

CONTENTS

Acronyms and Abbreviations	xi
Chapter 1. Introduction	1-1
1.1 Purpose of the EIR and the Environmental Review Process.....	1-1
1.2 Scoping and Notice of Preparation Process.....	1-2
1.3 <u>Final</u> EIR <u>Volume II</u> Contents.....	1-3
1.4 Agency Use of the Document.....	1-4
1.5 Review of the Draft EIR.....	1-5
Chapter 2. Summary	2-1
2.1 Purpose of the EIR	2-2
2.2 Project Location	2-2
2.3 Project Overview	2-2
2.3.1 Page Museum Renovations	2-3
2.3.2 New Museum Building.....	2-3
2.3.3 Tar Pits.....	2-4
2.3.4 Entrance Renovation and Other Internal Improvements	2-4
2.3.5 Landscaping.....	2-5
2.3.6 Project Construction	2-5
2.4 Project Objectives.....	2-6
2.5 Significant Environmental Impacts Identified.....	2-7
2.6 Areas of Controversy.....	2-59
2.7 Issues to Be Resolved.....	2-59
2.8 Project Alternatives	2-60
Chapter 3. Project Description.....	3-1
3.1 Project Location	3-1
3.2 Existing Setting	3-4
3.2.1 Surrounding Land Uses	3-4
3.2.2 Project Site Background	3-4
3.2.3 Existing Project Site Conditions.....	3-5
3.3 Project Objectives.....	3-7
3.4 Proposed Project.....	3-7
3.4.1 Page Museum Renovations	3-8
3.4.2 New Museum Building.....	3-12
3.4.3 Wilshire Gateway and Lake Pit	3-12
3.4.4 6th Street Gateway.....	3-13
3.4.5 Tar Pits.....	3-13
3.4.6 Pedestrian Path and Recreation	3-13
3.4.7 Landscaping.....	3-19
3.4.8 Circulation and Vehicle Parking.....	3-23
3.4.9 Utilities	3-24
3.4.10 Project Construction	3-24
3.4.11 Project Operation.....	3-26
3.5 Agency Approval Requirements and Intended Uses of this EIR	3-26
3.6 Environmental Review of Subsequent Actions	3-27

Chapter 4. Environmental Setting	4-1
4.1 Physical Setting	4-1
4.1.1 Regional Setting	4-1
4.1.2 Local Setting.....	4-2
4.1.3 Existing Project Site Characteristics.....	4-2
4.1.4 Surrounding Land Uses	4-8
4.2 Cumulative Context.....	4-8
4.2.1 CEQA Requirements for Cumulative Analyses	4-8
4.2.2 Approach to the Cumulative Analysis in this EIR.....	4-9
Chapter 5. Environmental Impact Analysis.....	5-1
5.1 Aesthetics	5.1-1
5.1.1 Existing Conditions	5.1-1
5.1.2 Regulatory Setting	5.1-5
5.1.3 Thresholds of Significance	5.1-9
5.1.4 Impact Assessment Methodology.....	5.1-9
5.1.5 Environmental Impact Analysis	5.1-10
5.1.6 Cumulative Impact Analysis	5.1-17
5.2 Air Quality.....	5.2-1
5.2.1 Existing Conditions	5.2-1
5.2.2 Regulatory Setting	5.2-10
5.2.3 Thresholds of Significance	5.2-17
5.2.4 Impact Assessment Methodology.....	5.2-18
5.2.5 Environmental Impact Analysis	5.2-20
5.2.6 Cumulative Impact Analysis	5.2-28
5.3 Biological Resources.....	5.3-1
5.3.1 Existing Conditions	5.3-1
5.3.2 Regulatory Setting	5.3-11
5.3.3 Thresholds of Significance	5.3-17
5.3.4 Impact Assessment Methodology.....	5.3-17
5.3.5 Environmental Impact Analysis	5.3-17
5.3.6 Cumulative Impact Analysis	5.3-28
5.4 Cultural Resources – Archaeological Resources.....	5.4-1
5.4.1 Existing Conditions	5.4-1
5.4.2 Regulatory Setting.....	5.4-7
5.4.3 Thresholds of Significance	5.4-12
5.4.4 Impact Assessment Methodology.....	5.4-12
5.4.5 Environmental Impact Analysis	5.4-13
5.4.6 Cumulative Impact Analysis	5.4-19
5.5 Cultural Resources – Historical Resources	5.5-1
5.5.1 Existing Conditions	5.5-1
5.5.2 Regulatory Setting.....	5.5-13
5.5.3 Thresholds of Significance	5.5-21
5.5.4 Impact Assessment Methodology.....	5.5-21
5.5.5 Environmental Impact Analysis	5.5-22
5.5.6 Cumulative Impact Analysis	5.5-38
5.6 Geology and Soils	5.6-1
5.6.1 Existing Conditions	5.6-1
5.6.2 Regulatory Setting.....	5.6-12
5.6.3 Thresholds of Significance	5.6-16

5.6.4	Impact Assessment Methodology	5.6-16
5.6.5	Environmental Impact Analysis	5.6-17
5.6.6	Cumulative Impact Analysis	5.6-27
5.7	Greenhouse Gas Emissions	5.7-1
5.7.1	Existing Conditions	5.7-1
5.7.2	Regulatory Setting	5.7-5
5.7.3	Thresholds of Significance	5.7-17
5.7.4	Impact Assessment Methodology	5.7-17
5.7.5	Environmental Impact Analysis	5.7-18
5.7.6	Cumulative Impact Analysis	5.7-28
5.8	Hazards and Hazardous Materials	5.8-1
5.8.1	Existing Conditions	5.8-1
5.8.2	Regulatory Setting	5.8-7
5.8.3	Thresholds of Significance	5.8-14
5.8.4	Impact Assessment Methodology	5.8-15
5.8.5	Environmental Impact Analysis	5.8-15
5.8.6	Cumulative Impact Analysis	5.8-24
5.9	Hydrology and Water Quality	5.9-1
5.9.1	Existing Conditions	5.9-1
5.9.2	Regulatory Setting	5.9-10
5.9.3	Thresholds of Significance	5.9-21
5.9.4	Impact Assessment Methodology	5.9-22
5.9.5	Environmental Impact Analysis	5.9-22
5.9.6	Cumulative Impact Analysis	5.9-33
5.10	Land Use and Planning	5.10-1
5.10.1	Existing Conditions	5.10-1
5.10.2	Regulatory Setting	5.10-4
5.10.3	Thresholds of Significance	5.10-28
5.10.4	Methodology	5.10-28
5.10.5	Environmental Impact Analysis	5.10-29
5.10.6	Cumulative Impacts	5.10-32
5.11	Noise and Vibration	5.11-1
5.11.1	Existing Conditions	5.11-1
5.11.2	Regulatory Setting	5.11-10
5.11.3	Thresholds of Significance	5.11-17
5.11.4	Impact Assessment Methodology	5.11-17
5.11.5	Environmental Impact Analysis	5.11-19
5.11.6	Cumulative Impact Analysis	5.11-30
5.12	Recreation	5.12-1
5.12.1	Existing Conditions	5.12-1
5.12.2	Regulatory Setting	5.12-3
5.12.3	Thresholds of Significance	5.12-6
5.12.4	Impact Assessment Methodology	5.12-6
5.12.5	Environmental Impact Analysis	5.12-7
5.12.6	Cumulative Impact Analysis	5.12-9
5.13	Transportation	5.13-1
5.13.1	Existing Conditions	5.13-1
5.13.2	Regulatory Setting	5.13-10
5.13.3	Thresholds of Significance	5.13-16
5.13.4	Impact Assessment Methodology	5.13-16

5.13.5	Environmental Impact Analysis	5.13-18
5.13.6	Cumulative Impact Analysis	5.13-25
5.14	Tribal Cultural Resources.....	5.14-1
5.14.1	Existing Conditions	5.14-2
5.14.2	Regulatory Setting.....	5.14-5
5.14.3	Thresholds of Significance	5.14-7
5.14.4	Impact Assessment Methodology.....	5.14-8
5.14.5	Environmental Impact Analysis	5.14-9
5.14.6	Cumulative Impact Analysis	5.14-13
5.15	Utilities and Service Systems.....	5.15-1
5.15.1	Existing Conditions	5.15-1
5.15.2	Regulatory Setting.....	5.15-4
5.15.3	Thresholds of Significance	5.15-8
5.15.4	Impact Assessment Methodology.....	5.15-9
5.15.5	Environmental Impact Analysis	5.15-9
5.15.6	Cumulative Impacts.....	5.15-18
5.16	Mandatory Findings of Significance	5.16-1
5.16.1	Environmental Evaluation	5.16-1
Chapter 6.	Alternatives Analysis.....	6-1
6.1	Introduction to the Alternatives Analysis.....	6-1
6.2	Alternatives Selection.....	6-2
6.2.1	Project Summary	6-2
6.2.2	Project Objectives.....	6-3
6.2.3	Significant Impacts Resulting from the Project.....	6-4
6.2.4	Alternatives Development and Analysis Process	6-6
6.3	Alternatives Considered But Eliminated.....	6-7
6.3.1	Alternative Projects from the Design Competition.....	6-7
6.3.2	Alternative Location	6-8
6.4	Alternatives Impacts Analysis.....	6-9
6.4.1	No Project/No Build Alternative	6-10
6.4.2	Alternative 1: Renovate Page Museum Only	6-17
6.4.3	Alternative 2: Maintain Central Atrium Pleistocene Garden.....	6-27
6.4.4	<u>Refined</u> Alternative 3: Adjusted Footprint to Reduce Contact with Page Museum and Expand Central Green	6-38
6.5	Environmentally Superior Alternative	6-59
Chapter 7.	Other CEQA Considerations.....	7-1
7.1	Growth-Inducing Impacts.....	7-1
7.2	Significant and Unavoidable Impacts.....	7-2
7.3	Significant Irreversible Environmental Changes.....	7-3
7.3.1	Commitment to Resources.....	7-4
7.3.2	Environmental Accidents	7-5
7.3.3	Conclusion	7-6
7.4	Environmental Effects Found Not to be SIGNIFICANT	7-6
7.4.1	Agricultural and Forestry Resources	7-6
7.4.2	Energy.....	7-7
7.4.3	Mineral Resources	7-12
7.4.4	Population and Housing.....	7-12
7.4.5	Public Services	7-13

7.4.6	Wildfire.....	7-16
Chapter 8.	References and Report Preparation	8-1
8.1	General References.....	8-1
8.2	Resource Area References.....	8-3
8.2.1	Aesthetics	8-3
8.2.2	Air Quality	8-4
8.2.3	Biological Resources	8-6
8.2.4	Cultural Resources – Archaeological Resources	8-8
8.2.5	Cultural Resources – Historical Resources.....	8-8
8.2.6	Geology and Soils.....	8-10
8.2.7	Greenhouse Gas Emissions	8-13
8.2.8	Hazards and Hazardous Materials	8-15
8.2.9	Hydrology and Water Quality	8-16
8.2.10	Land Use.....	8-18
8.2.11	Noise and Vibration.....	8-18
8.2.12	Recreation.....	8-19
8.2.13	Transportation.....	8-20
8.2.14	Tribal Cultural Resources	8-20
8.2.15	Utilities	8-21
8.3	Report Preparation.....	8-22
8.3.1	CEQA Lead Agency	8-22
8.3.2	Consultant Support	8-22

Appendices

Appendix A.	Notice of Preparation and Summary Comment Matrix
Appendix B.	La Brea Tar Pits Loops and Lenses Master Plan and Concept Design Summary Booklet
Appendix C.	Air Quality and Greenhouse Gas Technical Report
Appendix D.	Historic Resources Technical Report
Appendix E.	Geology and Soil Discipline Report
Appendix F.	Paleontological Resources Technical Report
Appendix G.	Methane Survey Report
Appendix H.	Low Impact Development and Hydrology Report
Appendix I.	Noise and Ground Vibration Technical Report
Appendix J.	Final Transportation Assessment
Appendix K.	Service Request Correspondence Letters
Appendix L.	Energy Analysis Report
Appendix M.	Resumes of Key EIR Personnel
Appendix N.	<u>Tree Survey for the La Brea Tar Pits Site</u>

Figures

Figure 3-1. Project vicinity map.	3-2
Figure 3-2. Project location map.	3-3
Figure 3-3. Existing site–Page Museum and Hancock Park.	3-6
Figure 3-4. Conceptual site plan.	3-9
Figure 3-5. Proposed museum ground-floor building program.	3-10
Figure 3-6. Visual simulation: Page Museum renovation.	3-11
Figure 3-7. Visual simulation: Wilshire Gateway.	3-14
Figure 3-8. Visual simulation: Pit 10 and Pit 91 outdoor classroom.	3-15
Figure 3-9. Visual simulation: Pit 91 interior.	3-16
Figure 3-10. Proposed landscaping concept.	3-17
Figure 3-11. Visual simulation: pedestrian pathway.	3-18
Figure 3-12. Landscape concept: Lake Pit and Pleistocene bioswale.	3-20
Figure 3-13. Landscape concept: late Pleistocene-Holocene.	3-21
Figure 3-14. Landscape concept: Holocene and freshwater riparian.	3-22
Figure 4-1. Existing site photographs: Page Museum.	4-4
Figure 4-2. Existing pits and tar seeps.	4-5
Figure 4-3. Cumulative development scenario project locations.	4-16
Figure 5.3-1. Vegetation communities on the project site.	5.3-2
Figure 5.3-2. Aquatic resources on the project site.	5.3-10
Figure 5.6-1. Fossil collection localities within Hancock Park.	5.6-7
Figure 5.8-1. Tar seeps within the project site.	5.8-5
Figure 5.9-1. Santa Monica Bay Watershed Management Area.	5.9-2
Figure 5.9-2. Ballona Creek watershed area.	5.9-3
Figure 5.9-3. Existing hydrology and drainage area map.	5.9-6
Figure 5.9-4. Los Angeles Coastal Plain Groundwater Basin.	5.9-8
Figure 5.9-5. Proposed drainage plan.	5.9-29
Figure 5.10-1. Existing City land use designations within the project vicinity.	5.10-2
Figure 5.10-2. Existing City zoning designations within the project vicinity.	5.10-3
Figure 5.11-1. Noise measurement locations.	5.11-7
Figure 5.11-2. Land use compatibility for exterior community noise exposure.	5.11-12
Figure 5.13-1. Transportation study area.	5.13-2
Figure 5.13-2. Roadway classifications near the project site.	5.13-3
Figure 5.13-3. Modal priorities near the project site.	5.13-4
Figure 6-1. Alternative 1: Museum plan and section diagrams.	6-18
Figure 6-2. Alternative 2: Museum plan and section diagrams.	6-28
Figure 6-3. <u>Original</u> Alternative 3: Museum plan and section diagrams.	6-41
Figure 6-4. <u>Refined</u> Alternative 3: Hancock Park site plan.	6-42
Figure 6-5. <u>Refined</u> Alternative 3: Aerial illustration.	6-43
Figure 6-6. <u>Refined</u> Alternative 3: Courtyard.	6-44

Tables

Table 1-1. Document Review Locations.....	1-5
Table 2-1. Project Components Summary	2-3
Table 2-2. Summary of Impacts and Mitigation Measures.....	2-8
Table 2-3. Comparison of Impacts Among Alternatives	2-61
Table 3-1. Project Components Summary	3-8
Table 3-2. Agency Approval Requirements	3-26
Table 4-1. Geographic Scope of Cumulative Impact Analysis.....	4-10
Table 4-2. SCAG Regional Population, Housing, and Employment Growth Projections.....	4-12
Table 4-3. Cumulative Development Scenario Project List.....	4-13
Table 5-1. Summary of Environmental Impacts Analysis	5-1
Table 5.1-1. County of Los Angeles General Plan, Relevant Goals and Policies	5.1-6
Table 5.1-2. City of Los Angeles General Plan, Relevant Policies and Objectives.....	5.1-7
Table 5.1-3. Wilshire Community Plan, Relevant Policies and Objectives.....	5.1-9
Table 5.2-1. State and Federal Ambient Air Quality Standards.....	5.2-2
Table 5.2-2. Summary of Ambient Air Quality in the Central Los Angeles Area.....	5.2-8
Table 5.2-3. Consistency with Assumptions of the AQMP	5.2-20
Table 5.2-4. Unmitigated Daily Construction Emissions Summary.....	5.2-22
Table 5.2-5. Unmitigated Daily Operational Emissions Summary.....	5.2-23
Table 5.2-6. Construction Localized Significance Thresholds Analysis	5.2-24
Table 5.2-7. Operational Localized Significance Thresholds Analysis	5.2-24
Table 5.2-8. Construction Health Risk Assessment Results – Unmitigated	5.2-25
Table 5.2-9. Operational Health Risk Assessment Results – Unmitigated.....	5.2-25
Table 5.2-10. Construction Health Risk Assessment Results – Mitigated.....	5.2-27
Table 5.3-1. Plant Species Observed at the La Brea Project Site	5.3-3
Table 5.3-2. Bird Species Observed at the La Brea Project Site.....	5.3-5
Table 5.3-3. Special-Status Plants Reported in Vicinity of the La Brea Tar Pits Project Site.....	5.3-6
Table 5.3-4. Special-Status Fauna Reported in Vicinity of the La Brea Tar Pits Project Site.....	5.3-6
Table 5.4-1. Archaeological Sites within 0.5 mile of the Project Site	5.4-5
Table 5.5-1. Previously Identified Historic Resources within CEQA APE.....	5.5-4
Table 5.5-2. Field Survey Results.....	5.5-5
Table 5.5-3. Character-Defining Features and Components, La Brea Tar Pits Historic District.....	5.5-7
Table 5.5-4. <i>Standards for Rehabilitation</i> , Recommended Treatments for Historic Building Sites	5.5-18
Table 5.5-5. <i>Standards for Rehabilitation</i> , Recommended Treatments for Setting (Districts).....	5.5-19
Table 5.5-6. Potential Impacts on Character-Defining Features, La Brea Tar Pits Historic District....	5.5-25
Table 5.5-7. Potential Impacts to Character-Defining Features, Page Museum Renovations	5.5-29
Table 5.6-1. Major Historic Earthquakes in Southern California	5.6-2
Table 5.6-2. Sample of Completed Local Paleontological Resources Monitoring Projects	5.6-5
Table 5.6-3. Museum of Natural History Fossil Localities within and near the Project Site.....	5.6-8
Table 5.6-4. Geologic Units and Paleontological Potential Underlying the Project Site.....	5.6-9
Table 5.7-1. Global Warming Potentials	5.7-3
Table 5.7-2. California Greenhouse Gas Inventory	5.7-4
Table 5.7-3. Estimated Annual Greenhouse Gas Emissions during Project Construction.....	5.7-19
Table 5.7-4. Estimated Annual Greenhouse Gas Emissions during Project Operation	5.7-19
Table 5.8-1. Existing Schools in the Project Vicinity.....	5.8-6
Table 5.9-1. Existing Drainage Area Descriptions	5.9-5

Table 5.9-2. Existing and Proposed Drainage Comparison	5.9-30
Table 5.10-1. Existing Surrounding Land Uses in the Project Vicinity.....	5.10-4
Table 5.10-2. County of Los Angeles 2035 General Plan Element Summary.....	5.10-6
Table 5.10-3. City of Los Angeles General Plan Framework Element and Chapter Summary.....	5.10-8
Table 5.10-4. Preliminary Project Policy Consistency Evaluation—County of Los Angeles General Plan ..	5.10-11
Table 5.10-5. Preliminary Project Policy Consistency Evaluation—City of Los Angeles General Plan (Framework Element Chapters, Conservation Element, and the Mobility Plan 2035)....	5.10-18
Table 5.10-6. Preliminary Project Consistency Evaluation—Wilshire Community Plan	5.10-24
Table 5.10-7. Preliminary Project Consistency Evaluation—SCAG 2020-2045 RTP/SCS	5.10-28
Table 5.10-8. Applicable Plans and Policies with which the Project Would Be Potentially Inconsistent.....	5.10-30
Table 5.11.1. Average Human Ability to Perceive Changes in Sound Levels	5.11-2
Table 5.11.2. Sound Levels of Representative Sounds and Noises	5.11-3
Table 5.11.3. Human Response to Ground Vibration.....	5.11-4
Table 5.11.4. Noise Monitoring Locations	5.11-8
Table 5.11.5. Measured Existing Ambient Noise Levels.....	5.11-8
Table 5.11.6. Existing Roadway Traffic Noise Levels	5.11-9
Table 5.11.7. Construction Vibration Impact Criteria for Building Damage	5.11-10
Table 5.11.8. County of Los Angeles Exterior Operational Noise Standards	5.11-13
Table 5.11.9. County of Los Angeles Construction Noise Limits	5.11-14
Table 5.11.10. City of Los Angeles Presumed Ambient Noise Levels.....	5.11-16
Table 5.11.11. Off-site Construction Traffic Noise Levels	5.11-19
Table 5.11.12. Noise Levels for Common Construction Equipment	5.11-20
Table 5.11.13. Estimated Construction Noise Levels at Nearby Sensitive Receptors	5.11-21
Table 5.11.14. Estimated Construction Noise Levels at Nearby Sensitive Receptors after Mitigation.....	5.11-22
Table 5.11.15. Estimated Noise Levels from Mechanical Equipment.....	5.11-23
Table 5.11.16. Estimated Noise Levels from Parking Activities	5.11-24
Table 5.11.17. Estimated Noise Levels from Loading and Trash Compactor Operations.....	5.11-25
Table 5.11.18. Estimated Noise Levels from Outdoor Uses	5.11-25
Table 5.11.19. Composite Operational Noise Impacts	5.11-27
Table 5.11-20. Construction Vibration Impacts – Building Damage	5.11-28
Table 5.11-21. Construction Vibration Impacts – Human Annoyance.....	5.11-28
Table 5.12-1. Parks and Recreational Facilities Surrounding the Project Site	5.12-2
Table 5.12-2. County of Los Angeles General Plan, Relevant Policies and Objectives.....	5.12-3
Table 5.12-3. City of Los Angeles General Plan, Relevant Policies and Objectives.....	5.12-5
Table 5.12-4. Wilshire Community Plan Objectives and Policies Relevant to the Proposed Project...	5.12-6
Table 5.13-1. Study Intersections	5.13-6
Table 5.13-2. Study Roadway Segments	5.13-7
Table 5.13-3. Existing 2022 (Adjusted) Daily Segment Volumes.....	5.13-8
Table 5.13-4. Net Vehicle Trip Generation Estimate	5.13-17
Table 5.13-5. Related Projects Trip Generation	5.13-25
Table 5.15-1. LADWP Water Demand and Supply Projections through Year 2045.....	5.15-1
Table 5.15-2. Remaining Disposal Capacity for Los Angeles County Class III Landfills Serving the Project Site	5.15-4
Table 5.15-3. Estimated Wastewater Generation (per capita/attendance)	5.15-15
Table 5.15-4. Estimated Construction Solid Waste Generation	5.15-16

Table 5.15-5. Estimated Operational Solid Waste Generation	5.15-17
Table 5.16-1. Summary of Impacts and Significance after Mitigation for Biological Resources and Cultural Historical Resources	5.16-2
Table 6-1. Project Components Summary	6-2
Table 6-2. Summary of Impacts Resulting from the Project	6-4
Table 6-3. Significant and Unavoidable Impacts Resulting from the Project.....	6-5
Table 6-4. Attainment of Project Objectives—No Project/No Build Alternative.....	6-11
Table 6-5. Attainment of Project Objectives—Alternative 1 Renovate Page Museum Only	6-19
Table 6-6. Overview of Alternative 2 Project Components Different from the Project	6-27
Table 6-7. Attainment of Project Objectives—Alternative 2, Maintain Central Atrium Pleistocene Garden	6-29
Table 6-8. Overview of Alternative 3 Project Components Different from the Project	6-45
Table 6-9. Attainment of Project Objectives—Alternative 3, Adjusted Footprint to Reduce Contact with Page Museum and Expand Central Green	6-45
Table 6-10. Comparison of Impacts Among Alternatives	6-59
Table 7-1. Significant and Unavoidable Impacts Resulting from the Project.....	7-2
Table 8-1. Consultant Personnel Involved in EIR Preparation	8-23

This page intentionally left blank.

ACRONYMS AND ABBREVIATIONS

µg/g	microgram(s) per gram
µg/m ³	microgram(s) per cubic meter
µPa	micropascal(s)
2035 General Plan	County of Los Angeles 2035 General Plan
AAM	annual arithmetic mean
AB	Assembly Bill
ADA	Americans with Disabilities Act
AHERA	Asbestos Hazard Emergency Response Act
Air Basin	South Coast Air Basin
APE	area of potential effects
APN	Assessor's Parcel Number
AQMP	Air Quality Management Plan
AR	Assessment Report
ARG	Architectural Resources Group
AR-TCR	Archaeological Resource-Tribal Cultural Resource
ASCE	American Society of Civil Engineers
Azusa Land Reclamation	Azusa Land Reclamation Company Landfill
B.P.	years before present
Basin Plan	<i>Water Quality Control Plan, Los Angeles Region: Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties</i>
bgs	below ground surface
BMP	best management practice
Building and Safety	County of Los Angeles Department of Public Works Building and Safety
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
cal	calibrated
CAL FIRE	California Department of Forestry and Fire Protection
Cal/OSHA	California Division of Occupational Safety and Health Administration
CalEEMod	California Emission Estimator Model
CalEPA	California Environmental Protection Agency
CalGEM	State of California Department of Conservation, Geologic Energy Management Division
CALGreen	California Green Building Standards Code

CalRecycle	California Department of Resources Recycling and Recovery
Caltrans	California Department of Transportation
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CAT	California Action Team
CBC	California Building Code
CCAA	California Clean Air Act
CCI	Code Consultants, Inc.
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CERS	California Environmental Reporting System
CESA	California Endangered Species Act
CFGF	California Fish and Game Code
CFR	Code of Federal Regulations
CGS	California Geological Survey
CH ₄	methane
CHL	California Historical Landmark
CHR	California Historical Resource
CHRIS	California Historical Resources Information System
City	City of Los Angeles
City of L.A. Thresholds Guide	<i>L.A. CEQA Thresholds Guide: Your Resource for Preparing CEQA Analyses in Los Angeles</i>
City RAP	City of Los Angeles Department of Recreation and Parks
CIWMP	Countywide Integrated Waste Management Plan
CLABC	County of Los Angeles Building Code
CMP	Congestion Management Program
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
<u>CNRA</u>	<u>California Natural Resources Agency</u>
CO	carbon monoxide
CO ₂	carbon dioxide

CO ₂ e	carbon dioxide equivalent
County	County of Los Angeles
County Code	Los Angeles County Code
County Public Works	Los Angeles County Department of Public Works
CPHI	California Point of Historical Interest
CPS-SLIC	Cleanup Program Site – Spills, Leaks, Investigations and Cleanups
CRHR	California Register of Historical Resources
CTMP	construction traffic management plan
CUPA	Certified Unified Program Agency
CWA	Clean Water Act
CWC	California Water Code
dB	decibel(s)
dBA	A-weighted decibel(s)
dbh	diameter at breast height
DDT	dichlorodiphenyltrichloroethane
DPM	diesel particulate matter
DSOD	Division of Safety of Dams
DTSC	California Department of Toxic Substance Control
DWR	California Department of Water Resources
EDR	Environmental Data Resources, Inc.
EIR	environmental impact report
Emergency Response Plan	Los Angeles County Operational Area Emergency Response Plan
EO	Executive Order
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
EWMP	Enhanced Watershed Management Program
FAR	floor area ratio
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rate Map
Foundation	Los Angeles County Museum of Natural History Foundation
FTA	Federal Transit Administration
General Plan	<i>Los Angeles County General Plan 2035</i>

GHG	greenhouse gas
gpd	gallons per day
gsf	gross square feet
GWh	gigawatt-hours
GWP	global warming potential
H ₂ S	hydrogen sulfide
HABS	Historic American Buildings Survey
HASP	Health and Safety Plan
HCM	Historic-Cultural Monument
HFC	hydrofluorocarbon
HPO	Historic Preservation Ordinance
HPOZ	Historic Preservation Overlay Zone
HQTA	high-quality transit area
HRA	health risk assessment
HSC	California Health and Safety Code
HVAC	heating, ventilation, and air conditioning
Hydrology Manual	County of Los Angeles Department of Public Works Hydrology Manual
I-10	Interstate 10
IBC	International Building Code
in/sec	inch(es) per second
IPCC	Intergovernmental Panel on Climate Change
IRWMP	Integrated Regional Water Management Plan
KHSRA	Kenneth Hahn State Recreation Area
KPFF	KPFF Consulting Engineers
kWh	kilowatt-hours
L ₀	highest ambient noise level that occurred at the site
L _{1.7}	ambient noise level exceeded for 1.7% of the time of the measurement duration
L ₂₅	ambient noise level exceeded for 25% of the time of the measurement duration
L ₅₀	ambient noise level exceeded for 50% of the time of the measurement duration
L _{8.3}	ambient noise level exceeded for 8.3% of the time of the measurement duration
LA County Parks	Los Angeles County Department of Parks and Recreation

LACFCD	Los Angeles County Flood Control District
LACMA	Los Angeles County Museum of Art
LADOT	Los Angeles Department of Transportation
LADWP	Los Angeles Department of Water and Power
LAFD	Los Angeles Fire Department
LAMC	City of Los Angeles Municipal Code
LAPD	Los Angeles Police Department
LARWQCB	Los Angeles Regional Water Quality Control Board
LASAN	Los Angeles Sanitation and Environment
LCFS	Low Carbon Fuel Standard
L _{dn}	Day-Night Sound Level
LEL	Lower Explosive Limit
L _{eq}	Equivalent noise level
LID	Low Impact Development
L _{max}	root-mean-squared maximum noise level
LOS	Level of Service
LST	localized significance threshold
LUST	leaking underground storage tank
LV	Vibration Velocity Level
L _{xx}	percentile-exceeded sound level
m	meter(s)
MATES V	Multiple Air Toxics Exposure Study V
MBTA	Migratory Bird Treaty Act
Metro	Los Angeles County Metropolitan Transportation Authority
mg/cm ²	milligram(s) per square centimeter
MLD	most likely descendent
MMT CO ₂ e	million metric tons carbon dioxide equivalent
mph	miles per hour
MPO	Metropolitan Planning Organization
MS4	Municipal Separate Storm Sewer System
MTCO ₂ e	metric tons CO ₂ e
Museum of Natural History	County of Los Angeles Museum of Natural History
M _w	Moment Magnitude Scale

MWD	Metropolitan Water District of Southern California
N ₂ O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NEPA	National Environmental Policy Act
NESHAP	National Emission Standards for Hazardous Air Pollutants
NHMLAC	Natural History Museums of Los Angeles County
NHPA	National Historic Preservation Act
NO ₂	nitrogen dioxide
NOP	Notice of Preparation
NO _x	oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
O ₃	ozone
OEHHA	Office of Environmental Health Hazard Assessment
OEM	Los Angeles County Office of Emergency Management
OPR	Governor's Office of Planning and Research
OSHA	Occupational Safety and Health Administration
Page Museum	George C. Page Museum
PAH	polycyclic aromatic hydrocarbon
PCB	polychlorinated biphenyls
PCE	perchloroethylene
PCE	perchloroethylene
PF	Public Facilities
PFC	perfluorocarbons
PM	particulate matter
PM ₁₀	particulate matter 10 microns or less in diameter
PM _{2.5}	particulate matter 2.5 microns or less in diameter
Porter-Cologne Act	Porter-Cologne Water Quality Control Act
ppb	parts per billion
PPE	personal protective equipment
ppm	parts per million
ppmv	parts per million volume

PPV	peak particle velocity
PRC	Public Resources Code
PRMP	Paleontological Resources Management Plan
project	La Brea Tar Pits Master Plan
PROW	Public Right-of-Way
PVS	peak vector sum
RCRA	Resource Conservation and Recovery Act
RMS	Root Mean Square
ROC	reactive organic gases
RPS	Renewable Portfolio Standard
RTP	Regional Transportation Plan
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
RWQCB	Regional Water Quality Control Board
SAFE	Safer Affordable Fuel-Efficient
SB	Senate Bill
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCCIC	South Central Coastal Information Center
SCOTUS	Supreme Court of the United States
SCS	Sustainable Community Strategy
SEA	Significant Ecological Area
sf	square feet or square foot
SF ₆	sulfur hexafluoride
SFHA	Special Flood Hazard Area
SGMA	Sustainable Groundwater Management Act
SIP	State Implementation Plan
SMP	Soil Management Plan
SNAP	Supplemental Nutrition Assistance Program
SO ₂	sulfur dioxide
SoCalGas	Southern California Gas Company
SO _x	sulfur oxides
SQMP	stormwater quality management program
SRA	source receptor area

SVP	Society of Vertebrate Paleontology
SWCA	SWCA Environmental Consultants
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminant
Tanner Air Toxics Act	Toxic Air Contaminant Identification and Control Act of 1983 (Assembly Bill 1807)
Tar Pits	La Brea Tar Pits
TCE	trichloroethylene
TDM	Transportation Demand Management
TMDL	Total Maximum Daily Loads
Transportation Assessment	<i>La Brea Tar Pits Master Plan Final Transportation Assessment</i>
TSCA	Toxic Substances Control Act
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
USPS	U.S. Postal Service
UST	underground storage tank
UWMP	urban water management plan
VC	vinyl chloride
VdB	vibration velocity decibels
VMТ	vehicle miles traveled
VOC	volatile organic compound
WDR	Waste Discharge Requirement
WEAP	Worker Environmental Awareness Program
WMA	Watershed Management Area
WMC	Watershed Management Committee
ZEV	zero-emission vehicle