

# Table of Contents

<b>Executive Summary.....</b>	<b>ES-1</b>
Introduction.....	ES-1
Project Location and Setting.....	ES-1
Project Objectives .....	ES-2
Project Characteristics.....	ES-2
Alternatives to the Project.....	ES-3
Areas of Known Controversy.....	ES-3
Issues to be Resolved.....	ES-4
Summary of Project Impacts and Mitigation Measures.....	ES-4
<b>Section 1 Introduction.....</b>	<b>1-1</b>
1.1 Purpose .....	1-1
1.2 Project Overview .....	1-1
1.3 Purpose and Legal Authority.....	1-1
1.4 EIR Adequacy.....	1-2
1.5 Lead, Responsible and Trustee Agencies .....	1-2
1.6 Environmental Review Process .....	1-2
1.6.1 Process Overview .....	1-2
1.6.2 Notice of Preparation and Scoping .....	1-4
1.6.3 Topics Addressed in the EIR .....	1-4
1.7 Availability of the Draft EIR .....	1-5
<b>Section 2 Project Description.....</b>	<b>2-1</b>
2.1 Introduction .....	2-1
2.2 Project Location .....	2-1
2.3 Site History .....	2-1
2.4 Surrounding Uses .....	2-4
2.5 Land Use and Zoning .....	2-4
2.6 Project Objectives .....	2-7
2.7 Project Overview .....	2-7
2.7.1 Project Components .....	2-7
2.7.2 Construction .....	2-8
2.7.3 Operation .....	2-23
2.8 Intended Use of this EIR and Project Approvals .....	2-23
2.9 Cumulative Impacts .....	2-23
<b>Section 3 Environmental Impact Analysis .....</b>	<b>3-1</b>
3.1 Aesthetics .....	3.1-1
3.1.1 Introduction .....	3.1-1
3.1.2 Existing Conditions .....	3.1-1
3.1.2.1 City of Pasadena.....	3.1-1
3.1.2.2 Central District Area.....	3.1-1
3.1.2.3 Surrounding Land Uses .....	3.1-2

3.1.2.4 Project Site .....	3.1-2
3.1.3 Regulatory Framework .....	3.1-3
3.1.3.1 State.....	3.1-3
3.1.3.2 Local.....	3.1-3
3.1.4 Methodology .....	3.1-7
3.1.5 Thresholds of Significance .....	3.1-7
3.1.6 Project Impacts .....	3.1-8
3.1.7 Cumulative Impacts .....	3.1-15
3.2 Air Quality .....	3.2-1
3.2.1 Introduction .....	3.2-1
3.2.2 Existing Conditions .....	3.2-2
3.2.3 Regulatory Framework .....	3.2-5
3.2.3.1 Federal .....	3.2-5
3.2.3.2 State.....	3.2-7
3.2.3.3 Local.....	3.2-8
3.2.4 Methodology .....	3.2-9
3.2.5 Thresholds of Significance .....	3.2-10
3.2.6 Project Impacts .....	3.2-11
3.2.7 Cumulative Impacts .....	3.2-17
3.3 Cultural Resources .....	3.3-1
3.3.1 Introduction .....	3.3-1
3.3.2 Existing Conditions .....	3.3-1
3.3.2.1 Natural Setting.....	3.3-1
3.3.2.2 Cultural Setting.....	3.3-3
3.3.2.3 Ethnographic Background.....	3.3-4
3.3.2.4 Cultural Resources Search Results .....	3.3-5
3.3.3 Regulatory Framework .....	3.3-8
3.3.3.1 Federal .....	3.3-8
3.3.3.2 State.....	3.3-8
3.3.3.3 Local.....	3.3-10
3.3.4 Methodology .....	3.3-10
3.3.4.1 Cultural Resources Records Search.....	3.3-10
3.3.4.2 Paleontological Resources Records Search.....	3.3-10
3.3.4.3 Native American Sacred Lands File .....	3.3-10
3.3.4.4 Archaeological Field Survey .....	3.3-11
3.3.4.5 Historic Resources Assessment .....	3.3-11
3.3.5 Thresholds of Significance .....	3.3-11
3.3.6 Project Impacts .....	3.3-11
3.3.7 Cumulative Impacts .....	3.3-15
3.4 Greenhouse Gases .....	3.4-1
3.4.1 Introduction .....	3.4-1
3.4.2 Existing Conditions .....	3.4-1
3.4.2.1 Background.....	3.4-1
3.4.2.2 Effects of Global Climate Change .....	3.4-2
3.4.2.3 State of California GHG Emissions Inventory.....	3.4-3
3.4.2.4 Global Ambient CO <sub>2</sub> , CH <sub>4</sub> , and N <sub>2</sub> O Concentrations .....	3.4-5
3.4.3 Regulatory Framework .....	3.4-5

3.4.3.1 Federal.....	3.4-5
3.4.3.2 State .....	3.4-6
3.4.3.3 Local.....	3.4-9
3.4.4 Methodology .....	3.4-10
3.4.5 Thresholds of Significance .....	3.4-11
3.4.6 Project Impacts .....	3.4-12
3.4.7 Cumulative Impacts .....	3.4-14
3.5 Noise and Vibration .....	3.5-1
3.5.1 Introduction .....	3.5-1
3.5.2 Existing Conditions .....	3.5-3
3.5.3 Regulatory Framework .....	3.5-4
3.5.3.1 Federal.....	3.5-4
3.5.3.2 State .....	3.5-4
3.5.3.3 Local.....	3.5-4
3.5.4 Methodology .....	3.5-6
3.5.5 Thresholds of Significance .....	3.5-7
3.5.6 Project Impacts .....	3.5-8
3.5.7 Cumulative Impacts .....	3.5-11
3.6 Transportation and Circulation .....	3.6-1
3.6.1 Introduction .....	3.6-1
3.6.2 Existing Conditions .....	3.6-1
3.6.2.1 Existing Street System .....	3.6-1
3.6.2.2 Parking.....	3.6-3
3.6.2.3 Existing Alternative Transportation.....	3.6-4
3.6.2.4 Study Area Intersections.....	3.6-5
3.6.2.5 Existing Traffic Volumes and Levels of Service.....	3.6-9
3.6.2.6 Freeway On- and Off-Ramps .....	3.6-12
3.6.3 Regulatory Framework .....	3.6-13
3.6.4 Methodology .....	3.6-14
3.6.4.1 Cumulative (2014) without Project Traffic .....	3.6-14
3.6.4.2 Cumulative (2014) Plus Project Traffic.....	3.6-14
3.6.4.3 Pedestrian Environmental Quality Index (PEQI) .....	3.6-14
3.6.4.4 Bicycle Environmental Quality Index (BEQI).....	3.6-15
3.6.4.5 Multimodal Level of Service (MMLOS) .....	3.6-15
3.6.4.6 Freeway On- and Off-Ramp Analysis.....	3.6-15
3.6.5 Thresholds of Significance .....	3.6-16
3.6.6 Project Impacts .....	3.6-18
3.6.7 Cumulative Impacts .....	3.6-38
<b>Section 4 Alternatives.....</b>	<b>4-1</b>
4.1 Introduction .....	4-1
4.2 Project Objectives .....	4-1
4.3 Selection of Alternatives for Analysis .....	4-2
4.4 Alternatives Considered but Rejected as Infeasible .....	4-2
4.5 Analysis Methodology.....	4-3
4.6 Comparative Impact Analysis .....	4-3
4.6.1 Alternative 1 – No Project .....	4-3
4.6.1.1 Aesthetics .....	4-4

4.6.1.2 Air Quality.....	4-4
4.6.1.3 Cultural Resources.....	4-4
4.6.1.4 Greenhouse Gases .....	4-4
4.6.1.5 Noise .....	4-4
4.6.1.6 Transportation and Traffic.....	4-5
4.6.1.7 Conclusion .....	4-5
4.6.2 Alternative 2 – Residential Project .....	4-5
4.6.2.1 Aesthetics.....	4-5
4.6.2.2 Air Quality.....	4-6
4.6.2.3 Cultural Resources.....	4-6
4.6.2.4 Greenhouse Gases .....	4-7
4.6.2.5 Noise .....	4-7
4.6.2.6 Transportation and Traffic.....	4-7
4.6.2.7 Conclusion .....	4-8
4.6.3 Alternative 3 – Commercial Office Project .....	4-9
4.6.3.1 Aesthetics.....	4-9
4.6.3.2 Air Quality.....	4-9
4.6.3.3 Cultural Resources.....	4-10
4.6.3.4 Greenhouse Gases .....	4-10
4.6.3.5 Noise .....	4-11
4.6.3.6 Transportation and Traffic.....	4-11
4.6.3.7 Conclusion .....	4-12
4.7 Environmentally Superior Alternative .....	4-12
<b>Section 5 Other CEQA Considerations.....</b>	<b>5-1</b>
5.1 Significant Irreversible Environmental Changes .....	5-1
5.2 Significant Unavoidable Impacts .....	5-1
5.3 Growth Inducing Impacts .....	5-2
5.4 Effects Found Not to be Significant .....	5-2
<b>Section 6 References.....</b>	<b>6-1</b>
<b>Section 7 List of Preparers.....</b>	<b>7-1</b>

## Appendices

- Appendix A – Notice of Preparation (NOP), Initial Study, and Comments on the NOP
- Appendix B – Air Quality Analysis
- Appendix C – Cultural Resources Technical Report
- Appendix D – Greenhouse Gas Calculations
- Appendix E – Noise Calculations
- Appendix F – Traffic Analysis

## List of Tables

Table ES-1 Summary of Project Impacts, Mitigation Measures, and Residual Impacts .....	ES-4
Table 2-1 Floor by Floor Details .....	2-8
Table 2-2 Pending and Approved Projects .....	2-23
Table 3.2-1 Criteria Pollutants and Their Effect on Health .....	3.2-1
Table 3.2-2 Summary of Pollutant Monitoring Data .....	3.2-3
Table 3.2-3 State and Federal Attainment Status .....	3.2-5
Table 3.2-4 National Ambient Air Quality Standards .....	3.2-6
Table 3.2-5 California Ambient Air Quality Standards .....	3.2-7
Table 3.2-6 SCAQMD Significance Thresholds .....	3.2-10
Table 3.2-7 Localized Significance Thresholds .....	3.2-11
Table 3.2-8 Construction Emissions Summary .....	3.2-12
Table 3.2-9 Operational Emissions Summary .....	3.2-13
Table 3.2-10 LST Analysis for Construction Emissions .....	3.2-14
Table 3.2-11 LST Analysis for Operational Emissions .....	3.2-14
Table 3.2-12 CO Concentrations – With Cumulative and Project Traffic (2014) .....	3.2-15
Table 3.4-1 GHG Emissions in California .....	3.4-3
Table 3.4-2 Comparison of Global Pre-Industrial and Current GHG Concentrations .....	3.4-5
Table 3.4-3 Construction-Related GHG Emissions .....	3.4-12
Table 3.4-4 Operational GHG Emissions .....	3.4-13
Table 3.4-5 Annual Proposed Project Emissions Compared to GHG Threshold .....	3.4-13
Table 3.5-1 Decibel Changes, Loudness, and Energy Loss .....	3.5-3
Table 3.5-2 Land Use Compatibility for Community Noise Environments .....	3.5-5
Table 3.5-3 Maximum Noise Levels and Usage Factors for Anticipated Construction Equipment .....	3.5-6
Table 3.6-1 Existing On-Street Parking Characteristics .....	3.6-3
Table 3.6-2 Intersection Levels of Service (LOS) – Existing (2012) Conditions .....	3.6-11
Table 3.6-3 Roadway Segment Average Daily Traffic Volumes – Existing (2012) Conditions .....	3.6-11
Table 3.6-4 Level of Service Definitions for Signalized Intersections .....	3.6-12
Table 3.6-5 Intersection LOS Threshold .....	3.6-17
Table 3.6-6 Street Segment Thresholds .....	3.6-17
Table 3.6-7 Applicable General Plan Mobility Elements Policies .....	3.6-18
Table 3.6-8 Estimated Weekday Trip Generation .....	3.6-20
Table 3.6-9 Estimated Weekday Trip Generation of Related Projects .....	3.6-23
Table 3.6-10 Summary of Intersection Level of Service Analysis .....	3.6-26
Table 3.6-11 Roadway Segment LOS Analysis – Existing (2012) Conditions .....	3.6-30
Table 3.6-12 On-Ramp Traffic Volumes .....	3.6-32
Table 3.6-13 Off-Ramp Traffic Volumes .....	3.6-33
Table 3.6-14 Summary of Intersection Level of Service – Project Plus NFL Project Future Weekday Conditions .....	3.6-40
Table 4-1 Comparison of Operational Air Emissions – Proposed Project and Residential Project.....	4-6

Table 4-2 Comparison of Greenhouse Gas Emissions – Proposed Project and Residential Project .....	4-7
Table 4-3 Comparison of Trip Generation Estimates – Proposed Project and Residential Project .....	4-8
Table 4-4 Comparison of Operational Air Emissions – Proposed Project and Commercial Office Project .....	4-10
Table 4-5 Comparison of Greenhouse Gas Emissions – Proposed Project and Commercial Office Project .....	4-11
Table 4-6 Comparison of Trip Generation Estimates – Proposed Project and Commercial Office Project .....	4-11
Table 4-7 Comparison of Alternatives to the Proposed Project .....	4-13

## List of Figures

Figure 2-1 Regional Location .....	2-2
Figure 2-2 Local Vicinity .....	2-3
Figure 2-3 Aerial Overview .....	2-5
Figure 2-4 Central District Specific Plan Area .....	2-6
Figure 2-5 Site Plan and First Floor Layout .....	2-9
Figure 2-6 Parking Layout .....	2-11
Figure 2-7 Second Floor Layout .....	2-13
Figure 2-8 Third Floor Layout .....	2-15
Figure 2-9 Fourth Floor Layout .....	2-17
Figure 2-10 Fifth Floor Layout .....	2-19
Figure 2-11 Conceptual Elevations .....	2-21
Figure 2-12 Pending and Approved Project Locations .....	2-25
Figure 3.1-1 Viewpoint Locations and Direction of Photosimulations .....	3.1-11
Figure 3.1-2 Vantage Point 1-Looking South (Southwest) along Fair Oaks Avenue at Corson Street.....	3.1-12
Figure 3.1-3 Vantage Point 2-Looking North (Northwest) along Fair Oaks Avenue at Walnut Street.....	3.1-12
Figure 3.1-4 Vantage Point 3-Looking West (Northwest) along Walnut Street at Raymond Avenue.....	3.1-13
Figure 3.1-5 Vantage Point 4-Looking East (Northeast) along Walnut Street .....	3.1-14
Figure 3.3-1 Surrounding Land Uses and Historic Structures .....	3.3-2
Figure 3.3-2 Old Pasadena Historic District Boundaries .....	3.3-12
Figure 3.4-1 2009 GHG Emissions for Energy Source Category .....	3.4-4
Figure 3.4-2 SCAQMD Tiered Approach to Assess GHG Significance .....	3.4-11
Figure 3.5-1 Common Indoor and Outdoor Noises .....	3.5-2
Figure 3.6-1 Access and Circulation .....	3.6-2
Figure 3.6-2 Existing Bicycle System Infrastructure .....	3.6-6
Figure 3.6-3 Existing Transit Lines .....	3.6-7
Figure 3.6-4 Study Area Intersections and Roadway Segments .....	3.6-8
Figure 3.6-5 Existing Peak Hour Traffic Volumes .....	3.6-10
Figure 3.6-6 Project-Only Peak Hour Traffic Volumes .....	3.6-21
Figure 3.6-7 Cumulative (2014) Without Project Peak Hour Traffic Volumes .....	3.6-22

Figure 3.6-8 Related Projects Only Peak Hour Traffic Volumes .....	3.6-25
Figure 3.6-9 Cumulative (2014) Plus Project Peak Hour Traffic Volumes .....	3.6-28

## Acronyms

AB	Assembly Bill
AM	weekday morning
ANSI	American National Standard Institute
AQMP	Air Quality Management Plan
ARTS	Pasadena Area Rapid Transit System
BAAQMD	Bay Area Air Quality Management District
BAU	business-as-usual
BCE	before Common Era
BEQI	Bicycle Environmental Quality Index
CAA	Federal Clean Air Act
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CCAA	California Clean Air Act
CCR	California Code of Regulations
CD	Central District
CDSP	Central District Specific Plan
CE	Common Era
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CH <sub>4</sub>	methane
CHL	California Historical Landmarks
CHRIS	California Historical Resources Information System
CMP	Congestion Management Program
CNEL	Community Noise Equivalent Level
CO	carbon monoxide
CO <sub>2</sub>	carbon dioxide
CONC	California Office of Noise Control
CPHI	California Points of Historical Interest
CRHR	California Register of Historical Resources
DOE	Determinations of Eligibility

DOT	Department of Transportation
DPM	diesel particulate matter
dB	decibels
du	dwelling unit
EIR	Environmental Impact Report
°F	Fahrenheit
FHWA	Federal Highway Administration
FR	Federal Register
GCC	global climate change
GHG	Greenhouse gas
g/mi	grams per mile
GWP	global warming potential
HCM	Highway Capacity Manual
HFCs	hydrofluorocarbons
HPDF	Historic Property Data File
I-210	Interstate 210
I-710	Interstate 710
ICU	Intersection Capacity Utilization
in/sec	inches per second
IPCC	Intergovernmental Panel on Climate Change
ITE	Institute of Transportation Engineers
LACMTA	Los Angeles County Metropolitan Transportation Authority
LADOT	Los Angeles Department of Transportation
lb/day	pounds per day
LCFS	low carbon fuel standard
Ldn	day-night average noise level
Leq	equivalent noise level
LOS	Level of Service
LSTs	localized significance thresholds
Metro	Los Angeles County Metropolitan Transportation Authority
MLD	most likely descendant
MM	mitigation measure
MMLOS	Multimodal Level of Service
mpg	miles per gallon
MPO	metropolitan planning organization
MTCO <sub>2</sub> e	metric tons of carbon dioxide equivalent
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
N <sub>2</sub> O	nitrous oxide

---

NCHRP	National Cooperative Highway Research Project
NFL	National Football League
NHPA	National Historic Preservation Act
NHTSA	National Highway Traffic Safety Administration
NO <sub>2</sub>	nitrogen dioxide
NOP	Notice of Preparation
NOx	nitrogen oxide
NP	no parking
NRHP	National Register of Historic Places
NSAT	no stopping at any time
O <sub>3</sub>	ozone
OAL	Office of Administrative Law
OHP	California Office of Historic Preservation
ONAC	Office of Noise Abatement and Control
Pb	lead
PEQI	Pedestrian Environmental Quality Index
PFCs	perfluorocarbons
PM	weekday evening
PM <sub>10</sub>	inhalable particulate matter of 10 microns or less
PM <sub>2.5</sub>	fine particulate matter of 2.5 microns or less
PMC	Pasadena Municipal Code
ppb	parts per billion
ppm	parts per million
PPV	peak particle velocity
PRC	Public Resources Code
RCNM	Roadway Construction Noise Model
ROG	reactive organic gases
RTAC	Regional Targets Advisory Committee
RTP	Regional Transportation Plan
SB	Senate Bill
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCCIC	South Central Coastal Information Center
SCS	Sustainable Communities Strategy
SF <sub>6</sub>	sulfur hexafluoride
SFDPH	San Francisco Department of Public Health
SIP	State Implementation Plan
SO <sub>2</sub>	sulfur dioxide

SOx	sulfur oxide
Sq. ft.	square feet
SP	service population
SR 110	State Route 110
SR 134	State Route 134
SRA	Source-Receptor Area
TAC	toxic air contaminants
TOD	Transit-Oriented Development area
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey
v/c	volume to capacity
VOC	volatile organic compounds
vpd	vehicles per day
vphpl	vehicles per hour per lane
3D	3 dimensional