

TABLE OF CONTENTS

1.0	INTRODUCTION	1-1
1.1	BACKGROUND	1-1
1.2	SUPPLEMENT TO EIR 564.....	1-1
1.3	SUMMARY OF UNCHANGED ITEMS	1-2
1.4	SUMMARY OF CHANGED ITEMS	1-3
1.5	OTHER EIRS AND RELATED DOCUMENTS INCORPORATED BY REFERENCE	1-4
1.6	INTENDED USE OF THE SUPPLEMENTAL EIR	1-5
1.7	LEAD AGENCY CONTACT INFORMATION	1-5
1.8	FORMAT OF THIS ENVIRONMENTAL ANALYSIS REPORT	1-5
2.0	PROJECT BACKGROUND AND HISTORY	2-1
2.1	RELEVANT HISTORY OF THE JAMES A. MUSICK FACILITY MASTER PLAN.....	2-1
2.2	HISTORY OF MUSICK JAIL AND JAILS IN ORANGE COUNTY.....	2-4
2.3	CURRENT JAIL FACILITIES AND CAPACITY	2-5
2.4	FEDERAL DETAINEE PROGRAM	2-6
2.5	PROJECT NEED.....	2-7
2.6	PREVIOUS COORDINATION EFFORTS OF THE COUNTY	2-11
3.0	PROJECT DESCRIPTION.....	3-1
3.1	PROJECT SITE LOCATION AND SETTING	3-1
3.2	SITUATIONAL SETTING	3-1
3.3	PROPOSED PHYSICAL IMPROVEMENTS	3-10
3.4	UPDATED STAFFING DATA (UPDATES EXHIBIT 8A).....	3-22
3.5	PREVIOUS AND PROPOSED ACTIONS	3-22
4.0	NEW ANALYSIS	4-1
4.1	INTRODUCTION	4-1
4.2	AGRICULTURE	4-1
4.3	GLOBAL CLIMATE CHANGE.....	4-17
5.0	COMPARATIVE EVALUATION OF ENVIRONMENTAL IMPACTS	5-1
5.1	INTRODUCTION	5-1
5.2	LAND USE AND PLANNING	5-1
5.3	POPULATION AND HOUSING.....	5-7
5.4	GEOPHYSICAL	5-9
5.5	HYDROLOGY AND WATER QUALITY	5-12
5.6	TRANSPORTATION/CIRCULATION	5-17
5.7	AIR QUALITY.....	5-29
5.8	NOISE	5-44
5.9	BIOLOGICAL RESOURCES.....	5-49
5.10	AESTHETICS	5-52
5.11	CULTURAL RESOURCES.....	5-64
5.12	RECREATION.....	5-68
5.13	MINERAL RESOURCES	5-70
5.14	HAZARDOUS WASTE/MATERIALS	5-71
5.15	PUBLIC SERVICES AND UTILITIES.....	5-75

5.16	CONSTRUCTION ACTIVITIES	5-79
5.17	CUMULATIVE IMPACTS	5-83
6.0	UPDATED MITIGATION MONITORING AND REPORTING PROGRAM ...	6-1
7.0	REFERENCES	7-1
8.0	LIST OF PREPARERS AND PERSONS CONTACTED	8-1

APPENDICES

- Appendix A: Appellate Court Decision (4th Appellate District, Division 3, December 8, 2000)**
- Appendix B: Press Coverage and Public Records (1987–2008)**
- Appendix C: County of Orange Environmental Analysis Checklist**
- Appendix D: Updated Traffic Study**
- Appendix E: Air Quality Update Technical Memorandum**
- Appendix F: Cumulative Impacts Analyses Incorporated by Reference**
- Appendix G: Best Management Practices (BMPs)**

LIST OF FIGURES

Figure 3-1: Regional Location Map	3-2
Figure 3-2: Vicinity Map.....	3-3
Figure 3-3: Vicinity Aerial Photo.....	3-4
Figure 3-4: Site Aerial Photo.....	3-5
Figure 3-5: Existing Layout/Uses.....	3-6
Figure 3-6: Orange County Great Park Land Use Plan	3-7
Figure 3-6A: Great Park Existing Zoning	3-8
Figure 3-6B: Great Park Proposed Zone Changes.....	3-9
Figure 3-8: EIR 564 Approved JAMF Master Site Plan	3-13
Figure 3-9: Revised JAMF Master Plan	3-14
Figure 3-10: EIR 564 Master Site Plan and Revised JAMF Master Plan Comparison	3-15
Figure 3-11: Phase I of Revised JAMF Master Plan	3-17
Figure 3-12: Candidate Conceptual Artistic Rendering of Structure Design for Main Entrance – Modern-High Tech	3-18
Figure 3-13: Candidate Conceptual Artistic Rendering of Structure Design for Main Entrance – Contemporary Classic.....	3-19
Figure 3-14: JAMF Phase I Fencing Plan	3-25
Figure 3-15: JAMF Master Plan Fencing Plan.....	3-26
Figure 4-1: JAMF Agricultural Expansion Areas	4-2
Figure 4-2: Off-site Mitigation Area	4-4
Figure 4-3: Northeast Mitigation Area.....	4-5
Figure 4-4: Worldwide Carbon Dioxide Emissions by Region, 2003–2030 (billions of metric tons of carbon dioxide)	4-22
Figure 5-1: Project Location and Study Area Intersections	5-18
Figure 5-2: Project Trip Distribution.....	5-25
Figure 5-3: Picture View Key.....	5-53
Figure 5-4: Views Around JAMF.....	5-54
Figure 5-5: Alton Parkway FEIR Conceptual Rendering.....	5-57
Figure 5-6: Site Section Key	5-58
Figure 5-7: Site Sections	5-59
Figure 5-8: Conceptual Rendering of Bake Parkway Entrance.....	5-60
Figure 5-9: Conceptual Rendering of Alton Parkway Entrance	5-61

LIST OF TABLES

Table 2.A: Orange County Jail Facilities and Capacity	2-6
Table 2.B: JAMF Building Ages.....	2-11
Table 3.A: JAMF Master Plan New Building Square Footage and Parking Summary.....	3-23
Table 4.A: Global Warming Potentials	4-20
Table 4.B: General Plan Goals and Policies that Would Reduce GHG Emissions	4-28
Table 4.C: Existing GHG Emissions.....	4-35
Table 4.D: Proposed Project GHG Emissions.....	4-36
Table 4.E: Net Plan-Related Increase in GHG Emissions.....	4-36
Table 4.F: Project Compliance with GHG Emission Reduction Strategies	4-39
Table 5.A: Level of Service Criteria	5-19
Table 5.B: Existing LOS Summary (2004)	5-20
Table 5.C: Interim LOS Summary (2014).....	5-22
Table 5.D: General Plan Build-Out (2030) LOS	5-23
Table 5.E: JAMF Trip Generation Summary	5-24
Table 5.F: Attainment Status of Criteria Pollutants in the South Coast Air Basin.....	5-31
Table 5.G: SCAQMD Significance Thresholds	5-34
Table 5.H: Saddleback Valley LST Thresholds	5-35
Table 5.I: Peak-Day Construction Emissions for Phase I	5-37
Table 5.J: Peak-Day Construction Emissions by Phase for Project Build Out	5-38
Table 5.K: Construction LST Impacts (lbs/day)	5-38
Table 5.L: Phase I Regional Operational Emissions	5-39
Table 5.M: General Plan Build-Out Regional Operational Emissions.....	5-40
Table 5.N: Summary of Operation Emissions, Localized Significance	5-40
Updated Mitigation Monitoring Program and Reporting Checklist James A. Musick Jail.....	6-2

LIST OF ACRONYMS

AB	Assembly Bill
ac	acre/acres
ACMs	asbestos-containing materials
ADP	average daily population
ADT	average daily trips
AELUP	Airport Environs Land Use Plan
AFA	Austin-Foust Associates, Inc.
afy	acre-feet per year
AQMP	Air Quality Management Plan
ARB	California Air Resources Board
ARB	California Air Resources Board
Basin	South Coast Air Basin
BMPs	best management practices
C ₂ F ₆	Hexafluoromethane
CAA	federal Clean Air Act
CAA	federal Clean Air Act
CalEPA	California Environmental Protection Agency
CAT	Climate Action Team
CBSC	California Building Standards Code
CCR	California Code of Regulations
CDCR	California Department of Corrections and Rehabilitation
CDMG	California Division of Mines and Geology
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CF ₄	Tetrafluoromethane
CFCs	chlorofluorocarbons
cfs	cubic feet per second
CH ₄	methane
CNEL	Community Noise Equivalent Level
CO	carbon monoxide
CO ₂ e	CO ₂ equivalents
CSA	Corrections Standards Authority
CVC	California Vehicle Code
DAMP	Drainage Area Management Plan
DATS	Deep Aquifer Treatment System
dBA	A-weighted decibels
DEIR	Draft Environmental Impact Report
DRWF	Dyer Road Well Field
EIR	Environmental Impact Report
EO	Executive Order
EPA	United States Environmental Protection Agency
F	degrees Fahrenheit
FAA	Federal Aviation Administration
FAR	Federal Aviation Regulations

FEIR	Final Environmental Impact Report
ft	foot/feet
GCC	global climate change
GHG	greenhouse gas
GPA	General Plan Amendment
gpcd	gallons per capita per day
GWP	global warming potential
HBP/CHF	Department of Harbors, Beaches and Parks/Coastal and Historic Facilities
HCP	Habitat Conservation Plan
HFCs	Hydrofluorocarbons
I-405	Interstate 405
I-5	Interstate 5
ICE	Immigration and Customs Enforcement
ICU	intersection capacity utilization
IPCC	Intergovernmental Panel on Climate Change
IRC	Intake and Release Center
IRP	Installation Restoration Program
IS	Initial Study
ITAM	Irvine Transportation Analysis Model
JAMF	James A. Musick Facility
kwh	kilowatt hours
LAWRP	Los Alisos Water Reclamation Plant
lbs/day	pounds per day
LEED	Lead in Energy and Environmental Design
LFTAM	Lake Forest Traffic Analysis Model
LFTM	Lake Forest Transportation Mitigation
LOS	level of service
LST	local significance threshold
m	meter/meters
MCAS	Marine Corps Air Station
mi	mile/miles
MMT	million metric tons
mph	miles per hour
MPO	Metropolitan Planning Organization
MWD	Metropolitan Water District of Southern California
MWRP	Michelson Water Reclamation Plant
N ₂ O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NCCP	Natural Communities Conservation Plan
NITM	North Irvine Transportation Mitigation
NO ₂	nitrogen dioxide
NOP	Notice of Preparation
NO _x	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
O ₃	ozone

OC	Orange County
OCFA	Orange County Fire Authority
OCSD	Orange County Sheriff's Department
OCTA	Orange County Transportation Authority
OCTAM	Orange County Transportation Analysis Model
OCSD	Orange County Sheriff's Department
OCWD	Orange County Water District
OECD	Organization for Economic Cooperation and Development
OECD	Organization for Economic Cooperation and Development
OPR	Governor's Office of Planning and Research
PCBs	polychlorinated biphenyls
PFCs	Perfluorocarbons
PM ₁₀	particulate matter less than 10 microns in diameter
PM _{2.5}	particulate matte less than 2.5 microns in diameter
ppm	parts per million
PRC	Public Resources Code
RFA	Request for Applications
ROC	Reactive Organic Compounds
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCE	Southern California Edison
SCG	Southern California Gas Company
SEIR	Supplemental Environmental Impact Report
sf	square foot/square feet
SF ₆	Sulfur Hexafluoride
SFPAs	Special Fire Protected Area
SIP	State Implementation Plan
SR-133	State Route 133
SR-241	State Route 241
SRA	source receptor area
SWPPP	Storm Water Pollution Prevention Plan
TDR	transfer-of-development rights
TMDLs	total maximum daily loads
tpy	tons per year
U.S.	United States
v/c	volume-to-capacity
WQMP	Water Quality Management Plan