

Draft Environmental Impact Report

ArtCenter College of Design

Master Plan

State Clearinghouse No. 2016091009



City of Pasadena
Planning & Community
Development Department

October 2017

Table of Contents

	<u>Page</u>
I. EXECUTIVE SUMMARY	I-1
II. INTRODUCTION	II-1
III. PROJECT DESCRIPTION	III-1
IV. ENVIRONMENTAL IMPACT ANALYSIS	IV-1
A. Aesthetics	IV.A-1
B. Air Quality	IV.B-1
C. Biological Resources	IV.C-1
D. Cultural and Tribal Cultural Resources	IV.D-1
E. Geology and Soils.....	IV.E-1
F. Greenhouse Gas Emissions	IV.F-1
G. Hazards and Hazardous Materials.....	IV.G-1
H. Hydrology and Water Quality	IV.H-1
I. Land Use	IV.I-1
J. Noise	IV.J-1
K. Public Services—Fire Protection	IV.K-1
L. Traffic.....	IV.L-1
M.1 Utilities and Service Systems—Water Supply and Infrastructure.....	IV.M.1-1
M.2 Utilities and Service Systems—Wastewater	IV.M.2-1
M.3 Utilities and Service Systems—Solid Waste	IV.M.3-1
M.4 Utilities and Service Systems—Energy.....	IV.M.4-1
V. ALTERNATIVES.....	V-1
A. Alternative 1: No Project/No Build Alternative.....	V-11
B. Alternative 2: Reduced Building Height Alternative.....	V-17
C. Alternative 3: No Encroachment Over and Under the Metro Right-of-Way Alternative.....	V-35
D. Alternative 4: Change in Location of the New Commuter Services and Facilities Hub on the Hillside Campus to the North Lot Alternative	V-47
E. Environmentally Superior Alternative.....	V-54

	<u>Page</u>
VI. OTHER CEQA CONSIDERATIONS	VI-1
VII. REFERENCES	VII-1
VIII. ACRONYMS AND ABBREVIATIONS	VIII-1
IX. LIST OF PREPARERS	IX-1

List of Appendices

Appendix

A Initial Study, Notice of Preparation (NOP), and NOP Comment Letters

A.1 Initial Study

A.2 Notice of Preparation (NOP)

A.3 NOP Comment Letters

B Lighting Study

C Air Quality and Greenhouse Gas Emissions

D Biological Resource Assessment

E Cultural Resources

E.1 Historical Resource Technical Report

E.2 SCCIC Records Search Results

E.3 AB 52 Consultation Request Letter

E.4 AB 52 Consultation Response Letter

E.5 City Response as Part of AB 52 Consultation

F Geotechnical Reports

F.1 Soils and Geology Report

F.2 Fault Rupture Hazard Study

F.3 Review of Fault Rupture Hazard Study Report

G Phase I Environmental Site Assessments

G.1 Phase I ESA (Hillside Campus)

G.2 Phase I ESA (South Campus)

H Water Resources Technical Report

I Land Use Project Consistency Analysis

J Noise Calculation Worksheets

K Pasadena Fire Department Response Letter

Appendix

L Traffic Impact Analyses

L.1 TIA CEQA Evaluation

L.2 TIA Outside of CEQA Analysis

**M Water Supply Assessment and Utility Infrastructure Technical Report:
Water**

M.1 Water Supply Assessment

M.2 Utility Infrastructure Technical Report: Water

N Utility Infrastructure Technical Report: Wastewater

O Energy Report and Calculations

O.1 Utility Infrastructure Technical Report: Energy

O.2 Energy Use Calculations

List of Figures

<u>Figure</u>	<u>Page</u>
III-1 Regional Map.....	III-3
III-2 Local Map.....	III-4
III-3 Aerial Photograph of Project Site and Surroundings—Hillside Campus	III-5
III-4 Aerial Photograph of the Project Site and Surroundings—South Campus	III-6
III-5 Existing Site Plan—Hillside Campus	III-8
III-6 Existing Site Plan—South Campus.....	III-10
III-7 Proposed Project—Hillside Campus Phase I.....	III-15
III-8 Proposed Project—Hillside Campus Phase II.....	III-18
III-9 Proposed Project—South Campus Phase I.....	III-19
III-10 Proposed Project—South Campus Phase II.....	III-24
IV-1 Location of Related Projects	IV-12
IV.A-1 Photo Location Map (Hillside Campus).....	IV.A-10
IV.A-2 Views of the North Lot	IV.A-11
IV.A-3 Views of MacMinn Drive	IV.A-12
IV.A-4 Views of the Sinclair Pavilion	IV.A-13
IV.A-5 Views of the South Building	IV.A-14
IV.A-6 Views of the South Lot.....	IV.A-15
IV.A-7 Photo Location Map (South Campus).....	IV.A-16
IV.A-8 Views of the 1111 Building and Parking Lot to the North.....	IV.A-17
IV.A-9 Views of the 988 Parcel	IV.A-18
IV.A-10 Views of the 950 Parcel	IV.A-19
IV.A-11 Views of the 888 Parcel	IV.A-20
IV.A-12 Views of the 870 Building	IV.A-21

<u>Figure</u>	<u>Page</u>
IV.A-13 View of the San Gabriel Mountains Looking North/Northeast from Arroyo Parkway	IV.A-22
IV.A-14 Existing and Proposed Views (Hillside Campus)—Looking Southeast along St. Katherine Drive	IV.A-35
IV.A-15 Existing and Proposed Views (South Campus)—Looking Northeast from Grace Terrace	IV.A-36
IV.A-16 Existing and Proposed Views (South Campus)—988 Building Looking Northeast from Raymond Avenue and Glenarm Street.....	IV.A-37
IV.A-17 Existing and Proposed Views (South Campus)—888 and 988 Buildings Looking South along Raymond Avenue	IV.A-38
IV.A-18 Existing and Proposed Views (South Campus)—1111 and 988 Buildings Looking Northwest from SR-110	IV.A-39
IV.A-19 Existing and Proposed Views (South Campus)—1111, 1101, and 988 Buildings Looking Northwest from SR-110	IV.A-40
IV.B-1 SCAQMD Source Receptor Areas	IV.B-18
IV.B-2 MATES IV Total Cancer Risk for Project Area	IV.B-21
IV.B-3 Air Quality Sensitive Receptors Locations—Hillside Campus	IV.B-23
IV.B-4 Air Quality Sensitive Receptors Locations—South Campus	IV.B-24
IV.C-1 Biological Resources within the BSA at the Hillside Campus	IV.C-7
IV.C-2 Wetland Map (Southern Portion of the BSA)	IV.C-13
IV.E-1 Regional Fault Map.....	IV.E-9
IV.E-2 Local Fault Map	IV.E-12
IV.E-3 Local Geologic Map (South Campus)	IV.E-13
IV.E-4 Local Seismic Hazard Map (Hillside Campus)	IV.E-24
IV.E-5 Landslide Inventory Map.....	IV.E-26
IV.E-6 Local Seismic Hazard Map (South Campus)	IV.E-28
IV.H-1 Los Angeles River Watershed Map	IV.H-14
IV.H-2 Subwatershed Map.....	IV.H-16
IV.H-3 Existing On-Site Drainage Pattern (Hillside Campus).....	IV.H-17
IV.H-4 Existing On-Site Drainage Pattern (South Campus)	IV.H-20

<u>Figure</u>	<u>Page</u>
IV.H-5 Groundwater Basins Map	IV.H-24
IV.H-6 Dam Inundation Map	IV.H-26
IV.H-7 Proposed On-Site Drainage Pattern (Hillside Campus)	IV.H-34
IV.H-8 Proposed On-Site Drainage Pattern (South Campus)	IV.H-36
IV.I-1 General Plan Land Use Designation (Hillside Campus)	IV.I-2
IV.I-2 General Plan Land Use Designation (South Campus).....	IV.I-3
IV.I-3 Zoning Map (Hillside Campus).....	IV.I-7
IV.I-4 Zoning Map (South Campus).....	IV.I-8
IV.J-1 Noise Monitoring Locations (South Campus).....	IV.J-10
IV.J-2 Noise Monitoring Locations (Hillside Campus)	IV.J-11
IV.K-1 Fire Stations in the Vicinity of the Project Site	IV.K-4
IV.M.3-1 County of Los Angeles Landfills.....	IV.M.3-11
V-1 Alternative 2 Conceptual Massing for the 1101 and 988 Buildings	V-19
V-2 Alternative 2 Conceptual Massing for the 888 Buildings.....	V-21
V-3 Oblique Aerial View of the Conceptual massing on the South Campus Looking Northwest.....	V-23
V-4 Oblique Aerial View of the Conceptual massing on the South Campus Looking Southeast.....	V-24

List of Tables

<u>Table</u>	<u>Page</u>
I-1	Summary of Environmental Impacts, Mitigation Measures, and Residual Impacts..... I-11
IV-1	Pasadena General Plan Update: Development Capacities (2035) IV-7
IV-2	List of Related Projects IV-8
IV.B-1	Ambient Air Quality Standards IV.B-3
IV.B-2	Summary of Ambient Air Quality in the Project Vicinity IV.B-19
IV.B-3	Estimated Daily Regional Operational Criteria Pollutant Emissions—Existing Campuses 2016..... IV.B-25
IV.B-4	SCAQMD Air Quality Significance Thresholds IV.B-31
IV.B-5	Estimate of Regional Project Construction Emissions (pounds per day)..... IV.B-35
IV.B-6	Estimate of Localized Project Construction Emissions (pounds per day)..... IV.B-36
IV.B-7	Project Regional Operational Emissions— At Project Buildout (2032) (pounds per day)..... IV.B-38
IV.B-8	Project Localized Operational Emissions—At Project Buildout (2032) (pounds per day)..... IV.B-39
IV.E-1	Seismic Source Summary—Hillside Campus IV.E-10
IV.E-2	Seismic Source Summary—South Campus..... IV.E-11
IV.F-1	Description of Identified GHGs..... IV.F-4
IV.F-2	Atmospheric Lifetimes and Global Warming Potentials..... IV.F-5
IV.F-3	California GHG Inventory (million metric tons CO ₂ e) IV.F-30
IV.F-4	Existing (2016) Project Site Annual GHG Emissions Summary IV.F-33
IV.F-5	Combined Construction-Related Emissions (MTCO ₂ e)..... IV.F-42
IV.F-6	Annual GHG Emissions Summary (Year 2032) (metric tons of carbon dioxide equivalent [MTCO ₂ e]) IV.F-43

<u>Table</u>	<u>Page</u>
IV.F-7	Consistency Analysis—Climate Change Scoping Plan IV.F-48
IV.F-8	Consistency Analysis—RTP/SCS IV.F-58
IV.F-9	Consistency with Applicable GHG Emissions Goals and Actions of Green City Action Plan IV.F-68
IV.H-1	Existing Drainage Stormwater Runoff—Hillside Campus IV.H-19
IV.H-2	Existing Drainage Stormwater Runoff—South Campus IV.H-21
IV.H-3	Proposed Drainage Stormwater Runoff—Hillside Campus IV.H-33
IV.H-4	Proposed Drainage Stormwater Runoff—South Campus IV.H-35
IV.J-1	Typical Noise Levels IV.J-2
IV.J-2	City of Pasadena Guidelines for Noise Compatible Land Use IV.J-7
IV.J-3	Description of Noise Measurement Locations IV.J-12
IV.J-4	Existing Ambient Noise Levels IV.J-14
IV.J-5	Existing Roadway Traffic Noise Levels IV.J-15
IV.J-6	Federal Transit Administration Construction Vibration Impact Criteria for Building Damage IV.J-19
IV.J-7	Construction Equipment Noise Levels IV.J-25
IV.J-8	Construction Noise Impacts—Hillside Campus IV.J-26
IV.J-9	Construction Noise Impacts—South Campus IV.J-27
IV.J-10	Nighttime Construction Noise Impacts—South Campus IV.J-29
IV.J-11	Construction Vibration Impacts—Building Damage IV.J-32
IV.J-12	Construction Vibration Impacts—Human Annoyance IV.J-33
IV.J-13	Estimated Noise Levels from Special Events Within Outdoor Areas—South Campus IV.J-37
IV.J-14	Roadway Traffic Noise Impacts—Future Plus Project IV.J-38
IV.J-15	Roadway Traffic Noise Impacts—Existing Plus Project IV.J-41
IV.J-16	Composite Noise Impacts IV.J-43
IV.J-17	Cumulative Roadway Traffic Noise Impacts IV.J-48

<u>Table</u>	<u>Page</u>
IV.K-1 Pasadena Fire Department Fire Stations Located in the Project Vicinity	IV.K-6
IV.K-2 Measured 90th Percentile Response Times for Fire and Medical Incidents (Fiscal Year 2015–2016).....	IV.K-7
IV.L-1 Bicycle Facilities Hierarchy	IV.L-12
IV.L-2 Transit Facilities Hierarchy	IV.L-12
IV.L-3 Existing Transit Service.....	IV.L-13
IV.L-4 City of Pasadena CEQA Transportation Thresholds of Significance.....	IV.L-18
IV.L-5 Phase I (Year 2017–Year 2022)	IV.L-20
IV.L-6 Phase I plus Phase II (Project Buildout 2032).....	IV.L-23
IV.L-7 Congestion Management Plan Traffic Impact Analysis— Intersection Capacity Utilization (ICU) Analysis	IV.L-25
IV.L-8 Congestion Management Plan Transit Impact Analysis—Transit Trip Calculation	IV.L-26
IV.L-9 CMP Transit Impact Analysis	IV.L-27
IV.L-10 Phase I Plus Phase II (General Plan Buildout 2035).....	IV.L-30
IV.L-11 Congestion Management Plan Traffic Impact Analysis— Intersection Capacity Utilization (ICU) Analysis (General Plan Buildout—2035)	IV.L-31
IV.M.1-1 Current Annual Supply Rights	IV.M.1-16
IV.M.1-2 Groundwater Volume Pumped—2011 to 2015 (AFY)	IV.M.1-18
IV.M.1-3 PWP Projected Water Supplies in Average Water Year (AFY)	IV.M.1-20
IV.M.1-4 Planned PWP Water Supplies (AFY)	IV.M.1-21
IV.M.1-5 Projected Water Demands for PWP (AFY)	IV.M.1-22
IV.M.1-6 Projected Supply and Demand Comparison for a Normal Year (AFY)	IV.M.1-23
IV.M.1-7 Projected Supply and Demand Comparison for a Single-Dry Year (AFY)	IV.M.1-24

<u>Table</u>	<u>Page</u>
IV.M.1-8 Projected Supply and Demand Comparison for Multiple-Dry Years (AFY)	IV.M.1-25
IV.M.1-9 Total Project Water Demands	IV.M.1-30
IV.M.1-10 Phased Project Water Demands	IV.M.1-31
IV.M.2-1 Estimated Existing Wastewater Generation	IV.M.2-3
IV.M.2-2 Estimated Wastewater Generation Resulting from the Project	IV.M.2-6
IV.M.2-3 Estimated Net Wastewater Generation Resulting from the Project	IV.M.2-7
IV.M.3-1 Solid Waste Disposal and Estimated Remaining Capacity for County of Los Angeles Landfills	IV.M.3-12
IV.M.3-2 Solid Waste Disposal and Estimated Remaining Capacity for Out- of-County Landfills	IV.M.3-15
IV.M.3-3 City of Pasadena Solid Waste Disposal by Landfill or Transformation Facility (2015)	IV.M.3-20
IV.M.3-4 Existing Project Site Solid Waste Generation	IV.M.3-22
IV.M.3-5 Project Demolition and Construction Waste Generation	IV.M.3-25
IV.M.3-6 Project Solid Waste Generation	IV.M.3-27
IV.M.4-1 Summary of Energy Use During Construction	IV.M.4-17
IV.M.4-2 Summary of Annual Energy Use During Operation	IV.M.4-19
V-1 Comparison of Impacts Associated with the Project and Impacts of the Alternatives	V-7
V-2 Summary of Alternative 2 (Reduced Building Height Alternative) Uses and Comparison to the Project	V-22