

FINAL
SUBSEQUENT ENVIRONMENTAL IMPACT REPORT
FOR THE PROPOSED
ONTARIO WAL-MART SUPERCENTER

SCH 2006101132

AUGUST 2007



FINAL
SUBSEQUENT ENVIRONMENTAL IMPACT REPORT
FOR THE PROPOSED
ONTARIO WAL-MART SUPERCENTER

SCH 2006101132

City of Ontario
Planning Department
303 East B Street
Ontario, California 91764
Richard Ayala, Project Manager
(909) 395-2036

Prepared by:

David Evans and Associates, Inc.
4200 Concourses, Suite 200
Ontario, California 91764
David Agnew, Project Manager
(909) 481-5750

AUGUST 2007



SECTION	PAGE
EXECUTIVE SUMMARY	S-1
1.0 INTRODUCTION.....	1-1
1.1 Overview	1-1
1.2 Purpose of the Subsequent EIR	1-1
1.3 Methodology.....	1-7
1.4 Scope and Format of the Subsequent EIR	1-10
2.0 ENVIRONMENTAL SETTING	2-1
2.1 Project Location and Environmental Setting	2-1
2.2 Project Background	2-10
2.3 Applicable Plans and Policies	2-11
3.0 PROJECT DESCRIPTION	3-1
3.1 Objectives of the Project	3-1
3.2 Project Characteristics	3-1
3.3 Discretionary Actions	3-11
4.0 ENVIRONMENTAL IMPACT ANALYSIS	4-1-1
4.1 Introduction	4-1-1
4.2 Land Use and Planning	4-2-1
4.3 Population and Housing.....	4-3-1
4.4 Transportation and Circulation	4-4-1
4.5 Air Quality.....	4-5-1
4.6 Noise	4-6-1
4.7 Geology and Soils	4-7-1
4.8 Hydrology and Water Quality.....	4-8-1
4.9 Biological Resources	4-9-1
4.10 Mineral Resources.....	4-10-1
4.11 Public Services and Recreation.....	4-11-1
4.11.1 Police Protection and Law Enforcement Services.....	4-11-1
4.11.2 Fire Protection Services	4-11-8
4.11.3 Educational Facilities and Services	4-11-13
4.11.4 Library Services	4-11-19
4.11.5 Medical Facilities and Services	4-11-21
4.11.6 Recreation Services	4-11-23
4.11.7 Other Governmental Services.....	4-11-28
4.12 Utilities	4-12-1
4.12.1 Water Services	4-12-1
4.12.2 Wastewater and Sewer Services	4-12-10
4.12.3 Storm Drainage	4-12-19
4.12.4 Solid Waste Disposal.....	4-12-25
4.12.5 Electrical Power Service	4-12-32
4.12.6 Natural Gas Service.....	4-12-36

SECTION	PAGE
4.12.7 Telephone and Cable Television Services	4.12-40
4.13 Human Health and Hazards	4.13-1
4.14 Visual Quality and Aesthetics	4.14-1
4.15 Socio-economic Conditions	4.15-1
4.16 Cultural Resources	4.16-1
5.0 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES AND UNAVOIDABLE ADVERSE IMPACTS	5-1
5.1 Significant Irreversible Environmental Changes	5-1
5.2 Unavoidable Adverse Impacts	5-3
6.0 CUMULATIVE IMPACTS	6-1
6.1 Related Projects	6-1
6.2 Cumulative Impact Analysis.....	6-16
7.0 GROWTH-INDUCING IMPACTS	7-1
8.0 IMPACTS FOUND TO BE INSIGNIFICANT	8-1
8.1 Agricultural Resources	8-1
9.0 ALTERNATIVES TO THE PROJECT.....	9-1
9.1 Summary of Project Actions and Objectives.....	9-1
9.2 Summary of Significant Impacts	9-1
9.3 Alternatives Analysis.....	9-1
9.3.1 No Project Alternative	9-2
9.3.2 Building Reuse Alternative	9-5
9.3.3 Specific Plan Alternative	9-8
9.3.4 Alternative Use	9-11
9.3.5 Lower Intensity Alternative	9-14
9.3.6 Alternate Site Alternative.....	9-17
9.4 Environmentally Superior Alternative.....	9-21
10.0 MITIGATION MONITORING PROGRAM.....	10-1
10.1 Standard Conditions	10-1
10.2 Mitigation Measures.....	10-9
11.0 RESPONSE TO COMMENTS	11-1
11.1 Comment Letters	11-1
11.2 Comments and Responses	11-1
11.3 Changes to Draft Subsequent EIR.....	11-26
12.0 LIST OF REFERENCES	12-1
12.1 References	12-1
12.2 Persons and Organizations Consulted.....	12-22
12.3 Preparers of the EIR	12-24

APPENDICES

A	INITIAL STUDY, NOTICE OF PREPARATION (NOP) AND MAILING LIST
B	RESPONSES TO NOP AND SCOPING MEETING COMMENTS
C	TRAFFIC IMPACT STUDY
D	AIR QUALITY IMPACT ANALYSIS (with revised CO hotspot analysis)
E	HEALTH RISK ASSESSMENT
F	NOISE IMPACT ANALYSIS
G	GEOTECHNICAL INVESTIGATION
H	PUBLIC SERVICE CORRESPONDENCE
I	PHASE 1 ENVIRONMENTAL SITE ASSESSMENT
J	SOCIO-ECONOMIC ANALYSIS AND VACANCY ANALYSIS
K	CULTURAL RESOURCES STUDY

LIST OF FIGURES

PAGE

2-1	Regional Map	2-2
2-2	Vicinity Map	2-5
2-3	Existing Land Uses	2-8
2-4	Aerial Photograph.....	2-9
2-5	Existing General Plan Designations.....	2-13
2-6	Existing Zoning	2-15
2-7	Redevelopment Project Areas.....	2-17
2-8	Specific Plan Illustrative Plan.....	2-18
3-1	Project Location	3-2
3-2	Proposed Site Plan.....	3-4
3-3	Proposed Building Elevations.....	3-5
3-4	Conceptual Landscaping Plan	3-8
3-5	Proposed Street Improvements	3-9
4.4-1	Roadway Geometrics	4.4-3
4.4-2	Existing Traffic Volumes	4.4-7
4.4-3	Trip Distribution.....	4.4-11
4.4-4	Trip Assignment	4.4-12
4.4-5	2008 without Project Traffic Volumes.....	4.4-14
4.4-6	2008 with Project Traffic Volumes.....	4.4-16
4.4-7	Traffic Recommendations	4.4-36
4.6-1	Acoustical Scale	4.6-2
4.6-2	Noise Survey Locations	4.6-5
4.6-3	Noise from Construction Equipment.....	4.6-9
4.7-1	Existing Topography	4.7-2
4.7-2	Soil Associations	4.7-3
4.8-1	Groundwater Boundaries	4.8-2
4.8-2	Chino Basin Boundaries.....	4.8-4

LIST OF FIGURES	PAGE
4.11-1 Public Facilities	4.11-2
4.12-1 Water Lines.....	4.12-3
4.12-2 Sewer Lines.....	4.12-12
4.12-3 Gas Lines	4.12-37
4.12-4 Telephone Lines	4.12-41
4.12.5 Cable Lines	4.12-42
4.14-1 Site Photographs	4.14-2
4.14-2 Site Photographs	4.14-3
4.14-3 Proposed Building Elevations.....	4.14-8
6-1 Related Projects in Ontario.....	6-8
6-2 Related Projects in Montclair	6-14
6-3 Related Projects in Upland	6-15

LIST OF TABLES	PAGE
S-1 Summary of Environmental Impacts and Mitigation Measures.....	S-5
2-1 Population and Housing Growth	2-3
2-2 Existing Land Uses	2-4
4.2-1 General Plan Policies	4.2-6
4.2-2 Specific Plan Standards.....	4.2-11
4.2-3 RCPG Policies	4.2-15
4.2-4 RTP Policies	4.2-17
4.3-1 Population and Housing Growth	4.3-1
4.3-2 Regional Projections.....	4.3-2
4.4-1 Study Intersections	4.4-2
4.4-2 Levels of Service	4.4-4
4.4-3 Existing Peak Hour Intersection LOS	4.4-5
4.4-4 Trip Generation	4.4-10
4.4-5 Year 2008 Peak Hour Intersection LOS without Project	4.4-13
4.4-6 Year 2008 with Project LOS	4.4-15
4.4-7 Mitigated LOS.....	4.4-34
4.5-1 Health Effects of Pollutants.....	4.5-2
4.5-2 Ambient Air Quality Standards.....	4.5-4
4.5-3 Air Quality Monitoring Data.....	4.5-5
4.5-4 Comparative Emission Estimates for Primary GHGs.	4.5-10
4.5-5 Equipment Fleet	4.5-13
4.5-6 Construction Activity Emissions	4.5-13

LIST OF TABLES	PAGE
4.5-7 LST Thresholds	4.5-15
4.5-8 Project Related Operational Emissions	4.5-16
4.5-9 Micro-Scale Air Quality Impact Assessment	4.5-18
4.5-10 Mitigated Construction Emissions.....	4.5-32
4.6-1 Noise/Land Use Compatibility Standard.....	4.6-3
4.6-2 Existing Noise Levels	4.6-6
4.6-3 Existing Roadway Noise Levels	4.6-6
4.6-4 Projected-Related Noise Impacts	4.6-11
4.6-5 Projected Distance of 65 dB CNEL.....	4.6-12
4.6-6 Number of Delivery Trucks	4.6-14
4.6-7 Distance to Nearest Residences.....	4.6-15
4.6-8 Estimated Noise from Loading Docks and Compactors.....	4.6-15
4.6-9 Truck Noise.....	4.6-16
4.6-10 Truck Noise at Nearest Residences.....	4.6-16
4.11-1 Crime Incidence	4.11-3
4.11-2 School Enrollment.....	4.11-13
4.12-1 Estimated Water Consumption.....	4.12-4
4.12-2 Estimated Sewage Generation.....	4.12-14
4.12-3 Estimated Solid Waste Generation	4.12-27
4.12-4 Recycling Programs	4.12-28
4.12-5 Estimated Power Consumption	4.12-33
4.12-6 Estimated Gas Consumption.....	4.12-38
6-1 Related Projects in Ontario.....	6-1
6-2 Related Projects in Montclair	6-9
6-3 Related Projects in Upland	6-11
6-4 Projected Growth	6-18
6-5 GHG Global Warming Potential and Atmospheric Lifetimes.....	6-34
6-6 California Global Climate Change Initiatives.....	6-44
6-7 Estimated Project Related Operational Emission of Primary GHGs.....	6-48
6-8 Comparative Emission Estimates for Primary GHGs	6-53
6-9 Greenhouse Gas Reduction Strategies	6-54
9-1 Comparison of Alternatives.....	9-21
10-1 Standard Conditions	10-2
10-2 Mitigation Monitoring Program	10-9

ACRONYMS AND ABBREVIATIONS

%	percent
°C	degrees Centigrade
°F	degrees Fahrenheit
°N	North Latitude
µg/m ³	micrograms per cubic meter
AAQS	Ambient Air Quality Standards
AB	Assembly Bill
ABC	Alcohol Beverage Control
ACM	Asbestos Containing Materials
acre-ft/yr	acre-feet per year
ACSM	American Congress on Surveying and Mapping
ADC	Alternative Daily Cover
AED	Automated External Defibrillator
AGU	American Geophysical Union
ALTA	American Land Title Association
AM	ante meridian or before noon
APN	Assessor's Parcel Number
AQIA	Air Quality Impact Analysis
AQMP	Air Quality Management Plan
Ave.	Avenue
AWS	All Way Stop
BACM	Best Available Control Measure
BMP	Best Management Practices
C/L	Centerline
CAAA	Clean Air Act Amendments
CA H ₂ Net	California Hydrogen Highway Network
CalMAX	California Materials Exchange
Cal-OSHA	California Division of Occupational Safety and Health
Caltrans	California Department of Transportation
CALVENO	California Vehicle Noise
CARB	California Air Resources Board
CBMWD	Chino Basin Municipal Water District
CBWM	Chino Basin Watermaster
CCAP	Climate Change Action Plan
CCR	California Code of Regulations
CCRI	Climate Change Research Initiative
CCOHS	Canadian Centre for Occupational Health and Safety
CD	compact disc
CDA	Chino Desalters
CEC	California Energy Commission
CEQA	California Environmental Quality Act
cf	cubic feet
CFC	chlorofluorocarbons
CFR	Code of Federal Regulations
cfs	cubic feet per second

ACRONYMS AND ABBREVIATIONS

CH ₄	methane
CIP	Capital Improvement Program
CJUHSD	Chaffey Joint Union High School District
Cl	Chloride
CMP	Congestion Management Program
CMS	Congestion Management Systems
CMU	concrete masonry unit
CNEL	Community Noise Equivalent Level
CO	Carbon Monoxide
CO ₂	Carbon Dioxide
COD	Chemical Oxygen Demand
Conc.	concentration
COPS	Community Oriented Policing
CRS	Cultural Resources Study
CSHS	California State Highway System
CSS	Cross Street Stop
CSUSB	California State University, San Bernardino
CTP	Comprehensive Transportation Plan
CUP	Conditional Use Permit
CWA	Clean Water Act
dB	decibel
dBA	decibels with an “A-weighting”
DEIR	Draft Environmental Impact Report
DIF	Development Impact Fee
DIR	Department of Industrial Relations
DOE	Department of Energy
DOSH	Department of Safety and Health
DPM	Diesel Particulate Matter
DVD	digital video discs
EB	eastbound
e.g.	exempli gratia (for example)
EIA	Economic Impact Analysis
EIR	Environmental Impact Report
EMD	Emergency Medical Dispatch
EMS	Emergency Medical Services
EMT-1	Emergency Medical Technician - Basic Life Support / AED
EMT-P	Emergency Medical Technician - Paramedics or Advanced Life Support
EO	Executive Order
EPA	Environmental Protection Agency
ERT	Emissions Reduction Target
ESA	Environmental Site Assessment
et seq.	et sequens or the following ones
FAQ	Frequently Asked Questions
FAR	Floor Area Ratio
FBI	Federal Bureau of Investigation

ACRONYMS AND ABBREVIATIONS

FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
g	gravity
GHG	Greenhouse Gases
GPA	General Plan Amendment
gpd	gallons per day
gpm	gallons per minute
Greenbook	Standard Specifications for Public Works Construction
GWP	Global Warming Potential
H ₂ O	water vapor
H-CFC	Hydro-Chlorofluorocarbon compound
HFC	Hydrofluorocarbon compound
HID	High Intensity Discharge
HOV	High Occupancy Vehicle
Hr	hour
HRA	Health Risk Assessment
HVAC	Heating, Ventilating, and Air-Conditioning
I-10	Interstate 10 Freeway
I-15	Interstate 15 Freeway
IARC	International Agency for Research on Cancer
i.e.	id est or that is
ICSC	International Council of Shopping Centers
IEUA	Inland Empire Utilities Agency
IPCC	Intergovernmental Panel on Climate Change
IS	Initial Study
ISC	Industrial Source Complex
ISCST3	Industrial Source Complex Short Term computer model
ITE	Institute of Transportation Engineers
ITS	Intelligent Transportation Systems
km	kilometer
KP	Kaiser Permanente
ksf	thousand square feet
kWh	kilo-watt hour
LAWA	Los Angeles World Airport
LBP	Lead Based Paint
lbs	pounds
lbs/day	pounds per day
lbs/year	pounds per year
Ldn	Day-Night Average Sound Level
LED	Light Emitting Diode
Leq	Equivalent Continuous Noise Level
LOS	Level of Service
LST	Local Significance Thresholds
Maglev	Magnetic Levitation Technology
Max.	maximum

ACRONYMS AND ABBREVIATIONS

mg/m ³	milligrams per cubic meter
mgd	million gallons per day
MgO	magnesium oxide
MISWD	Municipal and Industrial Solid Waste Division
MLD	Most Likely Descendant
MMRP	Mitigation Monitoring and Reporting Program
mph	miles per hour
MRF	Materials Recovery Facility
MRZ-2	Mineral Resource Zone 2
msl	mean sea level
MTBE	Methyl Tertiary-Butyl Ether
MUTCD	Manual on Uniform Traffic Control Devices
MVSP	Mountain Village Specific Plan
MVWD	Monte Vista Water District
MW	megawatts
MWD	Metropolitan Water District of Southern California
N ₂ O	Nitrous oxide
N/A	not available
Na	Sodium
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NDIR	Non-dispersive Infrared Photometry
NIA	Noise Impact Analysis
NIOSH	National Institute for Occupational Safety and Health
No.	number
NO	Nitrogen Oxide
NO ₂	Nitrogen Dioxide
NOAA	National Oceanic and Atmospheric Association
NOP	Notice of Preparation
NO _x	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NRC	National Research Council
O ₃	Ozone
OH	hydroxide
OMC	Ontario Municipal Code
OMSD	Ontario Montclair School District
OPR	Office of Planning and Research
PA	Planning Area
Pb	Lead
PCUP	Planning Conditional Use Permit
PDEV	Planning Development
pers. comm.	personal communication
PFC	Perfluorocarbon compound
PG&E	Pacific Gas and Electric Company
PGPA	Planning General Plan Amendment

ACRONYMS AND ABBREVIATIONS

PM	post meridian or afternoon
PM	Parcel Map
PM ₁₀	Respirable Particulate Matter (10 microns per less in diameter)
PM _{2.5}	Fine Particulate Matter (2.5 microns per less in diameter)
ppb	parts per billion
ppm	parts per million
PMTT	Parcel Map/Tentative Tract
PRC	Public Resources Code
PST	Pacific Standard Time
PUC	Public Utilities Commission
PZC	Planning Zone Change
RCPG	Regional Comprehensive Plan and Guide
r	radius
RACM	Reasonably Available Control Measures
RHNA	Regional Housing Needs Assessment
ROG	Reactive Organic Gases
RP-1	Regional Plant No. 1
RTP	Regional Transportation Plan
RV	Recreational Vehicle
RWQCB	Regional Water Quality Control Board
SANBAG	San Bernardino Associated Governments
SARWQCB	Santa Ana Regional Water Quality Control Board
SAWC	San Antonio Water Company
SB	Senate Bill
SBE	State Board of Equalization
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCE	Southern California Edison Company
SCG	Southern California Gas Company
SCH	State Clearinghouse
sf	square feet
SF ₆	Sulfur hexafluoride
sf/year	square feet per year
SMARA	Surface Mining and Reclamation Act
SMP	Sewer Master Plan
SO ₂	Sulfur Dioxide
SO ₄	Sulfate
SO _x	sulfur oxides
SOI	Sphere of Influence
SR 71	State Route 71
SR-60	State Route 60
St.	Street
SWAT	Special Weapons and Tactics Team
SWMD	Solid Waste Management Division

ACRONYMS AND ABBREVIATIONS

SWP	State Water Project
SWPPP	Stormwater Pollution Prevention Plan
T-8	tubular, 8/8 inch or 25 millimeter diameter
TAC	Toxic air contaminants
TCM	Transportation Control Measure
TDM	Transportation Demand Management
TDS	Total Dissolved Solids
Tg CO ₂ Eq.	teragrams of carbon dioxide equivalent
TIA	Traffic Impact Analysis
TIN	Total Inorganic Nitrogen
TIS	Traffic Impact Study
TMA	Transportation Management Association
TPM	Tentative Parcel Map
TRU	Transportation Refrigeration Unit
TS	Traffic Signal
TSM	Transportation System Management
TT	Tentative Tract
TTM	Tentative Tract Map
TuB	Tujunga loamy sand
UN	United Nations
UNEP	United Nations Environment Programme
UNFCCC	UN Framework Convention on Climate Change
UPRR	Union Pacific Railroad
U. S.	United States
USDA	United States Department of Agriculture
USDOT	United States Department of Transportation
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
UST	Underground Storage Tank
UVB	ultra-violet B radiation
UWMP	Urban Water Management Plan
VA	Vacancy Analysis
VMT	Vehicle Miles Traveled
VOC	Volatile Organic Compounds
w/	with
WB	westbound
WFA	Water Facilities Authority
WHO	World Health Organization
WMO	World Meteorological Organization
WQMP	Water Quality Management Plan
WRAP	Waste Reduction Award Program