less than significant with implementation of applicable mitigation measures, including payment of fees to affected agencies. Given that this Alternative would create fewer demands for public services and utilities, Alternative Two is considered environmentally superior to the proposed project.

6.4.3 ABILITY TO MEET PROJECT OBJECTIVES

This Alternative's ability to meet each of the proposed project's objectives is summarized below. The discussion cites the objective, which is shown in italicized text, and if the Alternative meets the intent of the objective.

1. *Comply with the City of Los Alamitos General Plan Goals and Policies.*

This Alternative would comply with the *City of Los Alamitos General Plan Goals and Policies*. A thorough analysis of *General Plan* goals and policies is provided in Section 5.1, Land Use, which concluded that the proposed project is consistent with the applicable goals and policies. The same goals and policies are applicable to Alternative Two, and thus, Alternative Two is consistent with applicable *General Plan* goals and policies. In addition, Appendix A of the *Los Alamitos Medical Center Specific Plan* provides a discussion of consistency with *General Plan* goals and policies. Alternative Two meets this objective.

2. *Design the project with consideration of the site's circulation, environmental, and physical opportunities and constraints.*

This Alternative includes a Specific Plan that would ensure the campus is well-planned and well-designed, and has considered the site's circulation, environmental, and physical opportunities and constraints. The Specific Plan ensures that future development is attractive and promotes quality development consistent with the visual character of the community. Alternative Two meets this objective.

3. *Create project identity through thematically coherent and aesthetically pleasing architecture, landscaped areas, colors, signage, and entry statements.*

This Alternative includes a Specific Plan that would ensure that the campus has a unique identity through implementation of the development standards and design guidelines. Alternative Two meets this objective.



4. *Size and phase the medical center development plan to satisfy, and be consistent with, current and anticipated future market demand.*

This Alternative includes a Specific Plan that maintains the Los Alamitos Medical Center Hospital and associated medical office buildings in its present location, as well as allows for the construction of a new Hospital Building and Medical Office Building (MOB A). Without the construction of Hospital Building 2, the ability to help meet the expected growth in demand for health care services would be reduced. Therefore, Alternative Two would not fully meet this project objective as compared to the proposed project.

5. *Encourage a streamlined and predictable discretionary review process for subsequent reviews.*

This Alternative includes a Specific Plan that outlines a planned, phased expansion of the Los Alamitos Medical Center over a 10- to 15-year period. In addition, the Specific Plan includes specifics on subsequent development entitlements to encourage a streamlined and predictable discretionary review process. Alternative Two meets this objective.

6. *Provide for coordinated land use, urban design, landscape, transportation, and infrastructure planning.*

This Alternative includes a Specific Plan that outlines a planned, phased expansion of the Los Alamitos Medical Center over a 10- to 15-year period. In addition, the Specific Plan provides development standards for land use, circulation, and infrastructure, along with design guidelines to address site planning, architecture, orientation, massing, and landscaping. Alternative Two meets this objective.

7. *Create a sustainable development that minimizes short term and long term adverse environmental impacts to the fullest extent feasible and adequately addresses consumer needs.*

This Alternative includes a Specific Plan that maintains the Los Alamitos Medical Center Hospital and associated medical office buildings in its present location, as well as allows for the construction of a new Hospital Building and Medical Office Building (MOB A). This Alternative would reduce the timeframe of the Specific Plan to 10 to 15 years, instead of 25 years as Phase 3 would not be constructed. Not constructing Hospital Building 2 reduces the ability of the Los Alamitos Medical Center to meet existing or expected growth in demand for health care services. However, the Specific Plan ensures the development of facilities to generally meet consumer needs, while minimizing short-term and long-term impacts on the environment. The environmental impacts have been reviewed in this EIR. Therefore, Alternative Two would not fully meet this project objective as compared to the proposed project.

8. *Improve the local job market by providing a substantial number of permanent new jobs within and available to the local community.*

This Alternative includes a Specific Plan, which provides for the expansion of the existing Los Alamitos Medical Center to meet existing or expected health care service demands. The expansion would provide an addition 188 jobs on-site and in the City of Los Alamitos,



which is less than that of the proposed. Therefore, Alternative Two would not fully meet this project objective as compared to the proposed project.

Alternative Two only provides for the construction of Hospital Building 1, MOB A, and Parking Structure 1 but does not allow for the construction of Hospital Building 2 and the Central Plant that would provide additional opportunities to expand both medical services and facilities on the campus and link inpatient and outpatient services. As detailed above, Alternative Two meets objectives 1, 2, 3, 5, and 6; and partially meets objectives 4, 7, and 8. Alternative Two partially meets the objectives of the proposed project by increasing hospital capacity to meet some of the increasing needs of its service area.

6.5 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA Guidelines Section 15126.6 indicates that if the No Project Alternative is the Environmentally Superior Alternative, then the EIR shall also identify an environmentally superior alternative among the other alternatives.

The context of an environmentally superior alternative for this EIR is based on the consideration of several factors including the project's objectives, as described in Section 3.5, Project Objectives, and the alternative's ability to fulfill the objectives with minimal impacts to the surrounding environment.

6.5.1 NO PROJECT/NO DEVELOPMENT ALTERNATIVE

The No Project/No Development Alternative results in fewer impacts to aesthetics, light, and glare; traffic; air quality/greenhouse gas emissions; noise; geology and seismic hazards; hazards and hazardous materials; hydrology, drainage, and water quality, and public services and utilities. Greater impacts would be anticipated for land use. The one significant unavoidable impact for cumulative greenhouse gas emissions would occur under this Alternative.

The No Project/No Development Alternative would not implement the overall objective of the proposed project, which is to provide adequate hospital and medical office facilities to meet projected future demands in the service area. Under this Alternative, the proposed hospital and medical office uses would not be developed. Therefore, none of the project objectives identified Section 3.5, Project Objectives, would be met under the No Project/No Development Alternative.

The No Project/No Development Alternative would result in fewer project-related environmental impacts and does not eliminate the one significant unavoidable impact. Also, this Alternative does not meet any of the objectives of the project; in particular it would not help meet the healthcare needs of the community.



6.5.2 ALTERNATIVE ONE – RELOCATION OF PARKING STRUCTURE 1 AND MOB A

In comparison to the proposed project, Alternative One would result in similar impacts relative to: land use; traffic, air quality/greenhouse gas emissions; noise, geology and seismic hazards; hazards and hazardous materials; hydrology, drainage, and water quality; and public services and utilities. Significant and unavoidable impacts would still occur with respect to cumulative greenhouse gas emissions.

Alternative One provides for the construction of the same buildings as the proposed project with the same square footage, number of hospital beds, structure height, and design characteristics. However, the site layout would be modified. MOB A would be relocated from its proposed location along Katella Avenue between MOB A and the TotalCare Pavilion. MOB A could be relocated elsewhere on the project site. Possible relocation areas include adjacent to Hospital Building 1 off Florista Street or adjacent to MOB 3. Parking Structure 1 would be relocated to provide access directly off Katella Avenue and would be located between MOB 2 and the TotalCare Pavilion and the structure would be reoriented in a north-south direction. As detailed above, Alternative One meets all eight objectives.

6.5.3 ALTERNATIVE TWO – PHASES 1 AND 2 ONLY

In comparison to the proposed project, Alternative Two would result in similar impacts in regard to land use; and hydrology, drainage, and water quality. This Alternative would result in a reduction of impacts in regard to aesthetics, light, and glare; traffic; air quality/greenhouse gas emission; noise; geology and seismic hazards; hazards and hazardous materials; and public services and utilities. Significant and unavoidable impacts would still occur with respect to cumulative greenhouse gas emissions.

Alternative Two provides for the construction of Hospital Building 1, MOB A, and supporting facilities, which would expand both medical services and facilities on the existing Los Alamitos Medical Center campus that would link inpatient and outpatient services. As detailed above, Alternative Two meets objectives 1, 2, 3, 5, and 6; and partially meets objectives 4, 7, and 8. Alternative Two would attain most of the basic objectives of the project; in particular, it would help meet future health care needs and help maintain the viability of the hospital.

6.5.4 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

As noted above, the determination of an environmentally superior alternative is based on the consideration of how the alternative fulfills the project objectives and how the alternative either reduces significant, unavoidable impacts or substantially reduces the impacts to the surrounding environment. In consideration of these factors, Alternative Two is selected as the Environmentally Superior Alternative to the proposed project.



Los Alamitos Medical Center Specific Plan Program Environmental Impact Report

Although the No Project/No Development Alternative would result in the fewest environmental impacts and would not contribute to cumulative significant environmental impacts associated with the project, it does not meet any of the objectives of the project and is therefore not considered feasible.

Alternative Two would result in the fewest environmental impacts in comparison to the proposed project, eliminates the significant traffic impacts, and would meet most of the basic objectives of the project. Therefore, Alternative Two is the environmentally superior alternative.

**Table 6-1
Comparison of Alternatives**

Environmental Category	Proposed Project	No Project/No Development	Alternative One (Relocation of Parking Structure 1 and MOB A)	Alternative Two (Phases 1 and 2 Only)
Land Use	Less Than Significant	▼	●	●
<i>Requires Specific Plan</i>	Yes	No	Yes	Yes
Aesthetics, Light, and Glare	Less Than Significant	▲	●	▲
Traffic	Less Than Significant	▲	●	▲
Air Quality/Greenhouse Gas Emissions	Significant Cumulative Greenhouse Gas Emissions	▲	●	▲
<i>Reduces Significant Unavoidable Air Quality Impacts</i>		Yes	No	Yes
<i>Eliminates Significant Unavoidable Air Quality Impacts</i>		No	No	No
Noise	Less Than Significant	▲	●	▲
Geology and Seismic Hazards	Less Than Significant	▲	●	▲
Hazards and Hazardous Materials	Less Than Significant	▲	●	▲
Hydrology, Drainage, and Water Quality	Less Than Significant	▲	●	●
Public Services and Utilities	Less Than Significant	▲	●	▲
Ability to Meet Most Project Objectives	Yes	No	Yes	Yes
● Indicates an impact that is equal to the proposed project (neither environmentally superior or inferior). ▼ Indicates an impact that is greater than the proposed project (environmentally inferior). ▲ Indicates an impact that is less than the proposed project (environmentally superior).				



Los Alamitos Medical Center Specific Plan Program Environmental Impact Report

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7.0 Growth Inducing Impacts of the Proposed Action



7.0 GROWTH INDUCING IMPACTS OF THE PROPOSED ACTION

In accordance with *CEQA Guidelines* Section 15126.2(d), the following discussion addresses ways in which the proposed project could foster employment or population growth, whether directly or indirectly in the surrounding environments. *CEQA* requires a discussion of how a project could increase population or employment in the areas surrounding a project, as well as analysis of the infrastructure and planning changes that would be necessary to implement the project. This section of the EIR discusses the manner in which the proposed project could affect growth in Los Alamitos.

Growth-inducing impacts fall into two general categories: direct and indirect. Direct growth-inducing impacts are generally associated with the provision of urban services to an undeveloped area. The provision of these services to a site and the subsequent development can serve to induce other landowners in the vicinity to convert their property to urban uses. In the case of the Los Alamitos Medical Center Specific Plan, project implementation would occur on an existing medical campus accessed by a major thoroughfare (Katella Avenue) as defined by the City's *General Plan*, and which is bounded on all sides by established neighborhoods. Indirect, or secondary growth-inducing impacts, consist of growth induced in the region by the additional demands for housing, goods and services associated with the population increase caused by, or attracted to, a new project.

The project proposes the development of an additional 164 hospital beds, two new hospital buildings (Hospital Buildings 1 and 2), one new medical office building (MOB A) to be used for additional outpatient and associated medical uses, and a new central plant. In addition, one medical office building (MOB 1) would be demolished along with the existing central plant. Buildout of the proposed Los Alamitos Medical Center Specific Plan involves the net increase of 164 hospital beds (totaling 331 beds), 176,200 square feet of Hospital Buildings, and 51,100 square feet of Medical Office Building.

Typical MOBs range from a low of 1,466 gross square feet (GSF) per provider to a high of 2,125 GSF per provider, averaging 1,796 GSF per provider.¹ For purposes of the analysis, it was assumed that 20 percent of the total space in the medical office buildings is devoted to diagnostic and treatment support services. Based upon the average size of 1,796 square feet per provider offices (POs), the remaining 40,880 square feet (from the total of 51,100 net square feet) would be able to support approximately 23 provider offices. It is estimated that each provider office supports a staff ratio of 4.7 staff per provider, which includes staff located in administrative buildings. As such, the proposed project would generate the demand for approximately 108 support staff. Therefore, an increase of 51,100 net square feet of medical office building space would result in an increase of approximately 131 positions (23 practitioners and 108 support staff). Ultimate buildout of the proposed hospital uses (additional 176,200 square feet) would require an additional 114 hospital staff, which is approximately one employee for every 1,552 square feet of hospital space. Given that the City is seeking to expand employment opportunities within the City, the additional 245 employees are considered to be a beneficial impact of implementing the proposed project and a beneficial impact to the City.

¹ EIP Associates, *Kaiser Permanente Redwood City Medical Center Master Plan Draft EIR*, 2002.



The original purpose of achieving jobs/housing balance within the Southern California region is outlined in the Southern California Association of Governments' (SCAG) *Regional Comprehensive Plan and Guide*, and is intended to result in a balanced development and a reduction in vehicle miles traveled within a region and, thereby, a reduction in roadway congestion, fuel consumption, and air emissions.

According to SCAG, the jobs/housing ratio for the City of Los Alamitos in 2010 is 4.07:1 in year 2010, and is projected to be 4.03:1 in the year 2035, indicating that the City will continue to be jobs rich.² The proposed project represents 1.4 percent of the total 17,859 jobs³ estimated by SCAG for the year 2035 in the City of Los Alamitos. SCAG's jobs/housing goal for the Orange County subregion is 0.54:1⁴ in year 2035. Buildout of the proposed project would contribute to the SCAG jobs/housing goal of 0.54:1 for the Orange County subregion by providing an additional 245 employment positions. The proposed project represents less than 0.01 percent of the total 1,981,901 jobs⁵ estimated by SCAG for the year 2035 in the Orange County subregion. Therefore, the proposed project would have a beneficial employment impact. The proposed project does not result in a net loss of jobs in the City, but instead results in a net increase. The proposed project would have a less than significant employment impact and would not result in an exceedance of official regional or local projections.

The proposed Los Alamitos Medical Center Specific Plan would result in direct growth by adding approximately 245 additional employment positions. SCAG estimates the City's employment will be 17,859 employees by 2035. The increase in jobs at the Los Alamitos Medical Center campus would directly contribute to overall employment in Los Alamitos and the Orange County subregion. SCAG's projected jobs/housing balance for the City of Los Alamitos will be 4.03:1 in year 2035. SCAG projects the Orange County subregion will have a job/housing balance of 0.54:1 in year 2035. New employment opportunities generated from implementation of the proposed project would maintain the jobs-to-housing balance within the City of Los Alamitos and the Orange County subregion.

The direct effects of the project would create two types of secondary effects or indirect growth. First, the direct spending associated with the increased retail activity would stimulate production of associated products and services in the economy. Although this secondary impact would not be substantial in terms of the local economy, existing firms throughout Orange and Los Angeles Counties, and in some cases beyond, would increase production. They would increase their purchases for materials and supplies, and at some point, they would hire new workers. Second, the new employees would form households. These new households, through spending, would increase demand for housing and a range of related services. Thus, the direct employment increase would, in turn, increase indirect employment, households, and population.

Construction of the proposed project would directly, but temporarily, increase construction employment. Given the relatively limited and standard nature of the construction anticipated, it is to be expected that the demand for construction employment would be met within the existing and

² Southern California Association of Governments (SCAG), Adopted 2008 RTP Growth Forecast, by City, <http://www.scag.ca.gov/forecast/index.htm>. Accessed June 30, 2010.

³ Ibid

⁴ Ibid

⁵ Ibid



future labor market in Los Alamitos and/or Orange County. Neither a substantial quantity of specialized labor nor construction workers from outside the City or County would be expected to be induced to relocate temporarily or to commute long distances.

The proposed project does not call for the construction of major new roadways or utility systems in undeveloped areas that would stimulate development in those undeveloped areas, although the infrastructure in a portion of the Los Alamitos Medical Center Specific Plan campus area would be improved. Thus, the proposed project would not induce growth by removing infrastructural barriers, by providing new infrastructure, and/or creating new transportation access to a previously inaccessible area.

In conclusion, growth and the rate of growth shape both the physical and social structure of communities. As indicated above, the proposed project would facilitate and contribute to growth in Los Alamitos. The increase in jobs would be minimal and would contribute to the SCAG's jobs/housing goal of 4.03:1 for the City of Los Alamitos and jobs/housing goal of 0.54:1 for the Orange County subregion in year 2035 by providing an additional 245 employment positions. In accordance with *CEQA Guidelines* Section 15126.2, this discussion of growth inducement is not intended to be characterized as necessarily beneficial, detrimental, or of little significance to the environment. The growth inducement section is provided for information purposes so that the public and local decision-makers have an appreciation of the potential long-term growth implications of the proposed project.



Los Alamitos Medical Center Specific Plan Program Environmental Impact Report

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8.0 Effects Found Not to be Significant



8.0 EFFECTS FOUND NOT TO BE SIGNIFICANT

The City of Los Alamitos Community Development Department conducted an Initial Study in April 2010 to determine significant effects of the proposed project. In the course of this evaluation, certain impacts of the proposed project were found to be less than significant due to the inability of a project of this scope to create such impacts or the absence of project characteristics producing effects of this type. The effects determined not to be significant are not required to be included in primary analysis sections of the EIR. In accordance with *CEQA Guidelines* Section 15128, the following section identifies those impacts determined to be less than significant in the Initial Study. A copy of the Initial Study and the explanation for the less than significant conclusions of the following environmental issue areas are included in Appendix A, Initial Study/Notice of Preparation. This section also summarizes which impacts were found to be less than significant in the EIR, both with and without the imposition of mitigation measures.

8.1 INITIAL STUDY CONCLUSIONS

AESTHETICS

- Have a substantial adverse effect on a scenic vista.
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.

AGRICULTURAL AND FORESTRY RESOURCES

- Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use.
- Conflict with existing zoning for agricultural use, or a Williamson Act contract.
- Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g)).
- Result in the loss of forest land or conversion of forest land to non-forest use.
- Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use.



AIR QUALITY

- Create objectionable odors affecting a substantial number of people.

BIOLOGICAL RESOURCES

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

CULTURAL RESOURCES

- Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines §15064.5.
- Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines §15064.5.
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.
- Disturb any human remains, including those interred outside of formal cemeteries.



GEOLOGY AND SOILS

- Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
 - Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.
 - Landslides.
- Result in substantial soil erosion or the loss of topsoil.
- Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water.

HAZARDS AND HAZARDOUS MATERIALS

- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment.
- Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

HYDROLOGY AND WATER QUALITY

- Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map.
- Place within a 100-year flood hazard area structures which would impede or redirect flood flows.
- Inundation by seiche, tsunami, or mudflow.

LAND USE AND PLANNING

- Physically divide an established community.
- Conflict with any applicable habitat conservation plan or natural community conservation plan.



MINERAL RESOURCES

- Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.
- Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

POPULATION AND HOUSING

- Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).
- Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere.
- Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

PUBLIC SERVICES

- Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:
 - Schools
 - Parks
 - Other Public Facilities

RECREATION

- Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.
- Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

TRANSPORTATION/TRAFFIC

- Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks.



MANDATORY FINDINGS OF SIGNIFICANCE

- Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory.

8.2 EIR CONCLUSIONS

8.2.1 LESS THAN SIGNIFICANT IMPACTS WITHOUT MITIGATION

The EIR concluded that impacts were less than significant without Mitigation for the following impact areas.

LAND USE

- The proposed project could conflict with the City of Los Alamitos General Plan.
- The proposed project could conflict with the standards and requirements of the City of Los Alamitos Zoning Code.
- The proposed project could conflict with the standards and requirements of the Airport Environs Land Use Plan.
- Implementation of the proposed project and other related cumulative projects could result in cumulatively considerable impacts involving conflicts with applicable land use plans, policies, or regulations.

TRAFFIC

- Development associated with implementation of the proposed project could result in adverse impacts to the function of state highway facilities in the project area under forecast year 2013 traffic conditions.
- Development associated with implementation of the proposed project could result in adverse impacts to the function of state highway facilities in the project area under buildout forecast year 2035 traffic conditions.
- Development associated with implementation of the proposed project could result in adverse impacts to the function of CMP in the project area under forecast year 2013 traffic conditions.



- Development associated with the implementation of the proposed project could result in adverse impacts to the function of CMP in the project area under buildout forecast year 2035 traffic conditions.

AIR QUALITY

- Development associated with implementation of the proposed project could result in an overall increase in mobile and stationary source emissions.
- Development associated with implementation of the proposed project could result in an overall increase in carbon monoxide hotspot emissions within the City.

NOISE

- Development associated with implementation of the proposed project could result in temporary vibration impacts to nearby sensitive receptors during grading and construction activities.
- Traffic generated by the proposed project could contribute to existing traffic noise in the area of exceed the City's established standards.
- Development associated with implementation of the proposed project could result in stationary-source noise impacts on nearby sensitive receptors.
- Implementation of the proposed project and other related cumulative projects could result in cumulatively considerable construction noise impacts.

GEOLOGY AND SEISMIC HAZARDS

- Implementation of the proposed project and other related cumulative projects could result in cumulatively considerable impacts related to geologic soils, and seismic hazards.

HAZARDS AND HAZARDOUS MATERIALS

- Development associated with implementation of the proposed project could result in an increased risk of upset associated with the routine use, generation, and transport of hazardous materials, hazardous waste, or accidental emission of hazardous materials or gases, which may potentially pose a health or safety hazard.
- Development associated with implementation of the proposed project could increase hazardous waste generation by the hospital and medical office uses, which could substantially increase risks of environmental exposure.



- Development associated with implementation of the proposed project could increase the number of individuals exposed to, but not the nature of, physical safety hazards at the Los Alamitos Medical Center.
- Implementation of the proposed project and other related cumulative projects could result in cumulatively considerable hazards and hazardous material impacts.

HYDROLOGY, DRAINAGE, WATER QUALITY

- Future development resulting from the implementation of the proposed project could result in urban uses being located on-site, which are in dam inundation areas of the City.

ELECTRICITY AND NATURAL GAS

- Development associated with implementation of the proposed project could increase the demand for electricity services and facilities.
- Development associated with Implementation of the proposed project could increase the demand for natural gas services and facilities.
- Implementation of the proposed project and other related cumulative projects could result in cumulatively considerable electricity and natural gas impacts.

8.2.2 LESS THAN SIGNIFICANT IMPACTS WITH MITIGATION INCORPORATION

The EIR Concluded that impacts were less than significant with the imposition of mitigation measures for the following impact areas.

AESTHETICS

- Construction activities associated with all phases of the proposed project could result in grading and construction activities that could temporarily alter the existing visual character of the project site and the surrounding area and introduce new sources of light/glare.
- Development associated with implementation of the proposed project could alter the existing visual character and viewshed from surrounding locations.
- Development associated with implementation of the proposed project could affect daytime and/or nighttime views in the area.
- Implementation of the proposed project and other related cumulative projects could result in cumulatively considerable aesthetics, light, and glare impacts.



TRAFFIC

- Development associated with implementation of the proposed project could result in adverse impacts to the function of intersections in the project area under forecast year 2013 traffic conditions.
- Development associated with implementation of the proposed project could result in adverse impacts to the function of intersections in the project area under forecast year 2035 traffic conditions.
- Development associated with the implementation of the proposed project could result in hazardous conditions due to a design feature or incompatible use or could result in inadequate emergency access.
- Implementation of the proposed project could result in adverse impacts related to the function of parking systems during construction activities.
- Development associated with implementation of the proposed project and other related cumulative projects could result in cumulatively considerable traffic impacts.

AIR QUALITY

- Development associated with implementation of the proposed project could generate dust and equipment emissions during construction.
- Implementation of the proposed project could conflict with the air quality management plan.
- Development associated with Implementation of the proposed project could generate greenhouse gas emissions that could have a significant impact on the environment.

NOISE

- Development associated with implementation of the proposed project could result in potentially significant adverse noise impacts on surrounding sensitive receptors during construction.

GEOLOGY AND SEISMIC HAZARDS

- Development associated with implementation of the proposed project could be subject to high levels of groundshaking during a seismic event, which could result in substantial damage to on-site buildings.
- Development associated with implementation of the proposed project could be subject to liquefaction impacts resulting from groundshaking.



- Development associated with implementation of the proposed project could be located on expansive soils creating potential risk to life or property.

HAZARDS AND HAZARDOUS MATERIALS

- Accidental release of hazardous materials during construction could result in a risk to workers, the public, or environment.

HYDROLOGY, DRAINAGE, WATER QUALITY

- Development associated with implementation of the proposed project could create or contribute to runoff water which could exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff.
- Construction and operation of the proposed project could result in adverse water quality impacts.
- Development associated with implementation of the proposed project could substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which could result in substantial erosion or siltation on- or off-site.
- Implementation of the proposed project and other related cumulative projects could contribute to cumulative hydrology and water quality impacts.

FIRE PROTECTION

- Construction of the proposed project could result in the need for additional fire flows and protection services.
- Operation of the proposed project could result in the need for additional fire protection services.
- Implementation of the proposed project and other related cumulative projects could result in cumulatively considerable impacts to fire protection services.

POLICE PROTECTION

- Construction of the proposed project could result in the need for additional police protection facilities and personnel.
- Operation of the proposed project could result in the need for additional police protection facilities and personnel.



- Implementation of the proposed project and other related cumulative projects could result in cumulatively considerable impacts to police protection facilities and personnel.

WATER

- Development associated with implementation of the proposed project could result in an increased demand for water supplies and infrastructure within the City.
- Implementation of the proposed project and other related cumulative projects could result in cumulative considerable impacts to water systems, including increased demand and infrastructure facilities within the City.

WASTEWATER

- Development associated with implementation of the proposed project could result in increased demand for wastewater services and infrastructure in the City.
- Implementation of the proposed project and other related cumulative projects could result in cumulatively considerable impacts to wastewater systems, including increased demand and infrastructure facilities within the City.

SOLID WASTE

- Development associated with implementation of the proposed project could potentially result in increased solid waste generation in exceedance of landfill capacity during construction.
- Development associated with implementation of the proposed project could potentially result in increased solid waste generation in exceedance of landfill capacity during operation.
- Implementation of the proposed project and other related cumulative projects could result in cumulatively considerable impacts related to solid waste disposal services and landfill disposal capacity.



9.0 Significant Environmental Effects Which Cannot be Avoided if the Proposed Action is Implemented



9.0 SIGNIFICANT ENVIRONMENTAL EFFECTS WHICH CANNOT BE AVOIDED IF THE PROPOSED ACTION IS IMPLEMENTED

CEQA Guidelines Section 15126(b) requires an EIR to “describe any significant impacts, including those which can be mitigated but not reduced to a level of insignificance. Where there are impacts that cannot be alleviated without imposing an alternative design, their implications and the reasons why the project is being proposed, notwithstanding their effect, should be described.”

Section 5.0 of this EIR provides a description of the potential environmental impacts of the proposed project and recommends General Plan goals and policies as well as mitigation measures to reduce impacts to a less than significant level, where possible. After implementation of the recommended goals, policies, and mitigation measures, most of the potentially significant impacts associated with the proposed project would be reduced to less than significant levels. However, the impacts listed below could not be feasibly mitigated and would result in a significant unavoidable impact associated with approval of the proposed project.

AIR QUALITY

Cumulative Greenhouse Gas Emissions Impacts – Although the project-related GHG emissions would be consistent with the goals of AB 32 with implementation of Mitigation Measure AQ-5, cumulative GHG impacts would be significant and unavoidable, as cumulative GHG emissions could hinder the statewide GHG reduction goals of AB 32.



Los Alamitos Medical Center Specific Plan Program Environmental Impact Report

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10.0 Significant Irreversible Environmental Changes Which Would Be Involved If The Proposed Project Were Implemented



10.0 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES WHICH WOULD BE INVOLVED IF THE PROPOSED PROJECT WERE IMPLEMENTED

CEQA Guidelines Section 15126.2(c) requires a discussion of any significant irreversible environmental changes that would be caused by the proposed project. Specifically, *CEQA Guidelines* Section 15126.2(c) states:

“Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts, and particularly, secondary impacts (such as highway improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also, irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.”

The environmental effects of the proposed project are discussed in [Section 5.0](#). The expansion of the Los Alamitos Medical Center includes a three-phase master planned expansion estimated to be constructed over a period of approximately 25 years. The expansion will result in the addition of hospital beds, a new medical office building (MOB A), and two parking structures. As part of the proposed project, one existing medical office building (MOB 1) will be demolished as well as a small administration building.

The hospital master plan expansion, which is the basis for the Specific Plan and its environmental analysis, is summarized as follows, by phase.

Phase 1. Three existing medical office buildings, the TotalCare Pavilion, and the existing Main Hospital Building will remain. Phase 1 consists of construction of a new 75,100 square foot medical office building (MOB A), and a parking structure north of MOB A. Kaylor Street will be vacated as part of this phase; Kaylor Street in Phase 1 will remain in its current configuration and will ultimately function as a private street from the north, and a driveway into the Medical Center Campus from the south.

Phase 2. Phase 2 consists of the demolition of an existing 24,000 square foot medical office building (MOB 1) south of the existing Main Hospital Building. A new hospital building (Hospital Building 1), totaling 92 beds, will be constructed. The emergency room will be relocated to the ground floor of the new Hospital Building 1 and the vacated emergency room space will be re-configured for outpatient services for special procedures. Patient rooms in the existing Main Hospital Building will be re-configured. An existing administration/warehouse building located at the intersection of Catalina and Kaylor Streets totaling 15,099 square feet is proposed for demolition and parking will be re-configured.



Phase 3. Phase 3 consists of the construction of the second hospital building (Hospital Building 2) totaling 126 beds, located to the north of Hospital Building 1. Construction of a second parking structure to meet parking requirements is also proposed. A new central plant building to service the new and existing hospital buildings is proposed on Catalina near Kaylor.

Expansion of the Medical Center would entail the commitment of natural resources, energy, land, and human resources. Manpower would also be committed for the development of residential and non-residential uses. Ongoing maintenance and operation of new developments would entail a further commitment of energy resources in the form of petroleum products (diesel fuel and gasoline), natural gas, and electricity. Long-term impacts would also result from an increase in vehicular traffic, and the associated air pollutant and noise emissions. This commitment of resources would be a long-term obligation in view of the fact that, practically speaking, it is impossible to return the land to its original condition once it has been developed. In summary, implementation of the proposed project would involve the following irreversible environmental changes:

- Soil erosion associated with grading and construction activities.
- Alteration of the human environment as a consequence of the development process, which commits land to residential uses, commercial uses (retail/general, office lodging), and industrial uses, and intensifies land uses within the City.
- Increased usage of public services and utilities (including fire protection, police protection, wastewater, solid waste, parks and recreational facilities, schools, natural gas, and electricity) during and after construction of new developments, which would result in temporary and permanent uses of these resources.
- Temporary and permanent commitment of energy and water resources as a result of the construction, long-term operation and maintenance of new developments, which may be considered a permanent investment.
- Utilization of various new raw materials (such as lumber, sand, and gravel) for construction.
- Gradual and permanent increases in Greenhouse Gas emissions and NOX emissions from construction to build the project and traffic generated during the buildout of the Specific Plan.



11.0 References



11.0 REFERENCES

11.1 LEAD AGENCY AND EIR PREPARER

LEAD AGENCY

City of Los Alamitos
Community Development Department
3191 Katella Ave.
Los Alamitos, CA 90720

Mr. Steven Mendoza, Community Development Director
Ms. Dani Wray, Assistant Planner

PREPARER OF THE LOS ALAMITOS MEDICAL CENTER SPECIFIC PLAN

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Irvine, CA 29618

Ms. Margit Allen, Project Manager, AICP

NU Architecture

Evan Obaseki, Architect

PREPARER OF THE ENVIRONMENTAL IMPACT REPORT

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Mr. Brian Allee, Environmental Analyst
Mr. Paul Tabone, Environmental Analyst
Mr. Eddie Torres, INCE, Air Quality & Noise Studies Manager
Ms. Kelly Chiene, Air Quality Analyst
Mr. Paul Martin, PE, PTOE, Traffic Study Manager
Mr. Phillip Masto, Traffic Analyst
Mr. Gary Gick, Document Preparation
Ms. Linda Bo, Graphic Artist



11.2 ORGANIZATIONS AND INDIVIDUALS CONTACTED

City of Los Alamitos
Community Development Department
3191 Katella Ave.
Los Alamitos, CA 90720

Mr. Steven Mendoza, Community Development Director
Ms. Dani Wray, Associate Planner

City of Los Alamitos
Police Department
3201 Katella Avenue
Los Alamitos, CA 90720

Mr. Todd Matern, Chief of Police

Orange County Fire Authority
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Irvine, CA 92602

Ms. Michele Hernandez, Management Analyst

AECOM for Rossmoor/Los Alamitos Sewer District
1501 Quail Street
Newport Beach, CA 92660

Mr. Jesus Lopez, PE

Rossmoor/Los Alamitos Area Sewer District
3243 Katella Avenue
Los Alamitos, CA 90720

Ms. Susan Bell, General Manager

Southern California Edison
2800 East Willow St
Long Beach, CA 90806

Mr. Mark Pearson, Planner



The Gas Company
1919 State College Blvd.
Anaheim, CA 92806

Mr. Paul Simonoff, Technical Services Supervisor

Orange County Sanitation District
10844 Ellis Avenue,
Fountain Valley, CA 92708

Ms. Wendy Smith, P.E., Planning Division

Orange County Airport Land Use Commission
John Wayne Airport-Administration Building
3160 Airway Avenue
Costa Mesa, CA 92626

Ms. Kari A. Rigoni, Executive Officer



Los Alamitos Medical Center Specific Plan Program Environmental Impact Report

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12.0 Mitigation Monitoring Program



12.0 MITIGATION MONITORING AND REPORTING PROGRAM

Sections 1.0 and 5.0 of this EIR identify the mitigation measures that will be implemented to reduce the impacts associated with the Los Alamitos Medical Center Specific Plan project. The *California Environmental Quality Act (CEQA)* was amended in 1989 to add Section 21081.6, which requires a public agency to adopt a monitoring and reporting program for assessing and ensuring compliance with any required mitigation measures applied to proposed development. As stated in Section 21081.6 of the *Public Resources Code*,

... the public agency shall adopt a reporting or monitoring program for the changes to the project which it has adopted, or made a condition of project approval, in order to mitigate or avoid significant effects on the environment.

Section 21081.6 provides general guidelines for implementing mitigation monitoring programs and indicates that specific reporting and/or monitoring requirements, to be enforced during project implementation, shall be defined prior to final certification of the EIR.

The mitigation monitoring table below lists those mitigation measures that may be included as conditions of approval for the proposed project. These measures correspond to those summarized in Section 1.0 and discussed in Section 5.0. To ensure that the mitigation measures are properly implemented, a monitoring program has been devised which identifies the timing and responsibility for monitoring each measure. The project applicant will have the responsibility for implementing the measures, and various departments of the City of Los Alamitos will have the primary responsibility for monitoring and reporting the implementation of the mitigation measures.



Los Alamitos Medical Center Specific Plan Program Environmental Impact Report

LOS ALAMITOS MEDICAL CENTER SPECIFIC PLAN PROGRAM ENVIRONMENTAL IMPACT REPORT							
MITIGATION MONITORING AND REPORTING PROGRAM							
Mitigation Measure		Monitoring Phase	Monitoring Agency	Action Indication Compliance	Verification of Compliance		
					Initials	Date	Remarks
AESTHETICS							
AES-1	Construction equipment staging areas shall use appropriate screening (i.e., temporary fencing with opaque material) to buffer views of construction equipment and material, when feasible. Staging locations shall be indicated in the Construction Management Plan (CMP).	During Pre-Construction and Construction	City of Los Alamitos Community Development Department Building and Safety Division	Periodic Site Inspections During Construction			
AES-2	All construction-related lighting shall be located and focused away from adjacent residential areas and consist of the minimal wattage necessary to provide safety at the construction site. A construction safety lighting plan shall be submitted to the City for review concurrent with Grading Permit applications and the Construction Management Plan (CMP).	Concurrent with Grading Permit Application	City of Los Alamitos Community Development Department Building and Safety Division	Periodic Site Inspections During Construction Review and Approval of Safety Lighting Plan			
AES-3	Prior to issuance of building permits, each structure shall undergo Site Plan Review approval in conformance with the adopted Specific Plan and conditions of approval for overall site design and architectural conformity.	Prior to Issuance of Building Permit	City of Los Alamitos Community Development Department Planning Division	Review and Approval of Site Plan(s) at Plan Check			
AES-4	Prior to site plan approval, the City of Los Alamitos Community Development Department shall ensure that the following elements are included in the project plans, as appropriate: The project plans shall comply with all lighting standards contained in the <i>Los Alamitos Medical Center Specific Plan</i>.	Prior to Site Plan Approval	City of Los Alamitos Community Development Planning Division	Review and Approval of Site Plan(s) at Plan Check			



Los Alamitos Medical Center Specific Plan Program Environmental Impact Report

LOS ALAMITOS MEDICAL CENTER SPECIFIC PLAN PROGRAM ENVIRONMENTAL IMPACT REPORT						
MITIGATION MONITORING AND REPORTING PROGRAM						
Mitigation Measure	Monitoring Phase	Monitoring Agency	Action Indication Compliance	Verification of Compliance		
				Initials	Date	Remarks
- The project plans shall comply with all lighting standards contained in the City's <i>Municipal Code</i>, including, but not limited to Chapter 8.48, Lighting Performance Standards, Section 17.14.040, Light and Glare, and Section 17.16.050, Exterior Lighting, as applicable. - All exterior lighting shall be designed and located as to avoid intrusive effects on adjacent residential properties and undeveloped areas adjacent to the project site. Low-intensity street lighting and low-intensity exterior lighting shall be used throughout the development to the extent feasible. Lighting fixtures shall use shielding, if necessary, to prevent spill lighting on adjacent off-site uses. - Design and placement of site lighting shall minimize glare affecting adjacent properties, buildings, and roadways. - Fixtures and standards shall conform to state and local safety and illumination requirements. - Development projects shall use minimally reflective glass, and all other materials used on exterior building and structures shall be selected with attention to minimizing reflective glare. - Automatic timers on lighting shall be designed to maximize personal safety during nighttime use while saving energy.						



Los Alamitos Medical Center Specific Plan Program Environmental Impact Report

LOS ALAMITOS MEDICAL CENTER SPECIFIC PLAN PROGRAM ENVIRONMENTAL IMPACT REPORT							
MITIGATION MONITORING AND REPORTING PROGRAM							
Mitigation Measure		Monitoring Phase	Monitoring Agency	Action Indication Compliance	Verification of Compliance		
					Initials	Date	Remarks
TRAFFIC							
TRF-1a	Kaylor Street/Katella Avenue. Prior to issuance of certificate of occupancy for MOB A, the project applicant shall install the following improvements: - Signalize the Kaylor Street/Katella Avenue intersection and lengthen the eastbound Katella Avenue left-turn pocket at Kaylor Street from 125 feet to 200 feet. - To accommodate eastbound left-turn queuing of vehicles accessing the medical center, modify the raised median on Katella Avenue to include an eastbound left-turn pocket approximately 100 feet in length at the Driveway 3/Katella Avenue intersection (refer to Exhibit 5.3-25). - Provide traffic signal interconnect and synchronization between the Kaylor Street/Katella Avenue intersection and the Cherry Street/Katella Avenue intersection.	Prior to Issuance of Certificate of Occupancy	City of Los Alamitos Public Works Department (Traffic Engineer)	Review and Approval of Traffic Plan(s) at Plan Check Installation of Traffic Improvements			
TRF-1b	Kaylor Street/Katella Avenue. Prior to issuance of certificate of occupancy for MOB A, the project applicant shall install the following improvements: 1. Defer construction of a median restricting the Maple Street/Katella Avenue intersection to right-in/right-out movements as recommended in TRF-1c2 below, and provide a pilot project to restrict only the northbound left-turns and maintain the westbound left-turn access from Katella Avenue to Maple Street via roadway striping modifications.						



**Los Alamitos Medical Center Specific Plan
Program Environmental Impact Report**

LOS ALAMITOS MEDICAL CENTER SPECIFIC PLAN PROGRAM ENVIRONMENTAL IMPACT REPORT							
MITIGATION MONITORING AND REPORTING PROGRAM							
Mitigation Measure		Monitoring Phase	Monitoring Agency	Action Indication Compliance	Verification of Compliance		
					Initials	Date	Remarks
TRF-1c	Kaylor Street/Katella Avenue. Within 12 months following installation of TRF-1b, the following are required: 1. The City of Los Alamitos shall collect data on the operation of the access measures noted in TRF-1b1 above. The project applicant shall reimburse the City for these costs. 2. Based on review and analysis of the data collected in TRF-1c1 by City of Los Alamitos, the project applicant, at the direction of the City of Los Alamitos, shall permanently implement TRF-1b1, or modify the Katella Avenue median to restrict the Maple Street/Katella Avenue intersection to right-in/right-out movements, or implement other similar improvements to address vehicular movements at the Maple Street/Katella Avenue intersection.						
TRF-2	Katella Avenue. Prior to issuance of certificate of occupancy for MOB A, the project applicant shall install the following improvements: • Further implement the OCTA Smart Street Program by coordinating with the City to prohibit on-street parking on Katella Avenue adjacent to the project site between Kaylor Street and Bloomfield Street. • Provide a dedicated right-turn lane at the westbound approach to the Kaylor Street/Katella Avenue and Driveway 3/Katella Avenue intersections (refer to Exhibit 5.3-25).	Prior to Issuance of Certificate of Occupancy	City of Los Alamitos Public Works Department (Traffic Engineer)	Review and Approval of Traffic Plan(s) at Plan Check Installation of Traffic Improvements			



Los Alamitos Medical Center Specific Plan Program Environmental Impact Report

LOS ALAMITOS MEDICAL CENTER SPECIFIC PLAN PROGRAM ENVIRONMENTAL IMPACT REPORT							
MITIGATION MONITORING AND REPORTING PROGRAM							
Mitigation Measure		Monitoring Phase	Monitoring Agency	Action Indication Compliance	Verification of Compliance		
					Initials	Date	Remarks
	Continue to prohibit on-street parking on the north side of Katella Avenue between Cherry Street and Kaylor Street.						
TRF-3	Los Alamitos Boulevard/Cerritos Avenue. Prior to issuance of certificate of occupancy for Hospital Building 2, the project applicant shall pay a proportionate share contribution to the City of Los Alamitos to widen the westbound Cerritos Avenue approach from one left-turn lane, two through lanes, and one right-turn lane to consist of two left-turn lanes, two through lanes, and one right-turn lane.	Prior to Issuance of Certificate of Occupancy	City of Los Alamitos Public Works Department (Traffic Engineer)	Payment of Proportionate Share Fees			
TRF-4	Kaylor Street/Katella Avenue. Prior to issuance of certificate of occupancy for MOB A, the project applicant shall install the following improvements: - A dedicated left-turn lane at the southbound approach on Katella Avenue to the Kaylor Street/Katella Avenue intersection. - A dedicated right-turn lane at the southbound approach on Katella Avenue to the Kaylor Street/Katella Avenue intersection.	Prior to Issuance of Certificate of Occupancy	City of Los Alamitos Public Works Department (Traffic Engineer)	Review and Approval of Traffic Plan(s) at Plan Check Installation of Traffic Improvements			
TRF-5	Cherry Street/Katella Avenue. Prior to issuance of certificate of occupancy for MOB A, the project applicant shall install the following improvement: A dedicated right-turn lane at the westbound approach to the Cherry Street/Katella Avenue intersection. Due to the restricted on-street parking, a defacto right-turn lane currently exists, and can be striped to better facilitate right-turns.	Prior to Issuance of Certificate of Occupancy	City of Los Alamitos Public Works Department (Traffic Engineer)	Review and Approval of Traffic Plan(s) at Plan Check Installation of Traffic Improvements			



Los Alamitos Medical Center Specific Plan Program Environmental Impact Report

LOS ALAMITOS MEDICAL CENTER SPECIFIC PLAN PROGRAM ENVIRONMENTAL IMPACT REPORT							
MITIGATION MONITORING AND REPORTING PROGRAM							
Mitigation Measure		Monitoring Phase	Monitoring Agency	Action Indication Compliance	Verification of Compliance		
					Initials	Date	Remarks
TRF-6	Ambulance Service. The project applicant shall continue to coordinate with the applicable ambulance service and applicable agency staff on the site access for EMS deliveries. The applicant shall provide a wayfinding system for public understanding of the location of the Emergency Room when arriving at the Medical Center.	Prior to Issuance of Certificate of Occupancy	City of Los Alamitos Public Works Department (Traffic Engineer)	Coordination with Ambulance Service Providers Installation of Wayfinding System to Emergency Room			
TRF-7	The project applicant shall prepare as part of the site plan submittal and implement during the construction phases of the project a Construction Management Plan. The Construction Management Plan shall include, but is not limited to, details on construction staging hours and construction equipment and supply staging locations, construction truck routes, and provisions for employee parking and parking management during construction. With respect to parking provisions during construction, the Construction Management Plan may include provisions for: 1) no construction worker parking on-site, and 2) off-site parking at an existing facility or facilities with a parking surplus, with a shuttle system, or other similar transportation method to and from the hospital campus. The Construction Management Plan shall be prepared as part of the site plan submittal and be approved by the Community Development Director prior to the issuance of any building permit.	Prior to Issuance of Building Permit	City of Los Alamitos Public Works Department (Traffic Engineer)	Preparation and Implementation of Construction Management Plan			
AIR QUALITY/GREENHOUSE GAS EMISSIONS							
AQ-1	Prior to issuance of any Grading Permit, the Director of Public Works and the Building Official shall confirm that the Grading Plan specifications stipulate that, in compliance with SCAQMD Rule 403, excessive fugitive dust emissions shall	Prior to Issuance of Grading Permit During Construction	City of Los Alamitos Department of Public Works	Periodic Site Inspections During Construction			



Los Alamitos Medical Center Specific Plan Program Environmental Impact Report

LOS ALAMITOS MEDICAL CENTER SPECIFIC PLAN PROGRAM ENVIRONMENTAL IMPACT REPORT						
MITIGATION MONITORING AND REPORTING PROGRAM						
Mitigation Measure	Monitoring Phase	Monitoring Agency	Action Indication Compliance	Verification of Compliance		
				Initials	Date	Remarks
be controlled by regular watering or other dust prevention measures, as specified in the SCAQMD's Rules and Regulations. In addition, SCAQMD Rule 402 requires implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off-site. Implementation of the following measures would reduce short-term fugitive dust impacts on nearby sensitive receptors: • All active portions of the construction site shall be watered twice daily to prevent excessive amounts of dust; • On-site vehicle speed shall be limited to 15 miles per hour; • All on-site roads shall be paved as soon as feasible, watered twice daily, or chemically stabilized; • Visible dust beyond the property line which emanates from the project shall be prevented to the maximum extent feasible; • All material transported off-site shall be either sufficiently watered or securely covered to prevent excessive amounts of dust prior to departing the job site; • Track-out devices shall be used at all construction site access points; and • All delivery truck tires shall be watered down and/or scraped down prior to departing the job site.						



Los Alamitos Medical Center Specific Plan Program Environmental Impact Report

LOS ALAMITOS MEDICAL CENTER SPECIFIC PLAN PROGRAM ENVIRONMENTAL IMPACT REPORT							
MITIGATION MONITORING AND REPORTING PROGRAM							
Mitigation Measure		Monitoring Phase	Monitoring Agency	Action Indication Compliance	Verification of Compliance		
					Initials	Date	Remarks
AQ-2	All trucks that are to haul excavated or graded material on-site shall comply with State Vehicle Code Section 23114 (Spilling Loads on Highways), with special attention to Sections 23114(b)(F), (e)(4) as amended, regarding the prevention of such material spilling onto public streets and roads. Prior to the issuance of grading permits, the project applicant shall demonstrate to the City of Los Alamitos how the project operations subject to that specification during hauling activities shall comply with the provisions set forth in Sections 23114(b)(F), (e)(4).	Prior to Issuance of Grading Permit During Construction	City of Los Alamitos Department of Public Works	Periodic Site Inspections During Construction			
AQ-3	The following measures shall be implemented to reduce ROG emissions resulting from application of architectural coatings: - Contractors shall use high-pressure-low-volume (HPLV) paint applicators with a minimum transfer efficiency of at least 50 percent; - Use required coatings and solvents with a ROG content lower than required under Rule 1113; - Construct/build with materials that do not require painting; and - Use pre-painted construction materials.	Prior to Issuance of Grading Permit During Construction	City of Los Alamitos Community Development Department (Planning Division)	Periodic Site Inspections During Construction			
AQ-4	Prior to issuance of any Grading Permit, the Director of Public Works and the Building Official shall confirm that the Grading Plan stipulates that, in compliance with SCAQMD Rule 403, ozone precursor emissions from construction equipment vehicles shall be controlled by maintaining equipment engines in good condition and in proper tune per manufacturer's specifications, to the satisfaction of the City	Prior to Issuance of Grading Permit During Construction	City of Los Alamitos Public Works Department (Building Division)	Periodic Site Inspections During Construction			



Los Alamitos Medical Center Specific Plan Program Environmental Impact Report

LOS ALAMITOS MEDICAL CENTER SPECIFIC PLAN PROGRAM ENVIRONMENTAL IMPACT REPORT							
MITIGATION MONITORING AND REPORTING PROGRAM							
Mitigation Measure		Monitoring Phase	Monitoring Agency	Action Indication Compliance	Verification of Compliance		
					Initials	Date	Remarks
	Engineer. Maintenance records shall be provided to the City. The City Inspector shall be responsible for ensuring that contractors comply with this measure during construction.						
AQ-5	The project applicant shall comply with South Coast Air Quality Management District Rule 1403, Asbestos Emissions From Demolition/Renovation Activities, as applicable, which specifies work practice requirements to limit asbestos emissions from building demolition and renovation activities, including the removal and associated disturbance of asbestos-containing materials. The requirements for demolition and renovation activities include asbestos surveying, notification, asbestos containing materials removal procedures and time schedules, asbestos-containing materials handling and clean-up procedures, and storage, disposal, and landfilling requirements for asbestos-containing waste materials. All operators are required to maintain records, including waste shipment records, and are required to use appropriate warning labels, signs, and markings.	Prior to Demolition and/or Rehabilitation	City of Los Alamitos Public Works Department (Building Division)	Periodic Site Inspections During Construction			
AQ-6	The Specific Plan shall include, but not be limited to, the following list of potential design features, as determined feasible by the project applicant in consultation with the Community Development Director. These features shall be incorporated into the Specific Plan and future buildings to ensure consistency with adopted statewide plans and programs. The project applicant shall demonstrate the incorporation of project design features prior to the issuance of building permits.	Prior to Issuance of Building Permit	City of Los Alamitos Community Development Department (Planning Division)	Review and Approval of Site Plan(s) at Plan Check			



Los Alamitos Medical Center Specific Plan Program Environmental Impact Report

LOS ALAMITOS MEDICAL CENTER SPECIFIC PLAN PROGRAM ENVIRONMENTAL IMPACT REPORT						
MITIGATION MONITORING AND REPORTING PROGRAM						
Mitigation Measure	Monitoring Phase	Monitoring Agency	Action Indication Compliance	Verification of Compliance		
				Initials	Date	Remarks
<i>Energy Efficiency</i> - Design buildings to be energy efficient, above Title 24 requirements. - Install light colored “cool” roofs and cool pavements, and strategically placed shade trees. - Provide information on energy management services for large energy users. - Install energy efficient heating and cooling systems, appliances and equipment, and control systems. - Provide education on energy efficiency. <i>Water Conservation and Efficiency</i> - Create water-efficient landscapes. - Use reclaimed water for landscape irrigation in new developments if available. Install the infrastructure to deliver and use reclaimed water. - Restrict watering methods (e.g., prohibit systems that apply water to nonvegetated surfaces) and control runoff. - Restrict the use of water for cleaning outdoor surfaces and vehicles. - Implement low-impact development practices that maintain the existing hydrologic character of the site to manage storm water and protect the environment. (Retaining storm water runoff on-site can drastically reduce the need for energy-intensive imported water at the site).						



Los Alamitos Medical Center Specific Plan Program Environmental Impact Report

LOS ALAMITOS MEDICAL CENTER SPECIFIC PLAN PROGRAM ENVIRONMENTAL IMPACT REPORT						
MITIGATION MONITORING AND REPORTING PROGRAM						
Mitigation Measure	Monitoring Phase	Monitoring Agency	Action Indication Compliance	Verification of Compliance		
				Initials	Date	Remarks
<i>Solid Waste Measures</i> - Reuse and recycle construction and demolition waste (including, but not limited to, soil, vegetation, concrete, lumber, metal, and cardboard). - Provide interior and exterior storage areas for recyclables and green waste and adequate recycling containers located in public areas. <i>Transportation and Motor Vehicles</i> - Limit idling time for commercial vehicles, including delivery and construction vehicles. - Promote ride sharing programs (e.g., by designating a certain percentage of parking spaces for ride sharing vehicles, designating adequate passenger loading and unloading and waiting areas for ride sharing vehicles, and providing a web site or message board for coordinating rides). - Increase the cost of driving and parking private vehicles (e.g., imposing parking fees). - Provide adequate bicycle parking near building entrances to promote cyclist safety, security, and convenience. Provide facilities that encourage bicycle commuting (e.g., locked bicycle storage or covered or indoor bicycle parking). - Create bicycle lanes and walking paths directed to the location of schools, parks and other destination points.						



Los Alamitos Medical Center Specific Plan Program Environmental Impact Report

LOS ALAMITOS MEDICAL CENTER SPECIFIC PLAN PROGRAM ENVIRONMENTAL IMPACT REPORT							
MITIGATION MONITORING AND REPORTING PROGRAM							
Mitigation Measure		Monitoring Phase	Monitoring Agency	Action Indication Compliance	Verification of Compliance		
					Initials	Date	Remarks
	Provide information on all options for individuals and businesses to reduce transportation-related emissions. Provide education and information about public transportation.						
NOISE							
NOI-1	To reduce noise impacts due to construction, the project applicant shall require construction contractors to implement the following measures which shall be ongoing through demolition, grading, and/or construction: - Equipment and trucks used for project construction shall utilize the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures, and acoustically-attenuating shields or shrouds, wherever feasible). - Impact tools (e.g., jack hammers, pavement breakers, and rock drills) used for project construction shall be hydraulically or electronically powered wherever possible to avoid noise associated with compressed air exhaust from pneumatically powered tools. However, where use of pneumatic tools is unavoidable, an exhaust muffler shall be used; this muffler can lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves shall be used where feasible, and this could achieve a reduction of 5 dBA. Quieter procedures shall be used, such as drills rather than impact equipment, whenever feasible. - Stationary noise sources shall be located as far from adjacent receptors as possible, and they shall be	During Demolition, Grading, and Construction	City of Los Alamitos Community Development Department (Planning Division/Building and Safety Division)	Periodic Site Inspections During Grading and Construction			



Los Alamitos Medical Center Specific Plan Program Environmental Impact Report

LOS ALAMITOS MEDICAL CENTER SPECIFIC PLAN PROGRAM ENVIRONMENTAL IMPACT REPORT							
MITIGATION MONITORING AND REPORTING PROGRAM							
Mitigation Measure		Monitoring Phase	Monitoring Agency	Action Indication Compliance	Verification of Compliance		
					Initials	Date	Remarks
	muffled and enclosed within temporary sheds, incorporated insulation barriers, or other measures to the extent feasible.						
NOI-2	Prior to the issuance of each grading permit, the project applicant shall submit to the City Building and Safety Department a list of measures to respond to and track complaints pertaining to construction noise, ongoing throughout demolition, grading, and/or construction. These measures shall include the following: • A procedure and phone numbers for notifying the City Building and Safety Department staff and Los Alamitos Police Department (during regular construction hours and off-hours); • A sign large enough to be visible by moving traffic posted on-site pertaining to the permitted construction days and hours and complaint procedures and who to notify in the event of a problem. The sign shall also include a listing of both the City and construction contractor's telephone numbers (during regular construction hours and off-hours); • The designation of an on-site construction complaint and enforcement manager for the project. The manager shall act as a liaison between the project and its neighbors. The manager's responsibilities and authority shall include the following: - o An active role in monitoring project compliance with respect to noise;	Prior to Issuance of Grading Permit	City of Los Alamitos Community Development Department (Building and Safety Division)	Coordination between City of Los Alamitos Community Development Department Planning Division and Building and Safety Division			



Los Alamitos Medical Center Specific Plan Program Environmental Impact Report

LOS ALAMITOS MEDICAL CENTER SPECIFIC PLAN PROGRAM ENVIRONMENTAL IMPACT REPORT							
MITIGATION MONITORING AND REPORTING PROGRAM							
Mitigation Measure		Monitoring Phase	Monitoring Agency	Action Indication Compliance	Verification of Compliance		
					Initials	Date	Remarks
	- o Ability to reschedule noisy construction activities to reduce effects on surrounding noise sensitive receivers; - o Site supervision of all potential sources of noise (e.g., material delivery, shouting, debris box pick-up and delivery) for all trades; and - o Intervening or discussing mitigation options with contractors. • Notification of adjacent property owners and occupants at least 30 days in advance of construction activities about the estimated duration of the activity; and • A preconstruction meeting shall be held with the job inspectors and the general contractor/on-site project manager to confirm that noise measures and practices (including construction hours, neighborhood notification, posted signs, etc.) are completed.						
GEOLOGY AND SEISMIC HAZARDS							
GEO-1	The project applicant shall have a geologist registered by the State of California prepare a HAZUS Analysis prior to issuance of grading permits for the Hospital Buildings. Any recommendations in the study are applicable to the Hospital Buildings, if required by OSHPD, and shall be implemented during site grading and construction.	Prior to Issuance of Grading Permit During Construction	City of Los Alamitos Community Development Department Building and Safety Division	Review and Approval of HAZUS Analysis			
GEO-2	Prior to issuance of a grading permit for each building, a registered geologist or soils engineer shall prepare an area-specific Geologic Study, which shall be submitted to the Community Development Department (Building and Safety) for approval. The Geologic Study shall specify the measures	Prior to Issuance of Grading Permit During Construction	City of Los Alamitos Community Development Department	Review and Approval of Geologic Study			



Los Alamitos Medical Center Specific Plan Program Environmental Impact Report

LOS ALAMITOS MEDICAL CENTER SPECIFIC PLAN PROGRAM ENVIRONMENTAL IMPACT REPORT							
MITIGATION MONITORING AND REPORTING PROGRAM							
Mitigation Measure		Monitoring Phase	Monitoring Agency	Action Indication Compliance	Verification of Compliance		
					Initials	Date	Remarks
	necessary to mitigate impacts related to liquefaction, expansion, and other geologic and seismic hazards, if any. All recommendations in the Geologic Study shall be implemented during area preparation, grading, and construction.		Building and Safety Division				
GEO-3	Prior to issuance of any grading permit for each building, the project applicant shall comply with each of the recommendations detailed in the Geotechnical Study, and other such measure(s) as the City deems necessary to adequately mitigate potential seismic and geotechnical hazards.	Prior to Issuance of Grading Permit During Construction	City of Los Alamitos Community Development Department Building and Safety Division	Review and Approval of Geologic Study Issuance of Grading Permit Site Inspections During Grading			
GEO-4	If potentially expansive units (i.e., clay soils) are encountered during construction, they shall be evaluated by the Project Geotechnical Engineer. Special foundation designs and reinforcement shall be utilized to mitigate expansive material as specified by the Project Geotechnical Engineer and to the satisfaction of the City. Specifically, if clay soils are exposed at the deeper subgrade level, the Construction Contractor shall employ dewatering techniques, as the clay soils shall not be allowed to dry out.	Inspect Soils During Excavation and Grading Activities	City of Los Alamitos Public Works Department	Periodic Site Inspections During Excavation and Grading			



Los Alamitos Medical Center Specific Plan Program Environmental Impact Report

LOS ALAMITOS MEDICAL CENTER SPECIFIC PLAN PROGRAM ENVIRONMENTAL IMPACT REPORT							
MITIGATION MONITORING AND REPORTING PROGRAM							
Mitigation Measure		Monitoring Phase	Monitoring Agency	Action Indication Compliance	Verification of Compliance		
					Initials	Date	Remarks
HAZARDS AND HAZARDOUS MATERIALS							
HAZ-1	Prior to site plan approval for each phase, the project applicant shall retain a qualified environmental specialist (e.g., a Registered Environmental Assessor or similarly qualified individual) to perform pre-construction hazardous materials surveys to inspect existing building areas subject to demolition or renovation for the presence of any unidentified asbestos, PCBs, mercury, lead, or other hazardous materials. If found at levels that require special handling, the project applicant shall manage these materials as required by law and according to federal and state regulations and guidelines, including those of the DTSC, SCAQMD, Cal/OSHA, and any other agency with jurisdiction over these hazardous materials.	Prior to Site Plan Approval	City of Los Alamitos Community Development Department Building and Safety Division	Review and Approval of Hazardous Materials Survey			
HAZ-2	Following the final Safety-Kleen facility monitoring event as determined by DTSC, a Risk Assessment shall be prepared and implemented by the Safety-Kleen in accordance with all applicable DTSC standards and regulations.	Prior to Land Acquisition During Construction	City of Los Alamitos Community Development Department (Building and Safety Division)	Review and Approval of Risk Assessment			
HAZ-3	The project applicant shall prepare a Work Plan for Environmental Monitoring the Former Safety-Kleen Systems Service Center (3862-3878 Florista Street) for the proposed Parking Structure 1. The Work Plan shall properly analyze potential health hazards associated with the location of a new parking structure over the former Safety-Kleen facility, and shall be reviewed and approved by DTSC prior to demolition or asphalt cap/parking lot removal.	Prior to Demolition and Construction	City of Los Alamitos Community Development Department Building and Safety Division	Review and Approval of Work Plan Implementation of Work Plan			



Los Alamitos Medical Center Specific Plan Program Environmental Impact Report

LOS ALAMITOS MEDICAL CENTER SPECIFIC PLAN PROGRAM ENVIRONMENTAL IMPACT REPORT							
MITIGATION MONITORING AND REPORTING PROGRAM							
Mitigation Measure		Monitoring Phase	Monitoring Agency	Action Indication Compliance	Verification of Compliance		
					Initials	Date	Remarks
HYDROLOGY, DRAINAGE, WATER QUALITY							
HYD-1	Concurrent with Site Plan Review or issuance of a grading permit, whichever comes first, a hydrology review shall be conducted by a Registered Civil Engineer for each development phase to ensure that runoff values for each phase remain at or below the runoff values shown in Table 5.8-5.	Concurrent with Site Plan Review or Issuance of Grading Permit	City of Los Alamitos Public Works Department	Review and Approval of Hydrology Review			
HYD-2	Prior to issuance of any Grading Permit, a Final Water Quality Management Plan, which includes both Structural and Non-Structural BMPs in order to comply with the requirements of the current DAMP and NPDES, shall be prepared for each development phase and/or building, as appropriate, to the satisfaction of the Los Alamitos Director of Public Works and the City Engineer.	Prior to Issuance of Grading Permit	City of Los Alamitos Public Works Department	Review and Approval of Final Water Quality Management Plan			
HYD-3	The project applicant shall implement the Best Management Practices identified in the Final Water Quality Management Plan.	Prior to Issuance of Grading Permit and/or Building Permit	City of Los Alamitos Public Works Department	Periodic Site Inspections			
HYD-4	Prior to issuance of any Grading or Building Permit, and as part of the future development's compliance with the NPDES requirements, the project applicant shall enroll electronically through the SMARTS program to comply with the State of California General Construction Permit. Proof of enrollment must be submitted to the City of Los Alamitos before issuance of grading or building permits. Also, a Stormwater Pollution Prevention Plan (SWPPP) shall be reviewed and approved by the Director of Public Works and the City Engineer for water quality construction activities on-site. A copy of the SWPPP shall be available and implemented at	Prior to Issuance of Grading Permit and/or Building Permit	City of Los Alamitos Public Works Department	Proof of Filing of Notice of Intent Review and Approval of SWPPP Issuance of Grading or Building Permits			



Los Alamitos Medical Center Specific Plan Program Environmental Impact Report

LOS ALAMITOS MEDICAL CENTER SPECIFIC PLAN PROGRAM ENVIRONMENTAL IMPACT REPORT							
MITIGATION MONITORING AND REPORTING PROGRAM							
Mitigation Measure		Monitoring Phase	Monitoring Agency	Action Indication Compliance	Verification of Compliance		
					Initials	Date	Remarks
	the construction site at all times. The SWPPP shall outline the source control and/or treatment control BMPs to avoid or mitigate runoff pollutants at the construction site to the "maximum extent practicable."			Site Inspections			
FIRE PROTECTION SERVICES							
FP-1	Adequate access to all buildings on the project site shall be provided and properly maintained for emergency vehicles during the building construction process to the satisfaction of the Orange County Fire Authority.	Prior to and During Construction	Orange County Fire Authority	Review and Approval of Site Plan(s) at Plan Check During Construction			
FP-2	Prior to construction, a will-serve letter from Golden State Water Company shall be obtained by the project applicant, which states that the Water Company can adequately meet water flow requirements.	Prior to Construction	Orange County Fire Authority	Proof of receipt of will-serve letter from Golden State Water Company			
FP-3	Prior to the issuance of building permits, the project applicant may be required to enter into a Secured Fire Protection Agreement with the Orange County Fire Authority. The agreement shall specify the project applicant's pro-rata fair share funding of capital improvements necessary to establish adequate fire protection facilities and equipment, and/or personnel. Said agreement shall be reached as early as possible in the planning process, preferably for each phase of the project, rather than on a parcel-by-parcel basis.	Prior to Issuance of Building Permit	Orange County Fire Authority	Review and approval of Secured Fire Protection Agreement if necessary			



Los Alamitos Medical Center Specific Plan Program Environmental Impact Report

LOS ALAMITOS MEDICAL CENTER SPECIFIC PLAN PROGRAM ENVIRONMENTAL IMPACT REPORT							
MITIGATION MONITORING AND REPORTING PROGRAM							
Mitigation Measure		Monitoring Phase	Monitoring Agency	Action Indication Compliance	Verification of Compliance		
					Initials	Date	Remarks
FP-4	All new structures shall have automatic fire sprinkler systems.	Prior to Issuance of Building Permit	Orange County Fire Authority	Review and Approval of Site Plan(s) at Plan Check			
		During Construction					
FP-5	A supervised fire alarm system that meets requirements of the California Fire Code shall be placed in an accessible location with an annunciator.	Prior to Issuance of Building Permit	Orange County Fire Authority	Review and Approval of Site Plan(s) at Plan Check			
		During Construction					
FP-6	Access to and around structures shall meet Orange County Fire Authority and California Fire Code requirements.	Prior to Issuance of Building Permit	Orange County Fire Authority	Review and Approval of Site Plan(s) at Plan Check			
		During Construction					
FP-7	A water supply system shall be in place to supply fire hydrants and automatic fire sprinkler systems.	Prior to Issuance of Building Permit	Orange County Fire Authority	Review and Approval of Site Plan(s) at Plan Check			
		During Construction					
FP-8	Roadway medians shall not exceed 1,000 feet without a turnaround. If medians are greater than 1,000 feet, emergency turnaround access for heavy fire equipment shall be provided.	Prior to Issuance of Building Permit	Orange County Fire Authority	Review and Approval of Site Plan(s) at Plan Check			
		During Construction					
FP-9	All traffic signals on public access ways shall include the installation of optical preemption devices.	Prior to Issuance of Building Permit	Orange County Fire Authority	Review and Approval of Site Plan(s) at Plan Check			
		During Construction					
FP-10	All electric gates within the project shall install emergency opening devices approved by the Orange County Fire Authority.	Prior to Issuance of Building Permit	Orange County Fire Authority	Review and Approval of Site Plan(s) at Plan Check			
		During Construction					



Los Alamitos Medical Center Specific Plan Program Environmental Impact Report

LOS ALAMITOS MEDICAL CENTER SPECIFIC PLAN PROGRAM ENVIRONMENTAL IMPACT REPORT							
MITIGATION MONITORING AND REPORTING PROGRAM							
Mitigation Measure		Monitoring Phase	Monitoring Agency	Action Indication Compliance	Verification of Compliance		
					Initials	Date	Remarks
POLICE PROTECTION							
PS-1	During construction, private security patrols shall be utilized to protect the construction site during non-construction hours.	During Construction	City of Los Alamitos Community Development Department Planning Division	Periodic Site Inspections During Construction			
PS-2	As final site and building plans are submitted to the City for approval in the future, design requirements which reduce demands for service and ensure adequate public safety (such as those pertaining to site access, site security and lighting) shall be incorporated into building designs.	Prior to Issuance of Building Permit	City of Los Alamitos Community Development Department Planning Division	Review and Approval of Site Plan(s) at Plan Check			
PS-3	Project design shall landscape the project site with low-growing groundcover and shade trees, rather than a predominance of shrubs that could conceal potential criminal activity around buildings and parking areas.	Prior to Issuance of Building Permit	City of Los Alamitos Community Development Department Planning Division	Review and Approval of Site Plan(s) at Plan Check			
PS-4	Project design shall provide lighting around and throughout the development to enhance crime prevention and enforcement efforts.	Prior to Issuance of Building Permit	City of Los Alamitos Community Development Department Planning Division	Review and Approval of Site Plan(s) at Plan Check			



Los Alamitos Medical Center Specific Plan Program Environmental Impact Report

LOS ALAMITOS MEDICAL CENTER SPECIFIC PLAN PROGRAM ENVIRONMENTAL IMPACT REPORT							
MITIGATION MONITORING AND REPORTING PROGRAM							
Mitigation Measure		Monitoring Phase	Monitoring Agency	Action Indication Compliance	Verification of Compliance		
					Initials	Date	Remarks
PS-5	Project design shall provide clearly visible (during the day and night) address signs and/or building numbers for easy identification during emergencies.	Prior to Issuance of Building Permit	City of Los Alamitos Community Development Department Planning Division	Review and Approval of Site Plan(s) at Plan Check			
PS-6	Project design shall provide visibility of doors and windows from the street and between buildings.	Prior to Issuance of Building Permit	City of Los Alamitos Community Development Department Planning Division	Review and Approval of Site Plan(s) at Plan Check			
WATER							
WAT-1	Prior to the issuance of building permits, the project applicant shall submit construction drawings to the Golden State Water Company, and, as necessary, shall pay all applicable connection fees and comply with Golden State Water Company permitting and fee requirements.	Prior to Issuance of Building Permit	City of Los Alamitos Public Works Department Golden State Water Company	Review and Approval of Site Plan(s) at Plan Check Receipt of Applicable Connection Fees Collected			
WASTEWATER							
WW-1	New sewer lateral sizes and connections shall be per the RLASD standards and all appropriate connection and inspection fees shall be paid. Plan check processing and permitting shall also be required from the RLASD.	Prior to Issuance of Wastewater Permit and Building Permit	City of Los Alamitos Public Works Department	Review and Approval of Site Plan(s) at Plan Check			



Los Alamitos Medical Center Specific Plan Program Environmental Impact Report

LOS ALAMITOS MEDICAL CENTER SPECIFIC PLAN PROGRAM ENVIRONMENTAL IMPACT REPORT							
MITIGATION MONITORING AND REPORTING PROGRAM							
Mitigation Measure		Monitoring Phase	Monitoring Agency	Action Indication Compliance	Verification of Compliance		
					Initials	Date	Remarks
				Receipt of Connection and Inspection Fees Collected			
WW-2	An inspection fee shall be collected if a connection directly to an OCSD facility is necessary. The amount of the fee shall be based on the design of the connection. When prepared, a plan of the proposed connection should be submitted for review.	Prior to Issuance of Wastewater Permit and Building Permit	City of Los Alamitos Public Works Department	Review and Approval of Site Plan(s) at Plan Check Receipt of Inspection Fees Collected			
WW-3	Capital Facility Capacity Charges (CFCCs) shall be collected to pay for additional capacity in the collection and treatment plant in accordance with the latest OCSD Fee Schedule, which is updated every first of July. Fees are based on the use and the square footage of the proposed facilities. A credit for existing uses at current rates shall be calculated and deducted from the total.	Prior to Issuance of Wastewater Permit and Building Permit	City of Los Alamitos Public Works Department	Review and Approval of Site Plan(s) at Plan Check Receipt of CFCCs			
WW-4	After construction has been completed, an annual regional user fee will be collected via the property tax roll for OCSD maintenance of the facilities; this fee shall be paid in accordance with the latest version of the OCSD Fee Schedule.	During Operations	City of Los Alamitos Public Works Department	Receipt of Annual Regional User Fees Collected			
SOLID WASTE							
SW-1	All demolition and construction shall be done in accordance with Los Alamitos Municipal Code Demolition Chapter 8.13.	During Demolition and Construction	City of Los Alamitos Public Works Department	Periodic Site Inspections During Demolition and Construction			



Los Alamitos Medical Center Specific Plan Program Environmental Impact Report

LOS ALAMITOS MEDICAL CENTER SPECIFIC PLAN PROGRAM ENVIRONMENTAL IMPACT REPORT							
MITIGATION MONITORING AND REPORTING PROGRAM							
Mitigation Measure		Monitoring Phase	Monitoring Agency	Action Indication Compliance	Verification of Compliance		
					Initials	Date	Remarks
SW-2	Future development projects within the Los Alamitos Medical Center Specific Plan area shall comply with all applicable City, County, State, and Federal regulations and procedures for the use, collection, and disposal of solid and hazardous wastes.	During Operations	City of Los Alamitos Public Works Department				



13.0 Comments and Responses



13.0 COMMENTS AND RESPONSES

13.1 CEQA REQUIREMENTS

Before approving a project, the *California Environmental Quality Act (CEQA)* requires the Lead Agency to prepare and certify a Final Environmental Impact Report (EIR).

In accordance with *CEQA Guidelines* Sections 15120 through 15132 and Section 15161, the City of Los Alamitos has prepared a Program EIR for the Los Alamitos Medical Center Specific Plan (SCH #2010041095). The Response to Comments section, combined with the Draft EIR and Mitigation Monitoring Program, comprise the Final EIR.

The following is an excerpt from the *CEQA Guidelines*, Section 15132, Contents of Final Environmental Impact Report:

The Final EIR shall consist of:

- (a) The Draft EIR or a version of the draft.
- (b) Comments and recommendations received on the Draft EIR either verbatim or in summary.
- (c) A list of persons, organizations, and public agencies commenting on the Draft EIR.
- (d) The responses of the Lead Agency to significant environmental points raised in the review and consultation process.
- (e) Any other information added by the Lead Agency.

This Comments and Responses section includes all of the above-required components and shall be attached to the Final EIR. As noted above, the Final EIR will be a revised document that incorporates all of the changes made to the Draft EIR following the 45-day public review period.

13.2 PUBLIC REVIEW PROCESS – DRAFT EIR

The Draft EIR was circulated for review and comment to the public, agencies, and organizations. The Draft EIR was also circulated to State agencies for review through the State Clearinghouse, Office of Planning and Research. A notice of availability was placed in the *News Enterprise*, on September 29, 2010. The 45-day public review period ran from September 30, 2010 to November 15, 2010. Comments received in writing during the 45-day public review period from the public and local and State agencies on the Draft EIR have been incorporated into this section.



13.3 FINAL EIR

The Final EIR allows the public and Lead Agency an opportunity to review revisions to the Draft EIR, the responses to comments, and other components of the EIR, such as the Mitigation Monitoring Program, prior to approval of the project. The Final EIR serves as the environmental document to support a decision on the proposed project.

After completing the Final EIR, and before approving the project, the Lead Agency must make the following three certifications as required by *CEQA Guidelines* Section 15090:

That the Final EIR has been completed in compliance with CEQA;

That the Final EIR was presented to the decision-making body of the Lead Agency, and that the decision-making body reviewed and considered the information in the Final EIR prior to approving the Project; and

That the Final EIR reflects the Lead Agency's independent judgment and analysis.

Additionally, pursuant to *CEQA Guidelines* Section 15093(b), when a Lead Agency approves a project that would result in significant unavoidable impacts that are disclosed in the Final EIR, the Lead Agency must submit in writing its reasons for supporting the approved action. This Statement of Overriding Considerations is supported by substantial information in the record, which includes the Final EIR. Since the proposed project would result in significant, unavoidable impacts as to one category of review, the Lead Agency would be required to adopt a Statement of Overriding Considerations if it approves the proposed project.

These certifications, the Findings of Fact, and the Statement of Overriding Considerations are included in a separate Findings document. Both the Final EIR and the Findings will be submitted to the Lead Agency for consideration of the proposed project.

13.4 ORGANIZATION OF COMMENTS AND RESPONSES

This section is organized in the following manner:

- Written Comment Letters and Responses
- Errata for Final EIR

13.5 WRITTEN COMMENT LETTERS AND RESPONSES

All written correspondence from those agencies or individuals commenting on the Draft EIR is reproduced on the following pages. The individual comments on each letter have been consecutively numbered for ease of reference. Following each comment letter are responses to each numbered comment. A response is provided for each comment raising substantive environmental



issues. Added or modified text is underlined (example), while deleted text will have a strike out (~~example~~) through the text, and is included in a box, as the example below shows.

~~"Text from EIR"~~ <u>Text from EIR</u>

COMMENT LETTERS

A total of 13 written comment letters were received; 11 during the 45-day public review period and two following the close of the public review period.

Public Comments

- A. Jody Shloss, Los Alamitos resident, dated November 8, 2010.
- B. Art Debolt, Los Alamitos resident, dated November 8, 2010.
- C. JM Ivler, Los Alamitos resident, dated November 17, 2010.
- D. David Emerson, Los Alamitos resident, dated November 15, 2010.

Agency Comments

- E. Mario Voce, Chairman, Environmental Quality Control Board, City of Seal Beach, dated October 27, 2010.
- F. Michele Hernandez, Management Analysis, Strategic Services, Orange County Fire Authority, dated November 8, 2010.
- G. Ted J. Commerdinger, AICP, Director of Community Development, City of Cypress, dated November 8, 2010.
- H. Ian MacMillan, Program Supervisor, Inter-Governmental Review, Planning, Rule Development & Area Sources, South Coast Air Quality Management District, dated November 10, 2010.
- I. Christopher Herre, Branch Chief, Local Development/Intergovernmental Review, Department of Transportation, dated November 12, 2010.
- J. Kari A. Rigoni, Executive Officer, Airport Land Use Commission for Orange County, dated November 15, 2010.
- K. Al Shami, Project Manager, Brownfields and Environmental Restoration Program, Department of Toxic Substances Control, dated November 15, 2010.
- L. State of California, Governor's Office of Planning and Research, State Clearinghouse and Planning Unit, dated November 16, 2010.
- M. Charles Larwood, Manger, Transportation Planning, OCTA, dated November 19, 2010.
- N. Michael Balsamo, Manger, General Land Use Planning, Orange County Public Works, dated November 18, 2010.

COMMENT LETTER A

Handled in at 11/08
P.C. Meeting

I am submitting the following written comments on the Draft EIR for the proposed Specific Plan project and requesting that they be considered, analyzed and responded to in the final EIR.

A1

I am expressing my concern that the City and applicant's accelerated project schedule for the public review of the proposed Specific Plan does not meet the legal public notice, hearing and procedural requirements of the State of California. The Draft EIR was submitted to the State Clearinghouse for review with the comment period advertised to end on November 15, 2015. Following the close of the comment period, all comments received must be reviewed and the response to these comments, including any additional impact analysis must be incorporated into the Final EIR before it can be certified and the final project approved. The Planning Commission is being asked to recommend certification of the environmental document and approval of the project prior to the comment period even ending. I have attached a newsletter that cites recent case law that addresses the procedural issues related to the notice and timing of these public hearings.

A2

I am requesting that the EIR include and analyze the alternative specific plan phasing to be reduced to ten years and that the city confirm that the project and EIR is in conformance with the OCTA required analysis that is necessary to receive transportation funds.

A3

Can detailed mitigations for traffic impacts identified in the Hospital EIR be utilized in later EIR or a different project by a different applicant? In other words the hospital EIR calls for a future widening of Cerritos Ave. at Los Alamitos Blvd. After approval of the hospital EIR but before construction and/or full build out can another applicant on another project identify and use the widening of Cerritos Ave at Los Alamitos Blvd. to mitigate traffic impacts in that other project, thereby eliminating available mitigation measures and with it the ability to reduce significant impacts to required levels

A4

Jody S. Moss
Nov. 8, 2010

Land Use Advisory

From the Buchanan Ingersoll & Rooney Land Use Planning Group

Buchanan Ingersoll & Rooney PC
Attorneys & Government Relations Professionals

January 2008

Streamlined Zoning Process Held Unlawful

By S. Douglas Kerner

California law requires that a legislative body must hold a public hearing when adopting a zoning ordinance or an amendment to a zoning ordinance. In addition, the hearing must be noticed at least 10 days prior to the hearing and must include a general explanation of the matter to be considered.

The legislative body's hearing typically occurs after the planning commission has held a hearing and has made a recommendation on the proposed zoning. Until now, two issues were unclear. First, whether the 10-day notice of the legislative body's hearing must be given *after* the planning commission's recommendation has been received and, second, whether the notice must include the planning commission's recommendation as part of the notice.

Those issues were just answered in *Environmental Defense Project of Sierra County v. Sierra County*, 2008 Cal. App. LEXIS 20 (Cal. App. 3d Dist. Jan. 9, 2008). In *Sierra County*, the California Court of Appeal held that the 10-day notice of the legislative body's hearing must be given *after* the planning commission's recommendation has been received and must include the planning commission's recommendation as part of the general explanation of the matter to be considered, which is required in the notice. In doing so, the court declared invalid the county's "streamlined zoning process," in which the county gave notice of the legislative body's hearing before the planning commission had made its recommendation. The court held that this practice does not comport with California's Planning and Zoning Law.

Background

In *Sierra County*, a landowner applied for approval of a tentative parcel map and change of zone. On January 13, 2005, the county gave notice that the planning commission would hold a public hearing on January 27, 2005. On January 20, 2005, before the planning commission hearing had been held, the county gave notice that the board of supervisors would hold a public hearing on February 1, 2005, for the proposed tentative parcel map and zone change. The county characterized this zoning amendment process as a "streamlined version" in which notice was given of the board of supervisors' hearing, which was set on the implicit contingency that the planning commission would approve the project.

At the planning commission hearing, the plaintiff's representative expressed concern over the hearing process because notice was given of the board of supervisors' hearing before the planning commission had even made a determination. After the public hearing was closed, the planning commission recommended approval of the project. The planning commission also made several modifications to staff's recommendation before recommending approval to the board of supervisors. The planning commission's recommendation was transmitted to the board of supervisors late in the day on January 28, 2005, the day after the hearing.

At the board of supervisors hearing on February 1, 2005, the plaintiff's representative again appeared and objected to the process. She pointed out that she was given only one full day to work on responses to the planning commission's

action. The hearing was closed, and the board of supervisors approved the tentative parcel map and zone change. The plaintiff sought judicial review.

The Court's Holding

After the trial court granted the plaintiff's motion for summary judgment requesting declaratory relief, the county appealed. The county argued that the plain language of the applicable statute — Government Code Section 65856 — did not require the board of supervisors to wait until the planning commission had made its recommendation on the matter under consideration before notice could be given of the legislative body's hearing.

The court acknowledged that Section 65856 is silent on the timing of the notice. Therefore, it creates an ambiguity as to when, in relation to the planning commission's recommendation, the notice may be given. While the county argued that the statute is clear and unambiguous because nowhere in the statute is a requirement that the legislative body receive the planning commission's report before it may give notice of its public hearing, the court said the county's argument was too narrow. It did not account for the statute's reference to other provisions of the Government Code.

Section 65856 requires that notice be given pursuant to section 65090. In turn, Section 65090 requires notice "at least 10 days prior to the hearing" that "shall include the information specified in Section 65094." Section 65094 specifies that the notice must include, among other things, "a general explanation of the matter to be considered." In the court's view, the question whether the 10-day notice may be given before receipt of the planning commission's recommendation is "inextricably bound" with the question of what must be included in a "general explanation of the matter to be considered."

The court went on to read these provisions in the context of the Planning and Zoning Law (Gov. Code § § 65000-66037) as a whole. Taking a broader perspective, the court stressed the importance of public participation at every level of the planning process. The court concluded that the purpose of the 10-day notice is to inform the public of the hearing so that people will have an opportunity to address the planning commission's recommendation. The court noted that this purpose would be "ill-served" if the notice could be given before the planning commission made its recommendation. Under the facts of the case, the public effectively was given only one full business day to prepare for the board of supervisors hearing. In the court's view, such a scenario thwarts meaningful review of the planning commission's action and detracts from the public's participation.

Accordingly, the court held the 10-day notice of the legislative body's hearing must be given after the planning commission's recommendation has been received. The notice also must include the planning commission's recommendation.

Implications for Developers

The case clearly invalidates the sort of "streamlined zoning practice" that Sierra County utilized, in which the public was not given a full 10 days to review the planning commission's recommendation. Particularly with respect to zone change requests, developers should ensure the local agency processing their application is following the notice requirements set forth in *Sierra County*. On occasion, in an effort to expedite a project approval, developers and local agencies will agree to schedule hearings before the city council or board of supervisors at the very next regularly scheduled meeting following a planning commission hearing. *Sierra County* dictates that those subsequent hearings of the legislative body must occur at least 10 days later and that notice of those hearings must include the planning commission's recommendation.

Of broader implication is the court's willingness to look beyond the language of the applicable statutes and render its decision based on the overall policy of the state to ensure meaningful public participation at every level of the planning process. It remains to be seen whether this rationale will be applied to other areas of the planning process.

For more information, email the author(s) at litigationadvisory@bipc.com.

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A. RESPONSES TO COMMENTS FROM JODY SHLOSS, LOS ALAMITOS RESIDENT, DATED NOVEMBER 8, 2010.

- A1. Comment acknowledged. Refer to Responses A2 through A4. No further response is necessary.
- A2. The City of Los Alamitos has fully complied with EIR process requirements specified in the *California Environmental Quality Act (CEQA)*, the *CEQA Guidelines*, and the City's *CEQA Guidelines*.

The Draft EIR was circulated for review and comment to the public, agencies, and organizations. The Draft EIR was also circulated to State agencies for review through the State Clearinghouse, Office of Planning and Research. A notice of availability was placed in the *News Enterprise*, on September 29, 2010. The 45-day public review and comment period for the Draft EIR began on September 30, 2010 and ended on November 15, 2010. Due to the time limit mandated by State law, all comments were received by the City no later than 5:00 PM on November 15, 2010. The City held Planning Commission hearings on October 11, 2010 at 7:00 PM and November 8, 2010 at 7:00 PM.

As specified in the City's *CEQA Guidelines*, the Planning Commission does not take action on the Final EIR, but is responsible for reviewing the Draft EIR and recommending certification of the Final EIR to the City Council. The City Council is responsible for certifying the Final EIR. As part of the City Council's consideration for EIR certification, the City Council will consider the Draft EIR, the comment letters and the responses to the comments, any errata to the Draft EIR, and the mitigation monitoring and reporting program.

- A3. *CEQA* requires that an EIR shall describe a range of reasonable alternative which would attain most of the basic objectives, but which would avoid or substantially lessen *the significant effects* of the project. (*CEQA Guidelines* § 15126.6(a); emphasis added.)

The only significant effect that was identified in the Draft EIR was air emissions relating to construction. An alternative that reduces the Specific Plan buildout from 15 years to 10 years does not reduce, eliminate, or change any of the significant unavoidable impacts. As this alternative would not limit these significant impacts, there is no need for examination.

With respect to conformance with the OCTA Smart Street requirements, the proposed project includes traffic mitigation measures that have been designed to fully comply with these requirements. In addition, Section 5.4, Traffic, includes a discussion of the Smart Street Program. Given such, the proposed project has complied with the OCTA Smart Street requirements. Therefore, implementation of the identified mitigation measures, which are consistent with the OCTA Smart Street requirements, ensures that the City Los Alamitos remains eligible for OCTA transportation funding.



- A4. As discussed on Page 5.3-59 of the Draft EIR, the project applicant is required to fully install traffic mitigation measures TRF-1 and TRF-2. In addition, as discussed on Page 5.3-76 of the Draft EIR, TRF-3 requires the project applicant pay a proportionate share contribution to implement the traffic mitigation at the Los Alamitos Boulevard/Cerritos Avenue intersection.

Subsequent development projects that undergo environmental review cannot assume implementation of TRF-1 and TRF-2 since implementation is subject to the Los Alamitos Medical Center Specific Plan schedules. If TRF-1 and TRF-2 are planned, programmed, and fully funded, then subsequent projects under environmental review can assume their implementation for the cumulative traffic analysis.

If mitigation measures are required of future projects, City staff will ensure consistency between measures to prevent conflicting solutions to reduce traffic impacts. If another project requires implementation of TRF-3, then a proportionate share contribution could be made to increase funding available to the City for implementation.

COMMENT LETTER B

Art Debolt
Hauled in at Nov 8
P.C. Meeting -

I am unable to attend tonight and ask that this be read into the record of the Planning Commission meeting on November 8, 2010. I would like my comment responded to in writing in the final EIR

B1

At the beginning of the EIR for the Specific Plan I asked the following question of Steven Mendoza and submitted one in written form, it was:

"Will the hospital project be of such a magnitude, that as the hospital mitigates their impacts, will they use up available mitigations such that the environmental impacts of future retail developments such as the Arrowhead site, will not be able to be mitigated and thus causing future developments to be possibly severely curtailed or even unable to be realized?" Answer by Mr. Mendoza verbally when I asked that question, "Most certainly it is possible and it would include development to the West of the city to the Freeway".

Mr. Mendoza now proffers an answer in writing to my question on page 10 of the staff report titled **"Impact Upon Future Development"**. He does so by asking the question, "If approval of the LAMC plan will hinder the ability to approve projects that may be presented to the City in the future?"

That is a rhetorical question and it is not MY QUESTION. Rhetorical, because all projects have the ability to be approved by the city, if the applicant complies with all city codes and conditions of approval. And that is the answer to Mr. Mendoza's question as detailed in the staff report.

B2

My question directly asks, if the hospital specific plan could consume available mitigations such that there would not be sufficient mitigation measures available to a future large scale retail development such as on the Arrowhead site. Thus a future project would have to be severely curtailed or not able to be developed?

The staff report in the aforementioned section does describe options available to a future applicant if available mitigations are either costly or non-existent. They are, "pay the cost", redesign the project, reduce the project density, modify or relocate access which means, take the project somewhere else. And, if it is simply not feasible to mitigate the impacts then a future developer can ask the city for a Statement of Overriding Conditions.

So in an oblique manner I guess the answer to my question is, "Most Certainly it will and it will include all future development in the City".

The Specific Plan before you is a good one and deserves approval, but with several conditions:

1. A term of 10 years for Build out. Can be extended by the CC in year 10 for good cause if Phase 3 is underway.
2. Phase 1 to begin within 1 year of approval as any other project in the city
3. Specific dates as to the commencement of Phase 2 and 3 and projected time of construction for each phase.
4. No certificate of occupancy on any MOB until parking structure is completed.

B3

These are not unreasonable requests. The alternative, which is before you, will be to tie up future development in the city for 25 years with no guarantees from the

hospital that any or all of the phases proposed will be started, let alone completed. If the hospital is acting in good faith and diligently pursuing the described construction, future Planning Commissions and City Councils will most certainly accommodate future requests for extensions or modifications if needed.

B3

Quoting from *The Planning Commissioner's Book* , provided by the Governor's office of Planning Research":

"Why have a planning commission?"

"The idea of appointing a group of laymen to make decisions and recommendations about land use planning originated at the turn of the century. Government reformers, seeking to take local government out of the hands of party "machines," reorganized administrative procedures in an attempt to reduce political influence on decisions. One solution was to create a planning commission, made up of appointed citizens, that would be responsible for setting the community's development direction."

B4

It is not the city council but rather the Planning Commission that sets the community's development direction.

To the planning commission, I would remind you of your duty to act independently on behalf of the Citizens of this Community. That is your job. You were not appointed to rubber stamp the wishes of the city council and/or the recommendations of staff. It may cost you your seat on this commission to do what is best for the citizens, but you will sleep well at night knowing you did the right thing on behalf of your neighbors.

B5

Thank you,

Art DeBolt

Los Alamitos Resident



B. RESPONSES TO COMMENTS FROM ART DEBOLT, LOS ALAMITOS RESIDENT, DATED NOVEMBER 8, 2010.

- B1. Comment acknowledged. No further response is necessary.
- B2. The comment raised by the Commentator at the EIR Scoping Meeting was noted and as shown in Appendix B, it has been identified as a non-CEQA related topic as it pertains to the economic consequences of the proposed project. Additionally, the comment requires speculation of future impacts, whereas the scope of an EIR is to review impacts of the proposed project and cumulative projects. *Lake County Energy Council v. County of Lake* (1977) 70 Cal.App.3d 851, 854-855 (“[W]here future development is unspecified and uncertain, no purpose can be served by requiring an EIR to engage in sheer speculation as to future environmental consequences.”) The proposed project and cumulative projects are defined in Section 3.0 and Section 4.0, respectively of the Draft EIR.

Although comments raised by the Commentator at the EIR Scoping Meeting and in the comment letter are too speculative for analysis in this Draft EIR, they will be forwarded to the City Council for consideration in certifying the EIR

- B3. The comments regarding the phases of the Los Alamitos Medical Center Specific Plan and suggestions for changes to the Specific Plan do not raise any issue with respect to the contents of the Draft EIR, or any environmental issue regarding the proposed project. However, these comments are acknowledged and will be forwarded to the City Council for their consideration. Because the Commentator does not specifically comment on the Draft EIR or raise any other CEQA issue, no further response is necessary.
- B4. The comment does not raise any issue with respect to the contents of the Draft EIR, or any environmental issue regarding the proposed project. However, this comment is acknowledged and will be forwarded to the decision-makers for their consideration. Because the Commentator does not specifically comment on the Draft EIR or raise any other CEQA issue, no further response is necessary.
- B5. The comment does not raise any issue with respect to the contents of the Draft EIR, or any environmental issue regarding the proposed project. However, this comment is acknowledged and will be forwarded to the decision-makers for their consideration. Because the Commentator does not specifically comment on the Draft EIR or raise any other CEQA issue, no further response is necessary.

COMMENT LETTER C

2010-11-11

Mr. Mendoza,

Items that are not addressed or need to be addressed regarding the LAMC EIR and Specific Plan:

- 1) The EIR does not take into consideration the SR-22/405/605 changes in traffic patterns

In a discussion with a CALTrans engineer I asked a number of questions regarding the SR-22/405/605 interchange project. One of my questions addressed what they anticipated happening to the parking lot that the 605 turns into just past the Katella bridge. They indicated that most of that traffic will go away as the flow will be much better managed in the interchanges and the entry points onto the 405 southbound (which is where most of the problem exists).

This made me consider where people from the North (around Ball and even Orange, but short of Lincoln) would go to get to the 405, as they now avoid the 605 and take Valley View. He explained that the difference in traffic patterns would change in time as people broke their old habits and started new ones. The key is always which method of reaching the 405 will be faster.

The traffic engineer indicated that he would expect that traffic to and from the 605/Katella ramps would increase slowly, but that it would be a steady increase with new traffic coming in from northerly just North of Ball and Norwalk, and easterly from Knott and Ball.

The EIR does not take into account the SR-22/405/605 being completed and the traffic patterns changing as people determine that the fastest way to the 405 North and South would be down Katella to the 605 South.

At the meeting the EIR traffic person seemed to want to talk about the construction detours, but that is NOT where my question was. Freeing up traffic in the current 605 South interchanges will expose the system that feeds that interchange to become more traveled. Since the primary feeder (the only one South of Lincoln) is Katella, the EIR must take into consideration the additional traffic from the change in traffic patterns that will arise when the project has completed and is seen as a better alternative than traveling down Valley View or Knott to the 405.

This failure to consider these changes in traffic patterns invalidates the number of trips that we can expect Katella to have to experience once the work has been completed as they indicate in the EIR.

C1

2) There are no penalties associated to plan failure

At any time the LAMC can state any reason to “delay” their implementation of the plans, even to the point of outright cancellation, without any penalties.

This means that they are being cart blank for the development of a 75,000 square foot Medical Office building.

After that building is completed there are no strings attached to the use of the building (certificate of occupancy) being contingent on having a functioning completed parking structure. So, it would be possible under the current scenario for the LAMC to build the medical office building in Phase I and not complete the parking structure. It would also be possible for the LAMC to complete the 75,000 square foot medical office building without the deconstruction of the smaller office building that marks the start of Phase II.

In fact, there are no penalties or leverage of any components failure as a cause to stop the project or force the LAMC to compensate the city for non-completion.

The LAMC has been provided a blank cheque in terms of development. They have the ability to develop the 75,000 square foot building with no penalties for stopping development or not building the parking structure and demolishing the smaller medical office building and adding the parking spaces. Or even adding ONE SINGLE BED,

OSHPD is an excuse, not an acceptable reason for this plan to go forward without a better plan in place to hold LAMC accountable to (1) use it or lose it and (2) pay penalties for not doing what they claim they want to do.

3) The EIR does not address any mitigation issues along Bloomfield.

There was no discussion on ER service. In Phase II it is clear that ER service will be from the rear of the facility. That means that either the ER will be serviced via Cherry or via Bloomfield. Since the city council is considering the eminent domain plan along Los Al Blvd, the North traffic will have no choice but to use Bloomfield.

Currently Bloomfield is a four-lane street that becomes a three lane street twice a day on weekdays. There are two 25MPH zones along the street as the east side of the street is a park, an elementary school and one of the two middle schools. In addition almost all the south-bound foot, bike and car traffic that goes from the high school to the south (not going to Seal Beach and Rossmoor) travels down Bloomfield as well.

What are the ER service plans? How are those plans mitigated against the foot traffic, bike traffic and car traffic related to the service of three schools along that route? The EIR doesn't consider any of these issues in detail and provides no mitigation dealing with the integration of ER traffic into the school zones.

C2

C3

4) Specific Plan timing

Seven to eight years before Phase II actually starts, but Phase I, the 75,000 square foot medical office building can break ground, be started and completed within two years.

Yet, every plea we have heard is that the LAMC needs beds, not a 75,000 square foot medical office building. So, I propose that the City of Los Alamitos approve a construction plan as follows.

- a) The 75,000 square foot medical office building can not be started until after OSHPD has completed their second phase of approvals for the first patient tower. (approx. 4 years).
- b) The 75,000 square foot medical office building can not get a certificate of occupancy until the parking garage is operational.
- c) Within 12 months from the certificate of occupancy for the 75,000 square foot medical office building deconstruction must be started on the exiting medical office building as defined in the start of Phase II.
- d) Within 24 months from the certificate of occupancy for the 75,000 square foot medical office building the parking area to the west of Kaylor and the dual cul-de-sac of Kaylor must be completed.

This schedule acknowledges that the control of the development of the patient tower is controlled by OSHPD, but ties all the development to the towers time line. It ensures that the MOB can not be started until the patient tower is well into the approval process, and can not be occupied until the parking garage is completed.

On the short time line plan (d) should be happening at about the time that the approval for the patient tower completes and construction begins. Under the long term time line (d) would be completed at about 12-18 months before the tower would begin construction. The faster the OSHPD process goes, the sooner that Phase I and Phase II will complete, meeting the expressed needs of the LAMC and the supporters of the project to provide more beds and better ER facilities.

5) Penalties.

There are no penalties outlined for any delays in the process of the development. Egregious penalties should be established for failure to progress through the development. I would propose a \$1.00/mo/sqft penalty for the 75,000 square foot MOB for delays in the plan. Using the a-d in (4) if (c) is not met, then each month or portion thereof the LAMC will pay a \$75,000 penalty to the City of Los Alamitos for their failure to complete the work in a timely fashion. The same could be done with (4)(d).

C4

C5

6) EIR review and potential re-mitigation

The city council is considering the eminent domain plan along Los Al Blvd, the North traffic will have no choice but to use Bloomfield (the closest North-South surface street to the East of Los Al Blvd). This traffic is not considered in the current EIR.

C6

If any plan is taken by the City Council that affects the traffic patterns current seen along Los Al Blvd, such as the proposed “revitalization” project, then it is imperative that, if the LAMC has not broken ground, a new EIR be done regarding traffic and a determination made in what steps the LAMC must undertake to mitigate traffic issues generated by any development along the Los Al Blvd corridor.

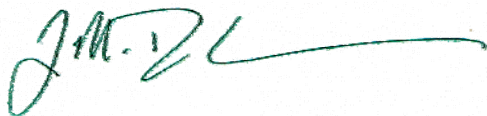
In addition, if the Planning Commission makes any changes to the zoning along Katella from Lexington on the East to the 605 on the west, The LAMC shall be responsible for mitigating any traffic from any unfinished development on the LAMC property in accordance to the new traffic that exists along the Katella corridor.

C7

By considering and implementing these six points, I believe that all the potential issues surrounding the EIR and the specific plan for the LAMC development will have been addressed. While we all want “more beds”, the current specific plan does not assure any such thing will come to pass. The items addressing the specific plan above tie project development to the “more beds” and also address concerns related to penalties for delay or non-compliance in meeting a scheduled plan.

Those portions above that deal with specific issues related to traffic and the EIR point out weaknesses in the current EIR (SR-22 and Bloomfield) and also put the development of the Katella corridor or the Los Alamitos Blvd corridor ahead of the LAMC when it comes to who is responsible for mitigation of traffic in the future. This leaves control of the cities development in the hands of the City of Los Alamitos, but gives first rights of completed development to the LAMC for not having to mitigate traffic for what they have completed construction of.

C8



JM Ivler
Los Alamitos resident
e-mailed 11/17/2010

JMI/ns



**C. RESPONSES TO COMMENTS FROM JM IVLER, LOS ALAMITOS RESIDENT,
DATED NOVEMBER 17, 2010.**

C1. As noted in Comment Letter I, the California Department of Transportation (Caltrans) has reviewed the Draft EIR and has no comment. As discussed on Page 5.3-61 of the Draft EIR, the long-range (year 2035) traffic analysis is based on traffic volume data provided by the Orange County Transportation Authority (OCTA) travel demand model. As stated on Page 5.3-61 *“The model is based on input variables such as population, households, employment, school enrollment, income, traffic counts, traffic speeds, intersection configuration, and planned roadway networks from a variety of sources such as locally approved General Plan land use entitlements, local planning department input, and state and federal data sources. The model forecasts the demand for future transportation infrastructure by prediction of future traffic patterns based on the input variables.”* Since the OCTA travel demand model accounts for changes and improvements to local and regional circulation, future traffic patterns are accounted for in the traffic volumes and resulting analysis.

C2. The comment regarding the phases of the Los Alamitos Medical Center Specific Plan does not raise any issue with respect to the contents of the Draft EIR, or any environmental issue regarding the proposed project. However, this comment is acknowledged and will be forwarded to the City Council for their consideration. Because the Commentator does not specifically comment on the Draft EIR or raise any other CEQA issue, no further response is necessary.

C3. A discussion regarding emergency room access, frequency and routing is included on Page 5.3-30 of the Draft EIR, and following are several text excerpts from page 5.3-30.

“Based on information provided by the project applicant, Care Ambulance Service typically makes about 400 patient deliveries to LAMC each month, which equates to approximately 14 ambulance deliveries per day.”

“EMS trips to the medical center can continue to utilize Cherry Street, Catalina Street, and Florista Street, and Bloomfield Street.”

As discussed on Page 5.3-30, EMS providers will access the hospital using the access from Catalina Street, while the public will access the Emergency Room using the Kaylor Street/Katella Avenue intersection. Mitigation Measure TRF-6 identified on Page 5.3-86 of the Draft EIR requires the applicant continue to coordinate with the applicable ambulance service and applicable agency staff and provide wayfinding for clarification of the location of the Emergency Room.

As shown on Exhibit 5.3-1 of the Draft EIR, the traffic analysis included four study intersections on Bloomfield Street, and no significant impacts at any of the Bloomfield Street intersections were forecast to occur with implementation of the proposed project. As shown on Exhibit 5.3-18 of the Draft EIR, about 20-30 peak hour trips are forecast to be added to Bloomfield Street north of Florista Street, equating to one additional trip every 2-3 minutes during the peak hour.



- C4. Refer to Response C2.
- C5. Comment acknowledged. This comment does not raise any CEQA-related issues. The City of Los Alamitos does not propose any penalties for the proposed project, nor are penalties part of the CEQA process. In addition, the project applicant is not seeking a development agreement with the City of Los Alamitos. No further response is necessary.
- C6. Changes to Los Alamitos Boulevard related to the recent Southern California Association of Governments (SCAG) Compass Blueprint Demonstration Project are speculative in nature at this time, since no application is under consideration by the City of Los Alamitos for City Council action. As with other subsequent projects, environmental review will be required to consider impacts to traffic and other subjects where applicable.
- C7. The comment raised by the Commentator at the EIR Scoping Meeting was noted and as shown in Appendix B, it has been identified as a non-CEQA related topic as it pertains to the economic consequences of the proposed project. Additionally, the comment requires speculation of future impacts, whereas the scope of an EIR is to review impacts of the proposed project and cumulative projects. *Lake County Energy Council v. County of Lake* (1977) 70 Cal.App.3d 851, 854-855 (“[W]here future development is unspecified and uncertain, no purpose can be served by requiring an EIR to engage in sheer speculation as to future environmental consequences.”) The proposed project and cumulative projects are defined in Section 3.0 and Section 4.0, respectively of the Draft EIR.

Although comments raised by the Commentator at the EIR Scoping Meeting and in the comment letter are too speculative for analysis in this Draft EIR, they will be forwarded to the City Council for consideration in certifying the EIR

- C8. Comment acknowledged. Refer to Responses C1 through C7, and C9.

COMMENT LETTER D

November 15, 2010

To: Steven Mendoza, Los Alamitos Community Development Director

From: David Emerson, 11295 Linda Way, Los Alamitos, CA 90720

About: Concerns relating to E.I.R. for Los Al Med Center 25 year plan

As a 50+ year area resident who has both lived and worked in Los Alamitos for the last 22 years, I have many concerns regarding both the LAMC 25 year expansion plan and the related Environmental Impact Report.

Timing related concerns:

1. I do believe modernization and modest expansion of the hospital is long overdue, however, I am disappointed that the plan does not contain a firm commitment to prompt completion of the Phase II items related to the hospital modernization and expansion.
2. The 25 year plan appears to be a bit of a one-way street. Tenet Healthcare obtains the right to move forward if they so choose, while the City of Los Alamitos has no guarantee that Tenet will move beyond Phase I, which would leave us with a new M.O.B. with three times the square footage of the one that would be demolished in Phase II, but no expansion or modernization of the hospital itself. I think mechanisms need to be in place to make sure Phase II's expansion and modernization of the hospital is completed within the next 7 years. I also think that occupation of the Phase I's new MOB A should begin with the relocation of all existing tenants in the current MOB 1 which MOB A is being built to replace.
3. It is difficult to project 25 years from now as to what may or may not be advisable, especially in view of the fact that half of the city consists of a military base which may well be phased out during that time. Due to Los Alamitos & the surrounding communities' unique traffic situation (see below), I think it is unwise at this time to allow Tenet the option to lock in the Phase III development for 25 years at their discretion. Thus, at this time, I strongly feel it is in the city's best interest to approve a 7 year plan consisting of Phase I & II, possibly with a scaled down MOB, then to deal with the possibility of a second hospital building when that becomes economically viable for Tenet.

D1

Traffic related concerns:

I was especially disappointed with the Traffic analysis and mitigation measures component of the E.I.R.

D2

As I indicated in my letter at the time of the Scoping hearing, this area has a unique traffic situation created by the lack of access both south and west from the LAMC:

- The primary viable access southward from the LAMC is Los Al Blvd, due to both the Military Base and, further south, the communities of College Park East at the northeast corner of Seal Beach and the adjoining Garden Park at the western border of Garden Grove.

D3

- The only secondary access is Valley View, two miles east of the LAMC.
- In the almost 4 miles between Studebaker Rd and Knott Avenue, there is no way for a car to get from Katella to Lampson or the 405/22 Freeways on surface streets without traveling on Los Al Blvd. or Valley View, and it would be extremely difficult to construct one in the future due to current development.
- Unfortunately the same situation exists to the west, with there being no east/west streets that connect to Studebaker road and the 605 freeway other than Katella between Cerritos and Westminster Blvd, a distance of over 3 miles. In this case, the barriers are not only the adjoining communities of Rossmoor and Leisure World, but also the San Gabriel River and the 605 freeway. Again, development has locked the community in. . . with half of the city of Los Alamitos yet to be developed.

D3

As a result of this horrific lack of major arteries going South or West from Los Alamitos and the surrounding communities, traffic at rush hour is already gridlocked on Katella and Los Alamitos Blvds., the primary access to the new doctors offices and expanded hospital.

D4

The greatest gridlock at this time occurs at the intersection of Los Alamitos Blvd. and Katella, Bloomfield and Katella, Farquhar and Katella, and Wallingsford/Walnut and Katella, although secondary intersections along Farquhar in particular also have substantial gridlock intermittently between 7:00 – 9:00 a.m. and from 2:30 – 6:00 p.m. on weekdays, as well as when training ends and begins at the Military Base on weekends.

I know, because I live off of Farquhar between Bloomfield and Los Al Blvd., and my work as a Realtor in the community as well as community involvements has me travelling these streets at all times of the day.

D5

Traffic flow is compounded by the fact that the only secondary schools in the Los Alamitos School District, which includes all of Rossmoor and Seal Beach, are all located north of the LAMC, with access primarily via Katella, Los Alamitos Blvd., and Bloomfield.

D6

Not only was the impact of the schools on the traffic patterns not adequately addressed in the E.I.R., when I asked the Director of the Traffic Study whether their flow rates represented summer or school year car counts, he couldn't even answer my question! That's how little attention was paid to the schools in the EIR!

D7

In addition to the schools, there is a unique relationship between the LAMC and the large retirement community of Leisure World which puts more of the traffic to the LAMC onto Los Al Blvd, the only viable route between the two. Indeed, the new bridge being built over the 405 for Los Al/Seal Beach Blvd. is the only bridge I have ever heard of with a lane dedicated to emergency traffic exclusively and exclusively in one direction (north). Although some of that results from the placement of the fire station in relation to College Park East, at least half of that traffic is created by ambulances transporting patients north on Los Alamitos Blvd.

D8

Whenever Katella gridlocks, Farquhar absorbs enough of the overflow traffic that it also gridlocks. For residents in my tract, Suburbia Estates, the only way out at time is Bloomfield, which absorbs overflow from Los Al Blvd. Additional traffic on Katella results on additional gridlock on Farquhar as surely as water flows downhill. Yet when I asked the Director of the Traffic Component if any of the Farquhar intersections were studied, he couldn't even tell me!

D9

What is missing?

1. I believe all intersections on Farquhar between (& including) Los Alamitos Blvd. and Bloomfield need to be thoroughly studied—including the only 2 entrance & exit streets from Suburbia estates.
2. All traffic studies need to take into account the unique configuration or arteries as outlined above.
3. All traffic studies need to take into account the unique influence of school traffic, and need to be conducted during times when school is in session.
4. It is absolutely incomprehensible to me that no mitigation is required on the already gridlocked intersections of Los Alamitos and Katella and Katella and Bloomfield or Bloomfield and Walnut. It is routine at peak hours for northbound traffic on Los Alamitos Blvd. to wait through 3 – 5 two minute signal cycles to get through the intersection. It is also routine at peak morning traffic for Katella eastbound to be backed up from Walnut/Wallingsford (and/or Katella) all the way onto the 605 freeway.
5. Local traffic has been reduced dramatically by the current “Great Recession,” and any traffic study should allow for flow rates to rebound at least 10% once the economy recovers.
6. During phase II and even more so if phase III is built, much LAMC traffic will travel on Bloomfield & Catalina or other Old Town streets due to the closure of Kaylor and placement of the 2nd parking structure, yet the mitigation is planned only for Kaylor/Katella and Cerritos/Los Al Blvd.
7. The EIR minimizes emergency vehicle traffic, which will be routed past a school and through the mixed use neighborhood of Old Town East, all on 2 lane roads.
8. Traffic (& all other) Analysis in the EIR were based on March, 1989 general plan currently in process of being updated. (see 5.3.7 of the EIR) That's a 21 year old general plan. It would seem prudent to wait for the revision before moving forward.
9. Parking: Pay parking would be instituted upon completion of Phase 1 project components. (5.3.7-88). When people have to pay to park, they look for parking in the surrounding community. This would adversely affect Old Town West, local businesses on Katella, and parking at Laurel Park. In addition, cars “cruising” to locate parking would add to the congestion on all streets surrounding the hospital. To mitigate, parking should be free.
10. Traffic mitigation has been repeatedly justified with explanations that the total project creates less traffic than 3 fast food outlets. That is simplistic on several fronts. First, the local McDonalds, the nearest fast food outlet to the LAMC, generates massive amounts of visits. . . quite likely more than any other single business in Los Alamitos! Secondly, much of that business is from vehicles already traveling down Katella, or up Los Alamitos Blvd. In other words, the traffic is from

D10

D11

D12

D13

D14

D15

D16

D17

D18

D19

cars already passing by or within a block of the fast food outlet. Hospitals and doctors offices, on the other hand, generate trips from miles away. Very few, if any, cars get off the 605 freeway to drive a mile to the local McDonalds unless they're already headed in that direction. Ditto for the 405. It's a very flawed comparison.	D19
11. The traffic signal proposed for Kaylor, far from mitigating traffic, will only make it worse as it further congests the most congested section of Katella. Coordinating it with the signal at Cherry hardly helps. That signal is already cumbersome because of the number of pedestrians crossing Katella either to access public transit or parking. Frequently I have waited to turn left from Cherry southbound but been unable to do so due to pedestrians crossing. As a result, now I turn right if I observe pedestrians are present.	D20
12. Even worse is the imposition of a barrier at Maple and Katella. When Bloomfield and Los Alamitos Blvds. are congested, I frequently turn left from Maple northbound onto Katella. When I return home westbound on Katella I routinely turn left onto Maple to avoid the line at Bloomfield. The neighborhood accessed by Maple is part of densely populated "Apartment Row" and blocking that access only adds to the lines of cars waiting to turn at Bloomfield and Los Alamitos Blvds. The mitigation only makes matters worse.	D21
13. As a minimum, a second left turn lane needs to be added at Bloomfield for eastbound Katella and at Los Alamitos Blvd. for westbound Katella.	D22
14. A pedestrian bridge is probably needed across Katella as well, with no crossing at either or both Cherry, Kaylor, and possibly Bloomfield.	D23
15. One of the choke points for Katella westbound is Walnut/Wallingsford, and traffic there needs to be mitigated as well, possibly by the addition of a second left turn lane from Katella westbound, or at least a lengthening of the pocket.	D24
16. Similarly, the left turn pocket for Los Al northbound at Katella routinely overflows at rush hour. It is already 2 lanes, so probably needs to be extended.	D25

Thank you for your consideration. Please feel free to contact me at 562-822-7653 or RealtorDE@gmail.com



D. RESPONSES TO COMMENTS FROM DAVID EMERSON, LOS ALAMITOS RESIDENT, DATED NOVEMBER 15, 2010.

- D1. The comment regarding the phases of the Los Alamitos Medical Center Specific Plan does not raise any issue with respect to the contents of the Draft EIR, or any environmental issue regarding the proposed project. However, this comment is acknowledged and will be forwarded to the City Council for their consideration. Because the Commentator does not specifically comment on the Draft EIR or raise any other CEQA issue, no further response is necessary.
- D2. The Commentator is offering opinion regarding the traffic analysis and mitigation measures in the Draft EIR. No further response is necessary.
- D3. The Commentator has provided discussion on the layout of the circulation system. While the comments are related to freeway access, typical freeway interchange design includes spacing of arterial interchanges at 1-mile increments, and 2-mile increments when approaching a freeway-to-freeway interchange such as the I-405/SR-22 system interchange. The spacing of freeway interchanges falls under the jurisdiction of the California Department of Transportation (CalTrans) and appears consistent with industry standards. No further response is necessary.
- D4. The Commentator has provided opinion regarding the operation of Katella Avenue and Los Alamitos Boulevard corridors. Refer to Table 5.3-4 in the Draft EIR for existing conditions intersection level of service analysis results.
- D5. Refer to Response D4.
- D6. As noted on Page 5.3-13 of the Draft EIR, traffic counts were collected in October 2008, while local schools were in session.

As shown on Exhibit 5.3-18 of the Draft EIR, approximately 20-30 peak hour trips are forecast to be added to Bloomfield Street north of Florista Street, equating to one additional trip every 2-3 minutes.

As also shown on Exhibit 5.3-18 of the Draft EIR, approximately 40-50 peak hour trips are forecast to be added to Los Alamitos Boulevard north of Catalina Street, equating to less than one additional trip each minute during the peak hour.

The Draft EIR concluded that no significant impacts are forecast to occur at Bloomfield Street study intersections. The analysis includes impacts along Katella Avenue and Los Alamitos Boulevard and recommends Mitigation Measures TRF-1 through TRF-5 to address the significant traffic impacts.

- D7. Refer to Response D4. Trip rates utilized to forecast traffic associated with the proposed project are based on industry-standardized Institute of Transportation Engineers (ITE) trip rates.



- D8. Based on RBF Consulting's review of the OCTA dedicated website (www.octa.net/wc_openhouse.aspx) for the West County Connectors project, the Seal Beach Boulevard bridge over I-405 includes four northbound lanes. Three lanes continue north through the I-405 Northbound Off-Ramp/Seal Beach Boulevard intersection, and one lane serves the I-405 Northbound Loop On-Ramp. The Commentator statement about a dedicated lane over the bridge structure serving emergency traffic cannot be substantiated and is typically cost-prohibitive.

The traffic impact analysis (refer to [Section 5.3, Traffic](#), of the Draft EIR) reviewed impacts on Seal Beach Boulevard-Los Alamitos Boulevard for near-term and long-range conditions accounting for current and future traffic volumes.

Ambulance service was analyzed on Page 5.3-30 of the Draft EIR, and states *"Based on information provided by the project applicant, Care Ambulance Service typically makes about 400 patient deliveries to LAMC each month, which equates to approximately 14 ambulance deliveries per day."*

- D9. The Commentator has provided opinion to operation of Katella Avenue and Farquhar Avenue corridors. Refer to [Table 5.3-4](#) of the Draft EIR for existing conditions intersection level of service analysis results which includes the Los Alamitos Boulevard/Farquhar Avenue intersection.
- D10. Refer to [Exhibit 5.3-1](#) of the Draft EIR for traffic study intersections and [Table 5.3-4](#) of the Draft EIR for existing conditions intersection level of service analysis results, which includes the Los Alamitos Boulevard/Farquhar Avenue intersection. The study area was determined based on discussion with City staff and the traffic study has received extensive review and approval.
- D11. As discussed on Page 5.3-61 of the Draft EIR, the long-range (year 2035) traffic analysis is based on traffic volume data provided by the Orange County Transportation Authority (OCTA) travel demand model, which states *"The model is based on input variables such as population, households, employment, school enrollment, income, traffic counts, traffic speeds, intersection configuration, and planned roadway networks from a variety of sources such as locally approved General Plan land use entitlements, local planning department input, and state and federal data sources. The model forecasts the demand for future transportation infrastructure by prediction of future traffic patterns based on the input variables."* Since the OCTA travel demand model accounts for changes and improvements to local and regional circulation, future traffic patterns are accounted for in the traffic volumes and resulting analysis.
- D12. Refer to Response D4.
- D13. Refer to the Level of Service (LOS) summary tables provided on Pages 5.3-51 and 5.3-70 of the Draft EIR for near-term and long-range traffic impact conclusions. The traffic analysis reviews impacts along Katella Avenue and Los Alamitos Boulevard and recommends Mitigation Measures TRF-1 through TRF-5 to address the significant traffic impacts.



- D14. As stated on Page 5.3-13 of the Draft EIR, the traffic analysis conservatively utilizes traffic counts from year 2008 conditions, which are understood to be higher than year 2009 or 2010 conditions.
- D15. Trip assignment for the proposed project accounts for changes in the circulation system, such as the vacation of Kaylor Street. As shown in *Table 5.3-11* on Page 5.3-36 of the Draft EIR, trip generation for Phase 2 is negative when accounting for the demolished 24,000 square foot medical office building and hospital bed reconfiguration.

Table 5.3-17 of the Draft EIR reviews the potential for traffic impacts when accounting for construction of Phases 1-3 for year 2035 conditions. Refer to the Level of Service (LOS) summary tables provided on Pages 5.3-51 and 5.3-70 of the Draft EIR for near-term and long-range traffic impact conclusions. The traffic analysis in the Draft EIR reviews impacts along Katella Avenue and Los Alamitos Boulevard and recommends mitigation measures TRF-1 through TRF-5 to address the significant traffic impacts.

- D16. Refer to Response D15.
- D17. The traffic analysis was prepared under contract to the City of Los Alamitos consistent with prior studies completed within the City.

The Commentator is incorrect in the statement that the “traffic (& all other) analysis in the EIR were based on March, 1989 General Plan. The analysis in the Draft EIR is based upon existing conditions at the time the Notice of Preparation was released as required by CEQA, not the existing conditions cited in the 1989 General Plan. The proposed project is subject to State planning and environmental law, and as such is being processed through the City of Los Alamitos utilizing these laws, as well as City codes and regulations. Delaying the planning and environmental review of the proposed project until after the City completed an update of its General Plan, which has not yet commenced and could take 18 months or more, would constitute a delay in excess of one year, and would violate State Law.

- D18. As discussed on Page 5.3-34 of the Draft EIR, *“Parking would be provided at ratios that meet or exceed the parking standards of the Los Alamitos Medical Center Specific Plan Development Regulations.”* Additionally, *“Parking would be on a paid basis, with employee parking provided at no charge.”* Pay parking is often employed at medical centers similar to the proposed project, and is consistent with patron expectations when parking in a parking structure as proposed in Phase 1 and Phase 3. Since the proposed project consolidates and simplifies visitor parking, the effect of “cruising” is expected to be negligible on the circulation system.
- D19. The Commentator is referring to information presented to the Planning Commission at recent Planning Commission hearing. The information was intended to be illustrative only, and the comparison was provided to establish a sense of scale for non-technical audiences to understand the size of the project in terms of traffic generation. The illustrative information is not included in the Draft EIR.



- D20. As discussed on Page 5.3-59 of the Draft EIR, *“Due to the close proximity of intersections, preliminary traffic synchronization analysis has been prepared for the Katella Avenue corridor between Los Alamitos Boulevard and Bloomfield Street. The analysis has been prepared based on currently available traffic signal timing and phasing data provided by City staff. Through adjustments to the signal timing and phasing data, the progression of traffic along Katella Avenue is maintained, primarily due to the relocation of the pedestrian crossing from the Cherry Street/Katella Avenue intersection to the Kaylor Street/Katella Avenue intersection. The maintained Katella Avenue operations provide acceptable operations and efficient flows of traffic in both the eastbound and westbound directions.”*

As noted in Section 5.3, Traffic of the Draft EIR, traffic flow along Katella Avenue would be maintained, and includes relocation of pedestrian crossings to the proposed Kaylor Street/Katella Avenue intersection. Motorists and pedestrians alike utilize the circulation system and limiting pedestrian activity is not considered acceptable.

- D21. As discussed on Page 5.3-72 of the Draft EIR, Mitigation Measure TRF-1 is *“consistent with the OCTA Smart Street Program to improve traffic flow and realize available traffic capacity on regional routes of significance.”* Additionally, *“Westbound left-turn movements onto Maple Street would be redistributed to Bloomfield Street or can make a u-turn at the Cherry Street/Katella Avenue intersection. While some local traffic may be redistributed access management along Katella Avenue would be improved. The existing grid pattern of roadways south of Katella Avenue supports the Katella Avenue raised median modifications and circulation enhancements.”* Traffic analysis operations summarized in Tables 5.3-15 and 5.3-18 of the Draft EIR account for implementation of Mitigation Measure TRF-1 and results in a forecast operation of LOS B at the Bloomfield Street/Katella Avenue intersection for year 2013 conditions and LOS D for year 2035 conditions.
- D22. Refer to Response D21.
- D23. Pedestrian movements crossing Katella Avenue are accommodated safely at designated locations as managed by the City of Los Alamitos Public Works Department. Use of a pedestrian bridge is applicable when crossing activity is concentrated at specific locations or when a medical or education campus includes properties on both sides of a high volume roadway. Since pedestrian crossings are diffused at many locations along Katella Avenue, and the proposed medical campus does not include project-related buildings with high pedestrian activity, inclusion of a pedestrian overcrossing is not required to mitigate an impact to traffic operations.
- D24. The *CVS Pharmacy Project Traffic Impact Analysis (Linscott, Law & Greenspan, Engineers, February 20, 2009)* included existing conditions analysis of the Walnut Street-Wallingsford Road/Katella Avenue intersection. The results of the City-approved traffic study indicated the Walnut Street-Wallingsford Road/Katella Avenue intersection is currently operating acceptably at LOS C in the morning and LOS B in the evening. Since no impact is identified at the Walnut Street-Wallingsford Road/Katella Avenue intersection no mitigation measures are required at the intersection. Concerns related to queuing operations at the Walnut Street-Wallingsford Road/Katella Avenue intersection is an item for consideration by the City during the next General Plan Update.



- D25. Section 5.3, Traffic, of the Draft EIR reviews impacts along Katella Avenue and Los Alamitos Boulevard and recommends Mitigation Measures TRF-1 through TRF-5 to address the significant traffic impacts. Concerns related to queuing operations at the Los Alamitos Boulevard/Katella Avenue intersection is an item for consideration by the City during the next General Plan Update.

COMMENT LETTER E

October 27, 2010

Steven A. Mendoza, Community Development Director
City of Los Alamitos
3191 Katella Avenue
Los Alamitos, CA 90720

SUBJECT: **CITY OF SEAL BEACH COMMENTS RE: "DRAFT EIR –
LOS ALAMITOS MEDICAL CENTER SPECIFIC PLAN"**

Dear Mr. Mendoza:

The City of Seal Beach has reviewed the above referenced Draft EIR and has no comments relative to the document. The proposed project area is such a distance from the City of Seal Beach as to not cause any significant direct or indirect impacts upon our community. The potential traffic impacts to the study intersections within the City of Seal Beach's jurisdiction appear to be below a level of significance.

The Environmental Quality Control Board (EQCB) considered and discussed the Draft EIR document at their regular meeting of October 27, 2010. The EQCB authorized the Chairman to sign this letter indicating the official comments of the City of Seal Beach.

Thank you for your consideration of the comments of the City of Seal Beach. If you have questions concerning this matter, please do not hesitate to contact Mr. Mark Persico, Director of Development Services, telephone (562) 431-2527, extension 1313.

Sincerely,



Mario Voce
Chairman, Environmental Quality Control Board
City of Seal Beach



E1



E. RESPONSES TO COMMENTS FROM MARIO VOCE, CHAIRMAN, ENVIRONMENTAL QUALITY CONTROL BOARD, CITY OF SEAL BEACH, DATED OCTOBER 27, 2010.

- E1. The comment letter acknowledges receipt of the Draft EIR and notes that the agency has no comments. The comment letter acknowledges the Environmental Quality Control Board (EQCB) considered and discussed the Draft EIR document at their regular meeting of October 27, 2010. The EQCB authorized the Chairman to sign the comment letter indicating the official comments of the City of Seal Beach. The comment letter does not raise any issues with respect to the contents of the Draft EIR, or any environmental issue regarding the proposed project; therefore, no further response is necessary.



COMMENT LETTER F

ORANGE COUNTY FIRE AUTHORITY

P.O. Box 57115, Irvine, CA 92619-7115 • 1 Fire Authority Rd., Irvine, CA 92602

Keith Richter, Fire Chief

(714) 573-6000

November 8, 2010

City of Los Alamitos
3191 Katella Ave
Los Alamitos, CA 90720-5600
Attn: Steven Mendoza, Comm Development Director

SUBJECT: Los Alamitos Medical Center Specific Plan Draft EIR

Dear Sir(s):

Thank you for the opportunity to review the subject document. The Orange County Fire Authority has no additional comments.

All standard conditions with regard to development, including water supply, built in fire protection systems, road grades and width, access, building materials, and the like will be applied to this project at the time of plan submittal. Please contact me at 714-573-6199 if you need further information on this matter.

F1

Sincerely,

A handwritten signature in black ink, appearing to read "Michele Hernandez", with a long horizontal flourish extending to the right.

Michele Hernandez
Management Analyst, Strategic Services



F. RESPONSES TO COMMENTS FROM MICHELE HERNANDEZ, MANAGEMENT ANALYSIS, STRATEGIC SERVICES, ORANGE COUNTY AUTHORITY, DATED NOVEMBER 8, 2010.

- F1. The comment letter acknowledges receipt of the Draft EIR and notes that the agency has no comments. The comment letter also notes that all standard conditions with regard to development, including water supply, built in fire protection systems, road grades and width, access, and building materials will be applied to the proposed project at the time of plan submittal. The comment letter does not raise any issues with respect to the contents of the Draft EIR, or any environmental issue regarding the proposed project; therefore, no further response is necessary.



CITY of CYPRESS

5275 Orange Avenue, Cypress, California 90630

Phone 714-229-6700

www.ci.cypress.ca.us

November 8, 2010

Mr. Steven Mendoza
Community Development Director
City of Los Alamitos
3191 Katella Avenue
Los Alamitos, CA 90720

City of Los Alamitos
Community Development

NOV 10 2010

RECEIVED

Subject: DEIR Los Alamitos Medical Center Specific Plan

Dear Mr. Mendoza:

Thank you very much for forwarding a copy of the DEIR for the above-referenced proposal to us for review and comment. Your proactive approach to soliciting input is welcome and appreciated, as it builds on the recent efforts on the part of both of our agencies to foster a more productive and inclusionary working relationship than the one experienced in the past.

G1

As stated at the initial meeting with you and your consultant (and throughout the environmental process thusfar), Cypress is most concerned about water quality, hydrology and storm water drainage (or lack thereof) as a result of the proposed project. This paramount concern continues to be that the end result of any development efforts in your community cannot adversely affect existing hydrology in our community.

G2

The presence of an undersized existing storm water drainage facility in Katella Avenue is already an identified issue and we previously stated that it will be incumbent upon the City of Los Alamitos and the project proponent to ensure us that storm water drainage directed into that pipe will not be allowed to flow at a rate or in a volume at any time (or in any manner) as to cause percolation/backup into Cypress properties and the improvements already in place thereon.

G3

The hydrology study conducted in the DEIR for the proposal asserts that runoff will not demonstrably change given the before and after site conditions; a position which we find intriguing given the abandonment of streets and the construction of considerably more building footprint. We had asked during the NOP process that the DEIR include options of on-site detention and retention, the installation of a new and enhanced capacity drainage system (whether in the form of a parallel facility or an upgrade to the existing facility) or the engineering/mathematical

G4

Prakash Narain, M.D., Mayor

Douglas Bailey, Mayor Pro Tem

Leroy Mills, Council Member

Phil Luebben, Council Member

Todd W. Seymore, Council Member

calculations and modeling that would provide us with assurance that no discharge of water into the existing or improved facility will cause any adverse impacts on Cypress properties (developed or entitled) that already detain, retain and meter storm water into the same facility. The document included none of these requested options. Therefore, this remains as a concern. The fact that a new water quality permit process is well underway in this portion of Orange County is an additional complication in this area going forward with the advent of stricter requirements in that permit.

G4

In short, we do not wish to experience back up/surcharge into our properties due to an omission/error/false assumption regarding permeable surfaces and absorption rates on the subject site within the DEIR. Given the proposed long term construction schedule of the proposal, such an event may not occur for some time – long after the entitlement process and its related periods of implementing corrective measures have passed.

G5

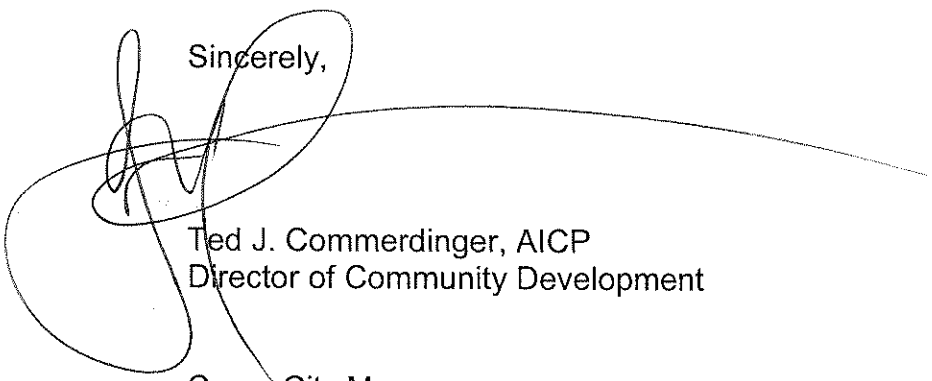
We therefore wish to have assurances from the City of Los Alamitos and the project proponent that should such events occur in the future, both our property owners and the City of Cypress will have guarantees that immediate corrective measures will be taken by the City of Los Alamitos and the project proponent to alleviate the surcharge at no cost to either the property owners or the City of Cypress.

G6

We again thank you for this opportunity to comment and look forward to the generation of a suitable vehicle to address our long term concerns in this area.

G7

Sincerely,



Ted J. Commerdinger, AICP
Director of Community Development

Cc: City Manager
City Council



G. RESPONSES TO COMMENTS FROM TED J. COMMERDINGER, AICP, DIRECTOR OF COMMUNITY DEVELOPMENT, CITY OF CYPRESS, DATED NOVEMBER 8, 2010.

- G1. The comment letter acknowledges receipt of the Draft EIR. No further response is necessary.
- G2. The Draft EIR includes a review of hydrology in Section 5.8, Hydrology, Drainage, and Water Quality, which is supported by hydrology and water quality technical studies that are included in their entirety in the Technical Appendices of the Draft EIR.

Stormwater Runoff

The following information is restated from page 5.8-14 of the Draft EIR, and identifies the existing systems in the vicinity of the project site.

“Stormwater runoff on the project site is conveyed through the parking lot via surface flow to concrete parking lot drainage swales, which convey flow to existing storm drain inlets in Kaylor Street and Katella Avenue. The storm drain in Kaylor Street ties into the Katella Avenue storm drain, which extends from Winners Circle on the east to Los Alamitos Boulevard on the west and outlets to the Orange County Flood Control District’s Katella Storm Channel (Facility No. C01S05).”

Hydrology

The City of Cypress questions the engineering/mathematical calculations and modeling used in the hydrology technical study. The proposed project was modeled using the Rational Method as outlined in the *Orange County Hydrology Manual* (OCHM) to determine the 10-year and 100-year runoff from the site, which is the appropriate method per the County of Orange and for County systems/facilities.

There is an existing storm drain in Kaylor Street that bisects the project site. The storm drain discharges into the existing storm drain in Katella Avenue. Concrete storm drains facilities are also present in Catalina, Kyle, and Florista Streets. The Kaylor Street storm drain was included in the calculations. Information for the storm drain was determined from as-built plans; refer to Appendix G, Preliminary Hydrology Report, of the Draft EIR for a copy of the plans. At all other discharge locations, runoff flows into the street, or is minor local flow. In these locations the runoff was quantified using Figure D-1, Time of Concentration Nomograph for Initial Subarea, from the *OCHM*, also the appropriate method per the County of Orange and for County systems/facilities.

The project site is 100 percent Commercial development. Commercial development has a 90 percent impervious area and 10 percent pervious area according to Figure D-1 of the *OCHM*; refer to Section 5.8, Hydrology, Drainage, Water Quality, pages 5.8-10 through 5.8-12 and Table 5.8-1, Summary of Pervious Area for Existing Conditions, of the Draft EIR.



Furthermore, the imperviousness of the site actually decreases with each subsequent **phase** (emphasis added) due to increased landscaping and open space areas; refer to page 5.8-16, *Table 5.8-3, Summary of Impervious Area by Phase*, *Table 5.8-4, Summary of Pervious Area for Existing and Phased Conditions*, *Table 5.8-5, Summary of Runoff for Existing and Phased Conditions* and *Exhibit 5.8-2, Pervious Areas by Subbasin – Phase 1 Conditions*, *Exhibit 5.8-3, Pervious Areas by Subbasin – Phase 2 Conditions*, and *Exhibit 5.8-4, Pervious Areas by Subbasin – Phase 3 Conditions*, of the Draft EIR.

Table 5.8-4
Summary of Pervious Area for Existing and Phased Conditions

New Subbasin Designation	Area [ac]	Existing	Phase 1	Phase 2	Phase 3
		Pervious Area [%]	Pervious Area [%]	Pervious Area [%]	Pervious Area [%]
A	0.4	10%	10%	13%	10%
B	0.1	21%	21%	21%	<u>20%</u>
C	1.6	10%	10%	10%	10%
D	1.6	13%	13%	16%	39%
E	2.9	10%	10%	22%	22%
F	1.0	13%	13%	18%	18%
G	1.5	10%	10%	10%	10%
H	0.9	13%	13%	15%	16%
I	0.5	12%	12%	12%	12%
J	0.3	10%	10%	10%	10%
K	1.7	10%	10%	10%	10%
L	0.9	10%	10%	10%	10%
M	1.3	13%	13%	13%	26%
N	0.9	13%	<u>10%</u>	<u>10%</u>	13%
O	0.9	10%	23%	23%	23%
P	1.3	13%	13%	13%	13%
Q	0.8	20%	20%	20%	20%
R	0.4	11%	19%	20%	20%
S	0.7	10%	11%	12%	12%
T	1.2	10%	13%	14%	14%
U	0.5	10%	10%	10%	10%
V	0.6	10%	10%	10%	10%
W	0.6	12%	12%	12%	12%
Total Site	22.3	9%	10%	13%	15%



Table 5.8-5
Summary of Runoff for Existing and Phased Conditions

Node Number or Subbasin ID	10-year Storm Runoff				100-year Storm Runoff			
	Existing [cfs]	Phase 1 [cfs]	Phase 2 [cfs]	Phase 3 [cfs]	Existing [cfs]	Phase 1 [cfs]	Phase 2 [cfs]	Phase 3 [cfs]
15 (SD in Kaylor)	15.6	15.6	15.4	15.4	24.6	24.6	24.4	24.6
G	3.5	3.5	3.5	3.5	5.3	5.3	5.3	5.3
H	2.3	2.3	2.3	2.3	3.6	3.6	3.5	3.5
I	1.6	1.6	1.6	1.6	2.4	2.4	2.4	2.4
J	1.0	1.0	1.0	1.0	1.5	1.5	1.5	1.5
K	4.9	4.9	4.9	4.9	7.5	7.5	7.5	7.5
L	2.1	2.1	2.1	2.1	3.2	3.2	3.2	3.2
M	3.8	3.8	3.8	3.6	5.8	5.8	5.8	5.6
N	2.6	2.6	2.6	2.6	4.0	4.0	4.0	3.9
O	2.3	2.1	2.1	2.1	3.3	3.3	3.3	3.3
P	3.4	3.4	3.4	3.4	5.1	5.1	5.1	5.1
Q	2.1	2.1	2.1	2.1	3.3	3.3	3.3	3.3
R	1.2	1.2	1.1	1.1	1.8	1.8	1.7	1.7
S	2.1	2.1	2.1	2.1	3.1	3.1	3.1	3.1
T	2.6	2.6	2.6	2.6	4.0	4.0	4.0	4.0
U	1.4	1.4	1.4	1.4	2.1	2.1	2.1	2.1
V	1.6	1.6	1.6	1.6	2.5	2.5	2.5	2.5
W	1.8	1.8	1.8	1.8	2.7	2.7	2.7	2.7
Total Site	55.8	55.5	55.4	55.2	85.8	85.8	85.5	85.4

Subbasin B contributed to the Kaylor Street storm drain. A one percent decrease in pervious area was determined to have no impact at the downstream end of the storm drain where it connects to the Katella Avenue storm drain. Given that there is no impact to the Kaylor Street storm drain, there would also be no impact to the Katella Avenue storm drain.

In conclusion, each phase of the proposed project results in a decrease of impervious area compared to existing conditions due to increased landscaped and open space areas. As a result, each subsequent phase of the proposed project would result in a reduction of the amount of runoff leaving the site. Thus, there are no adverse impacts to the existing storm drain facilities adjacent to the site during any of the three phases (emphasis added). Furthermore, Mitigation Measure HYD-1 has been included to ensure that impacts remain at less than significant levels.

HYD-1 Concurrent with Site Plan Review or issuance of a grading permit, whichever comes first, a hydrology review shall be conducted by a Registered Civil Engineer for each development phase to ensure that runoff values for each phase remain at or below the runoff values shown in Table 5.8-5.



Water Quality

The Construction Activities General Permit would require the preparation of a SWPPP prior to construction of the proposed project. Site-specific BMPs would be established after the proposed project has been reviewed by the City of Los Alamitos Public Works Department; refer to page 5.8-23 of the Draft EIR. A Preliminary Water Quality Management (WQMP) has been prepared for the proposed project to meet, at a minimum, the measures specified in the Countywide NPDES DAMP and City of Los Alamitos *Local Implementation Plan*, the assignment of long-term maintenance responsibilities, and the location(s) of all structural BMPs. In conclusion, compliance with the aforementioned standards and implantation of the Best Management Practices set forth in the Preliminary WQMP as well as implementation of Mitigation Measures HYD-2, HYD-3, and HYD-4, a less than significant impact would occur in this regard; refer to pages 5.8-22 through 5.8-28 and Appendix H, Preliminary Water Quality Management Plan of the Draft EIR. The mitigation measures account for the new water quality permit process currently being implemented in northwest Orange County.

In conclusion, the hydrology and water quality technical studies were prepared using the appropriate regulations and models, and the conclusions are valid and the mitigation measures ensure that project-related impacts remain at or below existing levels and do not impact on- or off-site systems or facilities.

In addition, the City of Los Alamitos received a comment letter (Comment Letter N) from Michael Balsamo, Manager, General Land Use Planning, Orange County Public Works, dated November 18, 2010, on the Draft EIR. The Orange County Public Works letter raised no comments or concerns related to water quality, hydrology, or storm water drainage. RBF Consulting contacted Mr. Aram Eftekhari at Orange County Public Works on January 4, 2011 and January 6, 2011 regarding their comment letter. Mr. Eftekhari confirmed that the lack of comments in their letter does indeed indicate that the agency has no comments or concerns related to water quality, hydrology, storm drainage, or the hydrology and water quality technical studies.

- G3. The City of Cypress has stated that presence of an undersized existing storm water drainage facility; however, there is no data to support this statement. As noted in Response G2, the Orange County Public Works Department raised no issues related to hydrology, or storm water drainage.

Also, Refer to Responses G2 and G4.

- G4. Refer to Response G2.

The United States Constitution limits an agency's authority to impose conditions to those situations where there is a clear "nexus" between the impact and the mitigation measures. *Nollan v. California Coastal Commission* (1988) 107 S.Ct. 3141. Thus, the mitigation proposed for a project must relate directly to the impacts caused. There must be "rough proportionality" between the environmental problems caused by a development project and the mitigation measure imposed on the project applicant. *Dolan v. City of Tigard* (1994) 512



U.S. 374; *CEQA Guidelines Sections* 15041, 15126.4. As required by *CEQA*, projects are required to mitigate **their impacts** (emphasis added) to the maximum extent feasible, but projects are not required to mitigate existing pre-project conditions.

Mitigation Measure HYD-1 is required to ensure that the hydrology impacts at all three phases remain at or below those cited in the Draft EIR. The hydrology study did not identify the need for facility improvements, such as the “*installation of a new and enhanced capacity drainage system (whether in the form of a parallel system or an upgrade to the existing facility)*” recommended in the comment. The hydrology technical study, Appendix G, provides the technical support for the analysis and conclusions in Section 5.8, Hydrology, Drainage, and Water Quality.

As noted in Response G2, there are no adverse impacts to the existing storm drain facilities adjacent to the site during any of three phases, given the implementation of site design features that reduce that amount of pervious and impervious surfaces as the proposed Specific Plan builds out. As shown in Response G3, the amount of pervious surfaces increases from 9 percent under existing conditions to 15 percent under buildout conditions. In conclusion, Mitigation Measure HYD-1 ensures that the project-related impacts are fully mitigated and no further mitigation is required.

- G5. Refer to Response G2. In addition, the project proposes a Specific Plan, which will establish the long-term plan for the project site along with site development standards. As part of the City Council approval of the proposed Specific Plan, additional Conditions of Approval may be required, along with the EIR mitigation measures. The City of Los Alamitos and the project applicant will have the responsibility to ensure that all mitigation measures and conditions of approval are implemented, both during construction and operation of the proposed project.
- G6. The project applicant will be responsible for implementing Mitigation Measure HYD-1. The timing and reporting process for Mitigation Measure HYD-1 will be spelled out in the Mitigation Monitoring and Reporting Program that will be included in the Final EIR.

The comment regarding other assurances does not raise any issue with respect to the contents of the Draft EIR, or any environmental issue regarding the proposed project. However, this comment is acknowledged and will be forwarded to the City Council for their consideration.

- G7. Comment acknowledged. No further response is necessary.



South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

COMMENT LETTER H

City of Los Alamitos
Community Development

NOV 19 2010

RECEIVED

E-MAILED: November 10, 2010

November 10, 2010

Mr. Steven A. Mendoza, Director smendoza@ci.los-alamitos.ca.us
Community Development Department
City of Los Alamitos
3191 Katella Avenue
Los Alamitos, CA 90720

Draft Environmental Impact Report (Draft EIR) for the Proposed Los Alamitos Medical Center Specific Plan

The South Coast Air Quality Management District (AQMD) appreciates the opportunity to comment on the above-mentioned document. The following comments are meant as guidance for the Lead Agency and should be incorporated into the final CEQA document.

H1

In the project description, the lead agency proposes construction that would include two new hospital buildings, a new central plant, support facilities and other activities. From the Draft EIR, however, it is not clear if the proposed construction includes new or relocated emergency generators and/or boiler equipment. If so, basic information including the number, size (rated heat input, maximum rated power, etc.), the proposed fuel for this equipment, hours of operation, and emissions, as applicable, should be included in the Final EIR. In addition, these types of equipment might be subject to the following AQMD rules and regulations: Rule 1146 - Emissions of Oxides of Nitrogen from Industrial, Institutional and Commercial Boilers, Steam Generators, and Process Heaters; Rule 1146.1 - Emissions of Oxides of Nitrogen from Small Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters; Rule 1470 - Requirements for Stationary Diesel-Fueled Internal Combustion and Other Compression Ignition Engines; and Regulation XIII – New Source Review. Compliance with these requirements should be referenced in the Final EIR. Questions related to the applicability of the aforementioned rules and regulation can be directed to AQMD staff at (909) 396-2601.

H2

Pursuant to Public Resources Code Section 21092.5, please provide the AQMD with written responses to all comments contained herein prior to the adoption of the Final EIR. The SCAQMD staff would be happy to work with the Lead Agency to address these issues and any other questions that may arise. Please contact Gordon Mize, Air Quality

H3

Mr. Steven A. Mendoza
Director of Community Development

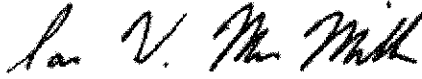
2

November 10, 2010

Specialist – CEQA Section, at (909) 396-3302, if you have any questions regarding these comments.

H3

Sincerely,



Ian MacMillan
Program Supervisor, Inter-Governmental Review
Planning, Rule Development & Area Sources

Attachment

IM:GM

LAC101001-02
Control Number



H. RESPONSES TO COMMENTS FROM IAN MACMILLAN, PROGRAM SUPERVISOR, INTER-GOVERNMENTAL REVIEW PLANNING, RULE DEVELOPMENT & AREA SOURCES, SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT, DATED NOVEMBER 10, 2010.

- H1. The comment letter acknowledges receipt of the Draft EIR. No further response is necessary.
- H2. The Central Plant's purpose is to provide power, hot water, and heating/air conditions to the existing hospital and new Hospital Buildings. During Phase 2, the Central Plant facilities would be located on top of Hospital Building 1 in a mechanical penthouse. With the buildout of Phase 3, the Central Plant would be re-located to the corner of Kaylor Street and Catalina Street, where it would remain permanently. The proposed structure would consist of a one- and two-story enclosed structure and associated cooling tower. No new emergency generators or boiler equipment are being proposed. The new location would be adjacent to other industrial uses and approximately 386 feet northwest of the nearest sensitive receptors. The off-site buildings, Catalina Street, and street trees and vegetation would serve as a buffer between the project site and these residential uses. Therefore, no revisions to the Draft EIR are necessary.
- H3. As required by *CEQA* (*Public Resources Code* Section 21092.5) and *CEQA Guidelines* Section 15088, the City of Los Alamitos will provide written responses to comments to the South Coast Air Quality Management District prior to certification of the Final EIR.

DEPARTMENT OF TRANSPORTATION

District 12
3347 Michelson Drive, Suite 100
Irvine, CA 92612-8894
Tel: (949) 724-2241
Fax: (949) 724-2592

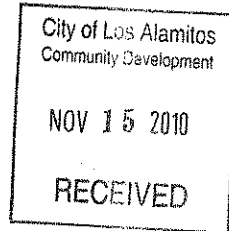
COMMENT LETTER I



*Flex your power!
Be energy efficient!*

November 12, 2010

Mr. Steven A. Mendoza
City of Los Alamitos
3191 Katella Avenue
Los Alamitos, California 90720



File: IGR/CEQA
SCH#: 2010041095
Log #: 2597
I-605

Subject: Los Alamitos Medical Center Specific Plan

Dear Mr. Mendoza,

Thank you for the opportunity to review and comment on the **Draft Environmental Impact Report (DEIR) for the Los Alamitos Medical Center Specific Plan project**. The proposed Plan includes a three-phase master planned expansion estimated to be constructed over a period of 25 years, which will include two new hospital buildings, one new medical office building, and 849 additional parking spaces on the 18.3 gross-acre Medical Center campus. The Medical Center Campus will eventually include 582,824 square feet of hospital and hospital-related uses, medical office space, support facilities, and parking. The planning area is bounded by Katella Avenue on the south, Cherry Street on the west, Catalina and Florista Streets on the north and Bloomfield St. on the east. The nearest state highways to the project are I-405 and I-605.

The Department of Transportation (Department) is a commenting agency on this project and has no comment at this time. However, in the event of any activity in the Department's right-of-way, an encroachment permit will be required.

Please continue to keep us informed of this project and any future developments that could potentially impact State transportation facilities. If you have any questions or need to contact us, please do not hesitate to call Marlon Regisford at (949) 724-2241.

Sincerely,

Christopher Herre, Branch Chief
Local Development/Intergovernmental Review

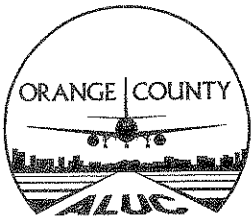
C: Terry Roberts, Office of Planning and Research

11



- I. RESPONSES TO COMMENTS FROM CHRISTOPHER HERRE, BRANCH CHIEF, LOCAL DEVELOPMENT/INTERGOVERNMENTAL REVIEW, DEPARTMENT OF TRANSPORTATION, DATED NOVEMBER 12, 2010.**
- I1. The comment letter acknowledges receipt of the Draft EIR and notes that the agency has no comments. The comment letter also notes that in the event of any activity in the agency's right-of-way, an encroachment permit would be required. The comment letter does not raise any issues with respect to the contents of the Draft EIR, or any environmental issue regarding the proposed project; therefore, no further response is necessary.

COMMENT LETTER J



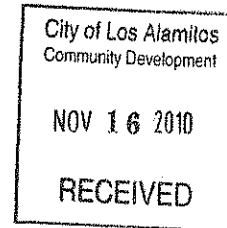
AIRPORT LAND USE COMMISSION

FOR ORANGE COUNTY

3160 Airway Avenue • Costa Mesa, California 92626 • 949.252.5170 fax: 949.252.6012

November 15, 2010

Mr. Steven A. Mendoza
Community Development Director
City of Los Alamitos
3191 Katella Avenue
Los Alamitos, CA 90720-5600



Subject: NOA of a DEIR for the Los Alamitos Medical Center Campus

Dear Mr. Mendoza:

Thank you for the opportunity to review the Draft Environmental Impact Report (DEIR) for the Los Alamitos Medical Center Specific Plan in the context of the Airport Land Use Commission's (ALUC) *Airport Environs Land Use Plan for Joint Forces Training Base (JFTB) Los Alamitos*. The proposed project includes a three-phase master planned expansion estimated to be constructed over a period of approximately 25 years. Once completed, the Medical Center campus will include 582,824 square feet of hospital and hospital-related uses, medical office space, support facilities, and parking.

J1

The proposed project is located within the Federal Aviation Regulation (FAR) Part 77 Notification Area for JFTB Los Alamitos. The DEIR should discuss whether the proposed project penetrates the Federal Aviation Administration (FAA) notification surface. Should any part of the proposed project penetrate the surface, the project proponent will need to file form 7460-1, Notice of Proposed Construction or Alteration, for Federal Aviation Administration (FAA) review.

J2

With respect to building height, the Specific Plan proposes a maximum of four stories or 70 feet, whichever is greater, measured to the top of parapet. At the maximum height of 70 feet, the proposed project will not penetrate the horizontal imaginary surface for JFTB Los Alamitos. As described in the *AELUP for JFTB*, buildings that rise to the height of the Horizontal Surface (150 feet Above Ground Level (AGL)) will violate the established approach criteria for the primary JFTB runway. We recommend the Specific Plan include language stating that the maximum building heights will not surpass the horizontal imaginary surface for JFTB Los Alamitos.

J3

The proposed project is located outside of the 60 dBA and 65 dBA CNEL noise contours for JFTB Los Alamitos and would not be subject to any special noise reduction

J4

requirements. The DEIR also discussed that no heliports are proposed as part of the project.

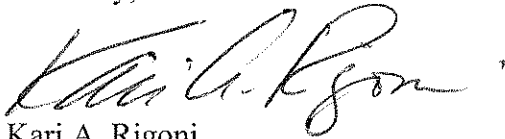
J4

A referral by the City to the ALUC may be required for this project due to the location of the proposal within an AELUP Planning Area and due to the nature of the required City approvals (i.e. Specific Plan and General Plan Amendment) under PUC Section 21676(b). In this regard, please note that the Commission wants such referrals to be submitted to, and agendized by, the ALUC staff between the Local Agency's expected Planning Commission and City Council hearings. Since the ALUC meets on the third Thursday afternoon of each month, submittals must be received in the ALUC office by the first of the month to ensure sufficient time for review, analysis, and agendizing.

J5

Thank you again for the opportunity to comment on the initial study. Please contact Lea Choum at (949) 252-5123 or via email at lchoum@ocair.com should you have any questions related to the Airport Land Use Commission for Orange County.

Sincerely,



Kari A. Rigoni
Executive Officer



J. RESPONSES TO COMMENTS FROM KARI A. RIGONI, EXECUTIVE OFFICER, AIRPORT LAND USE COMMISSION FOR ORANGE COUNTY, DATED NOVEMBER 15, 2010.

- J1. The comment letter acknowledges receipt of the Draft EIR and restates the project description. No further response is necessary.
- J2. As discussed on page 5.1-33 of the Draft EIR, the proposed project is located within the Federal Aviation Regulation Part 77 Notification Area for Joint Forces Training Base (refer to Exhibit 5.1-1). As described in the Airport Environs Land Use Plan for Joint Forces Training Base, building that rise to the height of the horizontal surface, 150 feet above ground level, would violate the established approach surface criteria for the primary Joint Forces Training Base runway. In addition, with respect to building heights, development proposals which include the construction or alteration of structures more than 200 feet above ground level, require filing with the FAA and review by the Airport Land Use Commission. The proposed heights for both Hospital Building 1 and Hospital Building 2 are 68'-0". All other proposed buildings are below 68'-0". Therefore, the proposed project would not violate the established approach surface criteria for the runway, nor require a filing with FAA or review by Airport Land Use Commission. Furthermore, the proposed project is not located within the Joint Forces Training Base Los Alamitos Impact Zones (refer to Exhibit 5.1-2). Therefore, the proposed project would be consistent with the standards and requirements of the Airport Environs Land Use Plan. Therefore, no revisions to the Draft EIR are necessary.
- J3. Since the proposed project would be consistent with all standards and requirements of the Airport Environs Land Use Plan, there will be no further revisions to the Specific Plan or the Draft EIR.
- J4. As provided in the comment, the proposed project is located outside of the 60 dBA and 65 dBA CNEL noise contours for JFT Los Alamitos and would not subject to any special noise reduction requirements. No revisions to the Draft EIR are necessary.
- J5. The City of Los Alamitos is not subject to the Airport Land Use Commission referral as the City has met all standards and requirements of the Airport Environs Land Use Plan.



Linda S. Adams
Secretary for
Environmental Protection

Department of Toxic Substances Control

Maziar Movassaghi
Acting Director
5796 Corporate Avenue
Cypress, California 90630



Arnold Schwarzenegger
Governor

November 15, 2010

Mr. Steven A. Mendoza
City of Los Alamitos
3191 Katella Avenue
Los Alamitos, California 90720-5600

NOTICE OF PREPARATION OF DRAFT ENVIRONMENTAL IMPACT REPORT (EIR) FOR LOS ALAMITOS MEDICAL CENTER SPECIFIC PLAN (SCH# 2010041095)

Dear Mr. Mendoza:

The Department of Toxic Substances Control (DTSC) has received your submitted Notice of Availability of the Environmental Impact Report for the above-mentioned project. The following project description is stated in your document: "The project applicant is proposing a Specific Plan for the Los Alamitos Medical Center campus. The Los Alamitos Medical Center is envisioned to be a safe, attractive, well-designed medical center where surrounding residents of all ages can obtain valuable medical treatment and care. The proposed Specific Plan for the Medical Center campus includes a three-phase master planned expansion estimated to be constructed over a period of approximately 25 years. The Specific Plan will include the provision of an additional 164 hospital beds, two new hospital buildings, and one new medical office building (75,100 gross square feet) to be used for additional outpatient and associated medical uses, and an additional 849 parking spaces than what currently exists on the Medical Center campus. It is anticipated that four new structures will be constructed on the existing 18.3 gross-acre Medical Center campus built over a 25-year period, as outlined below in the Development Program".

K1

Based on the review of the submitted document DTSC has the following comments:

- 1) The EIR should evaluate whether conditions within the project area may pose a threat to human health or the environment. Following are the databases of some of the regulatory agencies:

K2

- National Priorities List (NPL): A list maintained by the United States Environmental Protection Agency (U.S.EPA).
 - Envirostor (formerly CalSites): A Database primarily used by the California Department of Toxic Substances Control, accessible through DTSC's website (see below).
 - Resource Conservation and Recovery Information System (RCRIS): A database of RCRA facilities that is maintained by U.S. EPA.
 - Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS): A database of CERCLA sites that is maintained by U.S.EPA.
 - Solid Waste Information System (SWIS): A database provided by the California Integrated Waste Management Board which consists of both open as well as closed and inactive solid waste disposal facilities and transfer stations.
 - GeoTracker: A List that is maintained by Regional Water Quality Control Boards.
 - Local Counties and Cities maintain lists for hazardous substances cleanup sites and leaking underground storage tanks.
 - The United States Army Corps of Engineers, 911 Wilshire Boulevard, Los Angeles, California, 90017, (213) 452-3908, maintains a list of Formerly Used Defense Sites (FUDS).
- 2) The EIR should identify the mechanism to initiate any required investigation and/or remediation for any site that may be contaminated, and the government agency to provide appropriate regulatory oversight. If necessary, DTSC would require an oversight agreement in order to review such documents.
- 3) Any environmental investigations, sampling and/or remediation for a site should be conducted under a Workplan approved and overseen by a regulatory agency that has jurisdiction to oversee hazardous substance cleanup. The findings of any investigations, including any Phase I or II Environmental Site Assessment Investigations should be summarized in the document. All sampling results in which hazardous substances were found above regulatory standards should be

K2

K3

K4

clearly summarized in a table. All closure, certification or remediation approval reports by regulatory agencies should be included in the EIR.	K4
4) If buildings, other structures, asphalt or concrete-paved surface areas are being planned to be demolished, an investigation should also be conducted for the presence of other hazardous chemicals, mercury, and asbestos containing materials (ACMs). If other hazardous chemicals, lead-based paints (LPB) or products, mercury or ACMs are identified, proper precautions should be taken during demolition activities. Additionally, the contaminants should be remediated in compliance with California environmental regulations and policies.	K5
5) Future project construction may require soil excavation or filling in certain areas. Sampling may be required. If soil is contaminated, it must be properly disposed and not simply placed in another location onsite. Land Disposal Restrictions (LDRs) may be applicable to such soils. Also, if the project proposes to import soil to backfill the areas excavated, sampling should be conducted to ensure that the imported soil is free of contamination.	K6
6) Human health and the environment of sensitive receptors should be protected during any construction or demolition activities. If necessary, a health risk assessment overseen and approved by the appropriate government agency should be conducted by a qualified health risk assessor to determine if there are, have been, or will be, any releases of hazardous materials that may pose a risk to human health or the environment.	K7
7) If it is determined that hazardous wastes are, or will be, generated by the proposed operations, the wastes must be managed in accordance with the California Hazardous Waste Control Law (California Health and Safety Code, Division 20, Chapter 6.5) and the Hazardous Waste Control Regulations (California Code of Regulations, Title 22, Division 4.5). If it is determined that hazardous wastes will be generated, the facility should also obtain a United States Environmental Protection Agency Identification Number by contacting (800) 618-6942. Certain hazardous waste treatment processes or hazardous materials, handling, storage or uses may require authorization from the local Certified Unified Program Agency (CUPA). Information about the requirement for authorization can be obtained by contacting your local CUPA.	K8
8) If buildings, other structures, asphalt or concrete-paved surface areas are being planned to be demolished, an investigation should also be conducted for the presence of other hazardous chemicals, mercury, and asbestos containing materials (ACMs). If other hazardous chemicals, lead-based paints (LPB) or	K9

Mr. Steven A. Mendoza
November 15, 2010
Page 4

products, mercury or ACMs are identified, proper precautions should be taken during demolition activities. Additionally, the contaminants should be remediated in compliance with California environmental regulations and policies.

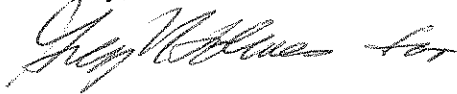
K9

- 9) DTSC can provide cleanup oversight through an Environmental Oversight Agreement (EOA) for government agencies that are not responsible parties, or a Voluntary Cleanup Agreement (VCA) for private parties. For additional information on the EOA or VCA, please see www.dtsc.ca.gov/SiteCleanup/Brownfields, or contact Ms. Maryam Tasnif-Abbasi, DTSC's Voluntary Cleanup Coordinator, at (714) 484-5489.

K10

If you have any questions regarding this letter, please contact me at ashami@dtsc.ca.gov, or by phone at (714) 484-5472.

Sincerely,



Al Shami
Project Manager
Brownfields and Environmental Restoration Program

cc: Governor's Office of Planning and Research
State Clearinghouse
P.O. Box 3044
Sacramento, California 95812-3044
state.clearinghouse@opr.ca.gov

CEQA Tracking Center
Department of Toxic Substances Control
Office of Environmental Planning and Analysis
P.O. Box 806
Sacramento, California 95812
ADelacr1@dtsc.ca.gov

CEQA # 3036



K. RESPONSES TO COMMENTS FROM AL SHAMI, PROJECT MANAGER BROWNFIELDS AND ENVIRONMENTAL RESTORATION PROGRAM, DEPARTMENT OF TOXIC SUBSTANCES CONTROL, DATED NOVEMBER 15, 2010.

- K1. The comment letter acknowledges receipt of the Draft EIR and restates the project description. No further response is necessary.
- K2. Section 5.7, Hazards and Hazardous Materials, of the Draft EIR evaluates whether conditions within the project area pose a threat to human health or the environment. The section incorporates information from the *Los Alamitos General Initial Study/Negative Declaration*, the *Los Alamitos Municipal Code*, the Los Alamitos Medical Center Environment of Code Care Management Plan, and various technical reports prepared for the Los Alamitos Medical Center and Safety-Kleen Systems, which are contained in Appendices I1 through K5. No revisions to the Draft EIR are necessary.
- K3. Refer to Mitigation Measures HAZ-1, HAZ-2, and HAZ-3 on page 5.7-20 of the Draft EIR for required investigation and/or remediation for any site that may be contaminated, and the government agencies to provide regulatory oversight. Furthermore, the Los Alamitos Medical Center maintains a Hazardous Materials and Waste Management Plan and an Emergency Management Plan to ensure that staff can respond to possible hazardous materials emergencies; refer to page 5.7-22 of the Draft EIR. No revisions to the Draft EIR are necessary.
- K4. Section 5.7, Hazards and Hazardous Materials of the Draft EIR summarizes all findings, investigations, sampling results, closures, certifications, and remediation approval reports by regulatory agencies; refer to pages 5.7-10 through 5.7-15 for Safety-Kleen Systems on-site hazards and pages 5.7-15 through 5.7-18 for Tenet Healthcare/Los Alamitos Medical Center on-site hazards. No revisions to the Draft EIR are necessary.
- K5. Refer to Mitigation Measure HAZ-1 on page 5.7-20. No revisions to the Draft EIR are necessary.
- K6. Refer to Mitigation Measure HAZ-1, HAZ-2, and HAZ-3 on page 5.7-20. Safety-Kleen Systems and Tenet Healthcare/Los Alamitos Medical Center have conducted on-going sampling; refer to pages 5.7-10 through 5.7-18 of the Draft EIR. No revisions to the Draft EIR are necessary.
- K7. California's Hazardous Materials Release Response Plans and Inventory Law, the "Business Plan Act", aims to minimize the potential for accidents involving hazardous materials and to facilitate an appropriate response to possible hazardous materials emergencies; refer to page 5.7-2 of the Draft EIR. SCAQMD and Cal/OSHA regulations restrict asbestos emissions from demolition and renovation activities, and specify safe work practices to minimize the potential for release of asbestos fibers; refer to page 5.7-8 of the Draft EIR. DOT, USPS, and the California Department of Health Services Radiologic Health Branch and Medical Waste Program (CDHSRHB) all specify packaging requirements for hazardous materials and wastes that limit the potential for packages to fail on impact. These requirements reduce the



potential for hazardous materials releases to occur in the unlikely event of an accident; refer to page 5.7-22 of the Draft EIR. Refer to Mitigation Measures HAZ-1, HAZ-2, and HAZ-3 on page 5.7-20 of the Draft EIR. No revisions to the Draft EIR are necessary.

- K8. As discussed in *Section 5.7, Hazards and Hazardous Materials*, of the Draft EIR, the proposed project would increase the generation of hazardous waste, along with its demand for hazardous waste disposal services. This increase in demand would, by itself, have little observable effect on the levels of existing hazards that waste disposal poses to people or to animal or plant populations on-site or in the vicinity of the medical center. As such, the proposed project would not create a hazard or potential hazard to the public through the use, disposal, or transport of hazardous materials. The project is not subject to obtain a United States Environmental Protection Agency Identification Number or required to obtain authorization from the local Certified Unified Program Agency. No revisions to the Draft EIR are necessary.
- K9. Refer to Response K4.
- K10. Comment acknowledged. No further response is necessary.

COMMENT LETTER L



Arnold Schwarzenegger
Governor

STATE OF CALIFORNIA

Governor's Office of Planning and Research State Clearinghouse and Planning Unit



Cathleen Cox
Acting Director

November 16, 2010

Mr. Steven A. Mendoza
City of Los Alamitos
3191 Katella Avenue
Los Alamitos, CA 90720-5600

City of Los Alamitos
Community Development

NOV 19 2010

RECEIVED

Subject: Los Alamitos Medical Center Specific Plan Program
SCH#: 2010041095

Dear Mr. Steven A. Mendoza:

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on November 15, 2010, and the comments from the responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

Please note that Section 21104(c) of the California Public Resources Code states that:

"A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation."

These comments are forwarded for use in preparing your final environmental document. Should you need more information or clarification of the enclosed comments, we recommend that you contact the commenting agency directly.

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.

Sincerely,

Scott Morgan
Director, State Clearinghouse

Enclosures

cc: Resources Agency

L1

**Document Details Report
State Clearinghouse Data Base**

SCH# 2010041095
Project Title Los Alamitos Medical Center Specific Plan Program
Lead Agency Los Alamitos, City of

Type EIR Draft EIR

Description The project applicant is proposing a Specific Plan for the Los Alamitos Medical Center campus. The Medical Center is envisioned to be a safe, attractive, well-designed medical center where surrounding residents of all ages can obtain valuable medical treatment and care. The proposed Specific Plan for the Medical Center campus includes a 3 phase master planned expansion estimated to be constructed over a 25 yr period. The Specific Plan will include the provision of an additional 164 hospital beds, 2 new hospital buildings, 1 new medical office building to be used for additional outpatient and associated medical uses, and an additional 849 parking spaces than what currently exists on the campus. It is anticipated that 4 new structures will be constructed on the 18.3 gross acre Medical Center campus and built over a 25 yr period.

Lead Agency Contact

Name Mr. Steven A. Mendoza
Agency City of Los Alamitos
Phone (562) 431-3538
email
Address 3191 Katella Avenue
City Los Alamitos
State CA **Zip** 90720-5600
Fax

Project Location

County Orange
City Los Alamitos
Region
Lat / Long 33° 48' 15.68" N / 118° 03' 56.52" W
Cross Streets Katella Ave., Cherry St., Kaylor St., Catalina St., Kyle St., Florista St., Bloomfield St.
Parcel No. 242-151-20, -152-20, 21...

Township	Range	Section	Base

Proximity to:

Highways I-405, I-605
Airports Los Alamitos Army Airfield
Railways
Waterways
Schools
Land Use Community/Institutional, Planned Ind., Prof. Office, Community Facilities (CF), Commercial Office (CO), Planned Light Ind. (PM)

Project Issues Aesthetic/Visual; Air Quality; Drainage/Absorption; Flood Plain/Flooding; Forest Land/Fire Hazard; Geologic/Seismic; Landuse; Noise; Public Services; Septic System; Sewer Capacity; Soil Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Water Quality; Water Supply

Reviewing Agencies Resources Agency; Department of Fish and Game, Region 5; Office of Historic Preservation; Department of Parks and Recreation; Department of Water Resources; California Highway Patrol; Caltrans, District 12; Regional Water Quality Control Board, Region 8; Department of Toxic Substances Control; Native American Heritage Commission

Date Received 09/30/2010 **Start of Review** 09/30/2010 **End of Review** 11/15/2010



L. RESPONSES TO COMMENTS FROM STATE OF CALIFORNIA, GOVERNOR'S OFFICE OF PLANNING AND RESEARCH, STATE CLEARINGHOUSE AND PLANNING UNIT, DATED NOVEMBER 16, 2010.

- L1. The comment acknowledges the closing of the public review period on November 15, 2010 and forwards comments received by the State Clearinghouse during that time. The comment notes that the City has complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Comment acknowledged and no revisions to the Draft EIR are necessary.

COMMENT LETTER M



RECEIVED
CITY OF LOS ALAMITOS
2010 NOV 22 PM 1:33

BOARD OF DIRECTORS

Jerry Amante
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November 19, 2010

Mr. Steven A. Mendoza
Community Development Director
City of Los Alamitos
3191 Katella Avenue
Los Alamitos, CA 90720

Subject: Notice of Completion/Notice of Availability of Draft Environmental Impact Report for Los Alamitos Medical Center Specific Plan

Dear Mr. Mendoza:

The Orange County Transportation Authority has reviewed the above referenced document. The following comments are provided for your consideration:

- Please correct page 5.3-26 to indicate that the Orange County Congestion Management Program (CMP) specifies that a significant project impact occurs when a proposed project causes or worsens a level of service (LOS) F by 0.10 or more of its intersection capacity utilization (ICU). This threshold is relevant only to CMP intersections for CMP conformance monitoring purposes. LOS standards specified in a jurisdiction's general plan remain applicable. **M1**
- It is recommended that the ICU analysis, as described in the 2009 Orange County CMP for the San Gabriel Freeway (Interstate 605) northbound ramps/Katella Avenue intersection, be documented in the environmental impact report. Any potential impacts identified at this state-controlled intersection should be coordinated with the California Department of Transportation. **M2**

If you have any questions or comments, please contact Hal McCutchan, Project Manager, at (714) 560-5759 or by email at hmccutchan@octa.net.

Sincerely,

A handwritten signature in dark ink, appearing to read "Charles Larwood".

Charles Larwood
Manager, Transportation Planning

CL:js

c: Greg Nord, OCTA



M. RESPONSES TO COMMENTS FROM CHARLES LARWOOD, MANAGER, TRANSPORTATION PLANNING, OCTA, DATED NOVEMBER 19, 2010.

M1. Page 5.3-26 of the Draft EIR will be modified as follows in the Final EIR:

CMP Thresholds of Significance

To determine whether the addition of project-generated trips results in a significant impact at the CMP study facility, and thus requires mitigation, the *Orange County CMP* utilizes the following threshold of significance:

- A significant project impact occurs when a proposed project increases traffic demand at a CMP study facility by one-percent or more of capacity ($V/C \geq 0.0410$), causing or worsening LOS F ($V/C > 1.00$).

The results of the analysis remain unchanged, since the CMP-monitored intersections included in the analysis are operating acceptably (LOS A-D) and do not exceed the threshold of significance provided.

M2. As shown in *Table 5.3-24* on Page 5.3-83 of the Draft EIR, the Interstate 605 Northbound On-Ramp/Katella Avenue intersection is forecast to operate at level of service (LOS) A for both the AM and PM peak hours. These results are consistent with the LOS A results included in the 2009 Orange County Congestion Management Program (OCTA). Since the intersection is forecast to operate acceptably with implementation of the proposed project, no mitigation is required.

COMMENT LETTER N



Jess A. Carbajal, Director
300 N. Flower Street
Santa Ana, CA
P.O. Box 4048
Santa Ana, CA 92702-4048
Telephone: (714) 834-2300
Fax: (714) 834-5188

NCL 10-036

November 18, 2010

Mr. Steven Mendoza, Community Development Director
City of Los Alamitos
3191 Katella Avenue
Los Alamitos, CA 90720

SUBJECT: Notice of Completion/Notice of Availability of Draft Environmental Impact Report for
Los Alamitos Medical Center Specific Plan – NCL 10-036

Dear Mr. Mendoza:

The County of Orange has reviewed the Notice of Completion/Notice of Availability of Draft Environmental Impact Report for Los Alamitos Medical Center Specific Plan located in the City of Los Alamitos and offers the following comments concerning environmental resources.

Environmental Resources

1. The reference on EIR page 5.8-4 (first complete paragraph) to the 2002 Santa Ana Region Municipal Stormwater Permit is outdated. The correct reference appears on Page 5.8.24 (first paragraph), to the current permit adopted in 2009. **N1**
2. The reference on Page 5.8.23 to incorporate permeable pavement where possible should be expanded upon. Such features are greatly encouraged in the 2009 regional permit, far more so than in the prior 2002 permit. **N2**
3. The wording of Mitigation Measure HYD-4 on Page 5.8-28 (and elsewhere) is outdated. Notice is not filed with the Regional Water Board. Rather, the current State Construction General Permit requires enrollment electronically through the State's Stormwater Multiple Application and Report Tracking System (SMARTS). **N3**

Traffic Engineering

Traffic Engineering requests the DEIR study the intersection at (a) Beach Boulevard at St. Cloud and (b) Katella Avenue at Wallingsford Road, as these are two of the major access locations to the Rossmoor Community. **N4**

Steven Mendoza
November 18 2010
Page 2

If you have any questions, please contact Chris Uzo Diribe at (714) 667-8845.

Sincerely,

A handwritten signature in black ink, appearing to read "Michael Balsamo", with a stylized, flowing script.

Michael Balsamo, Manager
General Land Use Planning

cc: Chris Crompton, Environmental Resources



N. RESPONSES TO COMMENTS FROM MICHAEL BALSAMO, MANAGER, GENERAL LAND USE PLANNING, ORANGE COUNTY PUBLIC WORKS, DATED NOVEMBER 18, 2010.

- N1. The Commentator has suggested replacing the reference to the 2002 Santa Ana Region Municipal Stormwater Permit with the current permit adopted in 2009. The City of Los Alamitos has no concerns with the proposed revision; thus, the revision will be made in the Final EIR. The reference on page 5.8-4 of the Draft EIR will be revised as follows in the Final EIR:

~~On January 18, 2002~~ In 2009, the Santa Ana RWQCB issued a municipal storm water NPDES (MS4) permit (Order No. R8-2009-0030) to the County of Orange and the 25 incorporated cities within the Santa Ana region, including the City of Los Alamitos.

- N2. The Commentator has suggested expanding upon the additional permeable paving to be constructed throughout the project site after completion of the proposed improvements. The City of Los Alamitos has no concerns with the proposed revision; thus, the revision will be made in the Final EIR. The reference on page 5.8.23 of the Draft EIR will be revised as follows in the Final EIR:

Currently, impervious surface covers approximately 91 percent of the site with approximately 9 percent consisting of urban landscaping. After completion of the proposed improvements, approximately 15 percent of the site would consist of landscaping, and additional permeable paving within the proposed parking areas would be constructed throughout the site to create less reflection and glare for motorists and to allow additional percolation of runoff and storm water into the ground permitting natural filtration. Upon completion of Phase 3, approximately 85 percent of the site would be impervious under proposed conditions, which is a six percent reduction over existing conditions.

- N3. The commentator has suggested revising wording for Mitigation Measure HYD-4, and elsewhere, as the wording is outdated in regards to filing a notice to the Regional Water Board. The City of Los Alamitos has no concerns with the proposed revision as the intent of the mitigation measure remains the same; thus, the revisions will be made in the Final EIR. Text on page 5.8-2 under the “National Pollutant Discharge Elimination System” will be revised as follows in the Final EIR:

The NPDES program is administered by the U.S. EPA, which delegates oversight in California to the RWQCBs. The NPDES program provides general permits and individual permits. The general permits include requirements for construction projects that disturb more than one acre of land. The general permit requires the applicant to



~~file a public notice of intent to~~ discharge stormwater and to prepare and implement a Storm Water Pollution Prevention Plan (SWPPP) and Water Quality Management Plan (WQMP). The project applicant shall enroll electronically through the State's Stormwater Multiple Application and Report Tracking System (SMARTS). The SMARTS program regulates storm water discharges from locations such as construction sites, industrial facilities, and small linear projects. The program is also responsible for updating, processing, reviewing, terminating Notices of Intent, annual reports, and maintaining the billing status of each discharger. SMARTS has been developed to provide an online tool to assist dischargers in submitting their notice of intents, no exposure certifications, notice of determinations, and annual reports. SMARTS also assists dischargers in viewing and printing receipt letters, monitoring the status of submitted documents, and viewing their applications and renewal fee statements. The system also allows the Regional Board and State Board staff to process and track the discharge submitted documents. A SWPPP includes a site map, description of proposed activities, demonstration of compliance with applicable ordinances and regulations, and a description of Best Management Practices (BMPs) that would be implemented to reduce erosion and discharge of construction-related pollutants. A WQMP is a plan for managing the storm water or runoff that flows from a developed site after construction is completed. A WQMP describes both Structural and Non-Structural BMPs that will be implemented and maintained throughout the life of a project and is used by facility operators, facility employees and maintenance employees, etc. to prevent and minimize water pollution that can be caused by storm water or urban runoff from the developed project.

In addition, Mitigation Measure HYD-4 on page 5.8-28 of the Draft EIR will be revised as follows in the Final EIR:

Prior to issuance of any Grading or Building Permit, and as part of the future development's compliance with the NPDES requirements, the project applicant shall ~~file a Notice of Intent to the Santa Ana RWQCB providing notification and intent~~ enroll electronically through the SMARTS program to comply with the State of California General Construction Permit. ~~A copy of the Notice of Intent acknowledgement from the State of California Regional Water Quality Control Board~~ Proof of enrollment must be submitted to the City of Los Alamitos before issuance of grading or building permits. Also, a Stormwater Pollution Prevention Plan (SWPPP) shall be reviewed and approved by the Director of Public Works and the City Engineer for water quality construction activities on-site. A copy of the SWPPP shall be available and implemented at the construction site at all times. The SWPPP shall outline the source control and/or treatment control BMPs to avoid or mitigate runoff pollutants at the construction site to the "maximum extent practicable."



- N4. The County of Orange comment letter dated May 28, 2010 recommended analysis of intersections accessing the Rossmoor community. The Los Alamitos Boulevard/Orangewood Avenue and the Seal Beach Boulevard/Plymouth Drive-Rossmoor Center Way intersections are included in the report. As shown in *Table 5.3-4* on Page 5.3-20 of the Draft EIR, the Rossmoor community study intersections near Seal Beach Boulevard/St. Cloud Drive are forecast to operate acceptably.

Additionally, traffic review has been coordinated with the City of Seal Beach, who did not request analysis of the Seal Beach Boulevard/St. Cloud Drive intersection. Therefore, the Seal Beach Boulevard/St. Cloud Drive intersection is not included in the Draft EIR traffic analysis.

The *CVS Pharmacy Project Traffic Impact Analysis (Linscott, Law & Greenspan, Engineers, February 20, 2009)* included existing conditions analysis of the Walnut Street-Wallingsford Road/Katella Avenue intersection. The results of the City-approved traffic study indicated the Walnut Street-Wallingsford Road/Katella Avenue intersection is currently operating acceptably at LOS C in the morning and LOS B in the evening. Therefore, the Walnut Street-Wallingsford Road/Katella Avenue intersection is not included in the Draft EIR traffic analysis.



13.6 ERRATA FOR FINAL EIR

The Final EIR will be a revised document that incorporates all of the changes made to the Draft EIR following the public review period.

1. **Text on page 5.8-2 under the “National Pollutant Discharge Elimination System” will be revised as follows in the Final EIR:**

The NPDES program is administered by the U.S. EPA, which delegates oversight in California to the RWQCBs. The NPDES program provides general permits and individual permits. The general permits include requirements for construction projects that disturb more than one acre of land. The general permit requires the applicant to ~~file a public notice of intent to discharge stormwater and to prepare and implement a Storm Water Pollution Prevention Plan (SWPPP) and Water Quality Management Plan (WQMP).~~ The project applicant shall enroll electronically through the State’s Stormwater Multiple Application and Report Tracking System (SMARTS). The SMARTS program regulates storm water discharges from locations such as construction sites, industrial facilities, and small linear projects. The program is also responsible for updating, processing, reviewing, terminating Notices of Intent, annual reports, and maintaining the billing status of each discharger. SMARTS has been developed to provide an online tool to assist dischargers in submitting their notice of intents, no exposure certifications, notice of determinations, and annual reports. SMARTS also assists dischargers in viewing and printing receipt letters, monitoring the status of submitted documents, and viewing their applications and renewal fee statements. The system also allows the Regional Board and State Board staff to process and track the discharge submitted documents. A SWPPP includes a site map, description of proposed activities, demonstration of compliance with applicable ordinances and regulations, and a description of Best Management Practices (BMPs) that would be implemented to reduce erosion and discharge of construction-related pollutants. A WQMP is a plan for managing the storm water or runoff that flows from a developed site after construction is completed. A WQMP describes both Structural and Non-Structural BMPs that will be implemented and maintained throughout the life of a project and is used by facility operators, facility employees and maintenance employees, etc. to prevent and minimize water pollution that can be caused by storm water or urban runoff from the developed project.

2. **The text on page 5.8-4 of the Draft EIR will be revised as follows in the Final EIR:**

~~On January 18, 2002~~ In 2009, the Santa Ana RWQCB issued a municipal storm water NPDES (MS4) permit (Order No. R8-2009-0030) to the County of Orange and the 25 incorporated cities within the Santa Ana region, including the City of Los Alamitos.

3. **The text on page 5.8.23 of the Draft EIR will be revised as follows in the Final EIR:**

Currently, impervious surface covers approximately 91 percent of the site with approximately 9 percent consisting of urban landscaping. After completion of the proposed improvements, approximately 15 percent of the site would consist of landscaping, and



additional permeable paving within the proposed parking areas would be constructed throughout the site to create less reflection and glare for motorists and to allow additional percolation of runoff and storm water into the ground permitting natural filtration. Upon completion of Phase 3, approximately 85 percent of the site would be impervious under proposed conditions, which is a six percent reduction over existing conditions.

4. Mitigation Measure HYD-4 on page 5.8-28 and Section 12.0, Mitigation Monitoring and Reporting Program of the Draft EIR will be revised as follows in the Final EIR:

HYD- 4 Prior to issuance of any Grading or Building Permit, and as part of the future development's compliance with the NPDES requirements, the project applicant shall ~~file a Notice of Intent to the Santa Ana RWQCB providing notification and intent~~ enroll electronically through the SMARTS program to comply with the State of California General Construction Permit. ~~A copy of the Notice of Intent acknowledgement from the State of California Regional Water Quality Control Board~~ Proof of enrollment must be submitted to the City of Los Alamitos before issuance of grading or building permits. Also, a Stormwater Pollution Prevention Plan (SWPPP) shall be reviewed and approved by the Director of Public Works and the City Engineer for water quality construction activities on-site. A copy of the SWPPP shall be available and implemented at the construction site at all times. The SWPPP shall outline the source control and/or treatment control BMPs to avoid or mitigate runoff pollutants at the construction site to the "maximum extent practicable."

5. The text on page 6-17 of the Draft EIR will be revised as follows in the Final EIR:

6.5.1 NO PROJECT/NO DEVELOPMENT ALTERNATIVE

The No Project/No Development Alternative results in fewer impacts to aesthetics, light, and glare; traffic; air quality/greenhouse gas emissions; noise; geology and seismic hazards; hazards and hazardous materials; hydrology, drainage, and water quality, and public services and utilities. Greater impacts would be anticipated for land use. The one ~~No~~ significant unavoidable impacts for cumulative greenhouse gas emissions would occur under this Alternative.

The No Project/No Development Alternative would not implement the overall objective of the proposed project, which is to provide adequate hospital and medical office facilities to meet projected future demands in the service area. Under this Alternative, the proposed hospital and medical office uses would not be developed. Therefore, none of the project objectives identified Section 3.5, Project Objectives, would be met under the No Project/No Development Alternative.

The No Project/No Development Alternative would result in fewer project-related environmental impacts and does not eliminates the one significant unavoidable impacts; ~~however, Also,~~ this Alternative does not meet any of the objectives of the project; in particular it would not help meet the healthcare needs of the community.



6. Table 6-1 on page 6-19 of the Draft EIR will be revised as follows in the Final EIR:

Environmental Category	Proposed Project	No Project/No Development	Alternative One (Relocation of Parking Structure 1 and MOB A)	Alternative Two (Phases 1 and 2 Only)
Land Use	Less Than Significant	▼	●	●
<i>Requires Specific Plan</i>	Yes	No	Yes	Yes
Aesthetics, Light, and Glare	Less Than Significant	▲	●	▲
Traffic	Less Than Significant	▲	●	▲
Air Quality/Greenhouse Gas Emissions	Significant Cumulative Greenhouse Gas Emissions	▲	●	▲
<i>Reduces Significant Unavoidable Air Quality Impacts</i>		Yes	No	Yes
<i>Eliminates Significant Unavoidable Air Quality Impacts</i>		~~Yes~~ No	No	No
Noise	Less Than Significant	▲	●	▲
Geology and Seismic Hazards	Less Than Significant	▲	●	▲
Hazards and Hazardous Materials	Less Than Significant	▲	●	▲
Hydrology, Drainage, and Water Quality	Less Than Significant	▲	●	●
Public Services and Utilities	Less Than Significant	▲	●	▲
Ability to Meet Most Project Objectives	Yes	No	Yes	Yes
● Indicates an impact that is equal to the proposed project (neither environmentally superior or inferior). ▼ Indicates an impact that is greater than the proposed project (environmentally inferior). ▲ Indicates an impact that is less than the proposed project (environmentally superior).				

7. The text on Page 5.3-26 of the Draft EIR will be revised as follows in the Final EIR:

CMP Thresholds of Significance

To determine whether the addition of project-generated trips results in a significant impact at the CMP study facility, and thus requires mitigation, the *Orange County CMP* utilizes the following threshold of significance:

- A significant project impact occurs when a proposed project increases traffic demand at a CMP study facility by one-percent or more of capacity ($V/C \geq 0.0410$), causing or worsening LOS F ($V/C > 1.00$).



8. The text on page 5.3-57 of the Draft EIR will be revised as follows in the Final EIR:

Recommended Forecast Year 2013 With Phase 1 Project Conditions Mitigation Measures

Operations at the Kaylor Street/Katella Avenue intersection are directly related to operations at the adjacent Cherry Street/Katella Avenue and Maple Street/Katella Avenue intersections, as well as site access to the Los Alamitos Medical Center. Therefore, implementation of Mitigation Measure TRF-1 and TRF-2 would eliminate the significant traffic impact at the Kaylor Street/Katella Avenue study intersection to achieve acceptable corridor operations along Katella Avenue for forecast year 2013 with project Phase 1 conditions. Through adjustments to the signal timing and phasing data, the progression of traffic along Katella Avenue is maintained, primarily due to the relocation of the pedestrian crossing from the Cherry Street/Katella Avenue intersection to the Kaylor Street/Katella Avenue intersection. The maintained Katella Avenue operations provide acceptable operations and efficient flows of traffic in both the eastbound and westbound directions. Mitigation Measures TRF-1 and TRF-2 are consistent with the OCTA Smart Street Program to improve traffic flow and realize available traffic capacity on regional routes of significance. The modified median on Katella Avenue would be continuous between Kaylor Street and Bloomfield Street with a break only at Driveway 3 for an eastbound left-turn lane. Westbound left-turn movements onto Maple Street would be redistributed to Bloomfield Street or can make a u-turn at the Cherry Street/Katella Avenue intersection. While some local traffic may be redistributed onto Bloomfield Street and Green Avenue south of Katella Avenue, the traffic circulation and access management along Katella Avenue would be improved. The existing grid pattern of roadways south of Katella Avenue supports the Katella Avenue raised median modifications and circulation enhancement. Exhibit 5.3-25, Mitigated Forecast Year 2013 With Project Conditions Intersection Volumes — Kaylor Street/Katella Avenue Area Mitigated Katella Avenue Corridor, shows the Katella Avenue corridor with and without the recommended mitigation measures.

9. The title on Exhibit 5.3-25 will be changed to Mitigated Katella Avenue Corridor.
10. The text on page 5.3-72 of the Draft EIR will be modified as follows in the Final EIR:

Recommended Forecast Year 2035 With Project Conditions Mitigation Measures

Operations at the Kaylor Street/Katella Avenue intersection are directly related to operations at the adjacent Cherry Street/Katella Avenue and Maple Street/Katella Avenue intersections, as well as site access to the Los Alamitos Medical Center. Mitigation Measures TRF-1, TRF-2, and TRF-3 are identified to eliminate the significant traffic impacts at the following two intersections, and to achieve acceptable corridor operations along Katella Avenue for forecast year 2035 with project conditions.

Through adjustments to the signal timing and phasing data, the progression of traffic along Katella Avenue is maintained, primarily due to the relocation of the pedestrian crossing from the Cherry Street/Katella Avenue intersection to the Kaylor Street/Katella Avenue intersection. The maintained Katella Avenue operations provide acceptable operations and efficient flows of traffic in both the eastbound and westbound directions.



11. The text on page 5.3-73 of the Draft EIR will be revised as follows in the Final EIR:

~~Assuming implementation of Mitigation Measure TRF-1, the majority of southbound left-turn motorists at the Cherry Street/Katella Avenue intersection are expected to modify their travel patterns and utilize parallel roadways such as Bloomfield Street to turn left onto Katella Avenue. Since southbound left-turns at the Cherry Street/Katella Avenue intersection would still be allowed, this analysis assumes some motorists are willing to wait for an adequate gap to turn from the stop sign onto Katella Avenue. Exhibit 5.3-32, Mitigated Forecast Year 2035 With Project Conditions Study Intersection Geometry – Los Alamitos Boulevard/Cerritos Avenue, shows mitigated forecast year 2035 with project conditions intersection geometry and Exhibit 5.3-33, Mitigated Forecast Year 2025 With Project Conditions Study Intersection Geometry – Kaylor Street/Katella Avenue Area Exhibit 5.3-25, Mitigated Katella Avenue Corridor, shows the Katella Avenue corridor with and without the recommended mitigation measures.~~

12. Exhibit 5.3-33 will be deleted in the Final EIR.

13. Mitigation Measure TRF-1 will be revised in the Final EIR (Section 1.0, Executive Summary; Section 5.3, Traffic; and Section 12.0, Mitigation Monitoring and Reporting Program) to address City Council direction at the February 7, 2011 EIR Certification hearing.

TRF-1a Kaylor Street/Katella Avenue. Prior to issuance of certificate of occupancy for MOB A, the project applicant shall install the following improvements:

- Signalize the Kaylor Street/Katella Avenue intersection and lengthen the eastbound Katella Avenue left-turn pocket at Kaylor Street from 125 feet to 200 feet.
- ~~Modify the Katella Avenue median to restrict the Maple Street/Katella Avenue intersection to right-in/right-out movements.~~
- To accommodate eastbound left-turn queuing of vehicles accessing the medical center, modify the raised median on Katella Avenue to include an eastbound left-turn pocket approximately 100 feet in length at the Driveway 3/Katella Avenue intersection (refer to Exhibit 5.3-25).
- Provide traffic signal interconnect and synchronization between the Kaylor Street/Katella Avenue intersection and the Cherry Street/Katella Avenue intersection.

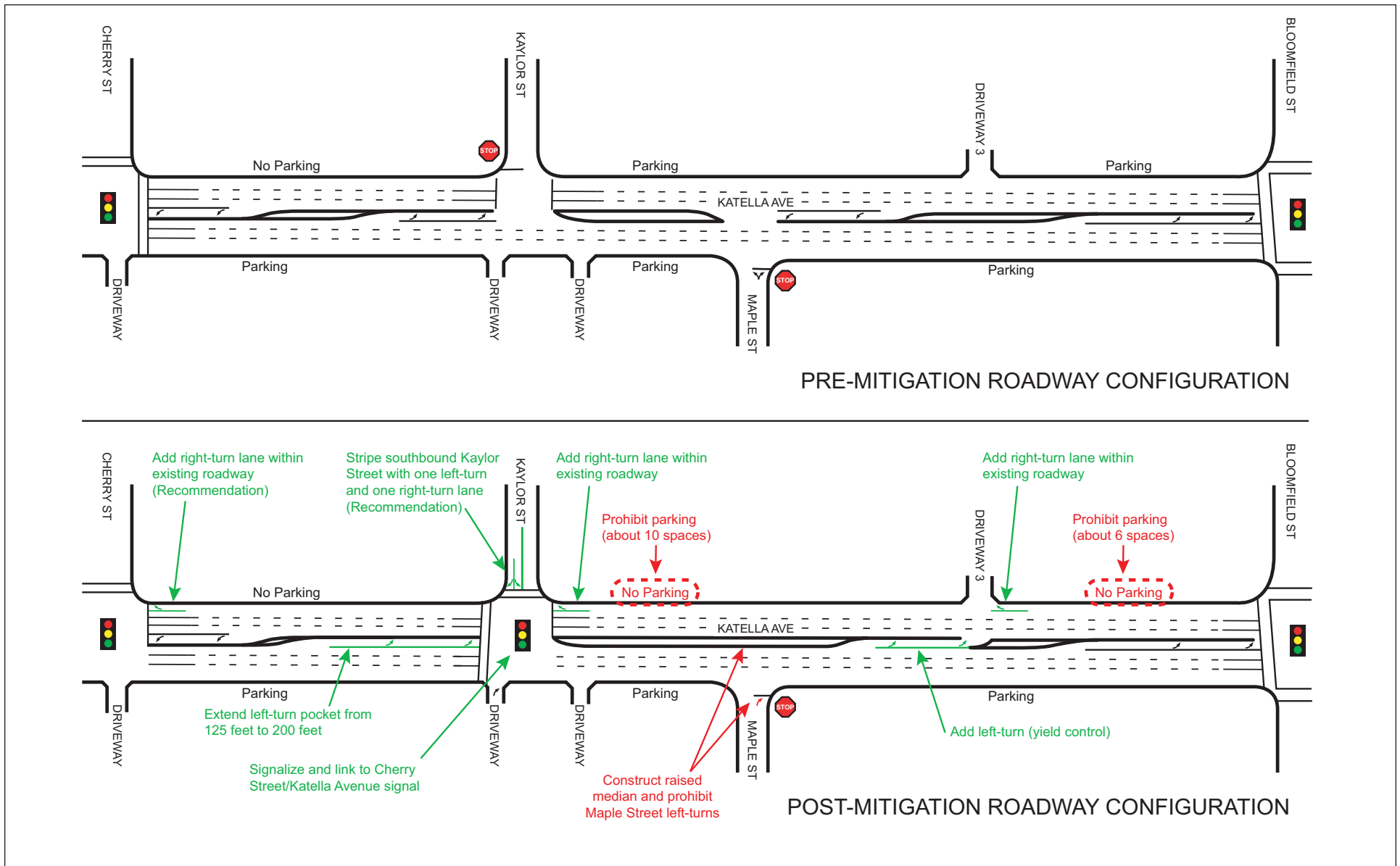
TRF-1b Kaylor Street/Katella Avenue. Prior to issuance of certificate of occupancy for MOB A, the project applicant shall install the following improvements:

1. Defer construction of a median restricting the Maple Street/Katella Avenue intersection to right-in/right-out movements as recommended in TRF-1c2 below, and provide a pilot project to restrict only the northbound left-turns and maintain the westbound left-turn access from Katella Avenue to Maple Street via roadway striping modifications.



TRF-1c Kaylor Street/Katella Avenue. Within 12 months following installation of TRF-1b, the following are required:

1. The City of Los Alamitos shall collect data on the operation of the access measures noted in TRF-1b1 above. The project applicant shall reimburse the City for these costs.
2. Based on review and analysis of the data collected in TRF-1c1 by City of Los Alamitos, the project applicant, at the direction of the City of Los Alamitos, shall permanently implement TRF-1b1, or modify the Katella Avenue median to restrict the Maple Street/Katella Avenue intersection to right-in/right-out movements, or implement other similar improvements to address vehicular movements at the Maple Street/Katella Avenue intersection.



NOT TO SCALE



01/11 • JN 10-107031

ENVIRONMENTAL IMPACT REPORT
LOS ALAMITOS MEDICAL CENTER SPECIFIC PLAN

Mitigated Katella Avenue Corridor

Exhibit 5.3-25



14.0 City Council Resolution - EIR Certification

RESOLUTION 2011-02

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF LOS ALAMITOS CERTIFYING THE ENVIRONMENTAL IMPACT REPORT FOR THE LOS ALAMITOS MEDICAL CENTER SPECIFIC PLAN (SCH# 2010041095) IN CONNECTION WITH ITS APPLICATION FOR SPECIFIC PLAN NO. 09-01, GENERAL PLAN AMENDMENT GPA 09-01, ZONE ORDINANCE AMENDMENT ZOA 10-03 AND STREET VACATION LOCATED AT AND AROUND 3751 KATELLA AVENUE (ORANGE COUNTY ASSESSOR PARCEL NO 242-151-20, 242-152-20, 242-152-21, 242-162-13, 242-162-14, 242-163-11, 242-163-12, 242-163-13, 242-163-14) INCLUDING RELATED FINDINGS, ADOPTION OF ENVIRONMENTAL FINDINGS, A STATEMENT OF OVERRIDING CONSIDERATIONS AND A MITIGATION MONITORING AND REPORTING PLAN PURSUANT TO CALIFORNIA ENVIRONMENTAL QUALITY ACT.

WHEREAS, the Los Alamitos Medical Center (hereafter "Applicant" and/or "LAMC") has filed an application for a Specific Plan adoption (SP09-01), General Plan Amendment (GPA 09-01) to change the Land Use Designation from Community and Institutional, Planned Industrial and Professional office to Specific Plan Land Use Designation, Zoning Ordinance Amendment to change Zoning Designations from Community Facilities (C-F), Commercial Office (C-O) and Planned Light Industrial (P-M), and Street Vacation No. 10-01 to vacate Kaylor Street for the construction of a proposed three-phase master planned expansion, including the provision of an additional 164 hospital beds, two new hospital buildings, one new medical office building (75,100 gross square feet) to be used for additional outpatient and associated medical uses, and an additional 849 parking spaces (hereafter "Project"), for a project generally located at and around 3751 Katella Avenue (hereafter "Subject Property"); and

WHEREAS, pursuant to the California Environmental Quality Act (CEQA) (Public Res. Code 21000 et seq.) the CEQA Guidelines and the City of Los Alamitos Local CEQA Guidelines, the City of Los Alamitos is the lead agency for the Project, as the public agency with general governmental powers; and

WHEREAS, as lead agency, the City of Los Alamitos caused an Initial Study of the Los Alamitos Medical Center Specific Plan Project to be prepared to evaluate the potential for adverse environmental impacts and based on the Initial Study concluded that a Program Environmental Impact Report (EIR) would be prepared for the Project; the Initial Study with a Notice of Preparation was mailed to the State Clearinghouse, responsible and trustee agencies and other interested parties; and

WHEREAS, the Initial Study concluded that implementation of the Los Alamitos Medical Center Specific Plan would have less than significant or no impacts in the following categories: Agricultural and Forestry Resources, Biological Resources, Cultural Resources, Mineral Resources, Population and Housing, and

WHEREAS, pursuant to Los Alamitos Local CEQA Guidelines, the City Council shall consider certification of the Final EIR and the Planning Commission shall make a recommendation regarding the Draft EIR to the City Council as an advisory board; and

WHEREAS, the purpose of a Draft EIR was to identify the significant effects on the environment of the project, to identify alternatives to the project, and to indicate the manner in which those significant effects can be mitigated or avoided; and

WHEREAS pursuant to CEQA Guidelines section 15082, the City solicited comments from potential responsible agencies, including details about the scope and content of the environmental information related to the responsible agency's area of statutory responsibility, as well as the significant environmental issues, reasonable alternatives, and mitigation measures that the responsible agency would have analyzed in the Draft EIR; and

WHEREAS, the City provided a Notice of Preparation (NOP) on April 28, 2010 and a 30-day public comment period. The City received nine (9) written comments during the NOP review period. These comments were provided to the City's environmental consultant, who assisted with issues to be evaluated and alternatives for the EIR analysis; and

WHEREAS, on April 28, 2010, the NOP and Initial Study were filed with the State Clearinghouse pursuant to State Public Resources Code (PRC) section 21092.3; and

WHEREAS, the Los Alamitos Planning Commission conducted a Public Scoping meeting on May 10, 2010 to solicit comments from the public and any potentially affected property owners. A notice of the meeting was sent to property owners and commercial tenants within a 500 foot radius from the subject site. Approximately fifteen (15) persons attended the meeting. The oral testimony that was received during the meeting, was further provided to the City's environmental consultant; and

WHEREAS, pursuant to Section 21092 of the California Public Resources Code, the City provided the required public notification that the Draft EIR was available during the required forty-five (45) day review period which began on Thursday September 30, 2010 and concluded on November 15, 2010 by publishing a public notice in a newspaper of general circulation in the area affected by the project and sending a public notice to all organizations and individuals who had previously requested such notice. In addition, the City placed copies of the Draft EIR at the City of Los Alamitos Community Development counter and the Los Alamitos/Rossmoor public library; and

WHEREAS, during the forty-five (45) day Notice of Availability (NOA) review period, the City consulted with and requested comments from all responsible and trustee agencies, other regulatory agencies and others pursuant to State CEQA Guidelines section 15086; and

WHEREAS, in response to the City's NOA, the City received four (4) written comments from residents and ten (10) comments from other responsible agencies.

These comments were provided to the City's environmental consultant, who prepared responses to the comments. Those comments and responses were included in the Final EIR for the City Council's consideration; and

WHEREAS, The Planning Commission, on September 13, 2010 took action to set the future public hearing for the date of October 11, 2010; and

WHEREAS, The Planning Commission held their first public hearing on October 11, 2010 which was continued to the November 8, 2010; and

WHEREAS, The Planning Commission completed the public hearing and adopted Resolution No. PC 10-21 recommending to the City Council certification of the Draft Environmental Impact Report (No. 2010041095); and

WHEREAS, The Planning Commission adopted Resolution No. PC 10-22 recommending to the City Council adoption of General Plan Amendment (GPA 09-01) to change the Land Use Designation; and

WHEREAS, The Planning Commission adopted Resolution No. PC 10-23 recommending to the City Council adoption of Zoning Ordinance Amendment 09-01 to change zoning designations; and

WHEREAS, the Traffic Commission received and filed a staff report of the Traffic Impacts of the Medical Center Specific Plan including Mitigation during their December 8, 2010 meeting; and

WHEREAS, a Final EIR, including Response to Comments, errata, and Mitigation Monitoring and Reporting Program was prepared and released on January 8, 2011, ten (10) days prior to the hearing at which the City Council adopted this Resolution 2011-02; and

WHEREAS, a Final EIR has been distributed to the City Council; and

WHEREAS, the City Council has considered information presented by the applicant, the Community Development Department, and other interested parties at public meetings and hearings held by the Planning Commission, Traffic Commission and City Council on May 10, 2010, September 13, 2010, October 11, 2010 November 8, 2010, December 8, 2010, January 18, 2011 and February 7, 2011; and

NOW THEREFORE BE IT RESOLVED by the City Council of the City of Los Alamitos as follows:

SECTION 1. The recitals are true and correct and are incorporated by reference herein.

SECTION 2. The Draft EIR complies with all the requirements of CEQA, the CEQA Guidelines, and Los Alamitos Local CEQA Guidelines and is sufficiently detailed

to adequately evaluate all of the potentially significant environmental effects of the Project.

SECTION 3. The City Council has independently reviewed and considered the contents of the Final EIR and it reflects the City's independent judgment and analysis.

SECTION 4. The Planning Commission and the City Council have reviewed and considered the Project and the Draft EIR, the written comments thereon with responses, the errata, and the Mitigation Monitoring and Reporting Program prepared for the Los Alamitos Medical Center Specific Plan, and have considered the significant and unavoidable environmental impacts of the Project. Based on the Final EIR, public comments and the entire record before the Planning Commission and the City Council, the City Council finds that;

1. The Project will cause no significant environmental impacts with respect to Land Use and Electricity and Natural Gas.
2. The Project will cause environmental impacts that are potentially significant, but which can be mitigated to a level of less than significant through the imposition of the Mitigation Monitoring and Reporting Plan in the areas of Aesthetics, Traffic, Air Quality/Greenhouse Gas Emissions, Noise, Geology and Seismic Hazards, Hazards and Hazardous Materials, Hydrology and Water Quality, Fire Protection, Police Protection, Water, Wastewater, and Solid Waste.
3. Specific impacts of the Los Alamitos Medical Center Specific Plan from Greenhouse Gas (GHG) emission have been identified in the Draft EIR as significant and unavoidable. Based upon significant economic, social and employment benefits from the Project, the City Council finds these effects acceptable and adopts the required facts and findings and Statement of Overriding Consideration, attached as Exhibit B to this Resolution.

SECTION 5. The City of Los Alamitos reviewed, considered, and rejected the following proposed alternatives to the Project: (1) relocation of the existing hospital campus to a new location elsewhere in Orange County and construction of the proposed Specific Plan; and (2) constructing a second hospital campus with medical office buildings at another location within the City of Los Alamitos or in Orange County. Relocation of the existing hospital facility and development of the proposed Specific Plan and construction of a new hospital and medical office buildings elsewhere in Orange County were determined not to be feasible because the Los Alamitos Medical Center's fundamental purpose is to expand its existing hospital campus to provide expanded services to the growing population of the region. Although it is recognized that healthcare service needs exist elsewhere in the County, the Los Alamitos Medical Center has significant investment in its current location and therefore seeks to fully utilize the capacity of its existing site and infrastructure systems. The site is well suited to serve area residents within the hospital's service area and is accessible from a major freeway and arterial streets that access various points throughout the community.

SECTION 6. The Final EIR, which is attached as Exhibit A, consist of the following:

- Los Alamitos Medical Center Specific Plan Draft Program Environmental Impact Report (September 2010);
- Comments to the Draft EIR;
- Responses to Comments;
- Errata for the Final EIR; and
- Mitigation Monitoring and Reporting Program.

SECTION 7. The time in which to seek judicial review of this decision shall be governed by Code of Civil Procedure Section 1094.6. The City Clerk shall certify to the adoption of this resolution, transmit copies of the same to the applicant and its counsel, if any, together with a proof of mailing in the form required by law and shall enter a certified copy of this resolution in the book of resolution of the City.

SECTION 8. The City Council finds that all available documentation is available within the Community Development Department at the City of Los Alamitos 3191 Katella Avenue, Los Alamitos, CA 90720.

SECTION 9. Based on the above findings, the City Council certifies the Final EIR.

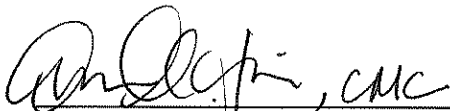
SECTION 10. The City Clerk shall certify as to the adoption of this Resolution.

PASSED, APPROVED, AND ADOPTED this 7th day of February, 2011.



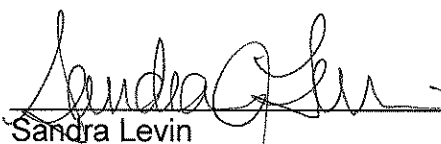
Kenneth Stephens
Mayor

ATTEST:



Adria M. Jimenez, CMC
City Clerk

APPROVED AS TO FORM:



Sandra Levin
City Attorney

[

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**STATEMENT OF FACTS AND FINDINGS
AND
STATEMENT OF OVERRIDING CONSIDERATIONS
REGARDING THE ENVIRONMENTAL EFFECTS
FOR THE
FINAL ENVIRONMENTAL IMPACT REPORT
FOR THE
LOS ALAMITOS MEDICAL CENTER SPECIFIC PLAN**

SCH No. 2010041095



TABLE OF CONTENTS

1.0	INTRODUCTION.....	1
2.0	PROJECT SUMMARY	3
2.1	Project Description.....	3
2.2	Project Phasing	10
2.3	Project Goals	11
3.0	ENVIRONMENTAL REVIEW AND PUBLIC PARTICIPATION	12
3.1	Independent Judgment Finding	12
3.2	Findings on the Final Program EIR.....	13
3.3	General Finding on the Mitigation Measures.....	13
3.4	Environmental Impacts and Findings	14
3.5	Effects Determined to be Less Than Significant in the Initial Study/ Notice of Preparation.....	15
3.6	Effects Determined to be Less Than Significant in the Final Program EIR Requiring No Mitigation.....	19
3.7	Effects Determined to be Mitigated to Less Than Significant in the Final Program EIR Requiring Mitigation.....	22
3.8	Effects Which Remain Significant and Unavoidable in the Final Program EIR After Mitigation and Findings	49
3.9	Project Alternatives and Analysis.....	51
4.0	Certification of the Final EIR	57
4.1	Findings	57
4.2	Conclusions	57
5.0	Statement of Overriding Considerations.....	58
5.1	Introduction.....	58
5.2	Significant Unavoidable Adverse Impacts.....	58
5.3	Overriding Considerations	58



LIST OF TABLES

Table 1	Proposed Medical Center Campus Facilities (New Buildings)	4
Table 2	Specific Plan Development Program By Phase	4
Table 3	Specific Plan Development Program By Use Type	5
Table 4	On-Site Parking	9



1.0 INTRODUCTION

The *California Environmental Quality Act (CEQA)*, *Public Resources Code Section 21000 et seq.*, and the implementing regulations set forth that *Title 14 California Code of Regulations Section 15000 et seq. (CEQA Guidelines)* require that a Lead Agency issue two sets of findings prior to approving a project that will generate a significant and unavoidable impact on the environment. The Statement of Facts and Findings is the first set of findings, in which the Lead Agency identifies the significant impacts, presents facts supporting the conclusions reached in the analysis, makes one or more of three findings for each impact, and explains the reasoning behind the agency's findings.

The following Statement of Facts and Findings has been prepared in accordance with *CEQA Section 21081. CEQA Guidelines Section 15091 (a)* provides that:

No public agency shall approve or carry out a project for which an EIR has been certified which identifies one or more significant environmental effects of the project unless the public agency makes one or more written findings for each of those significant effects, accompanied by a brief explanation of the rationale for each finding.

There are three possible finding categories available for the Statement of Facts and Findings pursuant to *CEQA Guidelines Section 15091 (a)*:

- (1) Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR.*
- (2) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.*
- (3) Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the final EIR.*

The Statement of Overriding Considerations is the second set of findings. Where a project will cause unavoidable significant impacts, the Lead Agency may still approve a project where its benefits outweigh the adverse impacts. Further, as provided in the Statement of Overriding Considerations, the Lead Agency sets forth specific reasoning by which benefits are balanced against effects, and approves the project.

The City Council and the Community Development Department of the City of Los Alamitos, the CEQA Lead Agency, finds and declares that the Los Alamitos Medical Center Specific Plan Program Environmental Impact Report (EIR) has been completed in compliance with *CEQA* and the *CEQA Guidelines*. The City Council and the Community Development Department of the City of Los Alamitos find and certify that the EIR was reviewed and information contained in the EIR was considered prior to approving the Los Alamitos Medical Center Specific Plan herein referred to as the "project."



Los Alamitos Medical Center Specific Plan Program Environmental Impact Report

Based upon its review of the EIR, the Lead Agency finds that the EIR is an adequate assessment of the potentially significant environmental impacts of the proposed project, represents the independent judgment of the Agency, and sets forth an adequate range of alternatives to this project.

The Final EIR is composed of the following elements:

- Los Alamitos Medical Center Specific Plan Draft Program Environmental Impact Report (September 2010);
- Responses to Comments;
- Errata for the Final EIR; and
- Mitigation Monitoring and Reporting Program.

Terms used in the Statement of Facts and Findings and the Statement of Overriding Considerations have the meanings set forth in the EIR unless otherwise expressly provided therein.



2.0 PROJECT SUMMARY

2.1 PROJECT DESCRIPTION

ENVIRONMENTAL LOCATION AND SETTING

Regionally, the project site is located in the northwestern portion of the City of Los Alamitos in northwest Orange County. Primary access to the project site is provided by the San Diego Freeway (I-405) and San Gabriel River Freeway (I-605), which are located approximately 4.5 miles south and 1.5 miles west, respectively. Locally, the 18.3 gross-acre project site is on Katella Avenue. The project site is bordered by Katella Avenue on the south, Cherry Street on the west, Catalina and Florista Streets on the north, and Bloomfield Street on the east. Kaylor Street traverses the western portion of the Los Alamitos Medical Center campus, connecting with Catalina Street on the north and Katella Avenue on the south.

PROJECT OVERVIEW

The project applicant is proposing a Specific Plan for the Los Alamitos Medical Center campus. The Los Alamitos Medical Center is envisioned to be a safe, attractive, well-designed medical center where surrounding residents of all ages can obtain valuable medical treatment and care. The proposed Specific Plan for the Medical Center campus includes a three-phase master planned expansion estimated to be constructed over a period of approximately 25 years.

The Specific Plan will include the provision of an additional 164 hospital beds, two new hospital buildings, one new medical office building (75,100 gross square feet) to be used for additional outpatient and associated medical uses, and an additional 849 parking spaces than what currently exists on the Medical Center campus. It is anticipated that four new structures will be constructed on the existing 18.3 gross-acre Medical Center campus built over a 25-year period, as outlined below in the Development Program.

DEVELOPMENT PROGRAM

Table 1, Proposed Medical Center Campus Facilities (New Buildings), summarizes the new facilities proposed under the Specific Plan.



Los Alamitos Medical Center Specific Plan Program Environmental Impact Report

Table 1
Proposed Medical Center Campus Facilities (New Buildings)

New Buildings	Square Feet	Building Height ¹ (Feet) / Story
New Medical Office Building A	75,100	50' 6" / 3
New Hospital Building 1	88,100	68' / 4
New Hospital Building 2	88,100	68' / 4
New Central Plant	14,100	43' 6" / 1 to 2
	265,400	
1. Building heights are to top of parapet. Height of elevator shaft not included.		
¹ = Feet " = Inches		

Table 2, Specific Plan Development Program By Phase, and Table 3, Specific Plan Development Program By Use Type, illustrate the ultimate building square footage of the Los Alamitos Medical Center campus as it relates to the existing campus. Once complete, the Medical Center campus will include 582,824 square feet of hospital and hospital-related uses, medical office space, support facilities, and parking. The floor area ratio (FAR) will increase from an existing 0.45 FAR to 0.73 FAR once the Medical Center campus is built out.

Table 2
Specific Plan Development Program By Phase

Use	Square Feet	Beds
Phase 1		
Existing Main Hospital	121,748	167
Existing MOB 1 (interim pending demolition in Phase 2)	24,000	--
Existing MOB 2	64,000	--
Existing MOB 3	60,000	--
Existing TotalCare Pavilion	71,676	--
Existing Administration/Warehouse Building (3776 & 3797 Catalina) (interim pending demolition in Phase 2)	15,099	
New Medical Office Building A	75,100	--
Subtotal Phase 1	431,623	167
Phase 2		
Hospital Building 1	88,100	92
Existing Main Hospital (internal reconfiguration only)	No change	113 ¹
Subtotal Phase 2	88,100	205
Cumulative Total, Phase 2	480,624¹	205
Phase 3		
Hospital Building 2	88,100	126
New Central Plant	14,100	--
Subtotal Phase 3	102,200	--
BUILDOUT TOTAL	582,824	331
Net Increase Over Existing	226,301	164
1. In Phase 2 the bed count in the existing hospital is reduced from 167 beds to 113 beds due to consolidation of rooms and interior renovation. No change in square footage is proposed. Existing MOB 1 will be demolished as part of phase 2 as will the existing Administration/Warehouse building.		
Notes:		
1. Net increase is in comparison to the 356,523 sq ft of existing uses shown on Table 3-1, of the Draft EIR, and accounts for demolition.		
2. MOB = Medical Office Building		



Los Alamitos Medical Center Specific Plan Program Environmental Impact Report

Table 3
Specific Plan Development Program By Use Type

Use	Existing Facilities	Phase	New Construction	Demolition	Net Change	Buildout Square Feet	Beds
Hospital & Related Uses							
Existing Main Hospital	121,748				0	121,748	167 Existing
Internal Reconfiguration		2					-54 Existing ¹
Hospital Building 2		2	88,100		+88,100	88,100	92 New
Hospital Building 3		3	88,100		+88,100	88,100	126 New
Subtotal Hospital & Related Uses	121,748		176,200	0	+176,200	297,948	331
Support Facilities							
Existing Administration/ Warehouse Building (3776 & 3797 Catalina)	15,099	2		-15,099	-15,099	0	
New Central Plant		3	14,100		+14,100	14,100	--
Subtotal Support Facilities	15,099		14,100	-15,099	-999	14,100	
Medical Office Buildings							
Existing MOB 1	24,000	2		-24,000	-24,000	0	--
Existing MOB 2	64,000				0	64,000	--
Existing MOB 3	60,000				0	60,000	--
Existing TotalCare Pavilion	71,676				0	71,676	--
Medical Office Building A		1	75,100		+75,100	75,100	--
Subtotal Medical Office Buildings	219,676		75,100	-24,000	+51,100	270,776	
TOTAL	356,523		265,400	-39,099	+226,301	582,824	331
Net Increase Over Existing						226,301	164
1. In Phase 2 the bed count in the existing hospital is reduced from 167 beds to 113 beds due to consolidation of rooms and interior renovation. No change in square footage is proposed. Existing MOB 1 will be demolished as part of phase 2 as will the existing Administration/Warehouse building. Notes: 1. Net increase is in comparison to the 356,523 sq ft of existing uses shown on Table 3-1, of the Draft EIR, and accounts for demolition. 2. MOB = Medical Office Building							

LAND USE SUMMARY BY PHASE

The development activity anticipated for the three phases are discussed below. At buildout, the Los Alamitos Medical Center campus will include 297,948 square feet of hospital and hospital-related uses; 260,776 square feet of medical office space; and 14,100 square feet of vital support facilities.



PHASE 1

Three medical office buildings, the TotalCare Pavilion, and the main hospital will remain unaltered during Phase 1. Phase 1 consists of the following elements:

- § Vacation of the entire right-of-way for Kaylor Street. Parking will be provided in a district setting, with parking spaces provided throughout the site and not specifically allocated by building. Kaylor Street will function as a private street during Phase 1, but will not be reconfigured once it has been vacated.
- § Construction of a new 3-story medical office building (MOB A) on the Katella Avenue project frontage, totaling 75,100 gross square feet.
- § Construction of a new parking structure north of the new Medical Office Building (MOB A).

PHASE 2

Phase 2 consists of the following elements:

- § Demolition of an existing 24,000-square-foot medical office building (MOB 1) located at the northwest corner of Kaylor Street and Katella Avenue to allow for reconfiguration of surface parking areas; as part of Phase 2, Kaylor Street south of the existing hospital will be reconfigured as a driveway and parking area.
- § Demolition of an existing 15,099-square-foot administration/warehouse building along Catalina/Kaylor Street and construction of surface parking.
- § Construction of a new four-story Hospital Building (Hospital Building 1) totaling 92 beds, resulting in a 38-bed net increase as a portion of the existing hospital will be renovated resulting in a reduced bed count. The existing hospital bed count will be reduced to 113 beds from the present total of 167 to allow for modernization of hospital room configurations. The emergency room will be relocated to the ground floor of the new Hospital Building 1 and the vacated emergency room space will be reconfigured for outpatient services for special procedures. A ground level, enclosed corridor will be constructed to link the existing hospital with the new Hospital Building 1.

PHASE 3

Phase 3 consists of the following elements:

- § Construction of a second four-story bed Hospital Building (Hospital Building 2) totaling 126 beds to the north of the Hospital Building 1. An elevated corridor will connect the two Hospital Buildings.
- § Construction of a Central Plant to service the new and existing hospital buildings.
- § Construction of a second parking structure to meet parking standards.



HOSPITAL BUILDINGS AND EMERGENCY ROOM RE-LOCATION

Hospital Building 1 is anticipated to be four stories (approximately 68 feet to top of parapet) in height, total approximately 88,100 square feet, and will be located on the east side of vacated Kaylor Street. Hospital Building 1 will include 92 beds, and will also include a new emergency room on the ground floor; the existing emergency room presently located in the main hospital will be re-located to the ground floor of Hospital Building 1 once it is constructed in Phase 2 of the expansion program. A ground level corridor will be constructed to link Hospital Building 1 with the existing hospital.

The existing emergency room space in the main hospital will be turned into a space for specialized medical procedures and laboratory uses. In addition, patient rooms in the existing hospital will be re-configured to reduce room occupancy in accordance with modern standards. Rooms that presently have three or four beds will be reduced to two beds and rooms that presently have two beds will be reduced to one bed.

As shown in *Table 3*, a total net gain of 38 beds is proposed for the Medical Center campus in Phase 2, with a total of 205 beds in the reconfigured main hospital and new Hospital Building 1. Hospital Building 2 is to be constructed in Phase 3 and will include 126 new beds, and will also be located along Kaylor Street. Hospital Building 2 is anticipated to be 88,100 square feet and will be 4 stories in height. An elevated corridor will connect Hospital Buildings 1 and 2.

CENTRAL PLANT

The purpose of the Central Plant is to provide power, hot water, and heating/air conditioning to the existing hospital and new Hospital Buildings 1 and 2. During Phase 2, the Central Plant facilities will be located on top of Hospital Building 1 in a mechanical penthouse. With the buildout of Phase 3, the Central Plant will be re-located to the corner of Kaylor Street and Catalina Street, where it will remain permanently. The proposed structure will consist of a one- and two-story structure and associated cooling tower.

SITE DEVELOPMENT STANDARDS

INTENSITY

The floor area ratio within the Specific Plan Area, including the medical center, existing and new medical office uses, and the central plant, based on gross acreage, shall not exceed 0.75.

BUILDING HEIGHTS

The Specific Plan proposes the following for new buildings:

- § Maximum of four stories or 70 feet, whichever is greater, measured to the top of parapet.



The following structures may exceed the allowed height:

- a. Plumbing vents, chimneys, etc.
- b. Fire walls.
- c. Mechanical features such as air conditioners, tanks, fans and similar equipment located on rooftops must be screened, but the architectural features used to provide that screening are not considered as part of the building for purposes of determining building height, so long as features do not exceed the minimum amount required to achieve screening.
- d. Skylights.
- e. Stair/Elevator structures.
- f. Solar panels.
- g. Architectural theme elements.

CIRCULATION AND ACCESS

Presently, there are four points of access into the site from Katella Avenue, including Kaylor Street and three driveways.

Access into the site will vary by phase. During Phase 1, primary access will continue to be via Kaylor Street, with a second driveway located between the TotalCare Pavilion and the new medical office building (MOB A). This driveway will provide direct access to the parking structure. One driveway will be eliminated as part of Phase 1. Access into the site from Katella for Phases 2 and 3 will be via two driveways, as Kaylor Street will be reconfigured as a driveway access into the site. In addition, one entrance along Cherry Street is anticipated to allow access to the Specific Plan area.

INTERNAL CIRCULATION

As part of the proposed Specific Plan, Kaylor Street will be modified as described below.

PHASE 1

Kaylor Street will be vacated during Phase 1 of Specific Plan implementation but will remain unaltered in configuration, providing full access into the site as a private street. A public access easement will be placed on the private driveway.

PHASES 2 AND 3

As part of Phase 2, Kaylor Street will be reconfigured from Katella Avenue north to function solely as a private driveway, providing access into the site from Katella Avenue and to the new parking structure and surface parking lots. On the north, Kaylor Street will continue as a private street that extends south from Catalina Street and terminates in a cul-de-sac constructed to



City standards. Kaylor Street will serve as an access point for ambulances to the new emergency room and access for employees and visitors.

EMERGENCY ROOM ACCESS

The ambulance route for the medical center will vary by phase. In Phase 1, there will be no change to the existing ambulance route to the emergency room in the existing hospital, which is via Kaylor Street. Upon construction of Hospital Building 1 in Phase 2, the emergency room will be relocated to the ground floor of that building. Ambulance access to the emergency room will be via Kaylor Street from the north and a driveway off of Florista Street. Office of State Health Planning and Development (OSHPD) and design practice dictate that walk-in patient access would be via a separate entrance with access provided from Katella Avenue.

PARKING

A total of 1,943 on-site parking spaces will be provided within the Specific Plan area at buildout, configured in surface and structured parking areas. Parking will be on a paid basis, with employee parking provided at no charge. Employees will take access to the parking areas and/or structure(s) via separate controlled entry points.

During Phase 1, parking will be re-configured. A portion of the surface parking will be demolished, and concurrent with re-configuration of the surface parking spaces, a parking structure will be constructed. Parking in the two existing lots in the northern portion of the site will be employee/staff parking. *Table 4, On-Site Parking*, outlines the provided on-site parking by type. A second parking structure is proposed for construction in Phase 3, as Specific Plan buildout nears completion.

On-street parking is also present on the adjacent public streets. This on-street parking does not count towards meeting the parking needs for the site. As shown in *Table 4*, the proposed parking exceeds requirements.

Table 4
On-Site Parking

Phase	Parking Spaces Provided	Parking Required	Levels
Phase 1			
Surface Parking	751		Surface
Parking Structure 1	1,050		6 levels, above ground
Subtotal Phase 1	1,801	1,792	
Phase 2			
Surface Parking	680		Surface
Parking Structure 1	1,050		6 levels, above ground
Subtotal Phase 2	1,730	1,713	
Phase 3/Buildout			
Surface Parking	362		Surface
Parking Structure 1	1,050		6 levels, above ground
Parking Structure 2	531		4 levels, above ground
Total at Buildout	1,943	1,934	



2.2 PROJECT PHASING

Development within the Los Alamitos Medical Center Specific Plan area is expected to occur in three general phases over a 25-year period, as outlined below. Within each phase there may be sub-phases related to construction sequencing.

Three existing medical office buildings and the existing hospital will remain. Phasing for the Los Alamitos Medical Center expansion consists of the following elements, broken down by subphase/construction sequence.

A construction management plan will be prepared as part of the site plan submittal to outline construction staging as well as provisions for employee parking and parking management during construction.

PHASE 1

- § Construction of a new medical office building (MOB A) on the Katella Avenue project frontage, totaling 75,100 gross square feet.
- § Extension of infrastructure to serve the new medical office building (MOB A).
- § Construction of a new parking structure on the eastern side of the new Hospital Building 1.
- § Vacation of the existing right-of-way for Kaylor Street (no reconfiguration) to act as a private street.

PHASE 2

- § Demolition of an existing 24,000-square-foot medical office building (MOB 1) located at the northwest corner of Kaylor Street and Katella Avenue to allow for reconfiguration of surface parking areas.
- § Demolition of an existing 15,099-square-foot warehouse building along Catalina/Kaylor Street.
- § Reconfiguration of surface parking and reconfiguration of Kaylor Street north of the hospital building.
- § Construction of a new four-story Hospital Building (Hospital Building 1) totaling 92 beds, resulting in a 38 bed net increase as a portion of the existing hospital will be renovated resulting in a reduced bed count.
- § Reconfiguration of the existing hospital's bed count and relocation of the existing emergency room to the new Hospital Building.
- § The existing hospital bed count will be reduced to 113 beds from the present total of 167.
- § Extension/Construction of infrastructure to serve the new Hospital Building 1.



PHASE 3

- § Construction of a Central Plant to service the new and existing hospital buildings.
- § Construction of a second Hospital Building (Hospital Building 2) totaling 126 beds to the north of the Phase 1 Hospital Building.
- § Construction of an additional parking structure and surface parking to meet Specific Plan parking standards.

2.3 PROJECT GOALS

Implementation of the proposed Los Alamitos Medical Center Specific Plan is intended to achieve the following goals:

- Comply with the City of Los Alamitos General Plan Goals and Policies.
- Design the project with consideration of the site's circulation, environmental, and physical opportunities and constraints.
- Create project identity through thematically coherent and aesthetically pleasing architecture, landscaped areas, colors, signage, and entry statements.
- Size and phase the medical center development plan to satisfy, and be consistent with, current and anticipated future market demand.
- Encourage a streamlined and predictable discretionary review process for subsequent reviews.
- Provide for coordinated land use, urban design, landscape, transportation, and infrastructure planning.
- Create a sustainable development that minimizes short-term and long-term adverse environmental impacts to the fullest extent feasible and adequately addresses consumer needs.
- Improve the local job market by providing a substantial number of permanent new jobs within and available to the local community.



3.0 ENVIRONMENTAL REVIEW AND PUBLIC PARTICIPATION

The City of Los Alamitos (City) conducted an extensive review of the project, which included a Draft EIR and a Final EIR, along with a public review and comment period. The following is a summary of the lead agency's environmental review of the project:

- Pursuant to *CEQA Guidelines* Section 15082, as amended, the City circulated a Notice of Preparation ("NOP") to public agencies, special districts, and members of the public who had requested such notice for a 30-day period. The NOP and Initial Study were submitted to the State Clearinghouse April 28, 2010, with the 30-day review period ending on May 28, 2010.
- The NOP public review period ran for 30 days. The City accepted a number of written comments from various interested parties. The scope of the issues identified in the comments included potential impacts associated with traffic and circulation, parking, land use, air quality, hydrology/water quality, and aesthetics.
- The Draft EIR was distributed for public review and a Notice of Availability ("NOA") and Notice of Completion ("NOC") was filed with the State Clearinghouse on September 30, 2010 to November 15, 2010, for a 45-day review period. A notice of availability was placed in the *News Enterprise*, on September 29, 2010. The Draft EIR was made available at the City of Los Alamitos Community Development counter and the Los Alamitos/Rossmoor public library.
- The City received a total of 13 written comment letters from public agencies. The Agency prepared specific responses to all written comments. The comments and responses are contained in Section 13.0 of the Final EIR. The Final EIR was also available at the City of Los Alamitos Community Development counter.
- On October 11, 2010 and November 8, 2010, the Planning Commission of the City of Los Alamitos held a noticed public hearing on the Final EIR. The Planning Commission staff report was also posted on the City's web page.

In accordance with *Public Resources Code* Section 21092.5, the City provided written responses to public agencies and the general public that commented on the Draft EIR.

3.1 INDEPENDENT JUDGMENT FINDING

The City selected and retained RBF Consulting (RBF) to prepare the Los Alamitos Medical Center Specific Plan Program EIR. RBF prepared the EIR under the supervision and direction of City staff. All findings set forth herein are based on substantial evidence in the record, as indicated, with respect to each specific finding.



Finding: The EIR for the project reflects the City's independent judgment. The City has exercised independent judgment in accordance with *Public Resources Code* Section 21082.1(c)(3) in retaining its own environmental consultant, and directing the consultant in the preparation of the EIR. The City has independently reviewed and analyzed the EIR and finds that the report reflects the independent judgment of the City.

The City has considered all the evidence presented in its consideration of the project and the EIR, including, but not limited to, the Final EIR, written and oral evidence presented at hearings on the project, and written evidence submitted to the City by individuals, organizations, regulatory agencies, and other entities. On the basis of such evidence the City finds that with respect to each environmental impact identified in the review process, the impact (1) is less than significant and would not require mitigation; or (2) is potentially significant but would be avoided or reduced to less than a significant level by implementation of identified mitigation measures; or (3) would be significant and not fully mitigable but would be, to the extent feasible, lessened by implementation of identified mitigation measures.

The EIR also identifies certain significant adverse environmental effects of the proposed project which cannot be avoided or substantially lessened. Prior to approving this project, the City must also adopt a Statement of Overriding Considerations which finds, based on specific reasons and substantial evidence in the record (as specified in Section 5.0), that certain identified economic, social, or other benefits of the proposed project outweigh such unavoidable adverse environmental effects.

3.2 FINDINGS ON THE FINAL PROGRAM EIR

Finding: The City has declared that the Final Program EIR has identified and discussed significant effects which may occur as a result of the Los Alamitos Medical Center Specific Plan. With the implementation of the mitigation measures discussed in the Final Program EIR, these effects can be mitigated to a level of less than significant as set forth in Section 3.7 of these Findings. However, there are certain other significant effects which either cannot be fully mitigated or for which no feasible or practical mitigation currently exist, and these unavoidable significant impacts are discussed in Section 3.8 of these Findings.

3.3 GENERAL FINDING ON THE MITIGATION MEASURES

The City has reviewed the mitigation measures applicable to the Los Alamitos Medical Center Specific Plan through their separate official actions and review processes applicable to it as the Lead Agency.

In the event that the description of the mitigation measures set forth in the Mitigation Monitoring and Reporting Plan do not use the exact wording of the mitigation measures recommended in the Final Program EIR, in each such instance, the mitigation measures in the Mitigation Monitoring and Reporting Plan are intended to be identical or substantially similar to the recommended mitigation measures in the Final Program EIR. Any minor revisions were made for the purpose of improving clarity or to better define the intended purpose.



Finding: The City has adopted Findings to the effect that the mitigation measures summarized in the Mitigation Monitoring and Reporting Plan will reduce all potential significant impacts of the project to a level of less than significant, except as set forth in Section 3.8 of these Findings. The City has duly adopted all mitigation measures recommended in the Final Program EIR. The City has further adopted the Mitigation Monitoring and Reporting Plan for the Los Alamitos Medical Center Specific Plan in the form as submitted to the City and the City of Los Alamitos at the public hearing when the Final Program EIR was considered.

3.4 ENVIRONMENTAL IMPACTS AND FINDINGS

The detailed analysis of potential environmental impacts and proposed mitigation measures for the project, the Responses to Comments, and any revisions or omissions to the Draft Program EIR are presented in the Final Program EIR.

The Final Program EIR evaluated 14 major environmental categories: Land Use; Aesthetics; Traffic; Air Quality/Greenhouse Gas Emissions; Noise; Geology and Seismic Hazards; Hazards and Hazardous Materials; Hydrology, Drainage, and Water Quality; Fire Protection; Police Protection; Water; Wastewater; Solid Waste; and Electricity and Natural Gas for potential significant unavoidable impacts, including cumulative impacts. Both project-specific and cumulative impacts were evaluated. Of these 14 environmental categories, the City has concurred with the conclusions in the Final Program EIR that, with exception to the issues considered in Section 3.8 of these Findings, all of the other issues and sub-issues discussed in these Findings can be mitigated below a significant impact threshold. For those issues which cannot be mitigated below a level of significance (see Section 3.8 of these Findings), overriding considerations exist that make the impacts acceptable. In addition to the 14 major environmental categories addressed in the Final Program EIR, five other major categories (Agricultural and Forest Resources, Biological Resources, Cultural Resources, Mineral Resources, and Recreation) were found to be non-significant in the Initial Study prepared for the project. The City has concurred through its respective official actions with the conclusions on these categories as outlined in the Initial Study (Appendix A of the Final EIR) and have found that no significant impacts have been identified as to those categories identified in the Initial Study and no further analysis is required.



3.5 EFFECTS DETERMINED TO BE LESS THAN SIGNIFICANT IN THE INITIAL STUDY/NOTICE OF PREPARATION

The City conducted an Initial Study in April 2010 to determine significant effects of the proposed project. In the course of this evaluation, certain impacts of the project were found to be less than significant due to the inability of a project of this scope to create such impacts or the absence of project characteristics producing effects of this type. The following effects were determined not to be significant, and were not analyzed in the EIR; refer to Appendix A, Initial Study and Notice of Preparation, of the Final EIR.

FINDING:

The City finds that based on substantial evidence in the record, the following impacts, to the extent they result from the project, will be less than significant.

AESTHETICS

Have a substantial adverse effect on a scenic vista.

Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.

AGRICULTURE RESOURCES

Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use.

Conflict with existing zoning for agricultural use, or a Williamson Act contract.

Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g)).

Result in the loss of forest land or conversion of forest land to non-forest use.

Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use.

AIR QUALITY AND GLOBAL CLIMATE CHANGE

Create objectionable odors affecting a substantial number of people.



BIOLOGICAL RESOURCES

Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.

Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.

Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

CULTURAL RESOURCES

Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines §15064.5.

Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines §15064.5.

Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

Disturb any human remains, including those interred outside of formal cemeteries.

GEOLOGY AND SOILS

Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

- 1) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.



4) Landslides.

Result in substantial soil erosion or the loss of topsoil.

Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water.

HAZARDS AND HAZARDOUS MATERIALS

Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment.

Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

HYDROLOGY AND WATER QUALITY

Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map.

Place within a 100-year flood hazard area structures which would impede or redirect flood flows.

Inundation by seiche, tsunami, or mudflow.

LAND USE AND PLANNING

Physically divide an established community.

Conflict with any applicable habitat conservation plan or natural community conservation plan.

MINERAL RESOURCES

Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.

Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

POPULATION AND HOUSING

Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).



Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere.

Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

PUBLIC SERVICES

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

- 3) Schools.
- 4) Parks.
- 5) Other public facilities.

RECREATION

Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.

Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

TRANSPORTATION/TRAFFIC

Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks.

MANDATORY FINDINGS OF SIGNIFICANCE

Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory.



3.6 EFFECTS DETERMINED TO BE LESS THAN SIGNIFICANT IN THE FINAL PROGRAM EIR REQUIRING NO MITIGATION

FINDING:

The City finds that based on substantial evidence in the record, the following impacts, to the extent they result from the project, will be less than significant.

LAND USE

Consistency with City Land Use Plans, Policies, and Ordinances. The proposed project could conflict with the City of Los Alamitos General Plan.

Consistency with City Land Use Plans, Policies, and Ordinances. The proposed project could conflict with the standards and requirements of the City of Los Alamitos Zoning Code.

Consistency with City Land Use Plans, Policies, and Ordinances. The proposed project could conflict with the standards and requirements of the Airport Environs Land Use Plan.

Cumulative Impacts. Implementation of the proposed project and other related cumulative projects could result in cumulatively considerable impacts involving conflicts with applicable land use plans, policies, or regulations.

TRAFFIC

Forecast Year 2013 Proposed Project Traffic Impacts on State Highway Facilities. Development associated with implementation of the proposed project could result in adverse impacts to the function of State highway facilities in the project area under Forecast Year 2013 traffic conditions.

Forecast Year 2035 Proposed Project Traffic Impacts on State Highway Facilities. Development associated with implementation of the proposed project could result in adverse impacts to the function of State highway facilities in the project area under Buildout Forecast Year 2035 traffic conditions.

Forecast Year 2013 Proposed Project Traffic Impacts on CMP Highway Facilities. Development associated with implementation of the proposed project could result in adverse impacts to the function of CMP in the project area under Forecast Year 2013 traffic conditions.

Forecast Year 2035 Proposed Project Traffic Impacts on CMP Highway Facilities. Development associated with the implementation of the proposed project could result in adverse impacts to the function of CMP in the project area under Buildout Forecast Year 2035 traffic conditions.



AIR QUALITY

Long-Term Mobile and Stationary Source Emissions. Development associated with implementation of the proposed project could result in an overall increase in mobile and stationary source emissions.

Carbon Monoxide Hotspots. Development associated with implementation of the proposed project could result in an overall increase in carbon monoxide hotspot emissions within the City.

NOISE

Construction-Related Vibration Impacts. Development associated with implementation of the proposed project could result in temporary vibration impacts to nearby sensitive receptors during grading and construction activities.

Mobile Noise Impacts. Traffic generated by the proposed project could contribute to existing traffic noise in the area or exceed the City's established standards.

Operational Stationary Source Noise Impacts. Development associated with implementation of the proposed project could result in stationary-source noise impacts on nearby sensitive receptors.

Cumulative Impacts. Implementation of the proposed project and other related cumulative projects could result in cumulatively considerable construction noise impacts.

GEOLOGY AND SEISMIC HAZARDS

Cumulative Impacts. Implementation of the proposed project and other related cumulative projects could result in cumulatively considerable impacts related to geologic soils, and seismic hazards.

HAZARDS AND HAZARDOUS MATERIALS

Hazardous Materials Use, Storage and Handling. Development associated with implementation of the proposed project could result in an increased risk of upset associated with the routine use, generation, and transport of hazardous materials, hazardous waste, or accidental emission of hazardous materials or gases, which may potentially pose a health or safety hazard.

Hazardous Waste Generation. Development associated with implementation of the proposed project could increase hazardous waste generation by the hospital and medical office uses, which could substantially increase risks of environmental exposure.

Hazardous Materials Exposure. Implementation of the proposed project could increase the number of individuals exposed to, but not the nature of, physical safety hazards at the Los Alamitos Medical Center.



Cumulative Impacts. Implementation of the proposed project and other related cumulative projects could result in cumulatively considerable hazards and hazardous materials impacts.

HYDROLOGY, DRAINAGE, AND WATER QUALITY

Dam Inundation. Development associated with implementation of the proposed project could result in urban uses being located on-site, which are in dam inundation areas of the City.

ELECTRICITY AND NATURAL GAS

Electricity Supplies and Distribution Infrastructure. Development associated with implementation of the proposed project could increase the demand for electricity services and facilities.

Natural Gas Supplies and Distribution Infrastructure. Development associated with implementation of the proposed project could increase the demand for natural gas services and facilities.

Cumulative Impacts. Implementation of the proposed project and other related cumulative projects could result in cumulatively considerable electricity and natural gas impacts.



3.7 EFFECTS DETERMINED TO BE MITIGATED TO LESS THAN SIGNIFICANT IN THE FINAL PROGRAM EIR REQUIRING MITIGATION

The City having reviewed and considered the information contained in the Final Program EIR, the Technical Appendices and the administrative record, finds, pursuant to the *Public Resources Code* Section 21801 (a)(1) and *CEQA Guidelines* Section 15091 (a)(1) that changes or alterations have been required in, or incorporated to, the proposed project, which would avoid or substantially lessen to below a level of significance the following potentially significant environmental effects identified in the Final EIR in the following categories:

- Aesthetics (short-term construction aesthetic, light, and glare impacts; long-term aesthetic impacts/visual character; long-term light and glare impacts; and cumulative impacts)
- Traffic (Forecast Year 2013 proposed project traffic impacts, Forecast Year 2035 proposed project traffic impacts, traffic hazards/emergency access, short-term construction-related parking, and cumulative impacts)
- Air Quality/Greenhouse Gas Emissions (short-term construction emissions, consistency with Air Quality Management Plan, and greenhouse gas emissions)
- Noise (construction noise impacts)
- Geology and Seismic Hazards (seismic groundshaking, liquefaction, and expansive soils)
- Hazards and Hazardous Materials (construction-related hazardous materials impacts)
- Hydrology, Drainage, and Water Quality (drainage system capacity, water quality, erosion and siltation, and cumulative impacts)
- Fire Protection (construction-related fire impacts, operational-related fire impacts, and cumulative impacts)
- Police Protection (construction-related police impacts, operational-related police impacts, and cumulative impacts)
- Water (project impacts and cumulative impacts)
- Wastewater (wastewater conveyance and treatment and cumulative impacts)
- Solid Waste (solid waste generated during project construction, solid waste generated during project operation, and cumulative impacts)



AESTHETICS

Short-Term Construction Aesthetic, Light, and Glare Impacts. Construction activities associated with all phases of the proposed project could result in grading and construction activities that could temporarily alter the existing visual character of the project site and the surrounding area and introduce new sources of light/glare.

Findings:

1. ***Changes or alterations have been required in, or incorporated into, the project, which avoid or substantially lessen the significant environmental effect as identified in the EIR.***
2. ***The effects identified in the EIR have been determined not to be significant.***

Facts in Support of Findings:

The potential physical blighting issues and visual character/quality conflicts during construction have been eliminated or substantially lessened to a level of less than significant by virtue of the mitigation measures identified in the EIR.

Mitigation Measures:

- AES-1 Construction equipment staging areas shall use appropriate screening (i.e., temporary fencing with opaque material) to buffer views of construction equipment and material, when feasible. Staging locations shall be indicated in the Construction Management Plan (CMP).
- AES-2 All construction-related lighting shall be located and focused away from adjacent residential areas and consist of the minimal wattage necessary to provide safety at the construction site. A construction safety lighting plan shall be submitted to the City for review concurrent with Grading Permit applications and the Construction Management Plan (CMP).

Long-Term Aesthetic Impacts/Visual Character. Development associated with implementation of the proposed project could alter the existing visual character and viewshed from surrounding locations.

Findings:

1. ***Changes or alterations have been required in, or incorporated into, the project, which avoid or substantially lessen the significant environmental effect as identified in the EIR.***
2. ***The effects identified in the EIR have been determined not to be significant.***



Facts in Support of Findings:

The potential physical blighting issues and visual character/quality conflicts have been eliminated or substantially lessened to a level of less than significant by virtue of the mitigation measure identified in the EIR.

Mitigation Measure:

AES-3 Prior to issuance of building permits, each structure shall undergo Site Plan Review approval in conformance with the adopted Specific Plan and conditions of approval for overall site design and architectural conformity.

Long-Term Light and Glare Impacts. Development associated with implementation of the proposed project could affect daytime and/or nighttime views in the area.

Findings:

1. ***Changes or alterations have been required in, or incorporated into, the project, which avoid or substantially lessen the significant environmental effect as identified in the EIR.***
2. ***The effects identified in the EIR have been determined not to be significant.***

Facts in Support of Findings:

The potential light and glare issues have been eliminated or substantially lessened to a level of less than significant by virtue of the mitigation measure identified in the EIR.

Mitigation Measure:

AES-4 Prior to site plan approval, the City of Los Alamitos Community Development Department shall ensure that the following elements are included in the project plans, as appropriate:

- The project plans shall comply with all lighting standards contained in the *Los Alamitos Medical Center Specific Plan*.
- The project plans shall comply with all lighting standards contained in the City's *Municipal Code*, including, but not limited to Chapter 8.48, Lighting Performance Standards, Section 17.14.040, Light and Glare, and Section 17.16.050, Exterior Lighting, as applicable.
- All exterior lighting shall be designed and located as to avoid intrusive effects on adjacent residential properties and undeveloped areas adjacent to the project site. Low-intensity street lighting and low-intensity exterior lighting shall be used throughout the development to the extent feasible. Lighting fixtures shall use shielding, if necessary, to prevent spill lighting on adjacent off-site uses.



- Design and placement of site lighting shall minimize glare affecting adjacent properties, buildings, and roadways.
- Fixtures and standards shall conform to state and local safety and illumination requirements.
- Development projects shall use minimally reflective glass, and all other materials used on exterior building and structures shall be selected with attention to minimizing reflective glare.
- Automatic timers on lighting shall be designed to maximize personal safety during nighttime use while saving energy.

Cumulative Impacts. Implementation of the proposed project and other related cumulative projects could result in cumulatively considerable aesthetics, light, and glare impacts.

Findings:

1. ***Changes or alterations have been required in, or incorporated into, the project, which avoid or substantially lessen the significant environmental effect as identified in the EIR.***
2. ***The effects identified in the EIR have been determined not to be significant.***

Facts in Support of Findings:

The potential cumulative aesthetic impacts have been eliminated or substantially lessened to a level of less than significant by virtue of the mitigation measures identified in the EIR.

Mitigation Measures: Refer to Mitigation Measures AES-1 through AES-4. No additional mitigation measures are required.

TRAFFIC

Forecast Year 2013 Proposed Project Traffic Impacts. Development associated with implementation of the proposed project could result in adverse impacts to the function of intersections in the project area under Forecast Year 2013 traffic conditions.

Findings:

1. ***Changes or alterations have been required in, or incorporated into, the project, which avoid or substantially lessen the significant environmental effect as identified in the EIR.***
2. ***The effects identified in the EIR have been determined not to be significant.***



Facts in Support of Findings:

The potential Forecast Year 2013 traffic impacts have been eliminated or substantially lessened to a level of less than significant by virtue of the mitigation measures identified in the EIR.

Mitigation Measures:

TRF-1 Kaylor Street/Katella Avenue. Prior to issuance of certificate of occupancy for MOB A, the project applicant shall install the following improvements:

- Signalize the Kaylor Street/Katella Avenue intersection and lengthen the eastbound Katella Avenue left-turn pocket at Kaylor Street from 125 feet to 200 feet.
- Modify the Katella Avenue median to restrict the Maple Street/Katella Avenue intersection to right-in/right-out movements.
- To accommodate eastbound left-turn queuing of vehicles accessing the medical center, modify the raised median on Katella Avenue to include an eastbound left-turn pocket approximately 100 feet in length at the Driveway 3/Katella Avenue intersection (refer to Exhibit 5.3-25).
- Provide traffic signal interconnect and synchronization between the Kaylor Street/Katella Avenue intersection and the Cherry Street/Katella Avenue intersection.

TRF-2 Katella Avenue. Prior to issuance of certificate of occupancy for MOB A, the project applicant shall install the following improvements:

- Further implement the OCTA Smart Street Program by coordinating with the City to prohibit on-street parking on Katella Avenue adjacent to the project site between Kaylor Street and Bloomfield Street.
- Provide a dedicated right-turn lane at the westbound approach to the Kaylor Street/Katella Avenue and Driveway 3/Katella Avenue intersections (refer to Exhibit 5.3-25).
- Continue to prohibit on-street parking on the north side of Katella Avenue between Cherry Street and Kaylor Street.

Forecast Year 2035 Proposed Project Traffic Impacts. Development associated with implementation of the proposed project could result in adverse impacts to the function of intersections in the project area under Buildout Forecast Year 2035 traffic conditions.

Findings:

1. ***Changes or alterations have been required in, or incorporated into, the project, which avoid or substantially lessen the significant environmental effect as identified in the EIR.***
2. ***The effects identified in the EIR have been determined not to be significant.***



Facts in Support of Findings:

The potential Forecast Year 2035 traffic impacts have been eliminated or substantially lessened to a level of less than significant by virtue of the mitigation measures identified in the EIR.

Mitigation Measures: Refer to Mitigation Measures TRF-1 and TRF-2. In addition, the following mitigation measure is recommended.

TRF-3 Los Alamitos Boulevard/Cerritos Avenue. Prior to issuance of certificate of occupancy for Hospital Building 2, the project applicant shall pay a proportionate share contribution to the City of Los Alamitos to widen the westbound Cerritos Avenue approach from one left-turn lane, two through lanes, and one right-turn lane to consist of two left-turn lanes, two through lanes, and one right-turn lane.

Traffic Hazards/Emergency Access. Development associated with the implementation of the proposed project could result in hazardous conditions due to a design feature or incompatible use or could result in inadequate emergency access.

Findings:

1. ***Changes or alterations have been required in, or incorporated into, the project, which avoid or substantially lessen the significant environmental effect as identified in the EIR.***
2. ***The effects identified in the EIR have been determined not to be significant.***

Facts in Support of Findings:

The potential traffic hazards and emergency access impacts have been eliminated or substantially lessened to a level of less than significant by virtue of the mitigation measures identified in the EIR.

Mitigation Measures:

TRF-4 Kaylor Street/Katella Avenue. Prior to issuance of certificate of occupancy for MOB A, the project applicant shall install the following improvements:

- A dedicated left-turn lane at the southbound approach on Katella Avenue to the Kaylor Street/Katella Avenue intersection.
- A dedicated right-turn lane at the southbound approach on Katella Avenue to the Kaylor Street/Katella Avenue intersection.

TRF-5 Cherry Street/Katella Avenue. Prior to issuance of certificate of occupancy for MOB A, the project applicant shall install the following improvement:

- A dedicated right-turn lane at the westbound approach to the Cherry Street/Katella Avenue intersection. Due to the restricted on-street parking,



a defacto right-turn lane currently exists, and can be striped to better facilitate right-turns.

TRF-6 Ambulance Service. The project applicant shall continue to coordinate with the applicable ambulance service and applicable agency staff on the site access for EMS deliveries. The applicant shall provide a wayfinding system for public understanding of the location of the Emergency Room when arriving at the Medical Center.

Short-Term Construction-Related Parking. Implementation of the proposed project could result in adverse impacts related to the function of parking systems during construction activities.

Findings:

1. ***Changes or alterations have been required in, or incorporated into, the project, which avoid or substantially lessen the significant environmental effect as identified in the EIR.***
2. ***The effects identified in the EIR have been determined not to be significant.***

Facts in Support of Findings:

The potential short-term construction-related parking impacts have been eliminated or substantially lessened to a level of less than significant by virtue of the mitigation measure identified in the EIR.

Mitigation Measure:

TRF-7 The project applicant shall prepare as part of the site plan submittal and implement during the construction phases of the project a Construction Management Plan. The Construction Management Plan shall include, but is not limited to, details on construction staging hours and construction equipment and supply staging locations, construction truck routes, and provisions for employee parking and parking management during construction. With respect to parking provisions during construction, the Construction Management Plan may include provisions for: 1) no construction worker parking on-site, and 2) off-site parking at an existing facility or facilities with a parking surplus, with a shuttle system, or other similar transportation method to and from the hospital campus. The Construction Management Plan shall be prepared as part of the site plan submittal and be approved by the Community Development Director prior to the issuance of any building permit.



Cumulative Impacts. Implementation of the proposed project and other related cumulative projects could result in cumulatively considerable traffic impacts.

Findings:

1. ***Changes or alterations have been required in, or incorporated into, the project, which avoid or substantially lessen the significant environmental effect as identified in the EIR.***
2. ***The effects identified in the EIR have been determined not to be significant.***

Facts in Support of Findings:

The potential cumulatively considerable traffic impacts have been eliminated or substantially lessened to a level of less than significant by virtue of the mitigation measures identified in the EIR.

Mitigation Measures: Refer to Mitigation Measure TRF-1 through TRF-6. No additional mitigation measures are required.

AIR QUALITY/GREENHOUSE GAS EMISSIONS

Short-Term Construction Emissions. Development associated with implementation of the proposed project could generate dust and equipment emissions during construction.

Findings:

1. ***Changes or alterations have been required in, or incorporated into, the project, which avoid or substantially lessen the significant environmental effect as identified in the EIR.***
2. ***The effects identified in the EIR have been determined not to be significant.***

Facts in Support of Findings:

The potential short-term construction emissions-related impacts have been eliminated or substantially lessened to a level of less than significant by virtue of the mitigation measures identified in the EIR.



Mitigation Measures:

- AQ-1 Prior to issuance of any Grading Permit, the Director of Public Works and the Building Official shall confirm that the Grading Plan specifications stipulate that, in compliance with SCAQMD Rule 403, excessive fugitive dust emissions shall be controlled by regular watering or other dust prevention measures, as specified in the SCAQMD's Rules and Regulations. In addition, SCAQMD Rule 402 requires implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off-site. Implementation of the following measures would reduce short-term fugitive dust impacts on nearby sensitive receptors:
- All active portions of the construction site shall be watered twice daily to prevent excessive amounts of dust;
 - On-site vehicle speed shall be limited to 15 miles per hour;
 - All on-site roads shall be paved as soon as feasible, watered twice daily, or chemically stabilized;
 - Visible dust beyond the property line which emanates from the project shall be prevented to the maximum extent feasible;
 - All material transported off-site shall be either sufficiently watered or securely covered to prevent excessive amounts of dust prior to departing the job site;
 - Track-out devices shall be used at all construction site access points; and
 - All delivery truck tires shall be watered down and/or scraped down prior to departing the job site.
- AQ-2 All trucks that are to haul excavated or graded material on-site shall comply with State Vehicle Code Section 23114 (Spilling Loads on Highways), with special attention to Sections 23114(b)(F), (e)(4) as amended, regarding the prevention of such material spilling onto public streets and roads. Prior to the issuance of grading permits, the project applicant shall demonstrate to the City of Los Alamitos how the project operations subject to that specification during hauling activities shall comply with the provisions set forth in Sections 23114(b)(F), (e)(4).
- AQ-3 The following measures shall be implemented to reduce ROG emissions resulting from application of architectural coatings:
- Contractors shall use high-pressure-low-volume (HPLV) paint applicators with a minimum transfer efficiency of at least 50 percent;
 - Use required coatings and solvents with a ROG content lower than required under Rule 1113;
 - Construct/build with materials that do not require painting; and
 - Use pre-painted construction materials.



- AQ-4 Prior to issuance of any Grading Permit, the Director of Public Works and the Building Official shall confirm that the Grading Plan stipulates that, in compliance with SCAQMD Rule 403, ozone precursor emissions from construction equipment vehicles shall be controlled by maintaining equipment engines in good condition and in proper tune per manufacturer's specifications, to the satisfaction of the City Engineer. Maintenance records shall be provided to the City. The City Inspector shall be responsible for ensuring that contractors comply with this measure during construction.
- AQ-5 The project applicant shall comply with South Coast Air Quality Management District Rule 1403, Asbestos Emissions From Demolition/Renovation Activities, as applicable, which specifies work practice requirements to limit asbestos emissions from building demolition and renovation activities, including the removal and associated disturbance of asbestos-containing materials. The requirements for demolition and renovation activities include asbestos surveying, notification, asbestos containing materials removal procedures and time schedules, asbestos-containing materials handling and clean-up procedures, and storage, disposal, and landfiling requirements for asbestos-containing waste materials. All operators are required to maintain records, including waste shipment records, and are required to use appropriate warning labels, signs, and markings.

Consistency With Air Quality Management Plan. Implementation of the proposed project could conflict with the Air Quality Management Plan.

Findings:

1. ***Changes or alterations have been required in, or incorporated into, the project, which avoid or substantially lessen the significant environmental effect as identified in the EIR.***
2. ***The effects identified in the EIR have been determined not to be significant.***

Facts in Support of Findings:

The potential conflicts with the Air Quality Management Plan have been eliminated or substantially lessened to a level of less than significant by virtue of the mitigation measures identified in the EIR.

Mitigation Measures: Refer to Mitigation Measures AQ-1 through AQ-4. No additional mitigation measures are required.



Greenhouse Gas Emissions. Development associated with implementation of the proposed project could generate greenhouse gas emissions that could have a significant impact on the environment.

Findings:

1. ***Changes or alterations have been required in, or incorporated into, the project, which avoid or substantially lessen the significant environmental effect as identified in the EIR.***
2. ***The effects identified in the EIR have been determined not to be significant.***

Facts in Support of Findings:

The potential greenhouse gas emissions-related impacts have been eliminated or substantially lessened to a level of less than significant by virtue of the mitigation measure identified in the EIR.

Mitigation Measure:

- AQ-6 The Specific Plan shall include, but not be limited to, the following list of potential design features, as determined feasible by the project applicant in consultation with the Community Development Director. These features shall be incorporated into the Specific Plan and future buildings to ensure consistency with adopted statewide plans and programs. The project applicant shall demonstrate the incorporation of project design features prior to the issuance of building permits.

Energy Efficiency

- Design buildings to be energy efficient, above Title 24 requirements.
- Install light colored "cool" roofs and cool pavements, and strategically placed shade trees.
- Provide information on energy management services for large energy users.
- Install energy efficient heating and cooling systems, appliances and equipment, and control systems.
- Provide education on energy efficiency.

Water Conservation and Efficiency

- Create water-efficient landscapes.
- Use reclaimed water for landscape irrigation in new developments if available. Install the infrastructure to deliver and use reclaimed water.
- Restrict watering methods (e.g., prohibit systems that apply water to nonvegetated surfaces) and control runoff.
- Restrict the use of water for cleaning outdoor surfaces and vehicles.



- Implement low-impact development practices that maintain the existing hydrologic character of the site to manage storm water and protect the environment. (Retaining storm water runoff on-site can drastically reduce the need for energy-intensive imported water at the site).

Solid Waste Measures

- Reuse and recycle construction and demolition waste (including, but not limited to, soil, vegetation, concrete, lumber, metal, and cardboard).
- Provide interior and exterior storage areas for recyclables and green waste and adequate recycling containers located in public areas.

Transportation and Motor Vehicles

- Limit idling time for commercial vehicles, including delivery and construction vehicles.
- Promote ride sharing programs (e.g., by designating a certain percentage of parking spaces for ride sharing vehicles, designating adequate passenger loading and unloading and waiting areas for ride sharing vehicles, and providing a web site or message board for coordinating rides).
- Increase the cost of driving and parking private vehicles (e.g., imposing parking fees).
- Provide adequate bicycle parking near building entrances to promote cyclist safety, security, and convenience. Provide facilities that encourage bicycle commuting (e.g., locked bicycle storage or covered or indoor bicycle parking).
- Create bicycle lanes and walking paths directed to the location of schools, parks and other destination points.
- Provide information on all options for individuals and businesses to reduce transportation-related emissions. Provide education and information about public transportation.

NOISE

Construction Noise Impacts. Development associated with implementation of the proposed project could result in potentially significant adverse noise impacts on surrounding sensitive receptors during construction.

Findings:

- 1. Changes or alterations have been required in, or incorporated into, the project, which avoid or substantially lessen the significant environmental effect as identified in the EIR.***
- 2. The effects identified in the EIR have been determined not to be significant.***



Facts in Support of Findings:

The potential construction noise impacts have been eliminated or substantially lessened to a level of less than significant by virtue of the mitigation measures identified in the EIR.

Mitigation Measures:

NOI-1 To reduce noise impacts due to construction, the project applicant shall require construction contractors to implement the following measures which shall be ongoing through demolition, grading, and/or construction:

- Equipment and trucks used for project construction shall utilize the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures, and acoustically-attenuating shields or shrouds, wherever feasible).
- Impact tools (e.g., jack hammers, pavement breakers, and rock drills) used for project construction shall be hydraulically or electronically powered wherever possible to avoid noise associated with compressed air exhaust from pneumatically powered tools. However, where use of pneumatic tools is unavoidable, an exhaust muffler shall be used; this muffler can lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves shall be used where feasible, and this could achieve a reduction of 5 dBA. Quieter procedures shall be used, such as drills rather than impact equipment, whenever feasible.
- Stationary noise sources shall be located as far from adjacent receptors as possible, and they shall be muffled and enclosed within temporary sheds, incorporated insulation barriers, or other measures to the extent feasible.

NOI-2 Prior to the issuance of each grading permit, the project applicant shall submit to the City Building and Safety Department a list of measures to respond to and track complaints pertaining to construction noise, ongoing throughout demolition, grading, and/or construction. These measures shall include the following:

- A procedure and phone numbers for notifying the City Building and Safety Department staff and Los Alamitos Police Department (during regular construction hours and off-hours);
- A sign large enough to be visible by moving traffic posted on-site pertaining to the permitted construction days and hours and complaint procedures and who to notify in the event of a problem. The sign shall also include a listing of both the City and construction contractor's telephone numbers (during regular construction hours and off-hours);
- The designation of an on-site construction complaint and enforcement manager for the project. The manager shall act as a liaison between the



project and its neighbors. The manager's responsibilities and authority shall include the following:

- An active role in monitoring project compliance with respect to noise;
 - Ability to reschedule noisy construction activities to reduce effects on surrounding noise sensitive receivers;
 - Site supervision of all potential sources of noise (e.g., material delivery, shouting, debris box pick-up and delivery) for all trades; and
 - Intervening or discussing mitigation options with contractors.
- Notification of adjacent property owners and occupants at least 30 days in advance of construction activities about the estimated duration of the activity; and
 - A preconstruction meeting shall be held with the job inspectors and the general contractor/on-site project manager to confirm that noise measures and practices (including construction hours, neighborhood notification, posted signs, etc.) are completed.

GEOLOGY AND SEISMIC HAZARDS

Seismic Groundshaking. Development associated with implementation of the proposed project could be subject to high levels of groundshaking during a seismic event, which could result in substantial damage to on-site buildings.

Findings:

- 1. Changes or alterations have been required in, or incorporated into, the project, which avoid or substantially lessen the significant environmental effect as identified in the EIR.***
- 2. The effects identified in the EIR have been determined not to be significant.***

Facts in Support of Findings:

The potential seismic groundshaking impacts have been eliminated or substantially lessened to a level of less than significant by virtue of the mitigation measures identified in the EIR.



Mitigation Measures:

- GEO-1 The project applicant shall have a geologist registered by the State of California prepare a HAZUS Analysis prior to issuance of grading permits for the Hospital Buildings. Any recommendations in the study are applicable to the Hospital Buildings, if required by OSHPD, and shall be implemented during site grading and construction.
- GEO-2 Prior to issuance of a grading permit for each building, a registered geologist or soils engineer shall prepare an area-specific Geologic Study, which shall be submitted to the Community Development Department (Building and Safety) for approval. The Geologic Study shall specify the measures necessary to mitigate impacts related to liquefaction, expansion, and other geologic and seismic hazards, if any. All recommendations in the Geologic Study shall be implemented during area preparation, grading, and construction.
- GEO-3 Prior to issuance of any grading permit for each building, the project applicant shall comply with each of the recommendations detailed in the Geotechnical Study, and other such measure(s) as the City deems necessary to adequately mitigate potential seismic and geotechnical hazards.

Liquefaction. Development associated with implementation of the proposed project could be subject to liquefaction impacts resulting from groundshaking.

Findings:

- 1. Changes or alterations have been required in, or incorporated into, the project, which avoid or substantially lessen the significant environmental effect as identified in the EIR.***
- 2. The effects identified in the EIR have been determined not to be significant.***

Facts in Support of Findings:

The potential liquefaction impacts have been eliminated or substantially lessened to a level of less than significant by virtue of the mitigation measures identified in the EIR.

Mitigation Measures: Refer to Mitigation Measures GEO-1 and GEO-2. No additional mitigation measures are required.



Expansive Soils. Development associated with implementation of the proposed project could be located on expansive soils creating potential risk to life or property.

Findings:

1. ***Changes or alterations have been required in, or incorporated into, the project, which avoid or substantially lessen the significant environmental effect as identified in the EIR.***
2. ***The effects identified in the EIR have been determined not to be significant.***

Facts in Support of Findings:

The potential expansive soil impacts have been eliminated or substantially lessened to a level of less than significant by virtue of the mitigation measures identified in the EIR.

Mitigation Measures: Refer to Mitigation Measures GEO-1 through GEO-3. In addition, the following mitigation measure is required.

- GEO-4 If potentially expansive units (i.e., clay soils) are encountered during construction, they shall be evaluated by the Project Geotechnical Engineer. Special foundation designs and reinforcement shall be utilized to mitigate expansive material as specified by the Project Geotechnical Engineer and to the satisfaction of the City. Specifically, if clay soils are exposed at the deeper subgrade level, the Construction Contractor shall employ dewatering techniques, as the clay soils shall not be allowed to dry out.

HAZARDS AND HAZARDOUS MATERIALS

Construction-Related Hazardous Materials Impacts. Accidental release of hazardous materials during construction could result in a risk to workers, the public, or environment.

Findings:

1. ***Changes or alterations have been required in, or incorporated into, the project, which avoid or substantially lessen the significant environmental effect as identified in the EIR.***
2. ***The effects identified in the EIR have been determined not to be significant.***

Facts in Support of Findings:

The potential construction-related hazardous materials impacts have been eliminated or substantially lessened to a level of less than significant by virtue of the mitigation measures identified in the EIR.



Mitigation Measures:

- HAZ-1 Prior to site plan approval for each phase, the project applicant shall retain a qualified environmental specialist (e.g., a Registered Environmental Assessor or similarly qualified individual) to perform pre-construction hazardous materials surveys to inspect existing building areas subject to demolition or renovation for the presence of any unidentified asbestos, PCBs, mercury, lead, or other hazardous materials. If found at levels that require special handling, the project applicant shall manage these materials as required by law and according to federal and state regulations and guidelines, including those of the DTSC, SCAQMD, Cal/OSHA, and any other agency with jurisdiction over these hazardous materials.
- HAZ-2 Following the final Safety-Kleen facility monitoring event as determined by DTSC, a Risk Assessment shall be prepared and implemented by the Safety-Kleen in accordance with all applicable DTSC standards and regulations.
- HAZ-3 The project applicant shall prepare a Work Plan for Environmental Monitoring the Former Safety-Kleen Systems Service Center (3862-3878 Florista Street) for the proposed Parking Structure 1. The Work Plan shall properly analyze potential health hazards associated with the location of a new parking structure over the former Safety-Kleen facility, and shall be reviewed and approved by DTSC prior to demolition or asphalt cap/parking lot removal.

HYDROLOGY, DRAINAGE, AND WATER QUALITY

Drainage System Capacity. Development associated with implementation of the proposed project could create or contribute to runoff water which could exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff.

Findings:

- 1. Changes or alterations have been required in, or incorporated into, the project, which avoid or substantially lessen the significant environmental effect as identified in the EIR.***
- 2. The effects identified in the EIR have been determined not to be significant.***

Facts in Support of Findings:

The potential drainage system capacity impacts have been eliminated or substantially lessened to a level of less than significant by virtue of the mitigation measure identified in the EIR.



Mitigation Measure:

- HYD-1 Concurrent with Site Plan Review or issuance of a grading permit, whichever comes first, a hydrology review shall be conducted by a Registered Civil Engineer for each development phase to ensure that runoff values for each phase remain at or below the runoff values shown in Table 5.8-5.

Water Quality. Construction and operation of the proposed project could result in adverse water quality impacts.

Findings:

1. ***Changes or alterations have been required in, or incorporated into, the project, which avoid or substantially lessen the significant environmental effect as identified in the EIR.***
2. ***The effects identified in the EIR have been determined not to be significant.***

Facts in Support of Findings:

The potential water quality impacts have been eliminated or substantially lessened to a level of less than significant by virtue of the mitigation measures identified in the EIR.

Mitigation Measures:

- HYD-2 Prior to issuance of any Grading Permit, a Final Water Quality Management Plan, which includes both Structural and Non-Structural BMPs in order to comply with the requirements of the current DAMP and NPDES, shall be prepared for each development phase and/or building, as appropriate, to the satisfaction of the Los Alamitos Director of Public Works and the City Engineer.
- HYD-3 The project applicant shall implement the Best Management Practices identified in the Final Water Quality Management Plan.
- HYD-4 Prior to issuance of any Grading or Building Permit, and as part of the future development's compliance with the NPDES requirements, the project applicant shall enroll electronically through the SMARTS program to comply with the State of California General Construction Permit. Proof of enrollment must be submitted to the City of Los Alamitos before issuance of grading or building permits. Also, a Stormwater Pollution Prevention Plan (SWPPP) shall be reviewed and approved by the Director of Public Works and the City Engineer for water quality construction activities on-site. A copy of the SWPPP shall be available and implemented at the construction site at all times. The SWPPP shall outline the source control and/or treatment control BMPs to avoid or mitigate runoff pollutants at the construction site to the "maximum extent practicable."



Erosion and Siltation. Development associated with implementation of the proposed project could substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which could result in substantial erosion or siltation on- or off-site.

Findings:

1. ***Changes or alterations have been required in, or incorporated into, the project, which avoid or substantially lessen the significant environmental effect as identified in the EIR.***
2. ***The effects identified in the EIR have been determined not to be significant.***

Facts in Support of Findings:

The potential erosion and siltation impacts have been eliminated or substantially lessened to a level of less than significant by virtue of the mitigation measures identified in the EIR.

Mitigation Measures: Refer to Mitigation Measures HYD-2 and HYD-4. No additional mitigation measures are required.

Cumulative Impacts. Implementation of the proposed project and other related cumulative projects could contribute to cumulative hydrology and water quality impacts.

Findings:

1. ***Changes or alterations have been required in, or incorporated into, the project, which avoid or substantially lessen the significant environmental effect as identified in the EIR.***
2. ***The effects identified in the EIR have been determined not to be significant.***

Facts in Support of Findings:

The potential cumulative hydrology and water quality impacts have been eliminated or substantially lessened to a level of less than significant by virtue of the mitigation measures identified in the EIR.

Mitigation Measures: Refer to Mitigation Measures HYD-2 and HYD-4. No additional mitigation measures are required.



FIRE PROTECTION

Construction-Related Fire Impacts. Construction of the proposed project could result in the need for additional fire flows and protection services.

Findings:

1. *Changes or alterations have been required in, or incorporated into, the project, which avoid or substantially lessen the significant environmental effect as identified in the EIR.*
2. *The effects identified in the EIR have been determined not to be significant.*

Facts in Support of Findings:

The potential construction-related fire impacts have been eliminated or substantially lessened to a level of less than significant by virtue of the mitigation measures identified in the EIR.

Mitigation Measures:

- FP-1 Adequate access to all buildings on the project site shall be provided and properly maintained for emergency vehicles during the building construction process to the satisfaction of the Orange County Fire Authority.
- FP-2 Prior to construction, a will-serve letter from Golden State Water Company shall be obtained by the project applicant, which states that the Water Company can adequately meet water flow requirements.
- FP-3 Prior to the issuance of building permits, the project applicant may be required to enter into a Secured Fire Protection Agreement with the Orange County Fire Authority. The agreement shall specify the project applicant's pro-rata fair share funding of capital improvements necessary to establish adequate fire protection facilities and equipment, and/or personnel. Said agreement shall be reached as early as possible in the planning process, preferably for each phase of the project, rather than on a parcel-by-parcel basis.

Operational-Related Fire Impacts. Operation of the proposed project could result in the need for additional fire protection services.

Findings:

1. *Changes or alterations have been required in, or incorporated into, the project, which avoid or substantially lessen the significant environmental effect as identified in the EIR.*
2. *The effects identified in the EIR have been determined not to be significant.*



Facts in Support of Findings:

The potential operational-related fire impacts have been eliminated or substantially lessened to a level of less than significant by virtue of the mitigation measures identified in the EIR.

Mitigation Measures:

- FS-4 All new structures shall have automatic fire sprinkler systems.
- FS-5 A supervised fire alarm system that meets requirements of the California Fire Code shall be placed in an accessible location with an annunciator.
- FS-6 Access to and around structures shall meet Orange County Fire Authority and California Fire Code requirements.
- FS-7 A water supply system shall be in place to supply fire hydrants and automatic fire sprinkler systems.
- FS-8 Roadway medians shall not exceed 1,000 feet without a turnaround. If medians are greater than 1,000 feet, emergency turnaround access for heavy fire equipment shall be provided.
- FS-9 All traffic signals on public access ways shall include the installation of optical preemption devices.
- FS-10 All electric gates within the project shall install emergency opening devices approved by the Orange County Fire Authority.

Cumulative Impacts. Implementation of the proposed project and other related cumulative projects could result in cumulatively considerable impacts to fire protection services.

Findings:

1. ***Changes or alterations have been required in, or incorporated into, the project, which avoid or substantially lessen the significant environmental effect as identified in the EIR.***
2. ***The effects identified in the EIR have been determined not to be significant.***

Facts in Support of Findings:

The potential cumulatively considerable fire protection services impacts have been eliminated or substantially lessened to a level of less than significant by virtue of the mitigation measures identified in the EIR.

Mitigation Measures: Refer to Mitigation Measures FS-1 through FS-10. No additional mitigation measures are required.



POLICE PROTECTION

Construction-Related Police Impacts. Construction of the proposed project could result in the need for additional police protection facilities and personnel.

Findings:

1. ***Changes or alterations have been required in, or incorporated into, the project, which avoid or substantially lessen the significant environmental effect as identified in the EIR.***
2. ***The effects identified in the EIR have been determined not to be significant.***

Facts in Support of Findings:

The potential construction-related police impacts have been eliminated or substantially lessened to a level of less than significant by virtue of the mitigation measure identified in the EIR.

Mitigation Measure:

- PS-1 During construction, private security patrols shall be utilized to protect the construction site during non-construction hours.

Operational-Related Police Impacts. Operation of the proposed project could result in the need for additional police protection facilities and personnel.

Findings:

1. ***Changes or alterations have been required in, or incorporated into, the project, which avoid or substantially lessen the significant environmental effect as identified in the EIR.***
2. ***The effects identified in the EIR have been determined not to be significant.***

Facts in Support of Findings:

The potential operational-related police impacts have been eliminated or substantially lessened to a level of less than significant by virtue of the mitigation measures identified in the EIR.

Mitigation Measures:

- PS-2 As final site and building plans are submitted to the City for approval in the future, design requirements which reduce demands for service and ensure adequate public safety (such as those pertaining to site access, site security and lighting) shall be incorporated into building designs.



- PS-3 Project design shall landscape the project site with low-growing groundcover and shade trees, rather than a predominance of shrubs that could conceal potential criminal activity around buildings and parking areas.
- PS-4 Project design shall provide lighting around and throughout the development to enhance crime prevention and enforcement efforts.
- PS-5 Project design shall provide clearly visible (during the day and night) address signs and/or building numbers for easy identification during emergencies.
- PS-6 Project design shall provide visibility of doors and windows from the street and between buildings.

Cumulative Impacts. Implementation of the proposed project and other related cumulative projects could result in cumulatively considerable impacts to police protection facilities and personnel.

Findings:

1. ***Changes or alterations have been required in, or incorporated into, the project, which avoid or substantially lessen the significant environmental effect as identified in the EIR.***
2. ***The effects identified in the EIR have been determined not to be significant.***

Facts in Support of Findings:

The potential cumulative police protection facilities and personnel impacts have been eliminated or substantially lessened to a level of less than significant by virtue of the mitigation measures identified in the EIR.

Mitigation Measures: Refer to Mitigation Measures PS-1 through PS-6. No additional mitigation measures are required.

WATER

Project Impacts. Development associated with implementation of the proposed project could result in an increased demand for water supplies and infrastructure within the City.

Findings:

1. ***Changes or alterations have been required in, or incorporated into, the project, which avoid or substantially lessen the significant environmental effect as identified in the EIR.***
2. ***The effects identified in the EIR have been determined not to be significant.***



Facts in Support of Findings:

The potential water supply and infrastructure impacts have been eliminated or substantially lessened to a level of less than significant by virtue of the mitigation measure identified in the EIR.

Mitigation Measure:

WAT-1 Prior to the issuance of building permits, the project applicant shall submit construction drawings to the Golden State Water Company, and, as necessary, shall pay all applicable connection fees and comply with Golden State Water Company permitting and fee requirements.

Cumulative Impacts. Implementation of the proposed project and other related cumulative projects could result in cumulatively considerable impacts to water systems, including increased demand and infrastructure facilities within the City.

Findings:

1. ***Changes or alterations have been required in, or incorporated into, the project, which avoid or substantially lessen the significant environmental effect as identified in the EIR.***
2. ***The effects identified in the EIR have been determined not to be significant.***

Facts in Support of Findings:

The potential cumulatively considerable water systems impacts have been eliminated or substantially lessened to a level of less than significant by virtue of the mitigation measure identified in the EIR.

Mitigation Measure: Refer to Mitigation Measure WAT-1. No additional mitigation measures are required.

WASTEWATER

Wastewater Conveyance and Treatment. Development associated with implementation of the proposed project could result in increased demand for wastewater services and infrastructure in the City.

Findings:

1. ***Changes or alterations have been required in, or incorporated into, the project, which avoid or substantially lessen the significant environmental effect as identified in the EIR.***
2. ***The effects identified in the EIR have been determined not to be significant.***



Facts in Support of Findings:

The potential wastewater conveyance and treatment impacts have been eliminated or substantially lessened to a level of less than significant by virtue of the mitigation measures identified in the EIR.

Mitigation Measures:

- WW-1 New sewer lateral sizes and connections shall be per the RLASD standards and all appropriate connection and inspection fees shall be paid. Plan check processing and permitting shall also be required from the RLASD.
- WW-2 An inspection fee shall be collected if a connection directly to an OCSD facility is necessary. The amount of the fee shall be based on the design of the connection. When prepared, a plan of the proposed connection should be submitted for review.
- WW-3 Capital Facility Capacity Charges (CFCCs) shall be collected to pay for additional capacity in the collection and treatment plant in accordance with the latest OCSD Fee Schedule, which is updated every first of July. Fees are based on the use and the square footage of the proposed facilities. A credit for existing uses at current rates shall be calculated and deducted from the total.
- WW-4 After construction has been completed, an annual regional user fee will be collected via the property tax roll for OCSD maintenance of the facilities; this fee shall be paid in accordance with the latest version of the OCSD Fee Schedule.

Cumulative Impacts. Implementation of the proposed project and other related cumulative projects could result in cumulatively considerable impacts to wastewater systems, including increased demand and infrastructure facilities within the City.

Findings:

1. ***Changes or alterations have been required in, or incorporated into, the project, which avoid or substantially lessen the significant environmental effect as identified in the EIR.***
2. ***The effects identified in the EIR have been determined not to be significant.***

Facts in Support of Findings:

The potential cumulative wastewater systems impacts have been eliminated or substantially lessened to a level of less than significant by virtue of the mitigation measures identified in the EIR.

Mitigation Measures: Refer to Mitigation Measures WW-1 through WW-4. No additional mitigation measures are required.



SOLID WASTE

Solid Waste Generated During Project Construction. Development associated with implementation of the proposed project could potentially result in increased solid waste generation in exceedance of landfill capacity during construction.

Findings:

1. ***Changes or alterations have been required in, or incorporated into, the project, which avoid or substantially lessen the significant environmental effect as identified in the EIR.***
2. ***The effects identified in the EIR have been determined not to be significant.***

Facts in Support of Findings:

The potential solid waste impacts during construction have been eliminated or substantially lessened to a level of less than significant by virtue of the mitigation measures identified in the EIR.

Mitigation Measures:

- SW-1 All demolition and construction shall be done in accordance with Los Alamitos Municipal Code Demolition Chapter 8.13.
- SW-2 Future development projects within the Los Alamitos Medical Center Specific Plan area shall comply with all applicable City, County, State, and Federal regulations and procedures for the use, collection, and disposal of solid and hazardous wastes.

Solid Waste Generated During Project Operation. Development associated with implementation of the proposed project could potentially result in increased solid waste generation in exceedance of landfill capacity during operation.

Findings:

1. ***Changes or alterations have been required in, or incorporated into, the project, which avoid or substantially lessen the significant environmental effect as identified in the EIR.***
2. ***The effects identified in the EIR have been determined not to be significant.***

Facts in Support of Findings:

The potential solid waste impacts during operations have been eliminated or substantially lessened to a level of less than significant by virtue of the mitigation measure identified in the EIR.



Mitigation Measure: Refer to Mitigation Measure SW-2. No additional mitigation measures are required.

Cumulative Impacts. Implementation of the proposed project and other related cumulative projects could result in cumulatively considerable impacts related to solid waste disposal services and landfill disposal capacity.

Findings:

1. ***Changes or alterations have been required in, or incorporated into, the project, which avoid or substantially lessen the significant environmental effect as identified in the EIR.***
2. ***The effects identified in the EIR have been determined not to be significant.***

Facts in Support of Findings:

The potential cumulative solid waste disposal service and landfill disposal capacity impacts have been eliminated or substantially lessened to a level of less than significant by virtue of the mitigation measures identified in the EIR.

Mitigation Measures: Refer to Mitigation Measures SW-1 and SW-2. No additional mitigation measures are required.



3.8 EFFECTS WHICH REMAIN SIGNIFICANT AND UNAVOIDABLE IN THE FINAL PROGRAM EIR AFTER MITIGATION AND FINDINGS

The City, having reviewed and considered the information contained in the Final EIR, Technical Appendices and the administrative record, finds, pursuant to *Public Resources Code* Section 21081 (a)(3) and *CEQA Guidelines* Section 15091 (a)(3), that specific economic, legal, social, technological, or other considerations, make infeasible the mitigation measures identified in the Final EIR and, therefore, the proposed project would cause significant unavoidable impacts in the category of:

- Air Quality/Greenhouse Gas Emissions (Cumulative [Greenhouse Gas Emissions] Impacts)

AIR QUALITY/GREENHOUSE GAS EMISSIONS

Cumulative (Greenhouse Gas Emissions) Impacts. Air quality emissions resulting from implementation of the proposed project and other related cumulative projects could impact regional air quality levels on a cumulatively considerable basis.

Findings:

1. ***Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the EIR.***
2. ***Impacts associated with project-generated greenhouse gas emissions have been reduced to the extent feasible. However, after implementation of the recommended mitigation measures contained in the EIR, the cumulative greenhouse gas emissions-related impacts would constitute a significant and unavoidable cumulative impact.***

Facts in Support of Findings:

The proposed project would promote the rehabilitation and updating of existing uses, promote the use of compact mixed-use, encourage the efficient use of infill parcels, and encourage the overall enhancement of the area.

Assembly Bill 32 (AB 32) requires the reduction of GHG emissions to 1990 levels that would require a 28 to 33 percent reduction in "business as usual" GHG emissions for the entire State. As detailed in the EIR, the proposed project would result in a less than significant impact regarding greenhouse gas (GHG) emissions, and would result in a 30 percent reduction in GHGs with implementation of Mitigation Measure AQ-6. However, the project-generated GHGs in combination with GHG emissions from other known and reasonably foreseeable projects would result in a much greater amount of GHG emissions. Although implementation of Mitigation Measure AQ-6 would reduce the proposed project's GHG emissions to a level that is



consistent with AB 32, such project-specific mitigation cannot be imposed upon cumulative projects.

The degree of future impacts and applicability, feasibility, and success of future mitigation measures cannot be adequately determined for each specific future project. As stated above, reducing GHG emissions to 1990 levels would require a 28 to 33 percent reduction in "business as usual" GHG emissions for the entire State. Although the project includes mitigation measures that would reduce GHG emissions, the City has not developed a Climate Action Plan or Greenhouse Gas Reduction Plan. Therefore, an accurate correlation cannot be made at this stage between GHG emissions from cumulative projects and the extent of potential GHG reductions that could be achieved. Future development within the project area would need to be analyzed on a project-by-project basis to determine the extent of each project's potential contribution to global climate change and appropriate mitigation measures specific to each project. Thus, as concluded in the EIR, impacts would be considered significant and unavoidable due to the magnitude of other cumulative projects, which would potentially hinder the intent and statewide reduction goals of AB 32. The proposed project's impacts associated with cumulatively considerable GHG emissions remain significant despite the implementation of the mitigation measures contained in the Final EIR.

Mitigation Measures: Refer to Mitigation Measures AQ-1 through AQ-6. No additional mitigation measures are required.

The overriding social, economic, and other considerations set forth in the Statement of Overriding Considerations and the Findings regarding Alternatives provide additional facts in support of these findings. Any remaining, unavoidable significant effects after available Final EIR mitigation measures are implemented are acceptable when balanced against the facts set forth therein.



3.9 PROJECT ALTERNATIVES AND ANALYSIS

Because the project would result in significant unavoidable environmental effects, the City Council considered the feasibility of any environmentally superior alternatives to the proposed project. In doing so, the City Council evaluated whether one or more of those alternatives could avoid or substantially lessen the project's significant unavoidable environmental effect(s) per *Public Resources Code* Section 21002. Where significant impacts can be mitigated to an acceptable (less than significant) level solely by the adoption of mitigation measures, the City, in drafting its findings, has no obligation to consider the feasibility of environmentally superior alternatives, even if their impacts would be less severe than those of the project as mitigated.

Accordingly, the City Council, in adopting the findings concerning project alternatives, considers only those environmental impacts of the proposed project that are significant and cannot be avoided or substantially lessened through mitigation. According to the analysis presented in the Final EIR, the proposed project would result in unavoidable significant impacts with regard to the following issue area:

- Air Quality (Cumulative Greenhouse Gas Emissions)

Where, as here, significant environmental effects would remain even after application of all feasible mitigation measures identified in the Final EIR, the City Council must adopt findings on the feasibility of project alternatives. If there is a feasible alternative to the project, decision makers must decide whether it is environmentally superior to the project.

'Feasible' means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social and technological factors" (*Public Resources Code* Section 21061.1). The *CEQA Guidelines* provide a broader definition of "feasibility" that also encompasses "legal" factors. The concept of "feasibility," therefore, involves a balancing of various economic, environmental, social, legal and technological factors (*Public Resources Code* Sections 21061.1 and 21081; *CEQA Guidelines* Section 15364). Additionally, "'feasibility' under CEQA encompasses 'desirability' to the extent that desirability is based on a reasonable balancing of the relevant economic, environmental, social, and technological factors.

The City Council, having evaluated all potentially feasible alternatives, has rejected all of the alternatives evaluated in the Final EIR as infeasible. Findings for these conclusions are provided below.



NO PROJECT/NO DEVELOPMENT ALTERNATIVE

The No Project/No Development Alternative assumes the Los Alamitos Medical Center Specific Plan would not be implemented and the proposed land uses and other improvements would not be constructed. The project site would be unaltered and it is anticipated that the existing hospital and medical office facilities would continue to operate within its current capacity. It should be noted that the hospital currently is licensed for 167 beds.

Findings:

1. **The findings relating to the proposed project set forth in this document and the overriding social, economic, and other issues set forth in the Statement of Overriding Considerations provide support for the proposed project and the elimination of this alternative from further consideration.**

Facts in Support of Findings:

Under this Alternative, the project site would continue to operate as the existing Los Alamitos Medical Center campus and would not be consistent with the City's General Plan goals and policies. This Alternative would fail to balance the growing population and availability of local medical services and would not upgrade the quality of the project site.

This Alternative would fail to adopt a Specific Plan that would implement specific Design Guidelines to achieve project identity. Past development on the existing Medical Center campus would continue to comply with the Conservation Element implementation measure 2-4.4.3 to "require new and substantial refurbished buildings to comply with the City's architectural guidelines and 'mission style' of design." While the implementation measure cites City architectural guidelines, none were adopted. In addition, the "mission style" of design has been widely interpreted on the Medical Center campus as development has occurred, and has not resulted in the campus having a unifying architectural theme or aesthetically coherent components. The Medical Center campus does not have a unique project identity, and is lacking thematically coherent and aesthetically pleasing architecture, landscaped areas, colors, signage, and entry statements, as no Design Guidelines are in place today for the Medical Center.

Further, the No Project/No Development Alternative would maintain the operation of the existing Los Alamitos Medical Center and associated medical office buildings at present levels; however, no additional project health care facilities would be constructed on-site. Without construction of the two new Hospital Buildings and one new Medical Office Building (MOB A), the ability to meet the expected growth in demand for health care services and to attract and maintain physician specialists would be reduced, and there would be fewer opportunities to provide patients with personalized care and state of the art technology within the existing Medical Center campus. Last, implementation of this Alternative would not create new permanent jobs.

As detailed above, under the No Project/No Development Alternative, the proposed two Hospital Buildings, one Medical Office Building (MOB A), and two parking structures would not



be developed. Therefore, none of the project objectives identified in Section 2.2 would be met under the No Project/No Development Alternative.

It is acknowledged that the proposed project would involve short- and long-term environmental impacts within the project area. However, as analyzed in this EIR, impacts would be less than significant or less than significant with mitigation with the exception of cumulative greenhouse gas emissions-related impacts. The No Project/No Development Alternative results in fewer impacts to aesthetics, light, and glare; traffic; air quality/greenhouse gas emissions; noise; geology and seismic hazards; hazards and hazardous materials; hydrology, drainage, and water quality; and public services and utilities. Greater impacts would be anticipated for land use. The cumulative greenhouse gas emissions-related impacts associated with the No Project/No Development Alternative are assumed to be the same as the proposed project (significant and unavoidable), as it is not possible to determine the project-specific mitigation that would be applied to cumulative projects to reduce greenhouse gas impacts.

Overall, implementation of the No Project/No Development Alternative would not implement the proposed Specific Plan for the project site. Future development would not be consistent with the General Plan goals and policies pertaining to achieving project identity. Also, the No Project/No Development Alternative would not create new permanent jobs or additional health care facilities to meet the expected growth in demand for health care services. Although the No Project/No Development Alternative is considered environmentally superior when compared to the proposed project, this Alternative would not eliminate the significant unavoidable cumulative greenhouse gas impact or achieve any of the project's objectives, as outlined in Section 2.3.

ALTERNATIVE ONE – RELOCATION OF PARKING STRUCTURE 1 AND MOB A

Under Alternative One (Relocation of Parking Structure 1 and Medical Office Building [MOB] A), all of the project components as proposed would be constructed:

- New Medical Office Building A
- New Hospital Building 1
- New Hospital Building 2
- New Central Plant
- Parking Structure 1
- Parking Structure

The square footage, number of hospital beds, structure height, and design characteristics, and would be the same as the proposed project. However, the site layout would be modified as follows:

- MOB A would be relocated from its proposed location along Katella Avenue between MOB A and the TotalCare Pavilion. MOB A could be relocated elsewhere on the project site. Possible relocation areas include adjacent to Hospital Building 1 off Florista Street or adjacent to MOB 3.



- Parking Structure 1 would be relocated to provide access directly off Katella Avenue and would be located between MOB 2 and the TotalCare Pavilion and the structure would be reoriented in a north-south direction.

Once complete, the Medical Center campus would include 582,824 square feet of hospital and hospital-related uses, medical office space, support facilities, and parking. At buildout, the Los Alamitos Medical Center campus would include 297,948 square feet of hospital and hospital-related uses; 260,776 square feet of medical office space; and 14,100 square feet of vital support facilities. The floor area ratio (FAR) would increase from an existing 0.45 FAR to 0.73 FAR once the Medical Center campus is built out.

Findings:

1. **The findings relating to the proposed project set forth in this document and the overriding social, economic, and other issues set forth in the Statement of Overriding Considerations provide support for the proposed project and the elimination of this alternative from further consideration.**

Facts in Support of Findings:

Similar to the proposed project, under this Alternative future development would comply with the General Plan Goals and Policies. This Alternative includes a Specific Plan that would ensure the campus is well-planned and well-designed, and has considered the site's circulation, environmental, and physical opportunities and constraints. The Specific Plan under this Alternative would ensure that future development is attractive, has a unique identity, and promotes quality development consistent with the visual character of the community. This Alternative would also allow for the long-term expansion of the existing hospital campus to meet the forecasted demand for health care services, similar to the proposed project. An additional 245 jobs would be provided on-site and in the City.

Under the Alternative One, two Hospital Buildings, one Medical Office Building (MOB A), and supporting facilities would be constructed, which would expand both medical services and facilities on the existing Los Alamitos Medical Center campus to link inpatient and outpatient services. Alternative One would meet all of the project's objectives, as identified in Section 2.3, and would provide the projected long-term hospital and medical office building demand based on projected growth trends.

It is acknowledged that the proposed project would involve short- and long-term environmental impacts within the project area. However, as analyzed in this EIR, impacts would be less than significant or less than significant with mitigation with the exception of cumulative greenhouse gas emissions-related impacts. The Alternative One results in similar impacts as the proposed project relative to: land use; traffic, air quality/greenhouse gas emissions; noise; geology and seismic hazards; hazards and hazardous materials; hydrology, drainage, and water quality; and public services and utilities. The cumulative greenhouse gas emissions-related impacts associated with Alternative One are assumed to be the same as the proposed project (significant and unavoidable), as it is not possible to determine the project-specific mitigation that would be applied to cumulative projects to reduce greenhouse gas impacts.



In conclusion, Alternative One is not considered environmentally superior when compared to the proposed project, and was not selected as the environmentally superior alternative.

ALTERNATIVE TWO – PHASES 1 AND 2 ONLY

Alternative Two (Phases 1 and 2 Only) would include only MOB A, Hospital Building 1, and Parking Structure 1 along with supporting infrastructure (i.e., utilities). Hospital Building 2, Parking Structure 2, and the Central Plant would not be implemented.

The square footage, number of hospital beds, structure height, design characteristics, and site layout of MOB A and Hospital Building 1 would be the same as the proposed project. Consequently, this Alternative would result in a net increase over existing conditions of 88,100 square feet of hospital uses (yielding a net increase of 38 new beds), and 51,100 square feet of medical office building uses. This Alternative would result in a total of 480,624 square feet of hospital and medical office building uses and a total of 205 hospital beds, and a Floor Area Ratio of 0.60 on-site. This Alternative would reduce hospital building and central plant uses by 88,100 and 14,100 square feet, respectively, relative to the proposed project, which is a 17 percent reduction in project development.

Parking associated with this Alternative would also be reduced, due to a reduction in demand from the reduced site density. Under this alternative, parking structure 1 would be constructed, while parking structure 2 would be eliminated from the Specific Plan. The need for parking structures would be further reduced by the additional availability for surface parking where hospital building 2 was proposed.

Findings:

- 1. The findings relating to the proposed project set forth in this document and the overriding social, economic, and other issues set forth in the Statement of Overriding Considerations provide support for the proposed project and the elimination of this alternative from further consideration.**

Facts in Support of Findings:

Similar to the proposed project, under this Alternative future development would comply with the General Plan Goals and Policies. This Alternative includes a Specific Plan that would ensure the campus is well-planned and well-designed, and has considered the site's circulation, environmental, and physical opportunities and constraints. The Specific Plan under this Alternative would ensure that future development is attractive, has a unique identity, and promotes quality development consistent with the visual character of the community. This Alternative would also allow for the long-term expansion of the existing hospital campus. However, without the construction of Hospital Building 2, the ability to help meet the expected growth in demand for health care services would be reduced, as compared to the proposed project. An addition 188 jobs (less than the proposed project) would be provided on-site and in the City.



Alternative Two only provides for the construction of Hospital Building 1, MOB A, and Parking Structure 1, but does not allow for the construction of Hospital Building 2 and the Central Plant that would provide additional opportunities to expand both medical services and facilities on the campus and link inpatient and outpatient services. Alternative Two partially meets the objectives of the proposed project by increasing hospital capacity to meet some of the increasing needs of its service area. However, not all of the project's goals, as outlined in Section 2.3, would be achieved with implementation of Alternative Two.

It is acknowledged that the proposed project would involve short- and long-term environmental impacts within the project area. However, as analyzed in this EIR, impacts would be less than significant or less than significant with mitigation with the exception of cumulative greenhouse gas emissions-related impacts. Alternative Two results similar impacts to land use and hydrology, drainage, and water quality. This Alternative would result in a reduction of impacts to aesthetics, light, and glare; traffic; air quality/greenhouse gas emission; noise; geology and seismic hazards; hazards and hazardous materials; and public services and utilities. The cumulative greenhouse gas emissions-related impacts associated with Alternative Two are assumed to be the same as the proposed project (significant and unavoidable), as it is not possible to determine the project-specific mitigation that would be applied to cumulative projects to reduce greenhouse gas impacts.

Overall, implementation of Alternative Two would reduce the most environmental impacts (as compared to the project and other alternatives considered), and would meet most of the basic objectives of the project; in particular, it would help meet future health care needs and help maintain the viability of the hospital. Alternative Two was identified as the environmentally superior alternative to the proposed project.

SUMMARY

For the reasons described above, the City Council expressly rejects each of the alternatives analyzed in the EIR in favor of the proposed project because none of the alternatives analyzed is feasible based on specific economic, legal, social, technological, and other grounds.



4.0 CERTIFICATION OF THE FINAL EIR

The City Council declares that no new significant information as defined by the *CEQA Guidelines* Section 15088.5, has been received by the Council after circulation of the EIR that would require recirculation.

The City Council certifies the Environmental Impact Report based on the following findings and conclusions:

4.1 FINDINGS

The project would have the potential for creating significant adverse impacts. These significant adverse environmental impacts have been identified in the EIR and will require mitigation as set forth in the Findings. Significant adverse impacts which cannot be mitigated to a level of insignificance after mitigation include cumulative greenhouse gas emissions, as discussed in the Findings.

4.2 CONCLUSIONS

1. Except as to those impacts stated above relating to cumulative greenhouse gas emissions, all other significant environmental impacts from the implementation of the proposed project have been identified in the EIR and, with implementation of the mitigation measures identified, will be mitigated to a level of insignificance.
2. Alternatives to the proposed project, which could potentially achieve the basic objectives of the proposed project, have been considered and rejected in favor of the proposed project.
3. Environmental, economic, social, and other considerations and benefits derived from the development of the proposed project override and make infeasible any alternatives to the proposed project or further mitigation measures beyond those incorporated into the proposed project.



5.0 STATEMENT OF OVERRIDING CONSIDERATIONS

5.1 INTRODUCTION

The *California Environmental Quality Act (CEQA)* and the *CEQA Guidelines* provide in part the following:

- a) *CEQA* requires that the decision maker balance the benefits of a proposed project against its unavoidable environmental risks in determining whether to approve the project. If the benefits of the proposed project outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered "acceptable."
- b) Where the decision of the public agency allows the occurrence of significant effects that are identified in the General Plan EIR but are not mitigated, the agency must state in writing the reasons to support its action based on the General Plan EIR and/or other information in the *CEQA Guidelines* Section 15091 (a)(2) or (a)(3).
- c) If an agency makes a statement of overriding considerations, the statement should be included in the record of the project approval and should be mentioned in the Notice of Determination (*CEQA Guidelines* Section 15093).

The City, having reviewed and considered the information contained in the Final Program EIR for the proposed project, Responses to Comments, and the public record, adopts the following Statement of Overriding Considerations that have been balanced against the unavoidable adverse impacts in reaching a decision on this project.

5.2 SIGNIFICANT UNAVOIDABLE IMPACTS

Although all potential project impacts have been substantially avoided or mitigated as described in the preceding findings, there is no complete mitigation for the following project impact:

- Air Quality (cumulative [greenhouse gas emissions] impacts)

Details of this significant unavoidable adverse impact were discussed in the Los Alamitos Medical Center Specific Plan Program EIR and are summarized, or were otherwise provided in Section 3.8, Effects Which Remain Significant and Unavoidable in the Final Program EIR After Mitigation and Findings, in the Statement of Facts and Findings.

5.3 OVERRIDING CONSIDERATIONS

To the extent that the significant effects of the project are not avoided or substantially lessened to below a level of significance, the City, having reviewed and considered the information contained in the Los Alamitos Medical Center Specific Plan Program EIR and the public record,



and having balanced the benefits of the project against the unavoidable effects which remain, finds that such unmitigated effects to be acceptable. Although such unavoidable impacts remain in the project, the City of Los Alamitos had determined that there are significant economic, social and employment opportunities within the project to adopt a Statement of Overriding Consideration as follows:

1. Provides new jobs for the construction of the Hospital and new jobs for the operation of the Hospital. The creation of jobs in the City of Los Alamitos and the surrounding region is critical to the City and regional economic health. The project would directly create 465 construction jobs in phase one for 15 months, 550 construction jobs for 36 months in Phase Two and 650 construction jobs for 36 months during Phase 3 and 141 jobs for every 10 percent of increase in volume for the hospital. According to the Labor Market Information Division of the State of California, the Orange County unemployment rate as of August 2010 was 9.6 percent. The project will create a total of 1,665 construction jobs as well as permanent jobs associated with the increase in medical services. Further the project will create additional job opportunities for other businesses in the City and region as many industry activities are conducted through numerous subcontractors and will create additional indirect jobs beyond those directly created by the project.
2. Increase of daytime population. The Los Alamitos Medical Center campus is an economic catalyst for many related businesses. In addition, the Medical Center campus brings with it an average of 562 hospital employees plus approximately 90 physicians each day plus the office staff in the medical office buildings, patients, and visitors who are consumers within the community. By having a daytime population that can purchase goods and services in Los Alamitos bolsters the businesses that are already in City. Business retention, expansion, and attraction are the keys to Economic Development in any community. Business follows business and, in this case, the Medical Center campus continues to attract medical professionals, suppliers, and consumers to the City. Primary employers introduce new money into the local economy by bringing in money from outside the community. For example, goods and merchandise created by companies are not typically purchased only by local individuals living in Los Alamitos. As noted in *Community Economic Analysis – A How To Manual* by Ronald J. Hustedde, Ron Shaffer, and Glen Pulver (revised May 2005), once a dollar enters a community, economic theorists believe it is turned over, or spent, an average of seven times at local stores and restaurants.
3. Accommodate a shift from multi-occupancy patient rooms to predominately single occupancy patient rooms while providing a net increase of 38 new patient beds at Phase 2 and 164 new patient beds at full build out. According to the California Office of Statewide Healthcare Planning and Development the total number of licensed beds in Orange County decreased from 80,183 to 78,616 between 1995 and 2009. The increase in the new patient beds will allow the Los Alamitos Medical Center campus to transfer patients more quickly from emergency rooms to hospital beds as patients' medical conditions permit instead of clogging the emergency room. The net increase will also allow the Hospital to convert multi-occupancy rooms to predominately single occupancy thereby improving conditions for inpatients. This is critical since a total of 70 emergency departments have closed in California over the past ten years.



4. Meet the health needs of the Los Alamitos area with an expanded state-of-the-art modern facility. The project will expand Los Alamitos Medical Center campus' ability to provide health services to the community at a time when other hospitals are closing. The Hospital Association of Southern California in its Facility Closure History reports that over 15 hospitals in Orange and Los Angeles Counties have closed or eliminated inpatient services since 2000, which represents a loss of over 2,800 patient beds. The project would enhance and improve emergency services available providing a valuable community resource easily accessible and centrally located in the community. The project would also meet the present and future health care needs of the community by expanding and evolving the Hospital. The expansion of the campus is critical to make up for the loss of medical services around the region, prepare for the influx of adults at the age of 65 and older projected to increase by 45 percent from 2009 to 2020 in Orange County, prepare for the newly insured as projected by Health Care Reform at 32 to 34 million patients nationwide and to provide up-to-date technology with new buildings.
5. Enhance open space landscaping and seating/solitude areas on the Hospital Campus. The project will substantially increase the amount of open space landscaping and garden areas on-site while also enhancing the surrounding streetscape. These measures will beautify the campus and provide a more welcoming therapeutic and aesthetically pleasing environment that will benefit patients, workers, visitors, and the community as a whole.
6. Meet the seismic requirements of the Alfred E. Alquist Hospital Facilities Seismic Safety Act of 1994. California has experienced major, catastrophic earthquakes in the past and will in the future. Geologic and archaeological evidence shows a long history of major earthquakes. Earthquakes worldwide have killed millions, injured and left homeless tens of thousands, and caused inestimable economic losses. History has recorded more than 3,400 deaths attributable to California earthquakes during the last century. The design of the new Hospital Building must comply with the requirements of the Alfred E. Alquist Hospital Facilities Seismic Safety Act of 1994, to maintain the hospital's ability to treat patients after a seismic event. In addition the project would create an up-to-date and expanded facility to meet the growing needs of the community during times of crisis.
7. Replace aging facilities with modern cost-effective, technologically current buildings and equipment. The project will allow the Los Alamitos Medical Center campus to continue providing the highest quality medical care through modernization and expansion of its facilities to accommodate rapidly changing healthcare technologies and changing methods of delivery of healthcare services. The implementation of the Specific Plan will enable the Hospital to respond to the needs of the community by providing modern facilities capable of delivering the highest quality medical care.
8. Maintain the viability of the Hospital as a critical facility for emergencies and hazard events. The Hospital is centrally located in Los Alamitos, adjacent to the City's major arterials of Katella Avenue and Los Alamitos Blvd. As the Hospital is isolated from other facilities in Orange County (being located at the far northern boundary with the Pacific Ocean to the south), it is a critical facility for emergency and hazard events.



Implementation of the Specific Plan would further the viability of the Hospital as a critical facility for emergencies and hazard events. Los Alamitos Medical Center campus plays a key role among two high profile targets in the event of an emergency, the Joint Forces Training Base (JFTB) and Port of Long Beach.

9. Implement a plan for the development and growth of the Hospital for the next 25 years. The Specific Plan would allow a superior development that could not occur without the development standards contained within the Specific Plan. The Specific Plan proposes Site Planning, Building Envelope, Open Space, Circulation, Mechanical Equipment Area Lighting Signage, and Sustainability and Energy Conservation Design Guidelines that would not exist without the Specific Plan. Further, the Specific Plan would ensure orderly and planned development to serve the community.
10. Expand the Hospital on the existing site in a centralized location and close to major transportation corridors to reduce vehicle miles traveled. Containing the inpatient and outpatient care within a cohesive core of connected facilities will improve the efficiency of patient transfers and emergency room services as well as convenience to doctors, staff, patients, and visitors especially as the campus is accessible from major transportation corridors. Residents will not have to travel out of town for medical services and residents will be able to take advantage of job opportunities provided by the Medical Center campus close to home. These attributes will enable vehicle miles traveled to be reduced for the community as a whole, especially as there are nearly three residents per job in the City of Los Alamitos.
11. Improve the inpatient experience by converting double occupancy rooms to single occupancy rooms and constructing additional new single-occupancy rooms. Patient privacy and comfort will be enhanced by converting existing multi-occupancy rooms to single occupancy rooms and providing additional new single occupancy rooms. This will enhance patients comfort and experience and thereby encourage the speedy recovery of patients with more individualized and personal attention. In addition, Hospitals are required to comply with the Health Insurance Portability and Accountability Act of 1996 (HIPPA Privacy Rule). This is a Federal rule covering the health-care industry and is designed to protect patients and their health information. Single patient rooms provide for privacy and confidentiality when discussing sensitive medical and social information. In addition, private rooms have been found to assist in combating the spread of infection.
12. Replace outdated buildings and equipment with new more energy efficient and environmentally sensitive structures and systems. The project will replace old and inefficient buildings and equipment with new more energy efficient and environmentally sensitive structures and systems.
13. Improve circulation on the Hospital site. The project provides a circulation plan that improves vehicular and pedestrian circulation. With the vacation of Kaylor as it traverses the site, a more cohesive and integrated project site will be created. New driveway aisles and parking areas will be created and certain driveways will be closed in order to enhance circulation.



14. Guarantee revenues from the Hospital site. The Los Alamitos Medical Center guarantees that, in the event that the City receives less than \$40,000 in annual revenues attributable to the subject property in the first five years beginning after the Certificate of Occupancy is issued for the Medical Center, the Medical Center will make annual payments to the City to cover such deficiency.

Although significant impacts will remain, the City will mitigate any significant adverse impacts to cumulative air quality impacts (pertaining to cumulative greenhouse gas emissions) to the maximum extent practicable. In its decision to approve the project, the City has considered the project benefits to outweigh the environmental impacts.