DRAFT

MITIGATED NEGATIVE DECLARATION

AND

INITIAL STUDY

DISTRIBUTING STATION 144



Los Angeles Department of Water and Power 111 North Hope Street, Room 1044 Los Angeles, CA 90012

Technical Assistance Provided by:

Aspen Environmental Group 30423 Canwood Street, Suite 215 Agoura Hills, CA 91301

September 2008

INITIAL STUDY

Table of Contents

1.	PRO.	JECT INFORMATION	
	1.1	Project Title	. 1
	1.2	Lead Agency Name and Address	. 1
	1.3	Contact Person and Phone Number	
	1.4	Project Location	. 1
	1.5	Project Sponsor's Name and Address	.1
	1.6	General Plan Designation.	
	1.7	Zoning	
	1.7	Surrounding Land Uses and Setting	1
	1.9	Project Description	
	1.9		
		Responsible Agencies	
	1.11	Reviewing Agencies	. 3
2.	ENV	IRONMENTAL DETERMINATION	.7
3.		LUATION OF ENVIRONMENTAL IMPACTS	
	3.1	Aesthetics	
	3.2	Agricultural Resources	
	3.3	Air Quality	10
	3.4	Biological Resources	15
	3.5	Cultural Resources	18
	3.6	Geology and Soils	20
	3.7	Hazards and Hazardous Materials	22
	3.8	Hydrology and Water Quality	
	3.9	Land Use and Planning	
	3.10	Mineral Resources	
	3.11	Noise	
	3.12	Population and Housing	
	3.12	Public Services	
		Recreation	
		Transportation and Traffic	
		Utilities and Service Systems	
	3.10	Mandatory Findings of Significance	
	5.17	Manuatory Findings of Significance	44
4.	Refi	ERENCES	46
5.	REPO	ORT PREPARATION	49
FIC	URES		
		onal Location Map	Δ
2	Doroc	olar Eocation Map	. +
23		el Map Plan	
J	SILE	1.1.111	.0
Арр	ENDIC	ES	
A		uality Technical Appendix	
В		I Cultural Resources Investigation	
Č		w of Geotechnical and Soil Compaction Reports, 560 South Alameda Street	

D Traffic Impact Analysis

1. Project Information

1.1 Project Title

Distributing Station 144 Project (DS-144 or proposed project)

1.2 Lead Agency Name and Address

Los Angeles Department of Water and Power Environmental Services 111 North Hope Street, Room 1044 Los Angeles, CA 90012

1.3 Contact Person and Phone Number

Erica Blyther Los Angeles Department of Water and Power Environmental Assessment (213) 367-2325

1.4 Project Location

The project is located at 1140 East Palmetto Street, in the eastern part of downtown Los Angeles, California in the 90013 zip code (see Figure 1 and Figure 2).

1.5 Project Sponsor's Name and Address

Hai-yuan Cheah Los Angeles Department of Water and Power Systems Planning and Project Bureau 111 North Hope Street, Room 923 Los Angeles, CA 90012

1.6 General Plan Designation

The proposed project site is designated as Heavy Manufacturing (City of Los Angeles).

1.7 Zoning

The proposed project site is located within the City of Los Angeles and is zoned Heavy Industrial (M3-1).

1.8 Surrounding Land Uses and Setting

The proposed project would be installed in an urban area that includes commercial and industrial uses. Surrounding uses include an LADWP training and service center, a pallet manufacturing facility, warehouses, and an office building.

1.9 **Project Description**

The Los Angeles Department of Water and Power (LADWP) is proposing to construct a new electrical distributing station (DS-144 or proposed Project). The proposed project would be constructed on a 0.88-acre parcel located at 1140 East Palmetto Street in Los Angeles, California. DS-144 will contain electrical switches, transformers, and controls that route power to the local area. The station will be surrounded by a 16-foot high masonry wall with a small control house (Figure 3). Approximately eight percent of the project site surface area would be composed of crushed rock, while the rest of the site surface would be paved or otherwise improved with buildings or equipment. The proposed project would connect to the existing power grid through underground street connections beneath Palmetto Street. The project site would be accessed from Palmetto Street. A staging area and lay down yard for equipment and stockpiles would be located onsite.

1

Construction

Construction would begin around June 2009 and would continue for approximately 24 months. Construction activities would occur between 6:00 a.m. and 4:30 p.m. Monday through Friday. Site preparation and construction activities would primarily consist of the equipment identified in Table 1-1.

Equipment Type	Estimated Maximum Number of Equipment Types Needed
Bulldozers	1
Excavators	1
Generators	1
Loaders	1
Fuel trucks	1
Concrete trucks	3
Dump trucks	2
15-ton crane	1
Other equipment	1

Table 1-1 Construction Equipment

Construction of the distributing station would proceed as follows:

- Erect a fence along the site boundary to secure the area,
- Over-excavate, compact, level and grade the site,
- Excavate the footings, foundation, and conduit trenches,
- Pour the concrete footings and foundation,
- Install the electrical equipment,
- Construct walls to enclose the electrical equipment,
- Make underground connection to distributing lines beneath street; and
- Landscape as appropriate.

On a typical workday, an average of 5 workers (up to a maximum of 10 workers) would travel directly to the site. Workers would park at an adjacent LADWP facility.

Additionally, construction activities would include truck trips associated with supply delivery, transport of excavated soil from trenching (soil would be transported to the closest appropriate LADWP facility, as is standard LADWP practice, for reuse or ultimate disposal), and transport of backfill and paving materials to the site. It is assumed that such truck operations would require 6 trucks to travel 20 miles per day, or an equivalent mix of trucks and trips, to a maximum of 120 miles per day. Table 1-2, below, lists the construction equipment required for the project along with the equipment's fuel type and the number of hours the equipment would be in service each day.

OFF ROAD EQUIPMENT						
Equipment	Туре	Hours per Day				
Backhoe (1)	Medium Diesel	6				
End Dump Trucks (3)	Heavy Diesel	8				
5-cyd Dump Truck (1)	Medium Diesel	6				
15-ton Crane (1)	Heavy Diesel	8				
Utility/Gang Truck (1)	Medium Diesel	2				
ON ROAD EQUIPMENT						
Equipment	Туре	Vehicle Miles Traveled				
Construction Worker Vehicles (2)	Light Gasoline	15				

Table 1-2 Construction	Equinment	+ Dailv	Usage
Table 1-2 Construction	Equipment	Dany	Usagu

Operation and Maintenance

The distributing station would not be regularly manned by personnel for operating purposes. Occasionally, access to the facility would be required for inspection, monitoring, and maintenance. Scheduled maintenance of the proposed project would include power transformers, 34.5-kV circuit breakers and switches, as well as 4.8-kV switchgear and ancillary equipment. Such activities would involve regular visits as well as scheduled maintenance work on a yearly basis, typically of two to three days duration.

1.10 Responsible Agencies

The following permits and approvals are anticipated for the project:

State of California

- Department of Transportation
- Division of Occupational Safety and Health (DOSH; aka Cal/OSHA)

City of Los Angeles

- Bureau of Engineering
- Department of Building and Safety
- Department of Public Works
- Department of Cultural Affairs

Regional Agencies

• South Coast Air Quality Management District

1.11 Reviewing Agencies

Reviewing Agencies include those agencies that do not have discretionary powers, but that may review this document for adequacy and accuracy. Potential Reviewing Agencies include the following:

State of California

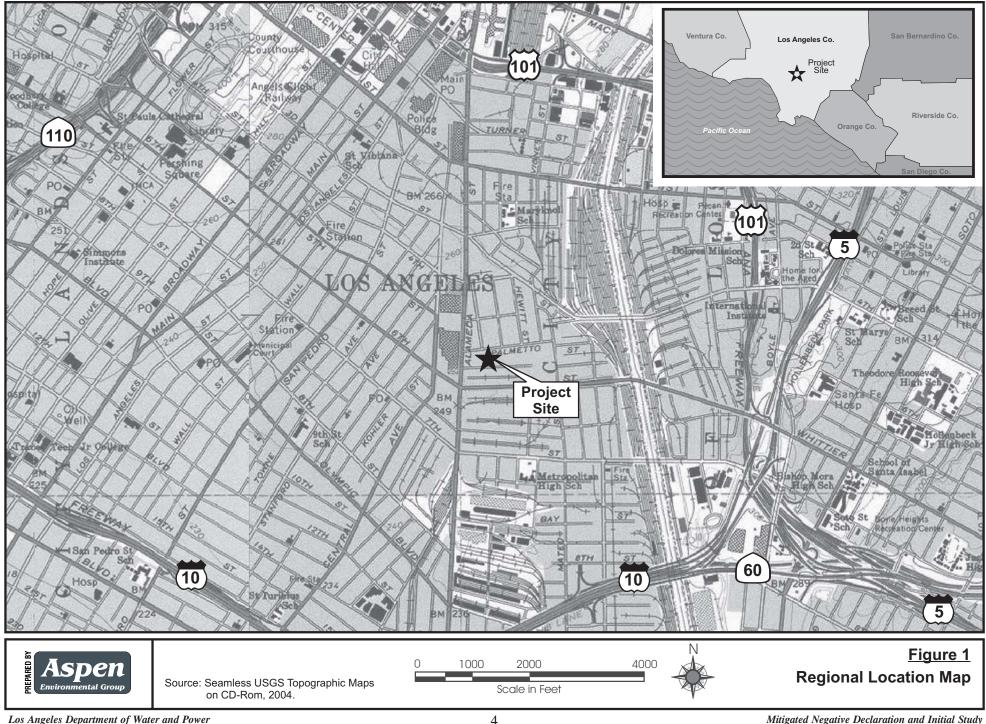
- California State Clearinghouse
- Office of Historic Preservation
- Department of Conservation, Division of Oil, Gas, and Geothermal Resources
- Native American Heritage Commission
- Public Utilities Commission

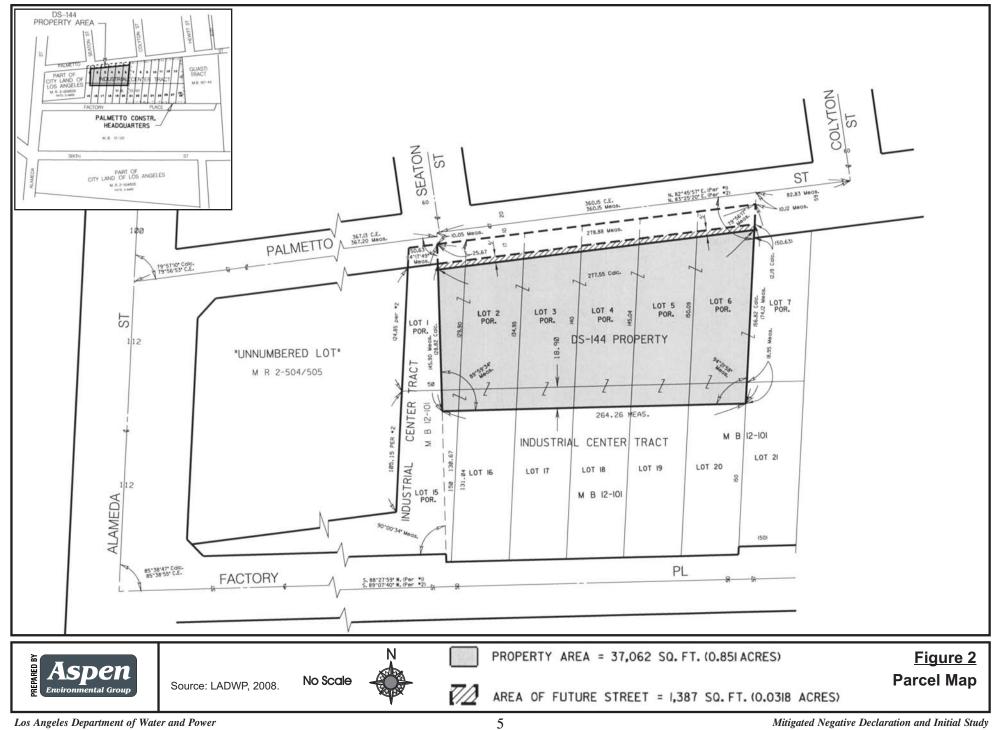
City of Los Angeles

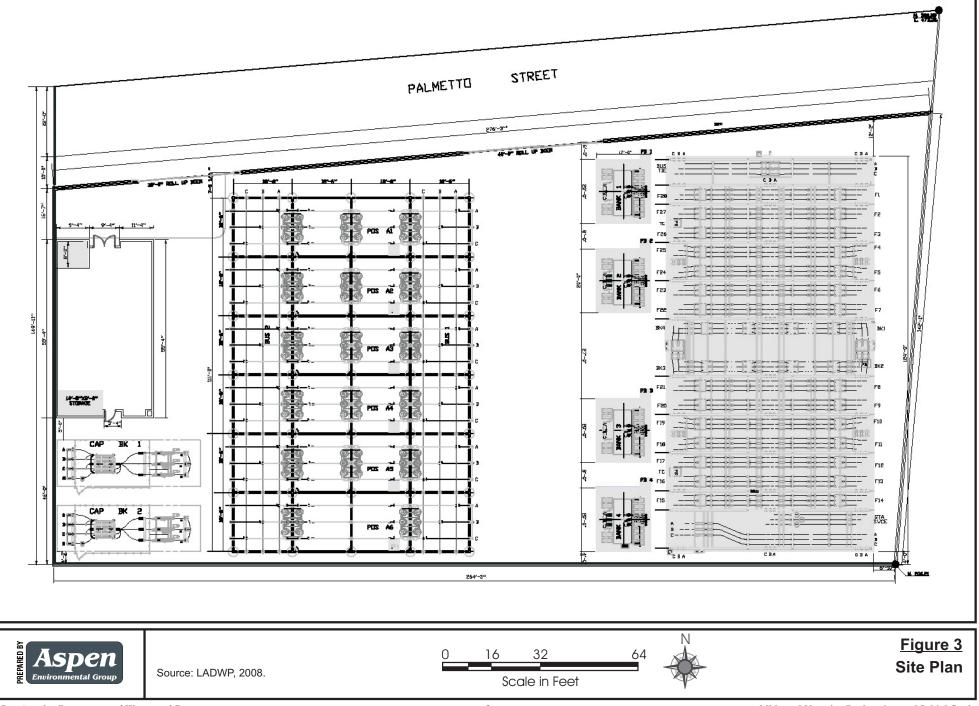
- Department of City Planning
- Department of Environmental Affairs

Regional Agencies

- Los Angeles County Metropolitan Transportation Authority
- Southern California Association of Governments







2. Environmental Determination

2.1 Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by the project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

Aesthetics	Agricultural Resources		Air Quality
Biological Resources	Cultural Resources		Geology/Soils
Hazards and Hazardous Materials	Hydrology/Water Quality		Land Use/Planning
Mineral Resources	Noise		Population/Housing
Public Services	Recreation		Transportation/Traffic
Utilities/Service Systems	Mandatory Findings of Signif	ficance	

2.2 Determination

On the basis of this initial evaluation:

I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions to the project have been made by or agreed to by the applicant. A MITIGATED NEGATIVE DECLARATION will be prepared.

I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT (EIR) is required.

I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An EIR is required, but it must analyze only the effects that remain to be addressed.

I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR, including revisions or mitigation measures that are imposed upon the project, nothing further is required.

harbes C. Holloway

Charles C. Holloway Manager of Environmental Assessment Los Angeles Department of Water and Power

8/27/08

3. Evaluation of Environmental Impacts

The following discussion addresses impacts to various environmental resources per the Environmental Checklist Form contained in Appendix G of the State CEQA Guidelines.

3.1 Aesthetics

AESTHETICS - Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Have a substantial adverse effect on a scenic vista?				\square
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				\boxtimes
c. Substantially degrade the existing visual character or quality of the site and its surroundings?			\boxtimes	
d. Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?			\square	

a. Would the project have a substantial adverse effect on a scenic vista?

NO IMPACT. The proposed project would be located in an area that is not characterized by scenic vistas. Surrounding properties include light and heavy industrial uses including an LADWP training and service center, a pallet manufacturing facility, warehouses, and an office building. Construction of the proposed project would not alter the aesthetic quality of the project area nor its nearby surroundings. Additionally, any potential scenic vistas that could be viewed from the project site (mountains to the north, Los Angeles skyline, Los Angeles River) are already substantially blocked by existing, nearby, multi-story structures that are as tall as, or taller than, the proposed distributing station.

b. Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?

NO IMPACT. No State scenic highways exist near the project area. The nearest officially designated State scenic highway is State Route 2, Angeles Crest Highway (DOT, 1999). The nearest designated scenic segment of the Angeles Crest Highway begins at the intersection with Interstate Route 210, approximately 12 miles north of the project area. Another highway near the Downtown Los Angeles area, Interstate Route 110, the Arroyo Seco Parkway, is designated as a Historic Parkway. The nearest portion of the designated Historic Parkway begins at the intersection with Interstate Route 5, approximately 3 miles north of the project area. The proposed project does not lie within the viewshed of any State scenic highways and therefore would result in no impact or damage to scenic resources within a State scenic highway (DOT, 1999).

c. Would the project substantially degrade the existing visual character or quality of the site and its surroundings?

LESS THAN SIGNIFICANT IMPACT. Currently, the project site consists of a vacant lot that is surrounded by warehouses, a wooden pallet manufacturing facility, an office building, and an LADWP training and service center. The proposed project site has been historically occupied by a lumber yard, warehouse, power plant, and a subsurface concrete water reservoir. Construction and operation of the proposed distributing station would be consistent with the existing surroundings and would not substantially degrade the existing visual character and/or quality of the site and its surroundings.

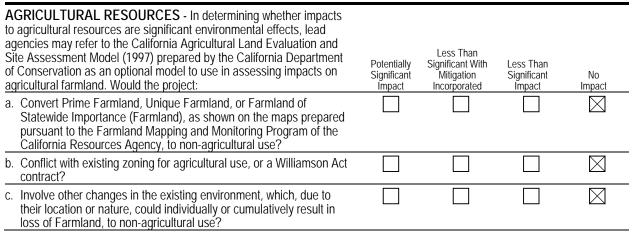
d. Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

LESS THAN SIGNIFICANT IMPACT. Construction activities would occur between 6:00 a.m. and 4:30 p.m., Monday through Friday. Neither construction equipment nor construction materials are expected

to be a source of substantial glare. Because construction activities are expected to be limited to daytime hours, no lighting for nighttime construction will be required, and therefore construction activities are not expected to create a new source of substantial light.

Operation of the proposed project would include night time security lighting. Since the project site is currently vacant, such lighting would be a new source of light in the area. However, the project will be designed such that security lighting will not adversely affect day or nighttime views in the area. The distributing station will be unmanned by personnel for normal operating purposes. Occasional access to the facility will be required for inspection and maintenance activities. The facility will be lit mainly for security purposes and infrequently for inspection or maintenance activities. Any non-essential lighting will be controlled either by switches or motion sensors. Security lighting will be designed in such a way as to minimize the amount of light that shines beyond the project site. Lights will be aimed in the appropriate directions and will be hooded or shielded as necessary. Additionally, the project site will be surrounded by a 16-foot high block wall which will also prevent onsite light from shining beyond the project site.

3.2 Agricultural Resources



a. Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as Shown on the Maps Prepared Pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to Non-agricultural use?

NO IMPACT. The proposed project site is not located on or near Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program (FMMP) of the California Department of Conservation, Division of Land Resource Protection. The proposed project site is classified as "Z" on the 2006 FMMP GIS data for Los Angeles County, which signifies that the area is not mapped by the FMMP. The project site and surrounding area do not contain any farmland (DOC 2006a).

b. Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

NO IMPACT. The proposed project site is not located on or near land zoned for agricultural use or subject to a Williamson Act contract. Only land located within an agricultural preserve is eligible for a Williamson Act contract. An agricultural preserve must consist of no less than 100 acres. However, in order to meet this requirement, two or more parcels may be combined if they are contiguous or in common ownership. As of 2005, all counties except Del Norte, Los Angeles, San Francisco, Inyo and Yuba offer Williamson Act contracts (DOC 2006b). Since Los Angeles County does not offer Williamson Act contracts, the proposed project could not conflict with a Williamson Act contract. As stated above, the proposed project would not conflict with existing zoning for agricultural use.

c. Would the project involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?

NO IMPACT. The proposed project is located in southeast downtown Los Angeles, in an area zoned for and characterized by industrial uses, on a currently vacant site that has been previously developed with industrial uses. Construction and operation of the proposed distributing station would provide electricity to the surrounding area and would not result in conversion of Farmland to non-agricultural use.

3.3 Air Quality

AIR QUALITY - Where available, the significance criteria established by the applicable air quality management or pollution control district may be relied upon to make the following determinations. Would the project:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
а.	Conflict with or obstruct implementation of the applicable air quality plan?				\square
b.	Violate any air quality standard or contribute substantially to an existing or projected air quality violation?			\square	
C.	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?				
d.	Expose sensitive receptors to substantial pollutant concentrations?			\boxtimes	
e.	Create objectionable odors affecting a substantial number of people?			\square	

The proposed project area is located in the South Coast Air Basin (SCAB). The SCAB is comprised of parts of Los Angeles, Riverside and San Bernardino Counties, and all of Orange County. The SCAB is bounded on the west by the Pacific Ocean, and surrounded by the San Gabriel Mountains to the north, the San Bernardino Mountains to the north and east, the San Jacinto Mountains to the southeast, and the Santa Ana Mountains to the south. The SCAB forms a low plain and the mountains channel and confine air flow, which traps air pollutants.

The primary agencies responsible for regulations to improve air quality in the SCAB are the South Coast Air Quality Management District (SCAQMD) and the California Air Resources Board (CARB). The Southern California Association of Governments (SCAG) is an important partner to the SCAQMD, as it is the designated metropolitan planning authority for the area and produces estimates of anticipated future growth and vehicular travel in the SCAB, which are used for air quality planning. The SCAQMD sets and enforces regulations for non-vehicular sources of air pollution in the SCAB, and works with SCAG to develop and implement Transportation Control Measures (TCM). TCM measures are intended to reduce and improve vehicular travel and associated pollutant emissions.

The U.S. Environmental Protection Agency (U.S. EPA) is the primary federal agency for regulating air quality. The U.S. EPA implements the provisions of the Federal Clean Air Act (FCAA). This Act establishes national ambient air quality standards (NAAQS) that are applicable nationwide. The U.S. EPA designates areas with pollutant concentrations that do not meet the NAAQS as non-attainment areas for each criteria pollutant. Areas that achieve the NAAQS after a non-attainment designation are redesignated as maintenance areas and must have approved Maintenance Plans to ensure continued attainment of the NAAQS.

Based on monitored air pollutant concentrations, the U.S. EPA and CARB designate areas relative to their status in attaining the NAAQS and California ambient air quality standards (CAAQS), respectively. The U.S. EPA has designated the SCAB as Severe-17 non-attainment for ozone (O_3) , serious non-attainment

for particulate matter of 10 microns or less (PM_{10}) and carbon monoxide (CO), non-attainment for fine particulate matter of 2.5 microns or less ($PM_{2.5}$), and attainment/maintenance for nitrogen dioxide (NO_2). The SCAB has been designated by the State as non-attainment for ozone, PM_{10} , and $PM_{2.5}$. The SCAB is designated as in attainment of the federal sulfur dioxide (SO_2) and lead NAAQS, as well as the State CO, NO_2 , SO_2 , lead, hydrogen sulfide, and vinyl chloride CAAQS.

Greenhouse Gases:

Greenhouse gases (GHGs) are defined as any gas that absorbs infrared radiation in the atmosphere. Common GHGs include water vapor, carbon dioxide (CO₂), methane, nitrous oxides (N₂O), chlorofluorocarbons (CFCs), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF₆), ozone and aerosols (Hendrix, Wilson, et. al., 2007). GHGs are emitted by both natural processes and human activities, and lead to the trapping and buildup of heat in the atmosphere near the earth's surface, commonly known as the "Greenhouse Effect." There is increasing evidence that GHGs and the Greenhouse Effect are leading to global warming and climate change (U.S. Environmental Protection Agency [EPA], 2007). "The potential adverse impacts of global warming include the exacerbation of air quality problems, a reduction in the quality and supply of water to the State from the Sierra snowpack, a rise in sea levels resulting in the displacement of thousands of coastal businesses and residences, damage to marine ecosystems and the natural environment, and an increase in the incidences of infectious diseases, asthma, and other human health-related problems" (California Health & Safety Code, Division 25.5, Part 1). The primary source of GHGs in the United States is energy-use related, primarily including activities involving fuel combustion.

In 2006, in response to concerns related to global warming and climate change, the California State Legislature adopted Assembly Bill 32 (AB 32), the "California Global Warming Solutions Act of 2006." AB 32 focuses on reducing GHGs in California and requires the California Air Resources Board (CARB), the State agency charged with regulating statewide air quality, to adopt rules and regulations that would achieve greenhouse gas emissions equivalent to State-wide levels in 1990 by 2020 (Hendrix, Wilson, et. al., 2007). In addition, two State-level Executive Orders have been enacted by the Governor (Executive Order S-3-05, signed June 1, 2005, and Executive Order S-01-07, signed January 18, 2007) that mandate reductions in GHG emissions.

Currently there are no adopted thresholds of significance or specific methodologies established for determining impacts related to a project's potential contribution to global climate change in California Environmental Quality Act (CEQA) documents. However, within the context of CEQA, it is generally accepted that a single project does not typically generate enough GHG emissions to significantly influence global climate change (Hendrix, Wilson, et. al., 2007). As such, it has been recommended that global climate change be addressed within the context of cumulative impacts until further guidelines, methodologies and thresholds of significance are established (Hendrix, Wilson, et. al., 2007).

As addressed above the South Coast Air Basin (SCAB) is currently designated non-attainment for some air quality standards that have been established at State and federal levels, including ozone, particulate matter of 10 microns or less, and carbon monoxide. The SCAB has been making consistent progress towards reaching attainment with the majority of emissions that influence global climate change (California Environmental Protection Agency, Air Resources Board [CARB], 2007), and is expected to continue to making progress towards the goals of AB 32 and Executive Orders S-3-05 and S-01-07.

As outlined in response to Initial Study Questions 3.3(a) through (e) (below), the proposed project would result in temporary, construction-related impacts related to air quality. However, all of these impacts are less than significant and none of them would be anticipated to impede or negatively contribute to the overall progress that the State and South Coast Air Quality Management District (SCAQMD) (the principal regulatory agency having jurisdiction over the SCAB) are making towards attainment and the GHG emission reduction timeframes that have been established by AB 32 and Executive Orders S-3-05

and S-01-07, which extend well beyond the period of the proposed project's principal air quality impacts (calendar years 2008 and 2009 for construction as opposed to the air quality attainment goals which currently extend out to calendar year 2020). In addition, as addressed in response to Initial Study Question 3.3(c), the proposed project would not be expected to result in a cumulatively considerable net increase in criteria pollutants. Therefore, construction of the proposed project would not be anticipated to result in any cumulatively significant impacts related to the SCAB's future baseline condition for GHGs and global climate change. Once operational, GHG emissions related to the proposed project would be negligible and GHG-related cumulative impacts would be less than significant or none (see response to Initial Study Questions 3.3[a] through [e]).

a. Would the project conflict with or obstruct implementation of the applicable air quality plan?

NO IMPACT. The Federal Clean Air Act requires jurisdictions of non-attainment areas to prepare air quality plans that demonstrate strategies for achieving attainment. Air quality plans developed to meet federal requirements are referred to as State Implementation Plans (SIPs). The California Clean Air Act also requires plans for non-attainment areas with respect to the State standards. For the proposed project area, the South Coast Air Quality Management District (SCAQMD) and the Southern California Association of Governments (SCAG) have responsibility for preparing an Air Quality Management Plan (AQMP), which addresses the Federal and State Clean Air Act requirements. The AQMP details goals, policies, and programs for improving air quality and establishes thresholds for daily emissions. Environmental review of individual projects within the region must demonstrate that daily construction and operational emission thresholds, as established by the SCAQMD, would not be exceeded, nor would the number or severity of existing air quality violations be increased.

The proposed project would be inconsistent with air quality plans if it would result in population and/or employment growth that exceeds the growth estimates included in the applicable air quality plan (SCAQMD, 1993). The proposed project would create an electrical distributing station. While the proposed project would provide electricity to meet local demand as well as that from anticipated growth in the local industrial area, the project itself does not include the development of any residential housing or create an increase in employment in the area. Therefore, the project would not result in direct population growth to the area or affect local or regional population or employment. Furthermore, operation of the proposed project would not require any additional LADWP employees. Therefore, the proposed project is consistent with the SCAG's Growth Management Plan and would not conflict with or obstruct implementation of SCAQMD's AQMP.

The SCAQMD Rules and Regulations constitute a significant part of the attainment plan. Applicable rules and regulations for the proposed project may include: Rule 401 Visible Emissions; Rule 402 Nuisance; Rule 403 Fugitive Dust; Rule 1110.2 Emission from Gaseous- and Liquid-Fueled Engines; Rule 1113 Architectural Coatings; and Rule 1166 Volatile Organic Compound Emission from Decontamination of Soil. The proposed project would be constructed and operated in compliance with all SCAQMD rules and regulations; therefore, the proposed project would not conflict with or obstruct implementation of SCAQMD's AQMP. No impacts would occur.

b. Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?

LESS THAN SIGNIFICANT IMPACT. The proposed project would be located in the Los Angeles County sub-area of the South Coast Air Basin (SCAB), which is under the jurisdiction of the SCAQMD. Project-related air emissions would have a significant effect if they resulted in concentrations that create either a violation of an ambient air quality standard or significantly contribute to an existing air quality violation. Should ambient air quality already exceed existing standards, the SCAQMD has established specific significance threshold criteria to account for the continued degradation of local air quality.

Table 3.3-1 presents the allowable contaminant generation rates at which construction and operational emissions are considered to have a significant regional effect on air quality within the SCAB.

Air Dollutont	Construction Phase	Operational Phase				
Air Pollutant	(lbs/day)	(lbs/day)				
Reactive Organic Gases (ROGs)	75	55				
Carbon Monoxide (CO)	550	550				
Nitrogen Oxides (NO _x)	100	55				
Sulfur Oxides (SO _x)	150	150				
Particulates (PM ₁₀)	150	150				

 Table 3.3-1 Regional Significance Thresholds

Source: SCAQMD, CEQA Air Quality Handbook, 1993.

Note: The SCAQMD no longer requires construction activities to be evaluated by quarterly thresholds (SCAQMD, 2001).

Short-Term Regional Construction Impacts. Construction of the proposed project would result in short-term increases in air pollution emissions in the area of the proposed project site. Construction equipment often requires combustion of diesel fuel, which generates the pollutants most likely to trigger a SCAQMD threshold (particularly oxides of nitrogen $[NO_x]$). Table 3.3-2 provides the maximum daily construction emissions for the proposed project. The construction scenario is considered worst-case due to the heavy equipment required for this type of construction activity, and was considered as the construction scenario for determining worst-case air quality emissions. Appendix A contains all assumptions and emission factors used to estimate the construction emissions.

As shown in Table 3.3-2, unmitigated construction emissions were found to be less than significant for construction. Furthermore, compliance with SCAQMD Rule 403 during construction would ensure that any exposed soils are watered to further reduce fugitive dust emissions to a level well below the SCAQMD construction threshold for PM_{10} (refer to Appendix A).

	2009			2010		
Emissions	Maximum Daily Emissions	Daily Threshold	Exceed Threshold?	2010 Maximum Daily Emissions	Daily Threshold	Exceed Threshold?
Reactive Organic Gases (ROGs)	32.37	75	NO	10.21	75	NO
Carbon Monoxide (CO)	65.28	550	NO	63.02	550	NO
Nitrogen Oxides (NOx)	83.92	100	NO	85.39	100	NO
Sulfur Oxides (SO _x)	0.00	150	NO	0.00	150	NO
Particulates (PM10)	11.20	150	NO	2.20	150	NO

 Table 3.3-2 Maximum Daily Construction Emissions (lb/day)

Operational Impacts. Long-term air quality impacts are those associated with the change in permanent usage of the proposed project site. Two types of air pollutant sources are considered with respect to a proposed project: stationary and mobile sources. As the proposed project is an electrical distributing station that does not contain any motorized or other such equipment that would generate emissions, no stationary source emissions would occur. Mobile source emissions are associated with vehicular traffic. Mobile source air pollutant emissions associated with the operation of the proposed project would be minimal and only generated during periodic maintenance and inspection activities. As discussed in Section 1.9, Project Description, maintenance would involve regular visits as well as scheduled maintenance work on a yearly basis, typically of two to three days duration. It is assumed daily maintenance activities could result in a maximum of 1 to 2 daily vehicle trips. This level of traffic would create minimal air quality emissions, and would not violate SCAQMD thresholds.

c. Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

LESS THAN SIGNIFICANT IMPACT. The CEQA Guidelines require that a project be evaluated with respect to its contribution to the cumulative baseline. The cumulative baseline includes all emissions

from existing sources in the region plus foreseeable changes to emissions associated with growth in the region. This contribution with respect to air emissions would include both construction and operational emissions. Cumulative projects would include any new development or general growth within the project area.

Short-Term Regional Construction Impacts. With regard to short-term impacts, cumulatively considerable impacts would result if emissions associated with the proposed project combined with other projects to result in emissions that exceed the SCAQMD thresholds. As shown in Table 3.3-2, unmitigated construction emissions were found to be less than significant for proposed project construction. In addition, dust control measures associated with SCAQMD Rule 403 would further minimize PM_{10} emissions from the project and would be consistent with the assumptions and regulations of the AQMP. The AQMP mandates reducing impacts to a level that is not cumulatively considerable. Only large unmitigated projects are considered cumulatively considerable. As such, the project would have no impact with respect to the implementation of the SCAQMD's AQMP. Therefore, the proposed project's construction emissions would not result in a significant contribution when combined with nearby construction projects' short-term emissions that could exceed SCAQMD significance thresholds for emissions.

Operational Impacts. The proposed project would not cause a substantial increase in overall traffic emissions in the area. As discussed in Section 1.9, Project Description, maintenance would involve regular weekly visits as well as scheduled maintenance work on a yearly basis, typically of two to three days duration. It is assumed daily maintenance activities could result in a maximum of 1 to 2 daily vehicle trips. This volume of project-generated traffic does not represent significant new traffic on the overall street network. While future development within the proposed project area could generate additional vehicle trips and contribute operational emissions to the project area, the proposed project operational emissions would not result in a significant contribution when combined with operational emissions of other future projects.

d. Would the project expose sensitive receptors to substantial pollutant concentrations?

LESS THAN SIGNIFICANT IMPACT. To assess impacts associated with exposing sensitive receptors to substantial pollutant concentrations, this analysis uses the SCAQMD's Local Source Thresholds (LST) methods (SCAQMD, 2007b). For LST analysis purposes, the proposed project site is defined as being located in Source Receptor Area 1 (SRA 1) for the City of Los Angeles Central Area (SCAQMD, 2007b). To determine LST impacts, the estimated daily onsite NO_x, CO, and PM₁₀ emissions from project construction (presented above in Table 3.3-2) are compared to SCAQMD's LST established for construction site size and proximity to sensitive receptors. For purposes of the proposed project, a worst-case construction scenario was used, with the construction site considered to be one acre in size with the nearest receptors being within 50 meters of the site. The PM_{2.5} LST threshold for the proposed project is 5 lbs/day (1-acre site with nearest sensitive receptor at 50 meters within the Central LA SRA) (SCAQMD, 2007b). Based on those assumptions, Table 3.3-3 presents the established SCAQMD LST for NO_x, CO, PM₁₀, and PM_{2.5} as compared to the estimated construction emissions for the proposed project.

as Con	npared to Local Sour	rce Thresholds (LST) Thresholds	
Emission Source Type	2009 Maximum Daily Construction Emissions	2010 Maximum Daily Construction Emissions	LST Threshold	Exceed Threshold?
Carbon Monoxide (CO)	65.28	63.02	671.00	NO
Nitrogen Oxides (NOx)	83.92	85.39	112.00	NO
Particulates (PM ₁₀)	11.20	2.20	14.00	NO
Particulates (PM _{2.5})	4.24	2.20	5.00	NO

Table 3.3-3 Maximum Daily Construction Emissions (lb/day)as Compared to Local Source Thresholds (LST) Thresholds

As shown in Table 3.3-3, the NO_x , CO, PM_{10} , and $PM_{2.5}$ emissions modeling results indicate that emissions would not exceed established SCAQMD LST, resulting in a less than significant impact. In

addition, SCAQMD fugitive dust control Rule 403 requirements would further minimize the fugitive dust (PM_{10}) emissions to stay well below the established SCAQMD LST for PM_{10} and $PM_{2.5}$ (refer to Appendix A).

e. Would the project create objectionable odors affecting a substantial number of people?

LESS THAN SIGNIFICANT IMPACT. Any odors (e.g., odors from construction vehicle emissions) that would be generated by the proposed project would be controlled in accordance with SCAQMD Rule 402 (Nuisance Emissions). Other than construction vehicle operation, no activities are anticipated to occur, and no materials or chemicals would be stored within the distributing station site or in staging areas, that would have the potential to cause odor impacts during the construction of the proposed project (including any appurtenant electrical facility structures). Operation of the proposed project would not include any activity that would create odors.

3.4 Biological Resources

BIOLOGICAL RESOURCES - Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				\boxtimes
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				\square
c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) either individually or in combination with the known or probable impacts of other activities through direct removal, filling, hydrological interruption, or other means?				
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of wildlife nursery sites?				\boxtimes
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				\square
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Communities Conservation Plan, or other approved local, regional, or state habitat conservation plan?				\boxtimes

a. Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

NO IMPACT. Special status species include flora, fauna, and vegetation communities that are listed as threatened or endangered, candidate species, or species of special concern under the California or federal Endangered Species Act, species that are listed as fully protected by the California Department of Fish and Game (CDFG), and plants considered by the California Native Plant Society (CNPS) to be rare, threatened, or endangered in California and beyond.

The project site is currently vacant and is located in an urban area. Surrounding properties include light and heavy industrial uses including an LADWP training and service center, a pallet manufacturing facility, warehouses, and an office building. A site visit was conducted by Aspen Environmental Group (Aspen) on May 2, 2007. The site visit was conducted to look for evidence of biological and other environmental resources. The proposed site does not support any natural habitat or vegetated landscaping that would support candidate, sensitive, or special status species including endangered, threatened, or rare species (CDFG, 2006; CNPS, 2007). The closest vegetation to the project site consists of small non-native ornamental trees located south of the project in the parking lot of a new office building. Construction of the proposed project would not require the removal of any native or ornamental shade trees.

A literature and records search of the California Natural Diversity Database (CNDDB) Rarefind and the California Native Plant Society (CNPS) online rare and endangered plant inventory provided a list of special status species in the Los Angeles 7.5-minute topographical quadrangle (CDFG, 2009; CNPS, 2007). No endangered, threatened, or rare species are expected to occur at the project site. Historically, the nearest endangered species that was known to occur in the vicinity project site is southwestern willow flycatcher (*Empidonax traillii extimus*), last seen in 1906 (CDFG, 2006). Although the exact location is unknown, the center of the estimated one-mile radius for the last documented specimen is approximately 1 mile northwest of the project site. Southwestern willow flycatcher requires native riparian woodland habitat for nesting; as this habitat no longer exists in or near the project site, this species is not expected to occur.

Four species recognized by the CDFG as California special concern (CSC) species have overlapping location radii with the center occurring approximately one mile northwest of the project site (CDFG, 2006). This includes burrowing owl (Athene cunicularia) last recorded in 1921, western mastiff bat (Eumops perotis californicus) last observed in 1918, big free-tailed bat (Nyctinomops macrotis) last documented in 1985, and American badger (Taxidea taxus) date last observed unknown. The CDFG database considers these species possibly extant in the quad although there is no specific location information available for these species. Burrowing owls would not be anticipated to occur on or near the project site as the heavy industrial development and compacted soils are unsuitable for nest building and would provide no suitable habitat for their target prey species (small rodents). Western mastiff bats have been known to roost in tall buildings and tunnels; however, the noise produced by the heavy industrial uses in the area and lack of native habitat for foraging would preclude this species from occurring in the project area. Big free-tailed bat was documented in the area in 1985, but no details of its exact location are available. This species requires high cliffs or rocky outcrops for roosting and no such habitat exists in or near the project site; therefore, this species is not expected to occur. The American badger is not expected to occur in or near the project site as this species requires loose friable soil with open undeveloped space for shelter and foraging. Therefore, no impacts to CSC species are expected.

Prostrate navarretia (*Navarretia prostrata*), which is recognized by the CNPS as a rare plant, is located near the project site (CNPS, 2007). Although the exact location of the last observation is not available, the center of the one-mile radius is estimated to be approximately one mile northwest of the project site. The prostrate navarretia is listed as a 1B.1 species by the CNPS, which indicates it is considered seriously endangered in California. This species was last recorded in the Los Angeles quad in 1881. No native habitat is found within or near the project site. The prostrate navarretia is considered extirpated in the area at this time and no impacts to this species are expected.

No occurrences of threatened species are historically known to occur within the area of the proposed project site (CDFG 2006). No direct or indirect impacts to biological resources are expected to occur to species listed as rare, threatened, or endangered pursuant to the Federal and State Endangered Species Acts. The proposed project is not expected to result in impacts to sensitive species recognized by the U.S. Fish and Wildlife Service as Federal Species. The proposed project site does not contain any natural habitat and the proposed project would not adversely impact special status species directly or indirectly through habitat modification. Therefore, no further study is required.

b. Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

NO IMPACT. The proposed project site is located in a highly developed area of Los Angeles. It includes light and heavy industrial uses and is surrounded by development on all sides. The project site is a vacant gravel-covered lot that is currently used for Los Angeles Department of Water and Power (LADWP) vehicle storage and has been used in the past for heavy industrial uses. Based on the May 2007 site visit by Aspen, no natural vegetation communities exist on or near the proposed project site and multiple decades of heavy industrial use have left the ground surface compact and unusable for native small mammals or reptiles. The closest vegetation to the project site consists of small non-native ornamental trees located south of the project in the parking lot of a new office building. No special status vegetation communities were identified in a CDFG Rarefind database search (CDFG, 2006). As no riparian or natural community habitats exist on or near the project site, no impacts to riparian or natural community habitats would result, and no further study is required.

c. Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) either individually or in combination with the known or probable impacts of other activities through direct removal, filling, hydrological interruption, or other means?

NO IMPACT. The proposed project site is located in a highly urbanized area and is zoned for heavy industrial uses. Light and heavy industrial uses surround the project site and include a LADWP training and service center, a pallet manufacturing facility, warehouses, and an office building. The project site is a vacant lot covered with gravel that has been used in the past for heavy industry, including a power plant in the 1900s. The closest vegetation to the project site consists of small non-native ornamental trees located south of the project in the parking lot of a new office building. The proposed project site and surrounding area do not contain any natural habitat, including federally protected wetlands habitat as defined by Section 404 of the Clean Water Act (CWA). As a result, no impacts to federally protected wetlands would occur.

d. Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of wildlife nursery sites?

NO IMPACT. The proposed project site is located in a highly urbanized area and is zoned for heavy industrial uses. No native habitat exists in or near the project site, which is surrounded by industrial development. The closest vegetation to the project site is located in the parking lot of the new office building immediately to the south of the project site. However, these trees are small non-native ornamental tress and would not provide sufficient habitat to be a migration corridor or nursery site for native species. The proposed project site is not located within, and does not intersect with any watercourses, designated greenbelts, or Significant Ecological Areas that could be used for wildlife movement.

e. Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

NO IMPACT. The City of Los Angeles, Tree Protection Ordinance, Sec. 46.00 of the Municipal Code, protects native oaks with a trunk diameter at breast height (DBH) greater than four inches. Other mature native trees are not protected by any ordinance or regulation within the City of Los Angeles; however, policies addressing impacts to other mature trees have been established by the City of Los Angeles Department of Public Works (LADPW) and the City of Los Angeles Department of Recreation and Parks (LADRP). Section 62 of the Los Angeles Municipal Code requires that a permit be obtained from the Street Tree Division of the Public Works Department for the removal of any tree on City streets or public property.

During the May 2007 site visit, the proposed project site was surveyed for trees by Aspen Environmental Scientist Jason Ricks. No vegetation was observed on or directly adjacent to the project site, including mature trees and protected oak tree species, such as valley oak (*Quercus lobata*), coast live oak (*Q. agrifolia*), and mesa oak (*Q. engelmannii*). The closest trees to the project site are small ornamental trees located in the parking lot of an office building located to the south of the project site. This project would not require the removal of any trees or other vegetation as no trees or vegetation occur within the construction area. As a result, the project would not conflict with any local polices or ordinances protecting biological resources.

f. Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Communities Conservation Plan, or other approved local, regional, or state habitat conservation plan?

NO IMPACT. The proposed project would not be located within an adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other approved plan. The proposed project site is currently vacant but has been previously occupied by developed industrial facilities; no NCCPs or HCPs occur on the proposed project site. The NCCP program, which began in 1991 under the state's Natural Community Conservation Planning Act, is administered by the CDFG. The closest NCCP is the Palos Verdes Peninsula Sub-Regional Plan, located over 25 miles to the southwest of the proposed project (CDFG, 2007). HCPs are administered by the USFWS and are intended to identify how impacts would be mitigated when a project would impact endangered species (USFWS, 2007). There are no HCPs currently in place for the project site or surrounding area (USFWS, 2007). Therefore, there are no impacts to biological resources related to conflicts with the provisions of any adopted HCP or NCCP, and no further study is required.

3.5 Cultural Resources

CULTURAL RESOURCES - Would the project:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
а.	Cause a substantial adverse change in the significance of an historical resource as defined in §15064.5?		\boxtimes		
b.	Cause a substantial adverse change in the significance of a unique archaeological resource pursuant to §15064.5?		\boxtimes		
C.	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?			\square	
d.	Disturb any human remains, including those interred outside of formal cemeteries?		\boxtimes		

a. Would the project cause a substantial adverse change in the significance of an historical resource as defined in §15064.5?

LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED. A Phase I Cultural Resources Investigation (included as Appendix B of this document) of the Distributing Station #144 project site was conducted by ArchaeoPaleo Resource Management, Inc. (2008). A standard records check through the California State University, Fullerton South Central Coastal Information Center (SCCIC) was completed. In addition to reviewing all historic and prehistoric documents housed at the SCCIC and a thorough evaluation of the Sanborn insurance maps and other historical documentation housed at the Los Angeles downtown library, research was also conducted on the documents pertaining to the California State Historical Resources Inventory (HRI) listing, the National Registry of Historical Places (NRHP) listing, the California Historical Landmarks listings, and the Los Angeles Historic Cultural Monuments lists. All of these documents were reviewed and produced negative findings for the project site (ArchaeoPaleo, 2007).

The results of the records search indicate that no historic or prehistoric archaeological sites have been recorded on the project site and that the site has never been systematically surveyed by professional

archaeologists. However, there have been eighteen archaeological projects completed within a one-half mile radius of the project site. In addition, there are three previously recorded cultural resources located within a one-half mile radius of the project site (ArchaeoPaleo, 2008).

Construction would involve grading and ground disturbance, such as trenching for foundation construction. These activities have very little potential to uncover undiscovered historic resources because the entire project site is underlain by 9 to 11 feet of compacted artificial fill material (Sladden Engineering, 2000 and GTC, 2008) (A review of geotechnical investigations performed at the site is presented in Appendix C). However, some construction activities, such as excavations for drilled piers and trenches for electrical deep ducts, have the potential to disturb native soils and uncover historical resources. Therefore, Mitigation Measures CUL-1 (Conduct Archaeological Monitoring) and CUL-2 (Historical and Cultural Training for Construction Personnel) are recommended to reduce impacts to historical resources to a less-than-significant level.

CUL-1 Conduct Archaeological Monitoring. LADWP shall conduct archaeological monitoring during all ground disturbing activities that would penetrate deeper than 10 feet below ground surface, such as excavations for drilled piers and trenches for electrical deep ducts. Monitoring shall be conducted by a qualified archaeological monitor familiar with the cultural resources of southern California.

In the event that a potential significant archeological resource is discovered, all work shall temporarily cease within the immediate area of the find until the site can be assessed by a qualified archeologist in consultation with the LADWP. If the material is determined to be significant, the qualified archeologist shall prepare and implement a treatment plan in consultation with the LADWP. Construction activity shall not resume until authorization has been provided by the LADWP and the qualified archeologist.

CUL-2 Historical and Cultural Training for Construction Personnel. LADWP shall require a qualified archeologist to provide a cultural resources briefing prior at the start of construction for all construction personnel. If construction personnel discover a cultural resource in the absence of an archeological monitor, construction shall be halted and a qualified archeologist shall be contacted to make an immediate evaluation of significance and recommend appropriate treatment of the resource.

b. Would the project cause a substantial adverse change in the significance of a unique archaeological resource pursuant to \$15064.5?

LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED. Due to the close proximity of several previously recorded archeological sites, the project site has a moderate level of sensitivity for archeological resources within soils deeper than ten feet below ground surface. Although no archeological resources were identified specifically within the proposed project site boundaries, some construction activities (such as excavations for drilled piers and trenches for electrical deep ducts) have the potential to uncover undiscovered archeological resources. Therefore, Mitigation Measures CUL-1 and CUL-2 are recommended to reduce impacts to archeological resources to a less-than-significant level.

c. Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

LESS THAN SIGNIFICANT IMPACT. A Vertebrate Paleontology record search was conducted at the Natural History Museum of Los Angeles County. The search did not identify any paleontologic resources on the project site. There are, however, nearby localities that have yielded vertebrate fossil remains. The site has superficial deposits of soil and younger Quaternary Alluvium derived from the Los Angeles River. These deposits are unlikely to contain significant vertebrate fossils, at least in the uppermost layers. At a deeper depth, there may be older Quaternary Alluvium or older deposits that may contain vertebrate fossil remains. There is always the potential for fossil finds to be located within

subsurface sediments (ArchaeoPaleo, 2008). However, the shallow nature of the proposed ground disturbance indicates that paleontological resources are not likely be impacted by the project.

d. Would the project disturb any human remains, including those interred outside of formal cemeteries?

LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED. As stated above, no archeological or paleontological resources have been identified at the project site. The Los Angeles area lies within the territory occupied by the Gabrielino/Tongva Native American group. Native American representatives identified by the Native American Heritage Foundation were contacted by telephone and were mailed a letter explaining the project and its location. The representatives were asked to write a response expressing any concerns that they might have regarding the project. No response has been received as of June 20, 2008 (ArchaeoPaleo, 2008). Although no known burial grounds have been identified on the proposed project site, the possibility of uncovering human remains exists. Implementation of the Mitigation Measure CUL-3 (Notification of Discovered Remains) would reduce impacts associated with the disturbance of human remains to a less-than-significant level:

CUL-3 Notification of Discovered Remains. In the event that human remains or potential human remains are discovered, construction activities within the immediate area of the find shall be immediately halted. The LADWP Project Construction Manager shall immediately notify the LADWP Project Manager and the County Coroner. The County Coroner will make a determination as to the origin of the remains and, if determined to be of Native American origin, the Native American Heritage Commission (NAHC) will be contacted. In consultation with the Most Likely Descendant, the NAHC and qualified archeologist shall determine the disposition of the remains in accordance with California Health and Safety Code §7050.5 and CEQA Guidelines §15064.5(e). If the remains are not of Native American origin, the County Coroner will make a determination as to the disposition of the remains. Construction may continue once compliance with all relevant sections of the California Health and Safety Code have been addressed and authorization to proceed issued by the County Coroner and the LADWP.

3.6 Geology and Soils

G	EOLOGY AND SOILS - Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
а.	Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
	 Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. 				
	ii) Strong seismic ground shaking?			\boxtimes	
	iii) Seismic-related ground failure, including liquefaction?				\boxtimes
	iv) Landslides?				\boxtimes
b.	Result in substantial soil erosion or the loss of topsoil?				\boxtimes
C.	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?				
d.	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994) creating substantial risks to life or property?				\square

GEOLOGY AND SOILS - Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				\boxtimes

- a. Would the project expose people or structures to potential adverse effects, including the risk of loss, injury, or death involving:
 - i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

NO IMPACT. The proposed project site is not located within mapped Alquist-Priolo Earthquake Hazard Zones or Fault Rupture Hazard Zones (City of Los Angeles, 1996a). The nearest fault to the proposed project is the Raymond Hill Fault, located within the City of South Pasadena approximately five miles east of the site (DOC, 2006). Therefore, the proposed project is not located within any mapped fault zones or directly crossing any existing faults.

ii) Strong seismic ground shaking?

LESS THAN SIGNIFICANT IMPACT. The proposed project would be subject to ground shaking associated with earthquakes on faults of both the major San Andreas and Transverse Ranges fault systems. The nearest active and potentially active faults are the Elysian Park Thrust, Hollywood, Compton Thrust, Raymond, Newport-Inglewood and Verdugo faults.

Based on a site specific probabilistic seismic hazard analysis, the anticipated peak ground acceleration (PGA) for a seismic event that has a 10% chance of exceedance in 50 years is 0.5g (gravity). Due to the LADWP's seismic design criteria, this moderate ground shaking is not likely to cause significant damage to the electrical equipment. The seismic design criteria for the LADWP state that all electrical distribution equipment must be able to withstand a PGA of 0.5g. Therefore, impacts would be less than significant.

iii) Seismic-related ground failure, including liquefaction?

NO IMPACT. Seismic-related ground failures such as liquefaction, lurching, lateral spreading, and differential settlement can result from strong ground shaking. The proposed project is not located within areas mapped as having potential for seismically induced liquefaction (City of Los Angeles, 1996b).

Lateral spreading is the horizontal component of soil movement toward an unsupported face or slope that results from liquefaction of underlying layers. Surface fissures on gently sloping ground are a common feature of lateral spreading and reflect the horizontal movement ranging from a few inches to several feet. As identified above, the proposed project is not located within areas mapped as having potential for seismically induced liquefaction. Therefore the project has no liquefiable or ground failure potential.

iv) Landslides?

NO IMPACT. The proposed project site consists of 0.88 acre of flat, graded ground surface and is not located within a mapped Landslide Hazard Zone (City of Los Angeles, 1996c). The properties surrounding the site are also flat and are developed with buildings and paved surfaces. No hills, slopes, or bluffs are located near the project site. Grading and excavation activities would not result in substantially deep excavations or tall stockpiles. Therefore, the proposed project is not expected to be impacted by landslides or to create a landslide hazard.

b. Would the project result in substantial erosion or the loss of topsoil?

NO IMPACT. Construction of the proposed project would require grading; however the location of surface disturbance would occur within level areas that have been previously disturbed. No significant erosion or loss of topsoil is expected in these areas due to project construction, as any disturbed paved areas would be repaved upon completion of construction. Once operational, the proposed project would contain electrical distribution equipment and would not involve any earthmoving or water generating activities that may cause erosion.

c. Is the project located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in onsite or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?

NO IMPACT. The proposed project would be located along flat terrain consisting primarily of previously disturbed soil and alluvial deposits as it would be located within an existing developed area. As described above in the response to Question 3.6 [a (ii, iii, iv)], the proposed project would not be susceptible to liquefaction. Furthermore, the proposed project components would be constructed to meet all applicable Uniform Building Code and seismic safety standards. No impacts would occur.

d. Is the project located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994) creating substantial risks to life or property?

NO IMPACT. Imported soils at the project site consist of non-expansive silty sands, clayey sands and sandy clays. Native soils consist of non-expansive sand and gravelly sand. The project would not be located on expansive soil, and therefore, no impact would occur.

e. Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

NO IMPACT. As described in Section 1.9, Project Description, the proposed project would not be staffed and would therefore not require a septic tank or alternative wastewater disposal system. Construction and operation of the proposed project would not affect any existing, or hinder future, septic tanks or alternative wastewater disposal systems, or the soils that would adequately support those systems.

3.7 Hazards and Hazardous Materials

H	HAZARDS AND HAZARDOUS MATERIALS - Would the project:		Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
а.	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			\square	
b.	Create a significant hazard to the public or the environment through the reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment?		\boxtimes		
C.	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			\square	
d.	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				
e.	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				

_					
Η	AZARDS AND HAZARDOUS MATERIALS - Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
f.	For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				\boxtimes
g.	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			\square	
h.	Expose people or structures to the risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?			\square	

a. Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

LESS THAN SIGNIFICANT IMPACT. Construction of the proposed project would involve the excavation and transport of surface materials (e.g., soils). However, according to a Soil Investigation Study conducted for the proposed project site, although both diesel and oil were found within soil samples collected from the site, the reported concentrations of diesel and oil are well below hazardous waste classifications (Parsons Corporation, 2007).

During construction, small quantities of hazardous materials such as petroleum hydrocarbons and their derivatives (e.g., gasoline, oils, lubricants, and solvents) would be required to operate the construction equipment. These materials would be used with large construction equipment (e.g., compactors and excavators) and would be contained within vessels engineered for safe storage. Storage of substantial quantities of these materials within the proposed project site and construction staging areas is not anticipated. Construction vehicles would require onsite refueling, and may require routine or emergency maintenance that could result in the release of oil, diesel fuel, transmission fluid or other materials; however, the materials would not be used in quantities or stored in a manner that would pose a significant hazard to the public or the workers themselves. Operation of the proposed project would involve the distribution of electricity, and would not require the use, storage, or disposal of hazardous substances.

b. Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED. As described above in the response to Question 3.7 (a), the proposed project would not involve the use of substantial quantities of hazardous materials that would pose a risk to the public. Before commencing any excavation, LADWP's construction contractor would be required to develop a construction plan, emergency response plan, spill prevention plan, or similar documents. These documents would identify specific locations for fuel storage, to adequately provide setbacks from existing water bodies (approximately 100-foot minimum) and water wells (approximately 200-foot minimum), and to provide requirements for hazardous material containment (e.g., earthen berms lined with plastic). Furthermore, as a routine business practice, prior to operation of the facility, LADWP will develop Spill Prevention Control and Countermeasure plans to prevent and contain hazardous releases, and conducts internal audits of its facilities to insure compliance. Pedestrians and vehicle traffic would be kept a safe distance away from construction zones via markers, barriers, and sign postings.

Environmental assessments and soil investigations performed for the proposed project site did not identify notable concentrations of hydrocarbons in soil samples collected from the site (Smith-Emery GeoServices 2001, and Parsons, 2002). However, since completion of those investigations, an oil seep has been observed onsite (LADWP, 2007). Oil seeps are natural springs where liquid hydrocarbons leak out of the ground (USGS, 2007). Whereas freshwater springs are fed by underground pools of water, oil seeps are fed by natural underground accumulations of oil (USGS, 2007). However, it is also possible

that the seep is a result of releases from abandoned subsurface equipment onsite or from past activities adjacent to the site.

Excavation and grading during construction of the proposed project could result in release of subsurface oil, resulting in a significant impact without mitigation. Therefore, Mitigation Measures HAZ-1a through HAZ-1c are recommended to reduce impacts to a less-than-significant level. Further investigation must be conducted (Mitigation Measure HAZ-1a) in order to determine whether the source of onsite oil is natural or a result of contamination. If the oil is the result of a natural seep, Mitigation Measure HAZ-1b would be implemented, which would require construction of an oil collection vault to prevent possible soil or storm drain contamination. If the oil is a result of previous onsite or adjacent site activities, Mitigation Measure HAZ-1c would be implemented, which would require that the oil and affected soil would be removed in accordance with Regional Water Quality Control Board clean-up standards.

- **HAZ-1a** Investigate Source of Oil Seep LADWP shall conduct a site investigation to determine the source of the onsite oil seep. The investigation may include the use of ground penetrating radar to determine if past equipment remains onsite. A backhoe would be used to excavate soil in the area of the seep to determine its source. Depending on the results of the investigation, one of the following measures will be implemented to prevent potential soil and water contamination.
- **HAZ-1b** Install Oil Collection Vault. If it is determined that the onsite oil is a result of a natural seep, a collection vault will be installed during other required street improvements associated with the proposed substation.
- **HAZ-1-c Remediate Soil Contamination**. If it is determined that the onsite oil is a result of contamination from previous activities on or adjacent to the site, the affected soil will be excavated and disposed in accordance with Regional Water Quality Control Board clean-up standards.

The proposed project site is located within a Methane Zone as defined by the City of Los Angeles' Methane Mitigation Standard (Ninyo & Moore, 2007). A methane soil gas site survey was performed for the site to evaluate the need for a methane prevention and monitoring system for the proposed control house building. The results of the investigation indicate that methane exists at the site (Ninyo & Moore, 2007). The maximum methane concentration detected is 18 parts per million by volume (ppmv) (Ninyo & Moore, 2007). Although methane levels detected at the site are significantly below the Lower Explosive Limit of 50,000 ppmv, per Section 91.7104 of the city of Los Angeles Methane Code, the proposed project site would require mitigation (City of Los Angeles, 2004). The minimum methane mitigation requirement for sites with methane concentrations of less than 100 ppmv that are located within a designated Methane Zone is Site Design Level 1. Therefore, Mitigation Measure HAZ-2 (Implement Site Design Level 1 Methane Mitigation) is recommended to reduce impacts to a less-than-significant level.

- **HAZ-2** Implement Site Design Level 1 Methane Mitigation. Mitigation shall be designed by an engineer specializing in hazardous gas mitigation systems and shall include, at a minimum, the following measures:
 - Passive methane mitigation system,
 - Impervious membrane, including conduit seals at all slab penetrations,
 - Passive venting system, including a minimum of a 2-inch gravel layer, perforated horizontal pipes, and vent risers, and
 - Trench dams at all conduit trenches going into the foundation.

c. Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

LESS THAN SIGNIFICANT IMPACT. The nearest school to the proposed project site is LAUSD Downtown Value Elementary School located at 950 West Washington Boulevard located approximately 1.0 mile west of the site (LAUSD, 2007). Therefore, given the distance of the school to the site and the limited scale and temporary nature of construction activities, construction of the proposed project is not anticipated to have an adverse effect on this school.

As discussed in Section 3.3, Air Quality, operation of construction equipment would produce air contaminant emissions. None of these emissions are expected to be generated at levels that are considered hazardous. In addition, construction of the proposed project would involve the excavation and transport of surface materials (e.g., soil). However, as described above in the response to Question 3.7 (a), according to a Soil Investigation Study for the proposed project site, although both diesel and oil were found within soil samples taken within the site, the reported concentrations of diesel and oil are well below hazardous waste classifications. Therefore, the transport and disposal of onsite soil would not involve acutely hazardous materials, substances or waste.

d. Would the project be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

LESS THAN SIGNIFICANT IMPACT. A government records search was conducted for the proposed project site that identified hazardous materials sites listed pursuant to Government Code Section 65962.5. Smith-Emery Geoservices conducted a search designed to meet the government records search requirements of the American Society for Testing and Materials' Standard Practice for Environmental Site Assessments. (Smith-Emery Geoservices, 2001).

Based on the Smith-Emery Geoservices study, several sites have been identified in the surrounding area and adjacent to the proposed project site, which are listed in various databases, compiled pursuant to Government Code Section 65962.5, as containing hazardous materials, or having previously contained hazardous materials. Although these facilities are listed on government hazardous materials databases, the storage, use, and disposal of such hazardous materials, or historic releases of such materials, they are not expected to present a risk to the public or the environment as a result of the proposed project based on one or more of the following reasons (Smith-Emery Geoservices, 2001):

- Listed on Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) database but a preliminary assessment has determined that no hazard was identified and no further action is needed.
- Listed as having registered underground storage tanks (USTs), or as small or large quantity generators only, and are not listed on any other lists that would indicate that a release to the environment has occurred.
- Listed on Leaking Underground Storage Tank (LUST) database as having a leaking tank but is located more than 0.25 mile from the proposed project site, is located hydrologically cross or down gradient, or has a status of "case closed" from the applicable regulatory agency.
- Listed on other databases and in Smith-Emery Geoservices opinion unlikely to have impact to the subject site based on one or more of the following reasons: is located greater than 0.25 mile from the proposed project site, is located hydrologically cross or down gradient, or has lack of impacted resources.

During construction or operation, if contamination with the potential to create a significant hazard to the public or the environment is discovered, the applicable regulatory agency would be contacted and the required corrective actions would be undertaken to eliminate the hazard.

e. For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

NO IMPACT. The nearest airport to the proposed project is the Bob Hope Airport (formerly known as Burbank-Glendale-Pasadena Airport), located more than 12 miles northwest of the site (Thomas Brothers). Due to the distance of the proposed project to this airport and the nature of construction and operational activities (low profile electrical distribution equipment), neither construction nor operation of the proposed project would have an impact on public airports or public use airports or result in an aviation safety hazard.

f. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

NO IMPACT. The proposed project site is not located within the vicinity of any identified private airstrips (Thomas Brothers, 2007).

g. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

LESS THAN SIGNIFICANT IMPACT. The proposed project would not impair or physically interfere with an adopted emergency response plan or a local, state, or federal agency's emergency evacuation plan, except for possible short-term periods during construction when roadway access may be limited in some areas. Construction site preparation would include the preparation and implementation of traffic control plans in coordination with the Los Angeles Department of Transportation (LADOT) to detour and delineate the traffic lanes around the work area(s). Emergency access during construction is discussed further under Transportation and Traffic (Section 3.15[e]). Implementation of coordination efforts with LADOT would minimize potential impacts to emergency response routes during construction.

Once operational, the proposed project would consist of stationary electrical distribution equipment and would not interfere with emergency response or evacuation plans.

h. Would the project expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

LESS THAN SIGNIFICANT IMPACT. The proposed project is located within a highly urbanized area, and is not located in close proximity to any open areas or wildlands. According to the City of Los Angeles, the proposed project site is not located within a Wildfire Hazard Area (City of Los Angeles, 1996d). Operation of the proposed project would require regular maintenance activities including brush control to ensure no vegetation would be in direct physical contact with active electrical line, thus reducing exposure of people or structures to a significant risk of loss, injury or death involving wildland fires.

3.8 Hydrology and Water Quality

HYDROLOGY AND WATER QUALITY - Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Violate any water quality standards or waste discharge requirements?		\boxtimes		
b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (i.e., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?				

HYDROLOGY AND WATER QUALITY - Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner, which would result in substantial erosion or siltation on or off site?		\boxtimes		
d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on or off site?		\boxtimes		
e. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?			\boxtimes	
f. Otherwise substantially degrade water quality?		\boxtimes		
g. Place housing within a 100-year floodplain, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				\square
 Place within a 100-year floodplain structures that would impede or redirect flood flows? 				\boxtimes
i. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				\boxtimes
j. Inundate by seiche, tsunami, or mudflow?				\square

a. Violate any water quality standards or waste discharge requirements?

LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED. Construction of the proposed project would require water, as necessary, to control fugitive dust. Fugitive dust emission at the construction site would be controlled by water trucks equipped with spray nozzles. This activity would generate minimal quantities of discharge water, which would drain into existing storm drains in the project area.

Best Management Practices (BMPs) for General Construction will be implemented to prevent or reduce the transport of sediment and/or other pollutants offsite. Additionally Mitigation Measure HYD-1 (Prevent Erosion, Siltation, and Transport of Sediments and Pollutants Offsite) is recommended to ensure that sediments and pollutants would not be transported offsite. Compliance with the BMPs would ensure that the potential for violating water quality standards would be less than significant.

- **HYD-1 Prevent Erosion, Siltation, and Transport of Sediments and Pollutants Offsite.** LADWP's contractor shall implement Standard Mitigation Measures as required by the Los Angeles Department of City Planning to prevent substantial changes to onsite runoff patterns, erosion, and transport of sediments and pollutants offsite. Such measures shall include but not be limited to: immediate cleanup of leaks, drips and spills to prevent contaminated soil on paved surfaces that can be washed away into the storm drains; the use of gravel approaches to reduce soil compaction and limit the tracking of sediment into streets; proper covering and maintenance of dumpsters; proper disposal or recycling of construction materials and wastes; and the covering with secured tarps or plastic sheeting of stockpiles and excavated soil.
- b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?

LESS THAN SIGNIFICANT IMPACT. No removal or addition of groundwater is associated with construction or operation of the project. Most precipitation in the area becomes surface runoff that is carried away by storm drains. Depth to groundwater at the proposed project site is deep (99 feet below ground surface); little water percolates downward through the unsaturated zone to reach the water table at this depth, since precipitation or surface drainage that infiltrates the soil would either immediately evaporate or be taken up as soil moisture. Groundwater recharge is primarily from the adjacent mountains and the San Fernando Valley via the Los Angeles Narrows; therefore impacts to groundwater recharge would be less than significant (SEG 2001).

c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner, which would result in substantial erosion or siltation on-or off-site?

LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED. The proposed project would not substantially alter the existing drainage pattern of the site or area. The surrounding area is developed with industrial uses and the drainage pattern is defined primarily by roadways and storm drains. Currently, the project site is a vacant, relatively flat, gravel-covered lot. Topography in the vicinity of the site slopes gently to the southwest (SEG 2001). Construction of the proposed project could result in minimal alterations to overland flow through construction of a block wall and through paving of portions of the project area, however drainage flows from the substation would be routed to the existing stormwater infrastructure along local roadways. While the potential for siltation off-site during construction activities exists, this risk would be minimized through implementation of general construction BMPs as well as Mitigation Measure HYD-1, described above. Additionally, no streams or rivers are located on or near the project site.

d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner, which would result in flooding on- or off-site?

LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED. The proposed project would not substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site. The proposed distributing facility would be constructed on a currently vacant 0.88-acre parcel that was previously developed with industrial uses. New impermeable surfaces could result in a decrease of infiltration capacity; however, this decrease of infiltration capacity would be minimal and would not result in an increase of runoff amount sufficient to cause flooding on- or off-site. The surrounding area is currently developed with paved surfaces and industrial uses and is highly impermeable, and surface runoff is managed through a system of storm drains. Any surface runoff that would occur during the construction phase of the project would be addressed by the general construction BMPs as well as Mitigation Measure HYD-1, described above.

e. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

LESS THAN SIGNIFICANT IMPACT. Fugitive dust emission at the construction sites would be controlled by water trucks equipped with spray nozzles. Construction water needs would generate minimal quantities of discharge water, which would drain into existing storm drains located near the project site. The amount of runoff would be minimal and is not expected to exceed the capacity of existing or planned stormwater drainage systems. Operation of the proposed project would not require the use of water and would therefore not contribute additional runoff to the existing drainage system. The stormwater drainage system surrounding the project area is designed to handle runoff from existing land uses in the area. Construction and operation of the proposed project would not require additional stormwater drainage capacity.

f. Otherwise substantially degrade water quality?

LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED. Short-term erosion could occur during construction activities, which could adversely affect surface water quality from

runoff water. Construction equipment and trash containers may potentially leak contaminants, increasing the possibility of washing contaminated runoff into nearby waterbodies, particularly the Los Angeles River. However, the amount of contaminants that could leak from construction equipment and trash containers would be relatively small. Additionally implementation of the general construction BMPs and Mitigation Measure HYD-1 described above prevent and/or reduce the amount of contaminants that could potentially leave the project site.

g. Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

NO IMPACT. The proposed project does not include development of any housing as part of the project. The proposed distributing station would be unmanned, and would require only infrequent visits by LADWP personnel for inspection and maintenance activities. The proposed project does not fall within a 100-year flood hazard area as mapped on the Los Angeles Flood Hazard Map (BOE 2002).

h. Place within a 100-year flood area structures to impede or redirect flood flows?

NO IMPACT. Although the project area is located approximately 0.5 mile from the Los Angeles River, the project area does not fall within a 100-year flood area as depicted on the Los Angeles Flood Hazard Map (BOE 2002) and would therefore not impede or redirect flood flows.

i. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

NO IMPACT. The proposed project consists of construction and operation of an unmanned distributing station. LADWP personnel would periodically visit the site to conduct maintenance activities. The project site is not located within a 100-year or 500-year flood zone. The proposed project would not involve construction or improvements to a dam or levee.

j. Inundation by seiche, tsunami, or mudflow?

NO IMPACT. The project site is nearly 14 miles from the nearest shoreline, the Santa Monica Bay (Rand McNally, 2007), and is 255 feet above mean seal level (SEG, 2001); the project site is not at risk of inundation by tsunami. Additionally, the project area is not located near enclosed bodies of water (such as lakes or reservoirs) that could produce a seiche. The topography of the project area and surrounding land is flat. Most of the surrounding land is either paved or occupied by structures; therefore there is little risk of mudflow.

3.9 Land Use and Planning

LAND USE AND PLANNING – Would the project:		Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Physically divide an established community?			\boxtimes	
b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?				
c. Conflict with any applicable habitat conservation plan or natural communities conservation plan?				\square

a. Would the project physically divide an established community?

LESS THAN SIGNIFICANT IMPACT. The proposed project would be located in the South Industrial subarea of the Central City North Community Plan Area (City of Los Angeles, 2000). This area is bounded by the City of Vernon, the Los Angeles River, Third Street, and Alameda Street. Industrial uses dominate this section of Central City North with large warehouses, truck and railroad yards. The

proposed project would be constructed directly adjacent to an existing LADWP Training and Service center. The proposed project would be consistent with surrounding land uses and would not physically divide an established community.

b. Would the project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

LESS THAN SIGNIFICANT IMPACT. The proposed project would be located in the Central City North Community Plan Area in downtown Los Angeles. The area is zoned primarily for industrial uses (City of Los Angeles, 2000). The following land use plans, policies, and regulations would apply to the proposed project:

- City of Los Angeles General Plan
 - Central City North Community Plan
- SCAQMD Air Quality Management Plan
- Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties
- City of Los Angeles Municipal Code

Based on a review of applicable land use policies and standards contained within the documents listed above, the proposed project would not result in any conflicts. The general intent of local plans and standards is to protect and enhance existing communities. The proposed project would provide greater electrical capacity and reliability to the Central City North Community Plan Area. Operation of the proposed project would not conflict with any applicable land use policies, plans, or applicable regulations. See Section 3.3, Air Quality, and Section 3.4, Biological Resources, for a more detailed description of compliance with regulations for those resource areas.

c. Would the project conflict with any applicable habitat conservation plan or natural community conservation plan?

NO IMPACT. As discussed in section 3.4, Biological Resources, the proposed project would not conflict with any applicable habitat conservation plans or natural community conservation plans.

3.10 Mineral Resources

MINERAL RESOURCES - Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Result in the loss of availability of a known mineral resource that would be of value to the region and residents of the state?			\square	
b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?				\boxtimes

a. Would the project result in the loss of availability of a known mineral resource classified MRZ-2 by the State Geologist that would be of value to the region and the residents of the State?

LESS THAN SIGNIFICANT IMPACT. The primary mineral resources within the City of Los Angeles are rock, gravel and sand deposits. Sand and gravel deposits follow the Los Angeles River flood plain, coastal plain and other water bodies and courses. Significant potential deposit sites identified by the state geologist lie along the flood plain from the San Fernando Valley through downtown Los Angeles (City of Los Angeles, 2001b). Much of the area within the MRZ-2 sites in Los Angeles was developed with structures prior to MRZ-2 classification and, therefore, is unavailable for extraction (City of Los Angeles, 2001b). The area surrounding the proposed project site is highly developed with industrial structures and therefore construction of the proposed project would not result in the loss of an available mineral resource (City of Los Angeles, 2001b).

b. Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

NO IMPACT. According to the Central City North Community Plan of the Los Angeles General Plan, the proposed project area is zoned for industrial uses and artist-in-residence occupancy. Mineral resource recovery is not a compatible land use for the proposed project area (City of Los Angeles, 2000). Therefore, no impacts to mineral resources would occur.

3.11 Noise

NOISE - Would the project result in:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?		\boxtimes		
 Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels? 			\square	
c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?			\boxtimes	
 A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? 		\boxtimes		
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				\boxtimes
f. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				

a. Would the project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED. The proposed project would be located within the City of Los Angeles and would be subject to the noise policies and standards of the City of Los Angeles General Plan and noise ordinances. Noise measurements were recorded at three locations in the vicinity of the proposed project. The noise levels listed in Table 3.11-1 provide a representative sample of ambient noise conditions near the proposed project site. The primary noise sources in the project area were documented as traffic noise along the streets adjacent to the proposed project site (e.g., Palmetto Street) and nearby industrial uses (including an adjacent wood pallet facility). As described in Table 3.11-1, the existing average ambient noise levels at the site ranged between 51.6 dBA and 56.1 dBA. A land use survey was conducted to identify any potentially sensitive receptors in the general vicinity of the proposed project site. Noise sensitive receptors are facilities (e.g., residential, hospitals, schools, sound studios, etc.) where excessive noise may convey annoyance or loss of business. No sensitive receptors were identified near the vicinity of the proposed project site.

Applicable Regulations

<u>City of Los Angeles</u>. The Los Angeles Municipal Code § 41.40 indicates that no construction or repair work shall be performed between the hours of 9:00 p.m. and 7:00 a.m. of the following day because such activities would generate loud noises and disturb persons occupying sleeping quarters in any adjacent dwelling, hotel, apartment, or other place of residence. In addition, no person, other than an individual homeowner engaged in the repair or construction of a single-family dwelling, shall perform any construction or repair work of any kind within 500 feet of residential buildings before 8:00 a.m. or after 6:00 p.m. on any Saturday, national holiday, or at any time on Sunday.

Loca	tion	Survey , , ,				
#	Description	Period	L _{eq}	L _{max}	Lmin	Noted Sources
1	Northeast corner of the proposed project site	12:45 p.m. to 1:00 p.m.	54.6	84.2	69.9	Maximum noise caused by auto traffic, garage door from adjacent LADWP building, pounding and sawing at wood pallet facility across the street.
2	Northwest corner of the proposed project site	1:05 p.m. to 1:20 p.m.	56.1	79.7	67.6	Maximum noise caused by auto traffic on Seaton St. and Palmetto St., and pounding and sawing at wood pallet facility across the street.
3	Southern site boundary, approximately 40-feet from nearby office structure	1:25 p.m. to 1:40 p.m.	51.6	75.2	60.6	Maximum noise caused by auto traffic on Palmetto St., and pounding and sawing at wood pallet facility across the street.

 Table 3.11-1
 Ambient Noise Levels Representative of the Project Area

Notes: All measurements are in dBA and were taken on March 2, 2007.

The Los Angeles Municipal Code §112.05 specifies the maximum noise level for powered equipment or powered hand tools. It states that any powered equipment or powered hand tool that produces a maximum noise level exceeding 75 dBA at a distance of 50 feet from construction or industrial machinery between the hours of 7:00 a.m. and 10:00 p.m. in any residential zone of the City or within 500 feet thereof shall be prohibited. However, the above noise limitation shall not apply where compliance is technically infeasible. Technically infeasible means that the above noise limitation cannot be complied with despite the use of mufflers, shields, sound barriers, and/or any other noise reduction device or techniques during the operation of equipment.

Impacts

Construction noise would be created from onsite and off-site sources. As stated in Section 1.9, Project Description, construction activities would occur between 6:00 a.m. and 4:30 p.m. Monday through Friday beginning around June 2009 and would continue for approximately 24 months. As no residential housing is located within 500 feet of the proposed project, the construction work hours would be consistent with Los Angeles Municipal Code Section 41.40.

Table 3.11-2 Noise Emission Characteristics of Construction Equipment

Type of Equipment Typical Noise Lev dBA at 50 feet									
Compactor	82								
Crane, Mobile	83								
Excavator/Shovel	82								
Loader	85								
Paver	89								
Truck	88								

Source: FTA, 1995.

Onsite Sources. Onsite noise during construction would occur primarily from heavy-duty diesel and gasoline-powered construction equipment. Off-site noise would be generated from trucks delivering materials and equipment to the job-site, as well as from vehicles used by workers commuting to and from the job sites. Short-term adverse noise levels would result from the construction of the proposed project. Onsite sources would include the operation of heavy construction equipment during construction. Based on the list of construction equipment identified in Section 1.9, Project Description, Table 3.11-2 presents the typical noise levels that would be produced by most of the heavy equipment required to construct the proposed project.

LADWP will comply with Section 112.05 of the Los Angeles Municipal Code to the greatest extent feasible by use of mufflers, shields, sound barriers, and/or any other noise reduction device or techniques during the operation of equipment. The actual magnitude of construction noise impacts would depend on the type of construction activity, the noise level generated by various pieces of construction equipment, the duration of the activity, the distance between the activity and the sensitive noise receptors, and whether local barriers and topography provide shielding effects. Generally, noise levels adjacent to the active construction areas can be expected to range from 75 to 90 dBA, depending

on the distance the receptor is from the source of noise. However, noise levels would decrease as distance increased from the construction site, and no sensitive receptors were identified in proximity of the site.

During construction, potential receptors in the immediate vicinity of construction activities would be exposed to potentially significant noise levels generated by heavy construction equipment operating within the construction zones. However, as indicated above, no sensitive receptors or residential uses are located within close proximity of the proposed project site. However, due to the potential noise impacts associated with the construction of the proposed project, Mitigation Measures NOI-1 through NOI-4 would ensure construction noise levels on neighboring land uses would be reduced to a less-than-significant level.

Mitigation Measures

- **NOI-1** LADWP or its construction contractor shall provide advance notice, between two and four weeks prior to construction, by mail to all property owners within 100 feet of the proposed project site. The announcement shall state specifically where and when construction will occur in the area. If construction delays of more than 7 days occur, an additional notice shall be made, either in person or by mail. Notices shall provide tips on reducing noise intrusion, for example, by closing windows facing the planned construction. The LADWP shall also publish a notice of impending construction in local newspapers, stating when and where construction will occur.
- **NOI-2** All noise-producing project equipment and vehicles using internal combustion engines shall be equipped with mufflers, air-inlet silencers where appropriate, and any other shrouds, shields, or other noise reducing features kept in good operating condition that meet or exceed original factory specification. Mobile or fixed "package" equipment (e.g., arc-welders, air compressors) shall be equipped with shrouds and noise control features which are readily available for that type of equipment.
- **NOI-3** All noise producing equipment in use at the project site shall be operated in the quietest manner possible. The equipment operator shall also avoid unnecessary equipment idling for long periods.
- **NOI-4** The use of noise producing signals, including horns, whistles, alarms, and bells shall be for safety warning purposes only.

Off-site Sources. Noise levels from off-site construction related traffic (delivery trucks, automobiles, and haul trucks) would be potentially adverse (approximately 70 dBA to 80 dBA at 50 feet). Travel in residential neighborhoods, particularly during early morning hours, could result in potentially significant short-term noise impacts. Mitigation Measure NOI-5 would reduce noise generated by construction related traffic to a less than significant level.

Mitigation Measures

NOI-5 LADWP's construction contractor shall create vehicle staging areas and travel routes to be placed and planned such that noise is directed away from sensitive receptors.

b. Would the project result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

LESS THAN SIGNIFICANT IMPACT. Construction activities could generate groundborne vibration. The City of Los Angeles Noise Ordinance does not include any City standards related to vibration impacts. As discussed above in the response to Question 3.11 (a), no sensitive receptors are located near the proposed project site. Although construction of the proposed project would include heavy equipment, it is unlikely that construction would result in perceptible, let alone excessive, groundborne vibration. Therefore, any vibration impacts would be short-term and temporary. Vibration impacts are considered less than significant.

c. Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

LESS THAN SIGNIFICANT IMPACT. Operation of the proposed project equipment may create some slight onsite noise. However, the project site is surrounded by industrial uses and no noise sensitive receptors have been identified near the proposed project site. Therefore, no impacts associated with a permanent increase in ambient noise levels would occur. Periodic and regular maintenance activities would generate some noise, however these activities would be temporary and of limited duration, and would therefore not permanently affect ambient noise levels in the area. As such, any increase in ambient noise levels would be less than significant.

d. Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

LESS THAN SIGNFICANT IMPACT WITH MITIGATION INCORPORATED. Construction-related activities would temporarily elevate noise levels in the vicinity of the project site (see the response to Question 3.11[a], above). As discussed above in the response to Question 3.11(a), implementation of Mitigation Measures NOI-1 through NOI-5 would reduce these impacts to a less-than-significant level.

e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

NO IMPACT. The nearest airport to the proposed project is the Bob Hope Airport (formerly known as Burbank-Glendale-Pasadena Airport), located more than 12 miles northwest of the site (Thomas Brothers, 2007). Due to the distance of the proposed project to this airport and the nature of construction and operational activities (low profile electrical distribution equipment), neither construction nor operation of the proposed project would have an impact on public airports or public use airports or result in an aviation safety hazard.

f. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

NO IMPACT. The proposed project site is not located within the vicinity of any identified private airstrips (Thomas Brothers, 2007).

3.12 Population and Housing

POPULATION AND HOUSING - Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Induce substantial population growth in an area, either directly (for example, by proposing new homes and business) or indirectly (for example, through extension of roads or other infrastructure)?				\square
b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				\boxtimes
c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				

a. Would the project induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

NO IMPACT. The proposed project would be located on land within the City of Los Angeles that is currently vacant. Construction activities resulting from project implementation would be short-term and temporary, as described in Section 1.9, Project Description.

For purposes of this analysis, U.S. Census Year 2000 data for population, housing, and employment for the City of Los Angeles, and the County of Los Angeles, are presented in Table 3.12-1. As shown in

Table 3.12-1, the City of Los Angeles contains a considerable construction workforce (81,032 persons in construction trades), with a total construction workforce within Los Angeles County of 202,829 workers.

		ŀ	lousing Units	Employment		
Location	Population Total Vacancy Units		Total Employed a	In Construction Trades		
City of Los Angeles	3,694,820	1,337,706	Owner: 24,079 (1.8%) Renter: 46,820 (3.5%)	1,532,074	81,032 (5.3%)	
County of Los Angeles	9,519,338	3,270,909	Owner: 52,335 (1.6%) Renter: 107,940 (3.3%)	3,953,415	202,829 (5.1%)	

Table 3.12-1 Year 2000 Existing Conditions Population, Housing, and Employment

Source: U.S. Census Bureau, 2007.

Note(s): a. Accounts for population greater than 16 years of age and in Labor Force.

As described in Section 1.9, Project Description, a maximum of 10 personnel would be employed on the project during the peak construction period. It is assumed that required construction personnel would come from within Los Angeles County, and specifically within the City of Los Angeles. Therefore, construction personnel would not generate a permanent increase in population levels or result in a decrease in available housing. No construction impacts related to existing or future population growth impacts would occur as a result of the proposed project.

Upon completion of construction, the proposed project would be unmanned, requiring only periodic maintenance, and would therefore not require additional permanent employees for operation. Furthermore, the proposed project does not involve the construction of any new residential housing units. As such, implementation of the proposed project would not result in a direct increase in the permanent population of the area or cumulatively exceed official regional or local population projections. The purpose of the proposed project is to provide electricity to the surrounding area. While the proposed DS-144 will be capable of being upgraded to meet future demand requirements, the project is considered growth serving and not growth inducing. Therefore, the proposed project would not induce population growth either directly or indirectly.

b. Would the project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

NO IMPACT. No residential properties exist within the proposed project site. No housing or persons would be displaced by the project.

c. Would the project displace substantial numbers of people necessitating the construction of replacement housing elsewhere?

NO IMPACT. The proposed project would result in construction of an electrical distributing station on a currently vacant parcel of land. There is no existing housing within the proposed project site. Therefore, the proposed project would not result in the displacement of people, nor would it necessitate the construction of replacement housing elsewhere.

3.13 Public Services

PUBLIC SERVICES	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i) Fire protection?			\boxtimes	
ii) Police protection?			\boxtimes	
iii) Schools?				\boxtimes
iv) Parks?				\boxtimes
v) Other public facilities?				\square

a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:

i) Fire protection?

LESS THAN SIGNIFICANT IMPACT. The project site is located within the City of Los Angeles. Within the City of Los Angeles, the Los Angeles Fire Department (LAFD) provides fire prevention and suppression services and emergency medical services.

The LAFD has a total of 3,576 uniformed firefighters, with a total of 1,091 uniformed Firefighters (including 223 serving as Firefighter/Paramedics), always on duty at 104 neighborhood fire stations located strategically across the LAFD's 470 square-mile jurisdiction (LAFD, 2007a). The LAFD Station nearest the DS-144 site is Station 9, located at 430 East 7th Street, which is located approximately one-half mile away from the proposed project (LAFD, 2007b).

Fire protection could be required at a project construction site in the event of a construction accident. The likelihood of an accident requiring such a response would be low as project construction would not occur in areas of high fire danger. There is no dry vegetation or other flammable material in the proposed project vicinity that would provide potential fire hazards either during construction or operation of the project. Therefore, the service capacities of local fire departments would not be adversely affected by the proposed project. Additionally, emergency access to and around the construction site would be maintained during construction. Once operational, the proposed project would not pose a fire risk, since the substation would be unmanned and the site would be entirely paved with cement and crushed rock. Therefore, less than significant impacts to fire protection services would occur, and the proposed project would not require the need for new or expanded fire service facilities.

ii) Police protection?

LESS THAN SIGNIFIANT IMPACT. The City of Los Angeles Police Department (LAPD) provides police service to the City of Los Angeles. The Police Station serving the DS-144 site is the LAPD Central Community Police Station at 251 East 6th Street (LAPD, 2007).

Because the proposed project does not include the construction of residential housing or generate the need for additional employees (refer to Section 1.9, Project Description), the project would not reduce the officer to population ratio. Police protection could be required at a project construction site in the event of a construction accident. The likelihood of an accident requiring such a response would be low. The proposed project would include security features such as controlled construction access and

nighttime security lighting (if required), which would reduce the demand for police protection. Emergency police access to and around the construction site would be maintained during construction, as required by the City of Los Angeles (refer to Section 3.15, Transportation and Traffic). Once operational, the proposed project would be an unmanned electrical substation that is not expected to generate any demands to the City of Los Angeles Police Department. Therefore, less than significant impacts to police protection services would occur, and the proposed project would not require the need for new or expanded police service facilities.

iii) Schools?

NO IMPACT. The demand for new or expanded school facilities is generally associated with an increase in housing or population. As described above and in Section 3.12, Population and Housing, the proposed DS-144 would neither induce population growth through the need for new employees nor result in new housing. Thus, the proposed project would not increase the need for new or expanded school facilities and no impact on schools within the proposed project vicinity would occur.

iv) Parks?

NO IMPACT. The demand for new or expanded parks is generally associated with an increase in housing or population. As described above and in Section 3.12, Population and Housing, the proposed DS-144 would neither induce population growth through the need for new employees nor result in new housing. The proposed DS-144 does not include the construction of, induce expansion of, or require the removal of any recreational facilities. No impact on parks within the proposed project vicinity would occur.

v) Other public facilities?

NO IMPACT. The demand for new or expanded hospital, library, power/data lines, and roadways is generally associated with an increase in housing or population. As described above and in Section 3.12, Population and Housing, the proposed project would neither induce population growth through the need for new employees nor result in new housing. Thus, the proposed project would not increase the need for new or expanded public facilities. Project implementation would not require new or altered public utilities or infrastructure services above existing conditions. No impacts would occur.

3.14 Recreation

RECREATION Less Than Less Than Potentially Significant With Significant Mitigation Significant No Impact Incorporated Impact Impact a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? b. Does the project include recreational facilities or require the \boxtimes construction or expansion of recreational facilities that might have an adverse physical effect on the environment?

a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

NO IMPACT. The increase in use of recreational facilities is generally spurred by regional population growth. As discussed in Section 3.12, Population and Housing, the proposed project would not induce growth, but would instead create an electrical substation to provide electricity to meet local demand as well as that from anticipated growth in the local industrial area. As such, the proposed project would cause no increase in the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.

b. Would the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?

NO IMPACT. The proposed project includes construction and operation of an electrical distributing station. The proposed project does not include the construction of, induce expansion of, or require the removal of any recreational facilities. Therefore, the proposed project would have no impacts on recreational facilities.

3.15 Transportation and Traffic

TI	RANSPORTATION/TRAFFIC - Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a.	Cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?		\boxtimes		
b.	Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?			\boxtimes	
C.	Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				\boxtimes
d.	Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?		\boxtimes		
e.	Result in inadequate emergency access?		\boxtimes		
f.	Result in inadequate parking capacity?		\boxtimes		
g.	Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?				\boxtimes

This transportation and traffic analysis summarizes the results of a Traffic Impact Analysis (TIA) conducted for the LADWP Distributing Station 144 Project by KOA Corporation on July 9, 2007. The methodology, findings and conclusions of the TIA are presented and referenced herein (refer to Appendix D for the complete TIA).

a. Would the project cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume-to-capacity ratio on roads, or congestion at intersections)?

LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED. There are three primary categories of traffic impacts that would occur as a result of the proposed project. The first category would be the impacts associated with construction traffic on the roadways that provide access to the project site. During construction activities, a number of vehicles would be traveling to and from the project site, including trucks delivering materials to the site, trucks transporting waste material away from the site, and construction workers' vehicles commuting to and from the site. The second category of traffic impacts would be the physical impacts of the construction activities that would occur within the project site and within Palmetto Street where the proposed distributing station would connect to the existing power grid through underground street connections (i.e., lane closures, detours, driveway blockages, loss of parking, and disruptions to traffic, transit, and pedestrian movements in the construction area). The third category of traffic impacts would be the impacts associated with the operation of the proposed project after construction is complete. The traffic impacts associated with the ach of these construction and operation categories have been evaluated for the affected streets and highways.

The project site is located on the south side of Palmetto Street. The roadway has been constructed with two travel lanes (one in each direction), although a striped roadway centerline is not provided. On-street parking is generally prohibited, although parking is permitted within a wider portion of the roadway that is located adjacent to the existing LADWP building located adjacent to the project site to the east. The curb-to-curb width ranges from 20-35 feet, within three distinct segments:

- The roadway has an approximate curb-to-curb width of 20 feet on its western end near Alameda Street
- The roadway has an approximate curb-to-curb width of 35 feet in front of the existing LADWP building (apparently widened as part of required roadway dedication when the building was constructed)
- The roadway has an approximate curb-to-curb width of 20 feet near its eastern terminus at Mateo Street

Construction Traffic

Construction within the Palmetto Street right-of-way to connect the distributing station to existing underground conduits would necessitate partial closures of the roadway. Average Daily Traffic (ADT) volumes were collected on Palmetto Street, at a point located immediately east of Alameda Street, in July 2007. The 24-hour count indicated that a total of 1,426 vehicles passed over the count point in both travel directions. The capacity of a two-lane collector roadway such as Palmetto Street is considered to be as high as 13,000 vehicles. Reduction of the roadway to single-lane operation within the extents of the work area would not necessarily cause roadway capacity issues. The construction project would not result in the total closure of a major roadway to through traffic because traffic would continue to be accommodated through the construction zone. Therefore, significant impacts associated with roadway closures are not expected. However, to ensure construction impacts would be less than significant, Mitigation Measure TRA-1(Prepare Traffic Control Plans and/or Traffic Control Measures) is recommended. This measure would require a construction area traffic control plan to be prepared for any location where such a plan is deemed necessary by the Los Angeles Department of Transportation (LADOT).

TRA-1 Prepare Traffic Control Plans and/or Traffic Control Measures. A construction area traffic control plan shall be prepared for any location where such a plan is deemed necessary by the LADOT. The plan would include, but not be limited to such features as warning signs, lights, flashing arrow boards, flag person(s), barricades, cones, lane closures, parking restrictions, and restricted hours during which lane closures would not be allowed; e.g., 7:00 a.m. to 9:00 a.m. and 4:00 p.m. to 6:00 p.m., or as directed by the affected public agencies (City of Los Angeles Department of Transportation, the City of Los Angeles, or Caltrans). Additionally, for construction zones where a formal traffic control plan is not deemed necessary, traffic control measures as outlined by LADOT's Work Area Traffic Control Handbook shall be implemented to reduce construction-related traffic impacts.

Operational Traffic

The only operational traffic associated with the completed project would be the traffic associated with inspection, maintenance, and repair of the facility. The traffic volumes generated by these activities are assumed to range from one to five vehicles trips per day less than five days per year. As these traffic volumes are considered minimal, operational vehicle trips would have a less than significant impact on the surrounding street network.

b. Would the project cause, either individually or cumulatively, a level-of-service standard established by the county congestion management agency for designated roads or highways to be exceeded?

LESS THAN SIGNIFICANT IMPACT. The Los Angeles County Congestion Management Program (CMP) indicates that a project may have a significant impact and that a traffic study would be required if the project would contribute 50 or more peak hour vehicle trips to a designated CMP intersection and/or if the project would add 150 or more peak hour trips in either direction to a designated CMP freeway monitoring location. The County Congestion Management Program level-

of-service impact thresholds are not intended to be applied to construction activities. As such, the project is not forecast to exceed the significant impact thresholds defined by the County Congestion Management Program or local jurisdictions. As detailed above in the response to Question 3.15(a), traffic volumes generated by operational activities are assumed to have a maximum range from one to five vehicles trips per day less than five days per year. As these traffic volumes are well below the CMP thresholds, a detailed CMP analysis is not required and the project would not have a significant impact at a CMP intersection or on the freeway network. The project would not exceed a level of service standard established by the congestion management agency.

c. Would the project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

NO IMPACT. The nearest airport to the proposed project is the Bob Hope Airport (formerly known as Burbank-Glendale-Pasadena Airport), located more than 12 miles northwest of the site (Thomas Bros. 2007). Due to the distance of the proposed project to this airport and the nature of construction and operational activities (low profile electrical distributing equipment), neither construction nor operation of the proposed project would have an impact on air traffic patterns or safety.

d. Would the project substantially increase hazards because of a design feature or incompatible uses?

LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED. Construction of the proposed project within the public ROW would potentially result in increased hazards to motorists, bicyclists, and pedestrians because the construction activities would occur within the travel lanes of various roadways, as detailed in the response to Question 3.15(a), above. Pedestrian and bicycle movement could be affected by transmission line construction activities if pedestrians and bicyclists were unable to pass through the construction zone or if established pedestrian and bicycle routes were blocked. There are no known bicycle paths located adjacent to the project site; however, that doesn't mean that pedestrians or bicyclists would not move through the construction zone. These conflicts would result in safety risks; however, the impacts would be reduced to less than significant with implementation of Mitigation Measure TRA-1, which is a construction area traffic control plan presented in the response to Question 3.15(a), as well as Mitigation Measure TRA-2 (Ensure Pedestrian and Bicycle Movement and Safety) presented below.

TRA-2 Ensure Pedestrian and Bicycle Movement and Safety. Provide alternative pedestrian and bicycle access/circulation routes where existing facilities such as sidewalks, crosswalks, and bike lanes would be obstructed by construction activities.

e. Would the project result in inadequate emergency access?

LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED. The project would potentially result in a significant impact relative to emergency access because construction activities within the public ROW could increase the response times for emergency vehicles (police, fire, and ambulance/paramedic units) and block or disrupt access to adjacent properties. This impact would be significant if construction activities would restrict access to or from adjacent land uses with no suitable alternative access and/or if the construction activities would restrict movements of emergency vehicles (police vehicles, fire vehicles, and ambulance/paramedic units) in an area where no reasonable alternative access routes are available. This impact would be less than significant with implementation of Mitigation Measure TRA-1, as presented in the response to Question 3.15(a), as well as Mitigation Measures TRA-3 (Coordinate with Emergency Service Providers) and TRA-4 (Notify Property Owners of Access Restrictions) presented below.

TRA-3 Coordinate with Emergency Service Providers. LADWP shall coordinate with emergency service providers (police, fire, and ambulance/paramedic agencies) prior to construction to provide information regarding lane closures, construction schedules, driveway blockages, etc. and to develop a plan to maintain or accommodate essential emergency access routes; e.g., plating over excavations, use of detours, etc.

TRA-4 Notify Property Owners of Access Restrictions. LADWP shall provide advance notification to affected property owners, businesses, residents, etc. of possible driveway blockages or other access obstructions and implement alternate access and parking provisions where necessary.

f. Would the project result in inadequate parking capacity?

LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED. The existing Palmetto Street roadway has two travel lanes and permitted on-street parking in the vicinity of the project site. Outside of the frontage of the adjacent LADWP building, the roadway is too narrow to provide legal onstreet parking. Businesses at the eastern end of the roadway near Mateo Street have on-site paved areas that join the roadway pavement. On-street parking is therefore provided at many of these parcels, but the parked vehicles are technically on private property. The reduction in parking supply would be temporary and of relatively short duration. Significant on-street parking supply impacts are unlikely as the project construction work zone on Palmetto Street is anticipated to be short in length and would not significant, Mitigation Measures TRA-5 (Restrict On-street Parking During Construction) and TRA-6 (Park Construction Worker Vehicles at Adjacent LADWP Facility) are recommended. Upon completion, the proposed project would not result in a reduction of parking in the project vicinity.

- **TRA-5 Restrict On-street Parking During Construction.** LADWP shall ensure that LADWP employee and agency vehicles from the existing LADWP facility are not parked within the on-street parking area in front of the existing building during construction efforts within the Palmetto Street right-of-way.
- **TRA-6 Park Construction Worker Vehicles at Adjacent LADWP Facility.** Construction worker vehicles should be parked at the LADWP facility located immediately adjacent to the project site.
- g. Would the project conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?

NO IMPACT. Public bus transit lines would not be affected by project-related construction within roadway ROW. There is no public bus transit service on Palmetto Street. There would not be any significant impacts to transit access.

3.16 Utilities and Service Systems

U	TILITIES AND SERVICE SYSTEMS - Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a.	Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?			\boxtimes	
b.	Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			\boxtimes	
C.	Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			\boxtimes	
d.	Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?			\square	
e.	Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				

UTILITIES AND SERVICE SYSTEMS - Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?			\boxtimes	
g. Comply with federal, state, and local statutes and regulations related to solid waste?			\boxtimes	

a. Exceed wastewater treatment requirements of the applicable Water Quality Control Board?

LESS THAN SIGNIFICANT IMPACT. The sanitary sewer system that serves the area of the proposed project site is operated under the jurisdiction of the City of Los Angeles Department of Public Works, Bureau of Sanitation. The City of Los Angeles wastewater collection system includes over 6,500 miles of major interceptor and mainline sewers, five central outfall sewers, eight maintenance yards, and 55 pumping plants, and the Hyperion Treatment Plant (HTP) provides wastewater treatment needs. Year 2006 daily average dry weather flow capacity of the HTP is 450 million gallons per day (mgd), and the plant treats an average dry weather flow of approximately 362 mgd (City of Los Angeles Bureau of Sanitation, 2006). Wastewater collected in the proposed project area is conveyed to the HTP by major interceptor sewers that are fed by smaller collector systems that extend throughout the area.

During construction, the amount of wastewater generated by construction workers would be considered a short-term minimal impact and would not result in a permanent increase in wastewater contribution to the HTP. Operation of the project would not generate wastewater. Therefore, because project operation would not introduce any new wastewater to a treatment plant's daily capacity, the proposed project would be within the requirements of the Los Angeles Regional Water Quality Control Board (RWQCB) and would not result in impacts to wastewater treatment providers.

b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

LESS THAN SIGNIFICANT IMPACT. As stated above in the response to Question 3.16(a), the existing wastewater treatment facilities serving the proposed project area would be adequate to provide wastewater services during construction and operation of the proposed project. Less than significant impacts would occur to wastewater treatment facilities serving the proposed project.

LADWP is responsible for supplying, conserving, treating, and distributing water for the City of Los Angeles. The LADWP obtains water from wells in the local groundwater basin, the Los Angeles Aqueduct System, water purchased from the Metropolitan Water District of Southern California, and recycled water from treatment and reclamation plants.

The proposed project may require water during site grading for dust suppression purposes. Due to the short-term nature of construction, the water consumed would be minimal and would not impact the local water supply. Operation of the proposed project would not require use of potable water. Therefore, water consumption associated with the proposed project would not require or result in the construction of new water treatment facilities or the expansion of existing facilities.

c. Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

LESS THAN SIGNIFICANT IMPACT. Project construction would occur next to existing roadways that contain stormwater drainage facilities. Any disruptions to existing stormwater drainage facilities in the proposed project area would be considered short-term and temporary. During construction, catch basins and storm drain piping would be relocated to maintain existing site drainage. Upon completion of construction activities, replacement (as needed) of any existing onsite storm drains would occur as part of final construction activities. Existing drainage patterns would not be altered, and no existing stormwater infrastructure would be removed or replaced during construction.

d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

LESS THAN SIGNIFICANT IMPACT. As stated above in the response to Question 3.16(a) and (b), the existing water and wastewater treatment facilities serving the proposed project area are anticipated to be adequate to provide wastewater, domestic potable water service, and fire flows for the area. In addition, although the control house would have a restroom, because the proposed project would be unmanned, the restroom would be used very infrequently (during periodic maintenance activities) and would require very minimal amounts of potable water annually.

e. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

LESS THAN SIGNIFICANT IMPACT. As stated above in the response to Question 3.16(a), the existing wastewater treatment facilities serving the proposed project area are anticipated to continue to provide adequate wastewater services to the area. As the proposed project is an unmanned electrical distribution facility, operation would not generate wastewater and would not require the construction of new wastewater treatment facilities or the expansion of existing facilities.

f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

LESS THAN SIGNIFICANT IMPACT. Within the City of Los Angeles, solid waste management (including collection and disposal services and landfill operation) is administered by various public agencies and private companies. Table 3.16-1 indicates the Los Angeles County landfill facilities that would likely eventually contain all proposed project waste and their most recent permitted disposal, daily disposal, remaining capacity, and permit status. In addition, one unclassified (inert waste) landfill (Azusa Land Reclamation) in Los Angeles County is permitted to accept only inert waste, including construction/demolition debris. The most recent permitted disposal capacity, remaining capacity, and permit status for the landfills serving the proposed project area are also shown in Table 3.16-1.

Name	Location	Permitted Daily Disposal (Tons)	Remaining Capacity (Million Cubic Yards)	Permit Expiration Date
Scholl Canyon Landfill (Class III)	Glendale	3,400	69.2 (calculated in 2005)	2019
Sunshine Canyon (Class III)	Sylmar	6,600	23.7 (calculated 2003)	2008
Bradley Landfill West (Class III)	Sun Valley	10,000	38.6 (calculated 2002)	2007
Azuza Land Reclamation (Unclassified)	Azusa	6,500	66.7 (calculated 1996)	2025

Table 3.16-1 Existing Landfills Available to the Project Site

Source: California Integrated Waste Management Board, 2007.

The proposed project would generate demolition and construction debris during project construction, primarily in the form of soil spoils and construction material waste. Soil spoils from grading would typically be used as backfill materials at the site of origin. Materials unsuitable for backfill use and economically not usable for other purposes would be disposed of in accordance with local and county guidelines in available landfills. Because the amount of backfill is unknown at this time, estimates of the total tons per day of solid waste debris from demolition activities associated with the proposed project are unavailable. During construction, recycling and onsite re-use of construction materials would occur when possible. Table 3.16-1 lists the unclassified landfill (Azusa Land Reclamation) likely to be used for disposal of demolition and construction debris.

The known total permitted daily disposal at the four identified landfills serving the area is 26,500 tons. While the proposed project would increase solid waste generation as a result of construction activities, it

is not anticipated that the tons per day of solid waste generated would account for a significant percent of the total daily permitted capacity available. Therefore, waste generated by demolition and construction activities would not exceed the available capacity at the landfills serving the proposed project area that would likely accept debris generated by the proposed project. Additionally, recycling and onsite re-use of construction materials would further minimize the amount of construction solid waste generation.

Upon completion of the proposed project, no permanent increase in solid waste generation would occur. The proposed project would be an unmanned electrical distribution facility and would not require any additional staff to oversee facility operations. Therefore, operation of the proposed project would not generate solid waste and would not result in an increase in solid waste contribution to the landfill facilities serving the proposed project area.

g. Comply with federal, state, and local statutes and regulations related to solid waste?

LESS THAN SIGNIFICANT IMPACT. As stated above in the response to Question 3.16(f), existing solid waste facilities serving the proposed project area are anticipated to continue to provide solid waste services in compliance with existing federal, state, and local statutes and regulations related to solid waste. As standard practice, LADWP complies with all applicable laws and regulations related to solid waste generation, collection, and disposal in the County of Los Angeles. The proposed project would result in a short-term and temporary increase in solid waste generation during project construction, but would not, directly or indirectly, affect standard solid waste operations of the facility, which inherently is in compliance with applicable regulations. Upon completion of the proposed project, no permanent increase in solid waste generation would occur. The proposed project would be an unmanned electrical distribution facility and would not require any additional staff to oversee operations. Therefore, operation of the project would not generate solid waste and would not introduce any increase in solid waste to the landfill facilities serving the project area. Recycling activities during construction would ensure that the project would be in compliance with the California Integrated Waste Management Act of 1989 (AB 939), the County of Los Angeles Source Reduction and Recycling Element, and the County of Los Angeles Countywide Integrated Waste Management Plan.

3.17 Mandatory Findings of Significance

MANDATORY FINDINGS OF SIGNIFICANCE	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self- sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?				
b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, effects of other current projects, and the effects of probable future projects.)			\square	
c. Does the project have environmental effects, which would cause substantial adverse effects on human beings, either directly or indirectly?			\boxtimes	

a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?

LESS THAN SIGNIFICANT IMPACT. The preceding analyses conclude that no significant unmitigated impacts to the environment would occur. Based on these findings, the proposed project is not expected to degrade the quality of the environment. The project site consists of a vacant, gravel-covered lot. The site contains no landscaping and does not support sensitive species. The project would not require the removal of trees or plant species. Because the proposed project site and surrounding industrial area is developed with impervious surfaces and characterized by high levels of human activity, the project would not have the potential to substantially reduce the habitat of fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal. As discussed in Section 3.5 (Cultural Resources), there are no known historic or prehistoric resources on the proposed project site and implementation of the mitigation measures in Section 3.5 would ensure that any impacts to previously undiscovered resources would be less than significant.

b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, effects of other current projects, and the effects of probable future projects.)

LESS THAN SIGNIFICANT IMPACT. A significant impact may occur if the proposed project, in conjunction with other related projects, would result in impacts that are less than significant when viewed separately but would be significant when viewed together. As described above for the different issue areas, construction and operation of the proposed project would result in minimal impacts. While construction of the proposed project would result in some significant impacts, these impacts would be reduced to less than significant levels with the implementation of mitigation measures. Therefore, as concluded in the above analyses, the proposed project's incremental contribution to cumulative impacts related to aesthetics, agricultural resources, air quality, biological resources, cultural resources, geology/seismic hazards, hazards/hazardous materials, hydrology/water quality, land use/planning, mineral resources, noise, population/housing, public services, recreation, transportation/traffic, and utilities would be less than significant. There may be environmental impacts which are individually limited but significant when viewed in connection with the effects of future projects. However, these cumulative impacts will be mitigated to a level of insignificance by implementing the mitigation measures identified in this Initial Study.

c. Does the project have environmental effects, which would cause substantial adverse effects on human beings, either directly or indirectly?

LESS THAN SIGNIFICANT IMPACT. As described in the response to Question 3.17(b), and in the analyses of the environmental effects above, all of the significant impacts that could result from the proposed project would be reduced to less than significant levels with the implementation of mitigation measures.

4. References

- ArchaeoPaleo Resource Management, Inc. 2008. Phase I Cultural Resource Assessment and Paleontologic Assessment for the Proposed LADWP Distributing Center #144. June.
- California Department of Fish and Game (CDFG). 2006. RareFind Natural Diversity Database. Version 3.1.0. Data last updated May 2007.
- _____. 2007. The Natural Community Conservation Planning (NCCP) program website, http://www.dfg.ca.gov/nccp/. Accessed May 2007.
- California Environmental Protection Agency, Air Resources Board (CARB). 2007. Draft Air Resources Board's Proposed State Strategy for California's 2007 State Implementation Plan. January 31, 2007. http://www.arb.ca.gov/planning/sip/2007sip/2007sip.htm. Accessed June 16, 2007.
- California Integrated Waste Management Board. 2007. California Waste Facilities, Sites, & Operations (SWIS) Database [online]: http://www.ciwmb.ca.gov/SWIS. Accessed May 25.
- California Native Pant Society (CNPS). 2007. Inventory of Rare and Endangered Plants, accessed May 2007.
- City of Los Angeles. 2004. City of Los Angeles Department of Building and Safety Ordinance No. 175790 (Methane Code). February 12.
- _____. 2001a. City of Los Angeles General Plan Conservation Element. Chapter 2: Resource Conservation and Management; Section 1: Agricultural Lands. http://cityplanning.lacity.org/. Accessed June 4, 2007.
- _____. 2001b. City of Los Angeles General Plan Conservation Element. Chapter 2: Resource Conservation and Management; Section 18: Mineral Resources (Sand and Gravel). http://cityplanning.lacity.org/. Accessed June 4, 2007.
- _____. 2000. Central City North Community Plan. http://cityplanning.lacity.org/. Accessed June 2, 2007.
- _____. 1997. Sunland-Tujunga-Lake View Terrace-Shadow Hills-East La Tuna Canyon Community Plan. Chapter 3: Land Use Policies and Programs, Page 12. http://cityplanning.lacity.org/. Accessed June 4, 2007.
- _____. 1996a. City of Los Angeles General Plan Safety Element, Exhibit A. November 26.
- _____. 1996b. City of Los Angeles General Plan Safety Element, Exhibit B. November 26.
- _____. 1996c. City of Los Angeles General Plan Safety Element, Exhibit C. November 26.
- _____. 1996d. City of Los Angeles General Plan Safety Element, Exhibit D. November 26.
- City of Los Angeles Bureau of Sanitation. 2007. Wastewater Collection and Treatment Website. [online] http://www.lacity.org/san/sanmact.htm. Accessed May 25.
- City of Los Angeles Department of Public Works, Bureau of Engineering. 2002. Los Angeles Flood Hazard Map (LAFHM).

http://navigatela.lacity.org/common/mapgallery/pdf/la_flood_haz_map.pdf. Accessed 6 June 2007.

DOC (California Department of Conservation). 2007. Seismic Hazards Zone Mapping Program for the City of Los Angeles. [online] http://www.consrv.ca.gov/cgs/shzp/affected.htm. Accessed May 23.

- _____. 2006a. Farmland Mapping and Monitoring Program 2006 Los Angeles County. http://www.consrv.ca.gov/dlrp/FMMP/map_products/index.htm. Accessed June 2, 2007.
- 2006b. Williamson Act Fact Sheet.
 http://www.conservation.ca.gov/dlrp/lca/pubs/WA%20fact%20sheet%2006.pdf. Accessed June 2, 2007.
- DOT (California Department of Transportation). 1999. California Scenic Highway Mapping System. http://www.dot.ca.gov/hq/LandArch/scenic_highways/index.htm. Accessed June 1, 2007.
- Federal Transit Administration (FTA). 1995. Transit Noise and Vibration Impact Assessment. April.
- GTC (Geotechnical Consultants). 2008. Review of Geotechnical and Soil Compaction Reports, 560 Alameda Street. June 2.
- Hendrix, M., Wilson, C., Held, T., Rivasplata, T. Rimpo, T, Walter, R. and Bogdan, K. 2007. Draft
 White Paper Alternative Approaches to Analyze Greenhouse Gas Emissions and Global Climate
 Change in CEQA Documents. Prepared for the California Association of Environmental
 Professionals. http://www.califaep.org/climate%20change/default.html. Accessed June 16, 2007.
- Leroy Crandall and Associates. 1981. Inspection and Testing of Compacted Fill and Inspection of Drilled Pile Excavations 1978 Addition to Bundling Building 560 South Alameda Street Los Angeles, California. February 2.
- Los Angeles Department of City Planning. 2005. Draft Standard Mitigation Measures for Mitigated Negative Declarations. April.
- Los Angeles Department of Water and Power (LADWP). 2007. CEQA Kickoff Meeting for DS-144. April 23.
- Los Angeles Fire Department. 2007a. LAFD Information Website. [online] http://www.lafd.org/about.htm. Accessed May 23.
- _____. 2007b. Fire Station 9 Information Page. [online] http://www.lacity.org/distlookup. Accessed May 23.
- Los Angeles Police Department. 2007. LAPD Information Website. [online] http://www.lapdonline.org. Accessed May 23.
- LAUSD, 2007. School locater search [online]: http://notebook.lausd.net/schoolsearch/selector.jsp. Accessed on May 24, 2007.
- LARWQCB (Los Angeles Regional Water Quality Control Board). 1995. Water Quality Control Plan, Los Angeles Region; Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties. http://www.swrcb.ca.gov/rwqcb4/html/meetings/tmdl/Basin_plan/basin_plan_doc.html. Accessed June 6, 2007.
- Ninyo & Moore. 2007. Methane Gas Assessment for LADWP Facility at 1140 Palmetto Street. May 18.
- Parsons Corporation, 2002. Soil Investigation Study for LADWP Distributing Station 144: 1114-1120 Palmetto Street. January 14.
- SCAQMD (South Coast Air Quality Management District). 2007a. Draft Final 2007 Air Quality Management Plan. http://www.aqmd.gov/aqmp/07aqmp/07AQMP_draftfinal.html. Accessed 6 June 2007.
- _____. 2007b. Final Localized Significance Threshold Methodology. http://www.aqmd.gov/ceqa/handbook/LST/Method_final.pdf. Accessed May 23, 2007.

_____. 1993. CEQA Air Quality Handbook.

- SEG (Smith-Emery GeoServices). 2001. Phase I Environmental Site Assessment Lot No. 3 South of Palmetto Street Los Angeles, California. SEG Report No. G-01-8308. June 8.
- Sladden Engineering. 2002. Interim Compaction Report, Portions of Lots 1 and 15 of Industrial Complex 560 South Alameda Street, Los Angeles, California. Aprils 26.
- _____. 2001. Compaction Report, Proposed Industrial Complex 560 South Alameda Street, Los Angeles, California. June 7.
- _____. 2000. Geotechnical Investigation Proposed Industrial Complex 560 South Alameda Street, Los Angeles, California. October 10.
- Smith-Emery Geoservices, 2001. Phase I Environmental Site Assessment Lot No. 3 South of Palmetto Street Los Angeles. June 8.
- Thomas Brothers, 2007. Thomas Brothers Guide for Los Angeles County.
- United States Census Bureau. 2007. Year 2000 US Census lookup [online]: http://factfinder.census.gov/servlet/DatasetMainPageServlet?_program=DEC&_lang=en&_ts=. Accessed May 25.
- U.S. Environmental Protection Agency. 2007. Climate Change Science State of Knowledge. http://www.epa.gov/climatechange/science/stateofknowledge.html Accessed June 18, 2007.
- United States Fish and Wildlife Service (USFWS). 2007. Endangered Species Habitat Conservation Planning website. http://www.fws.gov/endangered/hcp. Accessed May 2007.
- United States Geological Survey (USGS). 2007. Natural Oil and Gas Seeps in California Website. http://seeps.wr.usgs.gov/seeps/what.html. Accessed June 27.
- Zimas (Zone Information & Map Access System). 2007. City of Los Angeles, Department of City Planning. http://zimas.lacity.org/. Accessed May 30.

5. Report Preparation

Name/Organization	Project Role
Los Angeles Department of Water and F	
Erica Blyther, Environmental Specialist	Project Manager
Chuck Holloway, Environmental Affairs Officer	CEQA Document Review
Mark Sedlacek, Director of Environmental Services	CEQA Document Review
Aspen Environmental Group	
Jason Ricks	CEQA Project Manager
	Air Quality, Geology and Soils, Hazards and Hazardous Materials,
Scott Debauche	Noise, Population and Housing, Transportation and Traffic, Utilities and
	Service Systems
Lindsay Teunis	Biological Resources
Matthew Long	Aesthetics, Agricultural Resources, Hydrology and Water Quality, Land
	Use, and Mineral Resources,
Jennifer Lancaster	Public Services, Recreation
Kati Simpson	Graphics
Judy Spicer	Document/Production Coordinator
ArcheoPaleo Resource Management	
Robin Turner	Cultural Resources
KOA Associates	
Brian Marchetti	Traffic and Transportation

Table 5-1 List of Preparers and Reviewers

APPENDIX A AIR QUALITY TECHNICAL APPENDIX

LADWP Distribution Station.txt

Page: 1 07/13/2007 1:23 PM

File Name:C: \Urbemis\Projects2k2\LADWP Distribution Station AQResults.urbProject Name:Project Location:LADWP Distribution StationOn-Road Motor Vehicle EmissionsBased on EMFAC2002 version 2.2

SUMMARY REPORT (Pounds/Day - Summer)

CONSTRUCTION EMISSION ESTIMATES

PM10 PM10					PM10
*** 2009 ***	ROG	NOx	CO	S02	TOTAL
EXHAUST DUST TOTALS (Ibs/day, unmitigated) 2.39 8.81	32.37	65.28	83. 92	0.00	11. 20
					PM10
PM10 PM10 *** 2010 *** EXHAUST DUST	ROG	NOx	CO	S02	TOTAL
TOTALS (Ibs/day, unmitigated) 2.19 0.01	10. 21	63.02	85.39	0.00	2.20

Page: 2 07/13/2007 1:23 PM

URBEMIS 2002 For Windows 8.7.0

File Name:C: \Urbemis\Projects2k2\LADWP Distribution Station AQResults.urbProject Name:LADWP Distribution StationProject Location:South Coast Air Basin (Los Angeles area)On-Road Motor Vehicle EmissionsBased on EMFAC2002 version 2.2

SUMMARY REPORT (Pounds/Day - Winter)

CONSTRUCTION EMISSION ESTIMATES

					PM10
PM10 PM10 *** 2009 ***	ROG	NOx	CO	S02	TOTAL
EXHAUST DUST TOTALS (Ibs/day, unmitigated) 2.39 8.81	32. 37	65.28	83. 92	0.00	11. 20

PM10 PM10

PM10

LADWP Distribution Station.txt						
*** 2010 ***	ROG	NOx	CO	S02	TOTAL	
EXHAUST DUST						
TOTALS (Ibs/day,unmitigated)	10. 21	63.02	85.39	0.00	2.20	
2.19 0.01						

Page: 3 07/13/2007 1:23 PM

File Name:C: \Urbemis\Projects2k2\LADWP Distribution Station AQResults.urbProject Name:LADWP Distribution StationProject Location:South Coast Air Basin (Los Angeles area)On-Road Motor Vehicle EmissionsBased on EMFAC2002 version 2.2

SUMMARY	REPORT
(Tons/	Year)

CONSTRUCTION EMISSION ESTIMATES

	LJ				PM10
PM10 PM10 *** 2009 *** EXHAUST DUST	ROG	NOx	CO	S02	TOTAL
TOTALS (tpy, unmitigated) 0.18 0.12	1.14	5.05	6.65	0.00	0.30
					PM10
PM10 PM10 *** 2010 *** EXHAUST DUST	ROG	NOx	CO	S02	TOTAL
TOTALS (tpy, unmitigated) 0.10 0.00	0.47	2.91	3.94	0.00	0. 10

Page: 4 07/13/2007 1:23 PM

URBEMIS 2002 For Windows 8.7.0

File Name:C: \Urbemis\Projects2k2\LADWP Distribution Station AQResults.urbProject Name:Project Location:LADWP Distribution StationOn-Road Motor Vehicle EmissionsBased on EMFAC2002 version 2.2

DETAIL REPORT (Pounds/Day - Winter)

Construction Start Month and Year: June, 2009 Construction Duration: 24 LADWP Distribution Station.txt Total Land Use Area to be Developed: 0.88 acres Maximum Acreage Disturbed Per Day: 0.88 acres Single Family Units: 0 Multi-Family Units: 0 Retail/Office/Institutional/Industrial Square Footage: 19166.4

CONSTRUCTION EMISSION ESTIMATES UNMITIGATED (Ibs/day)

CONSTRUCTION EMISSION ESTIMATES UNMITIGATED (Ibs/day) PM10						PM10
PM10 Source EXHAUST DUST *** 2009***	ROG	NOx	CO	S02	TOTAL	
Phase 1 - Demolition Emissions Fugitive Dust - 0.00	5 –	-	-	-	0.00	
Off-Road Diesel	0.00	0.00	0.00	-	0.00	
0.00 0.00 On-Road Di esel	0.00	0.00	0.00	0.00	0.00	
0.00 0.00 Worker Trips	0.00	0.00	0.00	0.00	0.00	
0.00 0.00 Maximum Ibs/day 0.00 0.00	0.00	0.00	0.00	0.00	0.00	
Phase 2 - Site Grading Emissic Fugitive Dust	ons -	_	_	-	8.80	
- 8.80 Off-Road Diesel	9.45	55.72	80.35	_	1.67	
1. 67 0. 00 On-Road Di esel	0.00	0.00	0.00	0.00	0.00	
0.00 0.00 Worker Trips	0. 07	0.08	1. 74	0.00	0. 01	
0.00 0.01 Maximum Ibs/day 1.67 8.81	9. 52	55.80	82.09	0.00	10. 48	
Phase 3 - Building Constructic Bldg Const Off-Road Diesel	n 10 19	65.26	83. 42		2.39	
2.39 0.00				-		
0. 0Ŏ 0. 01	0.04	0. 02	0.50	0.00	0. 01	
Arch Coatings Off-Gas	32.23	-	-	-	-	
Arch Coatings Worker Trips 0.00 0.01	0.08	0. 12	2.33	0.00	0. 01	
Asphalt Off-Gas 	0. 05	-	-	-	-	
Asphalt Off-Road Diesel 0.00 0.00	0.00	0.00	0.00	-	0.00	
Asphalt On-Road Diesel 0.00 0.00	0. 01	0.14	0.03	0.00	0.00	
Asphalt Worker Trips 0.00 0.00	0.00	0.00	0.00	0.00	0.00	
Maximum Ibs/day 2.39 0.01	32.37	65.28	83.92	0.00	2.40	
Max Ibs/day all phases 2.39 8.81	32.37	65.28	83. 92	0.00	11. 20	
*** 2010*** Phase 1 - Demolition Emissions Fugitive Dust - 0.00	-	-	-	-	0.00	

- 0.00

Off-Road Diesel	LADWP Distri 0.00	bution Sta 0.00	ation.txt 0.00	_	0.00
0.00 0.00 On-Road Diesel	0.00	0.00	0.00	0.00	0.00
0.00 0.00 Worker Trips	0.00	0.00	0.00	0.00	0.00
0.00 0.00 Maximum Ibs/day 0.00 0.00	0.00	0.00	0.00	0.00	0.00
Phase 2 - Site Grading Emis Fugitive Dust - 0.00	ssi ons -	-	-	-	0.00
Off-Road Diesel 0.00 0.00	0.00	0.00	0.00	-	0.00
0.00 0.00 On-Road Di esel 0.00 0.00	0.00	0.00	0.00	0.00	0.00
0.00 0.00 Worker Trips 0.00 0.00	0.00	0.00	0.00	0.00	0.00
Maximum Ibs/day 0.00 0.00	0.00	0.00	0.00	0.00	0.00
Phase 3 - Building Construc Bldg Const Off-Road Diesel 2.19 0.00 Bldg Const Worker Trips	cti on 10. 18 0. 04	63. 00 0. 02	84. 93 0. 46	- 0. 00	2. 19 0. 01
0.0Ŏ 0.01 Arch Coatings Off-Gas	0.00	-	-	-	-
Arch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00
0.00 0.00 Asphalt Off-Gas	0.00	-	-	-	-
Asphal t Off-Road Diesel	0.00	0.00	0.00	-	0.00
Asphalt On-Road Diesel 0.00 0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Worker Trips 0.00 0.00	0.00	0.00	0.00	0.00	0.00
Maximum Ibs/day 2.19 0.01	10. 21	63.02	85.39	0.00	2.20
Max Ibs/day all phases 2.19 0.01	10. 21	63.02	85.39	0.00	2.20

Page: 5 07/13/2007 1:23 PM

Phase 1 - Demolition Assumptions: Phase Turned OFF Phase 2 - Site Grading Assumptions Start Month/Year for Phase 2: Jun '09 Phase 2 Duration: 1.2 months On-Road Truck Travel (VMT): 0 Off-Road Equipment No. Type 3 Off Highway Trucks 1 Rubber Tired Loaders Load Factor 0.490 Horsepower 417 165 0.465

Hours/Day 6. 0 8. 0

LADWP Distribution Station.txt

Phase 3 - Building Construction Assumptions Start Month/Year for Phase 3: Jul '09 Phase 3 Duration: 10.2 months Start Month/Year for SubPhase Building: Ju SubPhase Building Duration: 10.2 months	I '09		
Off-Road Equipment	llanaanawan	Lood Conton	Hauma (Day
No. Type	Horsepower	Load Factor	Hours/Day
1 Cranes	190	0. 430	8.0
1 Crawler Tractors	143	0. 575	8.0
1 Excavators	180	0. 580	6.0
1 Graders	174	0. 575	8.0
3 Off Highway Tractors	255	0. 410	6.0
Start Month/Year for SubPhase Architectura	L Coatings	Apr '09	
SubPhase Architectural Coatings Duration:		, pri ov	
Start Month/Year for SubPhase Asphalt: Apr			
	09		
SubPhase Asphalt Duration: 0.5 months			
Acres to be Paved: 0.22			
Off-Road Equipment			
No. Type	Horsepower	Load Factor	Hours/Day
			5

Page: 6 07/13/2007 1:23 PM

Changes made to the default values for Land Use Trip Percentages

Changes made to the default values for Construction

The user has overridden the Default Phase Lengths

Page: 7 07/13/2007 1:23 PM

URBEMIS 2002 For Windows 8.7.0

File Name:C: \Urbemis\Projects2k2\LADWP Distribution Station AQResults.urbProject Name:LADWP Distribution StationProject Location:South Coast Air Basin (Los Angeles area)On-Road Motor Vehicle EmissionsBased on EMFAC2002 version 2.2

DETAIL REPORT (Pounds/Day - Summer)

Construction Start Month and Year: June, 2009 Construction Duration: 24 Total Land Use Area to be Developed: 0.88 acres Maximum Acreage Disturbed Per Day: 0.88 acres Single Family Units: 0 Multi-Family Units: 0 Retail/Office/Institutional/Industrial Square Footage: 19166.4

CONSTRUCTION EMISSION ESTIMATES UNMITIGATED (lbs/day)

PM10 PM10

LADWP Distribution Station.txt

	ADWP Distr	ibution St	ation.txt		
PM10 Source EXHAUST DUST	ROG	NOx	CO	S02	TOTAL
*** 2009***					
Phase 1 - Demolition Emissio Fugitive Dust - 0.00	ns -	-	-	-	0.00
- 0.00 Off-Road Diesel 0.00 0.00	0.00	0.00	0.00	-	0.00
On-Road Di esel 0. 00 0. 00	0.00	0.00	0.00	0.00	0.00
Worker Trips 0.00 0.00	0.00	0.00	0.00	0.00	0.00
Maximum Ibs/day 0.00 0.00	0.00	0.00	0.00	0.00	0.00
Phase 2 - Site Grading Emiss Fugitive Dust	i ons				8.80
- 8.80 Off-Road Diesel	- 9. 45	55.72	80.35	_	1.67
1. 67 0. 00 On-Road Di esel	0.00	0.00	0.00	0.00	0.00
0.00 0.00 Worker Trips	0.07	0.08	1. 74	0.00	0.01
0.00 0.01 Maximum Ibs/day	9.52	55.80	82.09	0.00	10. 48
1. 67 8. 81	<i></i>		02.07		
Phase 3 - Building Construct Bldg Const Off-Road Diesel	i on 10. 18	65.26	83.42	-	2.39
2.39 0.00 Bldg Const Worker Trips	0.04	0.02	0.50	0.00	0. 01
0.00 0.01 Arch Coatings Off-Gas	32.23	-	-	-	-
Arch Coatings Worker Trips	0. 08	0. 12	2.33	0.00	0. 01
Asphalt Off-Gas	0.05	-	-	-	-
Asphalt Off-Road Diesel 0.00 0.00	0.00	0.00	0.00	-	0.00
Asphal t On-Road Di esel 0.00 0.00	0. 01	0.14	0.03	0.00	0.00
Asphalt Worker Trips 0.00 0.00	0.00	0.00	0.00	0.00	0.00
Maximum Ibs/day 2.39 0.01	32.37	65.28	83.92	0.00	2.40
Max Ibs/day all phases 2.39 8.81	32.37	65.28	83. 92	0.00	11. 20
*** 2010***					
Phase 1 - Demolition Emissio Fugitive Dust	ns -	-	-	-	0.00
- 0.00 Off-Road Diesel	0.00	0.00	0.00	-	0.00
0.00 0.00 On-Road Di esel	0.00	0.00	0.00	0.00	0.00
0.00 0.00 Worker Trips	0.00	0.00	0.00	0.00	0.00
0.00 0.00 Maximum Ibs/day	0.00	0.00 Page 6	0.00	0.00	0.00

Phase 2 - Site Grading Emissions					
Fugitive Dust - 0.00	-	-	-	-	0.00
0ff-Road Di esel 0.00 0.00 0n-Road Di esel 0.00 0.00	0.00	0.00	0.00	-	0.00
	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00
0.00 0.00 Maximum Ibs/day 0.00 0.00	0.00	0.00	0.00	0.00	0.00
Phase 3 - Building Construct	i on				
Bl dg Const Off-Road Di esel 2, 19 0, 00	10. 18	63.00	84.93	-	2.19
Bldg Const Worker Trips 0.00 0.01	0.04	0. 02	0.46	0.00	0. 01
Arch Coatings Off-Gas	0.00	-	-	-	-
Arch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00
Asphalt Off-Gas	0.00	-	-	-	-
 Asphalt Off-Road Diesel 0.00 0.00	0.00	0.00	0.00	-	0.00
Asphalt On-Road Diesel	0.00	0.00	0.00	0.00	0.00
0.00 0.00 Asphalt Worker Trips 0.00 0.00	0.00	0.00	0.00	0.00	0.00
Maximum Ibs/day 2.19 0.01	10. 21	63.02	85.39	0.00	2.20
Max Ibs/day all phases 2.19 0.01	10. 21	63.02	85.39	0.00	2.20

Page: 8 07/13/2007 1:23 PM

0.00

0.00

Phase 1 - Demolition Assumptions: Phase Turned OFF Phase 2 - Site Grading Assumptions Start Month/Year for Phase 2: Jun '09 Phase 2 Duration: 1.2 months On-Road Truck Travel (VMT): 0 Off-Road Equipment No. Type Horsepower Load Factor Off Highway Trucks Rubber Ti red Loaders 3 417 1 165 Phase 3 - Building Construction Assumptions Start Month/Year for Phase 3: Jul '09 Phase 3 Duration: 10.2 months

Start Month/Year for SubPhase Building: Jul '09 SubPhase Building Duration: 10.2 months Off-Road Equipment

Hours/Day

6.0

8.0

0.490

0.465

	LADWP Distribut	ion Station.txt		
No.	Туре	Horsepower	Load Factor	Hours/Day
1	Cranes	190	0.430	8.0
1	Crawler Tractors	143	0.575	8.0
1	Excavators	180	0. 580	6.0
1	Graders	174	0. 575	8.0
3	Off Highway Tractors	255	0. 410	6.0
Start N	Month/Year for SubPhase Architectu	ıral Coatings: A	pr '09	
SubPhas	se Architectural Coatings Duration	n: 1 months		
Start M	Month/Year for SubPhase Asphalt: A	Npr '09		
SubPhas	se Asphalt Duration: 0.5 months			
	to be Paved: 0.22			
	ad_Equipment			
No.	lype	Horsepower	Load Factor	Hours/Day

Page: 9 07/13/2007 1:23 PM

Changes made to the default values for Land Use Trip Percentages

Changes made to the default values for Construction

The user has overridden the Default Phase Lengths

Page: 10 07/13/2007 1:23 PM

URBEMIS 2002 For Windows 8.7.0

File Name:C: \Urbemis\Projects2k2\LADWP Distribution Station AQResults.urbProject Name:LADWP Distribution StationProject Location:South Coast Air Basin (Los Angeles area)On-Road Motor Vehicle EmissionsBased on EMFAC2002 version 2.2

DETAIL REPORT (Tons/Year)

Construction Start Month and Year: June, 2009 Construction Duration: 24 Total Land Use Area to be Developed: 0.88 acres Maximum Acreage Disturbed Per Day: 0.88 acres Single Family Units: 0 Multi-Family Units: 0 Retail/Office/Institutional/Industrial Square Footage: 19166.4

CONSTRUCTION EMISSION ESTIMATES UNMITIGATED (tons/year)

			,		PM10	PM10
PM10 Source EXHAUST DUST *** 2009***	ROG	NOx	CO	S02	TOTAL	
Phase 1 - Demolition Emissions Fugitive Dust - 0.00	-	-	-	-	0.00	

	LADWP Distri	bution Sta	tion.txt		
Off-Road Diesel 0.00 0.00	0.00	0.00	0.00	-	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00
0.00 0.00 Worker Trips	0.00	0.00	0.00	0.00	0.00
0.00 0.00 Total tons/year	0.00	0.00	0.00	0.00	0.00
0.00 0.00					
Phase 2 - Site Grading Emiss Fugitive Dust - 0.12	si ons -	-	-	-	0. 12
Off-Road Diesel	0. 12	0.74	1.06	-	0. 02
0.02 0.00 On-Road Di esel	0.00	0.00	0.00	0.00	0.00
0.00 0.00 Worker Trips	0.00	0.00	0. 02	0.00	0.00
0.00 0.00 Total tons/year 0.02 0.12	0. 12	0.74	1. 08	0.00	0. 14
Phase 3 - Building Construc	tion				
Bl dg Const Off-Road Di esel 0.16 0.00	0. 67	4.31	5.51	-	0. 16
Bldg Const Worker Trips 0.00 0.00	0.00	0.00	0.03	0.00	0.00
Arch Coatings Off-Gas	0.35	-	-	-	-
Arch Coatings Worker Trips	0.00	0.00	0.03	0.00	0.00
0.00 0.00 Asphalt Off-Gas	0.00	-	-	-	-
Asphalt Off-Road Diesel	0.00	0.00	0.00	-	0.00
0.00 0.00 Asphalt On-Road Diesel	0.00	0.00	0.00	0.00	0.00
0.00 0.00 Asphalt Worker Trips	0.00	0.00	0.00	0.00	0.00
0.00 0.00 Total tons/year 0.16 0.00	1.02	4.31	5.57	0.00	0. 16
Total all phases tons/yr 0.18 0.12	1.14	5.05	6.65	0.00	0.30
*** 2010*** Phase 1 - Demolition Emissic Fugitive Dust	ons -	-	-	-	0.00
- 0.00 Off-Road Diesel	0.00	0.00	0.00	_	0.00
0.00 0.00 On-Road Di esel	0.00	0.00	0.00	0.00	0.00
0.00 0.00 Worker Trips	0.00	0.00	0.00	0.00	0.00
0.00 0.00 Total tons/year	0.00	0.00	0.00	0.00	0.00
0.00 0.00	0.00	0.00	0.00	0.00	0.00
Phase 2 - Site Grading Emiss	sions				0.00
Fugitive Dust - 0.00	-	-	-	-	0.00
Off-Road Diesel 0.00 0.00	0.00	0.00	0.00	-	0.00

Page 9

	OWP Distri	bution Stat	tion.txt		
On-Road Di esel 0. 00 0. 00	0.00	0.00	0.00	0.00	0.00
0.00 0.00 Worker Trips 0.00 0.00	0.00	0.00	0.00	0.00	0.00
Total tons/year 0.00 0.00	0.00	0.00	0.00	0.00	0.00
Phase 3 - Building Constructio	on				
Bldg Const Off-Road Diesel	0.47	2.91	3.92	-	0. 10
0.10 0.00 Bldg Const Worker Trips 0.00 0.00	0.00	0.00	0. 02	0.00	0.00
Arch Coatings Off-Gas	0.00	-	-	-	-
Arch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00
Asphalt Off-Gas	0.00	-	-	-	-
- Asphalt Off-Road Diesel 0.00 0.00	0.00	0.00	0.00	-	0.00
Asphalt On-Road Diesel 0.00 0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Worker Trips	0.00	0.00	0.00	0.00	0.00
0.00 0.00 Total tons/year 0.10 0.00	0.47	2.91	3.94	0.00	0. 10
Total all phases tons/yr 0.10 0.00	0. 47	2.91	3.94	0.00	0. 10

Page: 11 07/13/2007 1:23 PM

Phase 1 - Demolition Assumptions: Phase Turned OFF Phase 2 - Site Grading Assumptions Start Month/Year for Phase 2: Jun '09 Phase 2 Duration: 1.2 months On-Road Truck Travel (VMT): 0 Off-Road Equipment Load Factor Hours/Day No. Ťype Horsepower Off Highway Trucks Rubber Tired Loaders 3 417 0.490 6.0 1 165 0.465 8.0 Phase 3 - Building Construction Assumptions Start Month/Year for Phase 3: Jul '09 Phase 3 Duration: 10.2 months Start Month/Year for SubPhase Building: Jul '09 SubPhase Building Duration: 10.2 months Off-Road Equipment No. Туре Horsepower Load Factor Hours/Day 190 1 0.430 Cranes 8.0 1 Crawler Tractors 143 0.575 8.0 0.580 1 Excavators 180 6.0 174 0.575 8.0 1 Graders 255 3 Off Highway Tractors 0.410 6.0 Start Month/Year for SubPhase Architectural Coatings: Apr '09 Page 10

LADWP Distribution Station.txt SubPhase Architectural Coatings Duration: 1 months Start Month/Year for SubPhase Asphalt: Apr'09 SubPhase Asphalt Duration: 0.5 months Acres to be Paved: 0.22 Off-Road Equipment No. Type Horsepower Load Factor Hours/Day

Page: 12 07/13/2007 1:23 PM

Changes made to the default values for Land Use Trip Percentages

Changes made to the default values for Construction

The user has overridden the Default Phase Lengths

APPENDIX B PHASE I CULTURAL RESOURCES INVESTIGATION

A PHASE I CULTURAL RESOURCE AND PALEONTOLOGIC ASSESSMENT FOR THE PROPOSED LOS ANGELES DEPARTMENT OF WATER AND POWER DISTRIBUTION CENTER #144 IN THE CITY OF LOS ANGELES, LOS ANGELES COUNTY, CALIFORNIA

Prepared for:

Los Angeles Department of Water and Power 111 N. Hope Street, Room 1050 Los Angeles, CA 90012

and

Aspen Environmental Group 30423 Canwood Street, Suite 215 Agoura Hills, CA 91301

Written by:

Robert S. Ramirez, M.A., RPA Robin D. Turner, M.A.

Edited by:

Robin D. Turner, M.A. O. Edward Plummer, Ph.D.

ArchaeoPaleo Resource Management, Inc. 13368 Beach Avenue Marina del Rey, California 90292 Ph (310) 823-2850 Fax (310) 823-2851

May 2008

TABLE OF CONTENTS

LIST OF FIGURES	iv
LIST OF TABLES	v
EXECUTIVE SUMMARY	vi
INTRODUCTION	1
Purpose of Study	1
Project Description	1
BACKGROUND	4
Natural Setting	4
Geological Setting	4
Paleontologic Setting	5
Prehistoric Setting	6
Ethnographic Setting	6
Historic Setting	7
Archival Research	7
Native American Consultation	14
SURVEY	14
Survey Methods	14
Survey Results	17
CONCLUSIONS	13
RECOMMENDATIONS	16
REFERENCES	17

TABLE OF CONTENTS (cont)

APPENDIX A: Vertebrate Paleontology Record Search	20
APPENDIX B: Native American Consultation	23

LIST OF FIGURES

Figure 1	Regional Project Location Map.	2
Figure 2	Project Site Location Map.	3
Figure 3	A 1906 Sanborn Map showing approximate project area.	11
Figure 4	A 1923 Sanborn Map showing the project site.	12
Figure 5	A 1953 Sanborn Map showing the project site.	13
Figure 6	Project Overview: View towards west.	15
Figure 7	Project Overview: View towards east.	15
Figure 8	Project Overview: View towards northeast.	16
Figure 9	Project Overview: View towards northwest.	16

iv

LIST OF TABLES

Table1	Archaeological Projects within One-Half Mile Radius of the Project Site.	8
Table 2	Recorded Cultural Resources within One-Half Mile Radius of the Project Site.	9

v

EXECUTIVE SUMMARY

A Phase I Cultural Resource Assessment was conducted for several parcels owned by the Los Angeles Department of Water and Power located at 1140-1154 E. Palmetto Street in the City of Los Angeles, Los Angeles County, California. The scope of this Phase 1 Cultural Resource Assessment includes both prehistoric and historic cultural and archival record searches, a review of existing published and unpublished references on local prehistory and history, an intensive pedestrian survey, a Native American Consultation, a complete vertebrate paleontologic record search, and the completion of this report.

The cultural archival record search, conducted at the South Central Coastal Information Center (SCCIC) located at California State University, Fullerton, indicated that no previously recorded prehistoric or historic archaeological sites were known to be present on the property and that the property had never been systematically surveyed by archaeologists. A total of three cultural resources have been previously recorded within a one-half mile radius of the project site. Additionally, eighteen archaeological projects have been completed within that same one-half mile radius. As of the writing of this document, none of the Native American Consultation responses have been received. The vertebrate paleontologic record search provided by the Vertebrate Section of the Natural History Museum of Los Angeles County did not identify any vertebrate fossils that have been known to come from the project site. Vertebrate and non-vertebrate fossil sites, however, have been located within a mile of the project site.

The results of the cultural, archaeological, and paleontologic pedestrian surveys indicate that no significant prehistoric or historic cultural resources or fossil sites were visually observed on the project boundaries.

However, due to the presence of previously recorded cultural resources and fossil sites documented nearby, development of this project may have adverse impacts on unknown buried cultural, archaeological, and/or paleontologic resources. There is the possibility that part or the entire Project area may contain 4 to 11 feet of artificial fill that may have been previously deposited on site. This conclusion for this analysis has been determined by previous geologic borings provided on other sections of the city block, and on or close to, the Project site. Therefore, it is recommended of ArchaeoPaleo Resource Management, Inc. (APRMI) that any forthcoming construction related ground disturbing activities in native soil be carefully monitored by a professional archaeologist and spot monitored by a qualified paleontologist. A professional archaeologist will determine what part, if any, of the site will require monitoring services.

vi

INTRODUCTION

Purpose of Study

At the request of the Los Angeles Department of Water and Power, a Phase I Cultural Resource Assessment and paleontologic record search and survey was conducted for the property located at 1140-1154 E. Palmetto St. in the City of Los Angeles, Los Angeles County, California (Figure 1).

The cultural resource assessment provides: (1) an archival records and literature search conducted at the South Central Coastal Information Center (SCCIC) to determine if any known prehistoric and/or historic cultural resources are present on the project site; (2) a determination as to whether, or how much, of the project site has been previously and systematically studied by professional archaeologists; (3) an intensive pedestrian reconnaissance to identify any unrecorded surface cultural resources; (4) a preliminary assessment of such resources should any be found within the project site (5) a Native American Consultation of interested parties, (6) and this document detailing the methods, results, and recommendations of this investigation.

The vertebrate paleontologic assessment consists of a record search provided by the Natural History Museum of Los Angeles County, a pedestrian reconnaissance of the site by a qualified paleontologist, a thorough review of geologic maps and literature, and this final Report of Findings.

This project was determined to require Phase 1 cultural and paleontologic assessments to provide the technical documentation required for the subsequent environmental studies. This report satisfies the requirements determined by the California Environmental Quality Act (CEQA), Section 106 of the National Historic Preservation Act, and the City of Los Angeles for Phase I Cultural Resource Assessments.

Project Description

The Los Angeles Department of Water and Power proposes the construction of a power distribution facility on the property located at 1140-1154 E. Palmetto Street in downtown Los Angeles (Figure 2). Even though the property is zoned for Heavy Manufacturing (M3-1) application, the LADWP DS-144 distribution plant fits well into this zoning designation. The project area is located on the Los Angeles 7.5 minute United States Geological Survey (USGS) topographic map in an unsectioned portion of Township 1 South, Range 13 West. Even though the project site is not currently developed, it is considered part of the historically significant industrial section in the City of Los Angeles. Major rail and vehicular transportation lines surround the project location, and the Los Angeles River lies approximately one-half mile to the east with City Hall and the Civic Center approximately one mile to the northwest.

1



Figure 1: Regional Project Location Map.

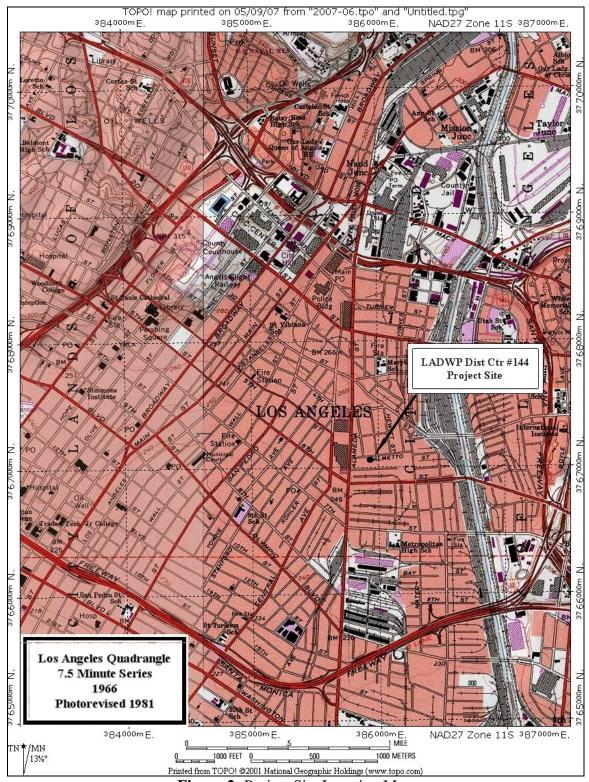


Figure 2: Project Site Location Map

BACKGROUND

Natural Setting

The project site lies within the Los Angeles Basin physiographic province. The Los Angeles Basin is a broad low lying flood plain surrounded by mountain ranges and the Pacific Ocean. It is bound to the north and east by the east-west trending Transverse Ranges consisting of the Santa Monica Mountains, the San Gabriel Mountains and the San Bernardino Mountains. To the south lie the Peninsular Ranges consisting of the Santa Ana Mountains and San Jacinto Mountains. The Pacific Ocean forms the western boundary. The basin's river system includes three major rivers, the Los Angeles River, the San Gabriel River, and the Santa Ana River which all flow west into the Pacific Ocean (Schoenherr 1992). These rivers experienced a significant permanent alteration beginning in the 1930's when many sections were lined with concrete as a response to flood control.

The Los Angeles Basin is characterized by a Mediterranean climate. This climate is typified by hot, dry summers and moderate winter precipitation including snow at the upper mountainous elevations. In the Los Angeles Basin, summers are influenced by a high-pressure zone associated with descending dry air from the upper atmosphere. This persistent high pressure generally prevents rain bearing storms from entering the area, keeping the summers dry. Coupled with the lack of precipitation, summers can be hot with temperatures reaching into the 80's or 90's and sometimes over the 100 degree Fahrenheit mark. Autumn brings the Santa Ana winds which blows from the Mojave Desert toward the ocean. Winter is generally characterized by alternating sporadic rainstorms with predominately clear, sunny days. The Los Angeles Basin is home to a variety of biotic communities which include some Coastal Sage Scrub, Chaparral, Southern Oak Woodland, Valley Grasslands, Pine Forest and Alpine (Schoenherr 1992).

Geologic Setting

Geologists, in general, have a more restricted definition of the Los Angeles Basin than that of the (Greater) Los Angeles Basin given above. In this view, the Santa Monica Mountains and the Puente Hills bounded the geological basin on the north; the Santa Ana Mountains and the San Joaquin Hills bounded it on the south; The Palos Verdes Peninsula (Hills) indicates the western boundary (Woodford, et al. 1954; Sharp 1972).

The basin was larger during the Miocene Period (23.03 to 5.332 million years ago [abbreviated commonly as Mya]). It then extended inland to what is now Pasadena and Pomona and merged to some extent with the Ventura Basin to the northwest. The Catalina land mass bounded it on the southwest (Woodford, et al. 1954:65). The basin itself began to form approximately 15 million years ago (during the Miocene) when the surrounding mountains began a rotational shift, essentially stretching the crustal floor and thus lowering its surface. This stretching was accompanied by volcanic extrusions, some of which can be seen observed the rim of the basin (Palos Verdes Peninsula, Griffith Park, and Covina or San Jose Hills) (Sharp 1972: 21).

At the beginning of the Pliocene (from 5.332 million to 1.806 million years ago), the basin was a deep marine trough, that was filling with sediments and organic microorganism material (the source of the oil in the Los Angeles oil fields) from the sea and land. At approximately 5 million years ago, this stretching ceased as other geological processes began shifting the basin's floor relatively upward, eventually above sea level. The sediments in the Los Angeles Basin extend in some places 20,000 to 30,000 feet below the current surface (Sharp 1972:22), some of which may be pre-basin sediments above the basement rock.

The project site is near the northern edge of the basin within the flood plain of the Los Angeles River, not far from downtown Los Angeles. It lies within a half-a-mile of the current channelized river bed. The land is regarded as Quaternary alluvium (Qal), i.e., recent (post Pleistocene) river deposits (Schoellhamer et al. 1954). To the east across the Los Angeles River just beyond the 101 Freeway lies Upper Pleistocene terrace deposits. The site is not far away from the Elysian and the Repetto Hills, both of which contain outcrops of Upper Miocene/Lower Pliocene sedimentary deposits. The Los Angeles River is an antecedent river, at least in regard to the Elysian Park anticline near Riverside Drive to the north of downtown Los Angeles. That is, the river preceded the rise of those areas and continued to cut its channel amongst the rising land (Sharp 1972: 28). What stratum immediately underlies the alluvial deposits and at what depth may not be known, though undoubtedly one of the basin's sedimentary layers (see Appendix A).

In 2000, Sladden Engineering (2000) conducted six geologic borings on the western part of the block defined by South Alameda Street, Factory Place and Palmetto Street east of where Colyton Street ends. One boring was positioned near Alameda Street. The other five borings were within a projection of Seaton Street or the east of that projection, that is, close to or within the proposed building sites. The borings east of the projection of Seaton Street generally indicated native soil is located between 4 to 9 feet below the current street elevation. The northeast boring stopped at a concrete slab 8 feet below the then current surface. The two borings within the projection of Seaton Street were made in a road into the excavation. That is, the borings started 8 to 11 feet below the original grade (the surrounding surface). The Sladden borings indicate that the Project site may contain 4 to 11 feet of artificial fill. It is anticipated that all or part of the Project site contains the same artificial fill that was discovered during the borings completed on other areas of the city block.

Paleontologic Setting

At the beginning of the Pliocene, the basin was a deep marine trough. The Pliocene and later deposits, at least at the center of the basin, show a progression from deep water marine fossils toward shallow water marine fossils, then to lagoon specimens which gradually extend into land species as you move closer to the surface within the stratum. The Pleistocene deposits (1,808,000 to 11,550 years BP, i.e., before present) indicate a surface rising upward above the sea. The sequence is shallow-water foraminifers, shallow-water mollusks and then land fossils. However there is a horizontal as well as a vertical aspect to the deposits. As expected, along the coast marine deposits are prolific,

while five to ten miles inland, non-marine or continental deposits are observed. This simple sequence is complicated by faults, folding and other geological processes that have continued to today (Woodford et al. 1954). Most Los Angeles Basin fossils are Eocene, Miocene, Pliocene, and Pleistocene in age. The Pleistocene land fossils include a full array of large terrestrial specimens such as mammoth, horse, sloth, bison, and camel; to the medium and small taxa of vertebrates that include antelope, deer, and rodents; to multiple species of birds, and even tortoises and amphibians. Pleistocene trees, plants, seeds, and even algae have been collected throughout the basin. Even though the majority of these fossils can be assigned to living species, it is common to discover new taxa throughout the basin as construction expands outward and into the deeper sediments.

Prehistoric Setting

The prehistoric occupation of southern California can be divided chronologically into four distinct cultural periods or horizons (Moratto 1984) as described below:

Horizon I, described as the **Early Man Period**, began with the arrival of the first inhabitants of the region from approximately 12,000 years ago to about 6,000 B.C. This period is characterized by the presence of nomadic to semi-nomadic hunter-gatherer groups who exploited both coastal and inland environments for food and shelter. Many early sites were located on shorelines of ancient lakes and marshes, as well as along stream channels and estuaries. These groups appeared to be primarily big game hunters following large and medium sized game animals through the seasonal round.

Horizon II, also called the **Millingstone Period**, dates from approximately 6,000 B.C. to 1,000 B.C. This period is characterized by the extensive use of millingstone implements (manos and metates) and core tools. This period saw a greater reliance on shellfish and plant resources with less emphasis on hunting and fishing. Typical inland sites contain numerous artifacts such as manos, metates, and hammerstones, but also include small shell midden sites that are more commonly seen throughout coastal communities.

Horizon III, identified as the **Intermediate Period**, dates from approximately 1,000 B.C. to A.D. 750. The mortar and pestle appears during this period suggesting a greater reliance on the acorn as a food source. There is also an abundance of projectile points and faunal remains which indicate an increase in land and sea mammal exploitation.

Horizon IV, considered the Late Prehistoric Period, began about 750 A.D and terminated with European contact. This period is characterized by greater population density and social complexity. The bow and arrow was widely used during this period and there was an intensification of fishing and sea mammal hunting. Artifact assemblages were more diverse and elaborate and extensive trade networks existed which increased social contacts with other groups.

Ethnographic Setting

The Los Angeles area lies within the territory occupied by the Gabrielino/Tongva Native American group. The Gabrielino/Tongva speak a Takic language which is part of the

Uto-Aztecan linguistic family. Historically, their territory included the coast from Malibu to Aliso Creek, parts of the Santa Monica Mountains, the San Fernando Valley, the greater Los Angeles Basin, the San Gabriel Valley, the San Bernardino Valley, and parts of the Santa Ana Mountains. They also occupied the islands of San Clemente, San Nicolas, and Santa Catalina (Bean and Smith 1976).

Within this territory, there were possibly more than 50 or 100 mainland villages with populations averaging between 50 to 100 people. These villages appeared to have been politically autonomous and composed of non-localized lineages which were lead by political elites. This territory contained a broad and diverse resource base with which the Gabrielino/Tongva were able to make trade a major component of their society. Local goods such as steatite, shell beads, dried fish, and sea otter pelts were exchanged for items such acorns, seeds, and obsidian along trade networks that extended along the coast and into interior southern California and as far east as Arizona (Bean and Smith 1976; Kroeber 1925). This wealth of resources, coupled with a well developed trade and political system, resulted in a society that was one of the wealthiest and most sophisticated in native southern California.

Historic Setting

The Spanish were the first known non-native people to occupy the Los Angeles area. In 1771, the mission San Gabriel Arcángel was established within what is now known as the San Gabriel Valley (Laylander 2000). It was then followed by the pueblo of Los Angeles in 1781. The pueblo was a civilian settlement established at the behest of the first Spanish royal governor of California, Felipe de Neve (Peak and Associates 1992). A total of 44 people, recruited from Sonora and Sinaloa, Mexico (New Spain), comprised the first colonists of what was called "El Pueblo de Nuestra Señora La Reina de Los Angeles del Río Porciúncula." The site was chosen because of its fertile soil and abundance of nearby water for irrigation. The pueblo functioned as an agricultural settlement intended primarily to support itself and help feed the Spanish soldiers at nearby frontier forts (Peak and Associates 1992). In addition to farming, ranching became an important part of the economy of the pueblo.

In 1821, Mexico achieved independence from Spain and the pueblo continued as an outpost in Mexico's northern territory. The pueblo continued to grow, and cattle ranching with its hide and tallow trade, became major aspects of the economy. By the mid-1830's the pueblo had increased to approximately 1,000 residents with an additional 200 or more California Indians working as domestic servants and laborers. It was during this time that Mexico ended the mission system and secularized its land holdings (Peak and Associates 1992).

Mexican rule ended with the Mexican-American war and the Treaty of Guadalupe Hidalgo in 1848. The beginning of U.S. rule signaled a new influx of people and continued growth for Los Angeles. The railroads arrived with the completion of the Southern Pacific line in 1876 (Peak and Associates 1992). In the 1890's oil was discovered and by the turn of the century almost fifteen hundred wells were in operation

in Los Angeles. Population and urban growth continued throughout the twentieth century, and by the beginning of the twenty-first century, Los Angeles had grown to a city of almost 4 million people (U.S. Census Bureau).

Archival Research

An archival records and literature search was conducted for the project area at the South Central Coastal Information Center (SCCIC) located on the California State University, Fullerton campus. The SCCIC is the legal local repository for archaeological and historical resource information within the County of Los Angeles and is part of the California State Historic Information System (CHRIS) repository. The archival records search included a review of all previously recorded historic and prehistoric archaeological site documents that were written describing projects or sites within a onehalf mile radius of the project site. A thorough literature search and review of relevant reports were also conducted at the SCCIC. The results of the records search indicate that no historic or prehistoric archaeological sites have been recorded in the project site and that it has never been systematically surveyed by professional archaeologists, although many sections of the city block that contains the of the project site has undergone various site alterations. However, there have been eighteen archaeological projects completed within a one-half mile radius of the project site (Table 1). In addition, there are three previously historical recorded cultural resources located within a one-half mile radius of the project site (Table 2).

ID	Author	Date	Title
LA 2788	Brown	1992	Archaeological Literature and Records Review,
LA 2727			and Impact Analysis for the Eastside Corridor
			Alternatives Los Angeles, California.
LA 2950	Peak and	1992	Consolidated Report: Cultural Resource Studies
	Associates		for the Proposed Pacific Pipeline Project
LA 2966	Geotransit	1993	Draft Stage I Environmental Site Assessment
	Consultants		Eastside Extension (From Whittier Boulevard and
			Atlantic Boulevard Intersection to Union Station
			Area) Metro Red Line Los Angeles, California.
LA 3813	Peak and	1992	An Archival Study of a Segment of the Proposed
	Associates		Pacific Pipeline, City of Los Angeles, California.
LA 3923	Greenwood and	1998	Archaeological Investigations at Maintenance of
	Foster		Way Facility, South Santa Fe Avenue (CA-LAN-
			2563H).
LA 4047	Greenwood and	1998	Transportation-Related Resources on South Santa
	Lee		Fe Avenue, Los Angeles.
LA 4074	Ohara	1989	Sixth Street Viaduct Over Los Angeles River.
LA 4217	Lee	none	Seismic Retrofit of First Street Bridge over the
			Los Angeles River.
LA 4625	Starzak	1994	Historic Property Survey Report for the Proposed
			Alameda Corridor from the Ports of Long Beach
			8

Table 1. Archaeological Projects within One-Half Mile Radius of the Project Site.

n
1
eless
rnia.
3 rd
e
mia:
ab,
M.
5 th
es,
Visit
C
$\frac{1}{\sqrt{5^{\prime}}}$

Table 2.	Recorded Cultural	Resources within	One-Half Mile	Radius of the	Project Site.
----------	-------------------	------------------	---------------	---------------	---------------

Primary or Trinomial	Author	Date	Description
19-002610	Owen	1997	Historic granite cobblestone street pavement.
19-003683	Hale	2003	Historic refuse deposit.
19-186112	Ashkar	1999	Historic railroad line.

The 1906 Sanborn fire insurance map shows a lumber yard belonging to the Consolidated Lumber Company as being located on the project site (Figure 3). The map shows the general area of the project site without the area being outlined for clearer viewing. The 1928 United States Geologic Survey (USGS) topographic map for Los Angeles was reviewed and portrayed the project site to be fully developed. The 1923 and 1953 Sanborn insurance maps show a water softening plant and cooling towers and concrete reservoirs located within the subject property (Figures 3 and 4). After 1953, all Sanborn maps show the property to be used as a parking lot. All Sanborn maps were viewed at the downtown branch of the Los Angeles City Library.

In addition to reviewing all historic and prehistoric documents housed at the SCCIC, the thorough evaluation of the Sanborn insurance maps and other historical documentation housed at the Los Angeles downtown library, research was also conducted on the documents pertaining to the California State Historical Resources Inventory (HRI) listing, the National Registry of Historical Places (NRHP) listing, the California Historical Landmarks listings, and the Los Angeles Historic Cultural Monuments lists. All of these documents were reviewed and produced negative findings.

A Vertebrate Paleontology record search was conducted by Samuel A. McLeod, Ph.D. of the Natural History Museum of Los Angeles County. The records and document search did not identify any paleontologic resources to be on the project site. There are however, nearby localities that have yielded vertebrate fossil remains. Specimens of fossil horse, Equus, were noted in older Quaternary Alluvium deposits east of the project site (LACM 3363) near the I-710 freeway and specimens of fossil mammoth, Mammuthus, were found to the northwest, at the intersection of Wilshire Boulevard and Western Avenue (LACM 6204). In addition, specimens of fossil eagle ray, *Myliobatis*, white shark, Carcharodon sulcidens and Carchardon carcharias and the sheepshead fish, Semicossyphus, were found in Pliocene Fernando Formation deposits near 6th Street and Wilshire Boulevard (LACM 3868 and LACM 6971). Specimens of the fossil bristlemouth fish, Cyclothone, were noted in the Miocene Puente Formation deposits near Hill Street and 1st Street (LACM 5961) (see Appendix A). All of the above mentioned specimens were recovered during the MTA Redline Subway Project excavation. Ms. Robin D. Turner recovered all of these fossils with the exception of the horse and bristlemouth fish specimens. There were 52 new fish species recovered during the Segment 2 portion of the MTA Redline Subway Project located at the located listed above.

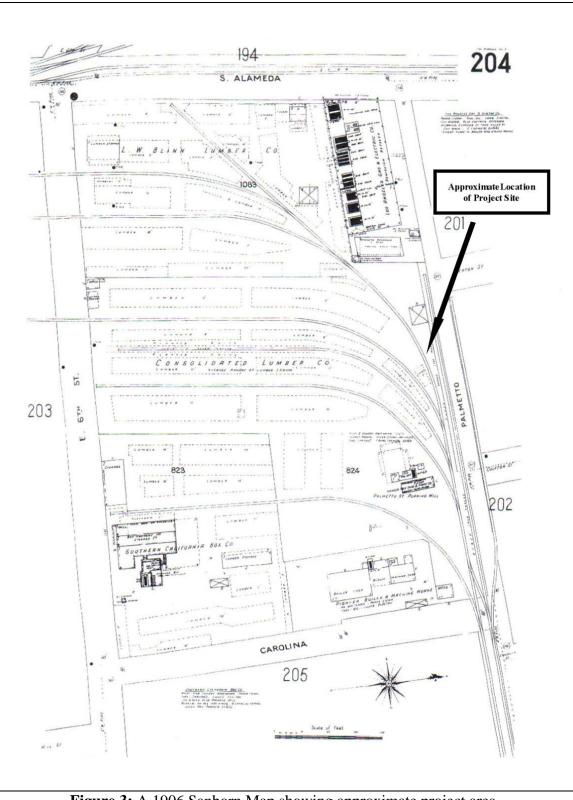


Figure 3: A 1906 Sanborn Map showing approximate project area.

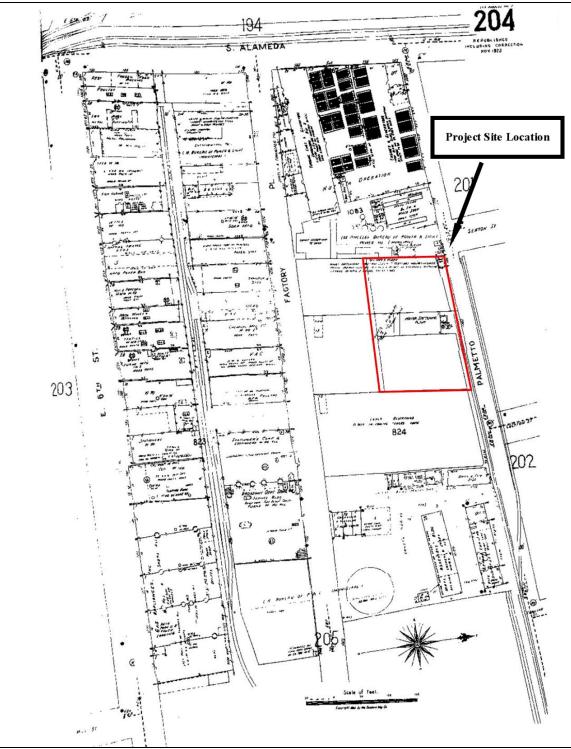


Figure 4: A 1923 Sanborn Map showing the project site.

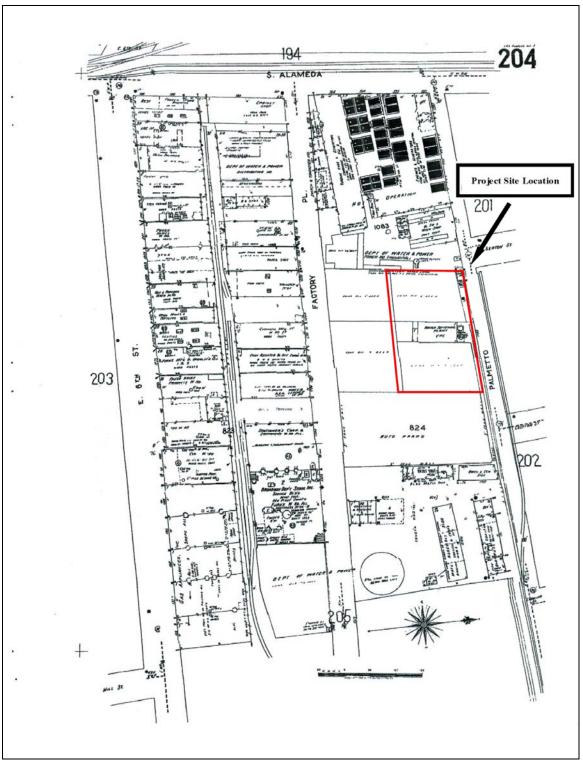


Figure 5: A 1953 Sanborn Map showing the project site.

Native American Consultation

A Native American consultation and initial contact was conducted on June 13, 2007 through phone calls made by Robin Turner to the tribal representatives to discuss the letters that were originally sent on June 10, 2007. Each Native American representative was notified by phone of the project and asked look for these letter by mail. The letter described the purpose of the project, the project site itself, and several maps to help identity the exact location of the LADPW property were included to help identify the property boundaries. During the telephone conversations, the representatives were asked to write a response letter to LADWP and mail them to the ArchaeoPaleo Resource Management, Inc. address explaining what, if any, concerns they might have regarding the proposed project relating to the property. These initial letters, and the response contact log, are attached as Appendix B. Government to Government contacts were not required for this project.

SURVEY

Survey Methods

An intensive pedestrian survey of the project area was performed by Adrianna Jackson, archaeologist for ArchaeoPaleo Resource Management, Inc. on May 8, 2007. The survey involved walking linear transects spaced 5 meters apart following a north/south orientation. All visible ground surfaces within the project site were examined for historic and prehistoric cultural resources. Currently, there are no standing structures on the subject property; there are however several portable storage containers along with motor vehicles and other movable equipment (Figures 6, 7, 8 and 9). These objects have effectively obstructed the view of the ground so survey was based only on partial observation. In addition, a gravel ground base covers nearly the entire project area obstructing the surface view.

A paleontologic survey was conducted by Robin D. Turner, archaeologist/paleontologist for ArchaeoPaleo Resource Management, Inc. The paleontologic survey involved walking linear transects spaced 5 meters apart following a north/south orientation and inspecting all visible ground surfaces within the project site. No fossil sites or geologic features were observed during the pedestrian survey.



Figure 6: Project Overview: View towards west.



Figure 7: Project Overview: View towards east.



Figure 8: Project Overview: View towards northeast.



Figure 9: Project Overview: View towards northwest.

Survey Results

The survey did not identify any cultural or paleontologic resources within the project area. No prehistoric artifacts or features were observed during the course of this survey. No evidence of any historic structures or features was observed. Additionally, no visible fossil remains were identified on the subject property. Modern disturbances include a layer of gravel base which covers the entire surface of the project site, effectively reducing ground visibility to near zero. No native flora or fauna were noted during survey.

CONCLUSIONS

A Phase I Cultural Resource Assessment was performed for the property located at 1140-1154 Palmetto Street in the City of Los Angeles, Los Angeles County. The scope of the investigation involved an archival record and literature search conducted at the South Central Coastal Information Center, a review of existing published and unpublished references on local prehistory and history, an intensive pedestrian survey, a paleontologic pedestrian assessment of the property and archival record search, and the assessment concludes with this document. The pedestrian survey did not identify any prehistoric or historic cultural resources within the project site nor were any paleontologic resources identified.

The archival records search indicated that no previously recorded prehistoric or historic archaeological sites were known to be present within the project site. A review of the Sanborn fire insurance maps, however, shows a long history of land use on the project site. The earliest Sanborn map, circa 1906, shows that a lumber yard belonging to the Consolidated Lumber Company occupied the site. A water softening plant, cooling towers and concrete reservoirs, were first recorded on the 1923 Sanborn map. Occupation of the site occurred at least until the early 1950's. Although no cultural resources were identified during survey, the gravel base layer severely limited ground visibility. There is the possibility that cultural resources and/or historic building foundations may be present underneath this obstructive gravel layer.

A review of the Los Angeles County Museum of Natural History vertebrate paleontologic locality and specimen records found that no vertebrate fossil localities are currently known to lie directly on the project site. As noted above, the site has surficial deposits of soil and younger Quaternary Alluvium derived from the Los Angeles River. These deposits are unlikely to contain significant vertebrate fossils, at least in the uppermost layers. However, at a deeper depth, there may be older Quaternary Alluvium or older deposits that may contain vertebrate fossil remains (see Appendix A). There is the potential for fossil remains to be located within subsurface sediments. While the geotechnical investigation by Sladden Engineering (2000) indicate the presence of imported or previously disturbed fill material ranging in depth from 4 to 10 feet that may be uniform on site, paleontologic monitoring services will determine if fossil remains occur below the construction fill.

RECOMMENDATIONS

Due to the presence of previously recorded cultural resources within a one-half mile radius of the project site and the knowledge that the property has been used for at least 100 years, development of this project may have adverse impacts on unknown buried cultural resources. However, due to the high potential of imported or previously disturbed fill material that may exist to depths ranging from 4 to 10 feet below surface grade, no cultural resources are expected to be encountered within the top four feet of soil for the original northern project area and the proposed southern building site. This document recommends that any forthcoming ground disturbing activities (including utility trenching and mass grading) that would penetrate deeper than four feet below the ground surface, or in areas of known native soil, be carefully monitored by a professional archaeologist. A qualified paleontologist should be retained to determine if fossil remains occur on site and to recover the fossil remains if required.

REFERENCES

Bean, Lowell J. and Charles R. Smith

1978 Gabrielino. In *Handbook of North American Indians*, Vol. 8, edited by Robert F. Heizer, pp. 538-529. Smithsonian Institution, Washington D.C.

Dibblee, Thomas, W. Jr.

1989 Geologic Map of the Los Angeles Quadrangle, Los Angeles County California.

Dillon, B. D.

1984 Alameda District Plan, Los Angeles, California: Prehistoric and Early Historic Archaeological Research. On file, South Central Coastal Information Center, California Historical Resources Information System, California State University, Fullerton.

Kroeber, Alfred J.

1925 *Handbook of the Indians of California*, pp 620-635. Dover Publications, Inc. New York, N.Y.

Laylander, Don.

Moratto, Michael J.

1984 California Archaeology, Chapter 4. Academic Press, Inc. Orlando, FL.

Peak and Associates

1992 An Archival Study of a Segment of the Proposed Pacific Pipeline, City of Los Angeles, California. Report LA 3813 on file at the South Central Coastal Information Center, California State University, Fullerton

Schoellhamer, J.E., J.G. Vedder and R.F. Yerkes

1954 Geology of the Los Angeles Basin Area. In *Geology of the Natural Provinces*, Chapter 2 of *Geology of Southern California*, edited by Richard H. Jahns, enclosed map supplement, California Department of Natural Resources, Division of Mines, San Francisco.

Schoenherr, Allan A.

1992 *A Natural History of California*, Chapter 8. University of California Press. Berkeley, CA.

Sharp, Robert P.

1972 *Geology Field Guide to Southern California*, pp. 21-28. Wm. C. Brown Company, Dubuque, Iowa.

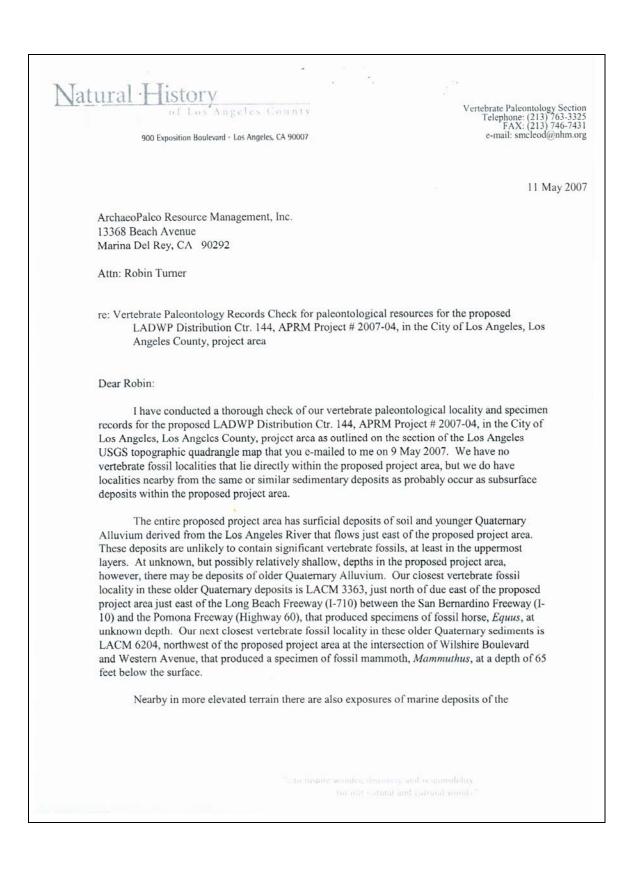
Sladden Engineering

2000 Geotechnical Investigation, Proposed Industrial Complex 560 South Alameda Street, Los Angeles, California.

Woodford, A.O., J.E. Schoellhamer, J.G. Vedder and R.F. Yerkes

²⁰⁰⁰ In: Archives of California Prehistory: Early Ethnography of the Californians; 1533-1825, Number 47, pp. 70. Coyote Press. Salinas, CA.

1952 "Geology of the Los Angeles Basin." In *Geology of the Natural Provinces*, Chapter 2 of *Geology of Southern California*, edited by Richard H. Jahns, pp. 65-81. California Department of Natural Resources, Division of Mines, San Francisco. APPENDIX A: Vertebrate Paleontology Record Search



Pliocene Fernando Formation and the late Miocene Puente Formation (also known as the Modelo Formation in this area), both of which may also occur at unknown depth in the proposed project area. Our closest vertebrate fossil localities from the Fernando Formation are LACM 3868 and 6971, northwest of the proposed project area near 6th Street and Wilshire Boulevard around the Harbor Freeway (I-110), that produced fossil specimens of eagle ray, *Myliohatis*, white sharks, *Carcharodon sulcidens* and *Carcharodon carcharias*, and sheepshead, *Semicossyphus*. Locality LACM 3868 was found near the surface with exposures of the Fernando Formation outcropping in the area, but locality LACM 6971 was discovered at a depth of 60 feet below the surface during excavations for a building. Our closest fossil vertebrate locality in the Puente Formation is LACM 5961, discovered during excavation for the Metrorail station near Hill Street and 1st Street north-northwest of the proposed project area, that produced specimens of the fossil bristlemouth fish, *Cyclothone*.

Surface grading or shallow excavations in the younger Quaternary Alluvium occurring in the proposed project area will probably not encounter significant fossil vertebrate remains. Deeper excavations that extend down into older Quaternary Alluvium or deposits of the marine Fernando or Puente Formations, however, have a good chance of encountering significant fossil vertebrates. Any substantial and deep excavations in the proposed project area, therefore, should be monitored closely to quickly and professionally recover any fossil remains discovered while not impeding development. Additionally, many specimens in the Fernando and Puente Formations are small and may not be detected in normal paleontological excavation monitoring. We recommend that samples from these rock units, if encountered, be collected and analyzed for their paleontological potential. Any fossils recovered during mitigation should be deposited in an accredited and permanent scientific institution for the benefit of current and future generations.

This records search covers only the vertebrate paleontology records of the Natural History Museum of Los Angeles County. It is not intended to be a thorough paleontological survey of the proposed project area covering other institutional records, a literature survey, or any potential onsite survey.

Sincerely,

fanne 4. M. Leod

Samuel A. McLeod, Ph.D. Vertebrate Paleontology

enclosure: invoice

APPENDIX B: Native American Consultation

Native American Contacts Log LADWP Distribution Center 144 Project

<u>Name</u> Sam Dunlap	Affiliation Gabrielino Cahuilla Luiseno	Contact Type Talked to Sam by phone on June 13, 2007 Sent letter on June 10, 2007	Comments No written response as of June 16, 2007	
Ron Andrade	No affiliation given on NAHC listing	Talked to Pamela by phone on June 13, 2007 Sent letter on June 10, 2007	No written response as of June 16, 2007	
Cindy Alvitre	Gabrielino	Talked to Cindy by phone on June 13, 2007 Sent letter on June 10, 2007	No written response as of June 16, 2007	
John Tomy Rosas	Gabrielino Tongva	Left voicemail message on June 13, 2007 Sent letter on June 10th, 2007	No written response as of June 16, 2007	
Anthony Morales Gabrielino Tongva		Left voicemail message on June 13, 2007 He called back on June 14th and we discussed the project Sent letter on June 10th, 2007	No written response as of June 16, 2007	
on		Left voicemail message on June 13, 2007 Sent letter on June 10th, 2007	No written response as of June 16, 2007	
Kumeyaay on June 13, 2007		Left voicemail message on June 13, 2007 Sent letter on June 10th, 2007	No written response as of June 16, 2007	
Linda Candelaria Gabrielino Tongva		Talked to Barbara by phone on June 13, 2007 Sent letter on June 10th, 2007	No written response as of June 16, 2007	

* This log is an attachment to the Phase 1 Cultural Resource Assessment Report that was due before the individuals listed above had a chance to respond to the letters that were sent to them. All responses will be attached to the Resopnse to Comments section in the Draft EIR or other appropriate documents as required.



Mr. Samuel Dunlap P. O. Box 1391 Temecula, CA 92593

Re: LADWP Distribution Station 144 – APN 5164001903

The Los Angeles Department of Water and Power (LADWP) is preparing to build a new distribution center near Alameda Blvd. on Palmetto Street in downtown Los Angeles. Attached to this letter is a copy of the TOPO map showing the subject property as well as a more detailed Mapquest satellite map indicating the exact site.

LADWP is currently using this property as a storage/parking lot and there are no existing structures or buildings on the property. Research conducted at the South Central Coastal Information Center housed at California State University at Fullerton found that no prehistoric or historic sites have been previously documented at this location. The ArchaeoPaleo Resource Management, Inc. pedestrian reconnaissance did not encounter any surficial sites due to the ground being completely covered in gravel.

Your name was given to us by the Native American Heritage Commission. Since your ancestral homeland is part of this general vicinity, LADWP would like to know what significance this property has to you and your family. Please send your written responses to my attention at:

ArchaeoPaleo Resource Management, Inc. 13368 Beach Ave. Marina del Rey, CA 90292

Sincerely,

Robin Turner President/Principal

C: Mr. Jason Ricks Aspen Environmental Group

> 11368 Beach Ave. Marina del Rey, CA 90292



LA City/County Native American Indian Commission Mr. Ron Andrade, Director 3175 West 6th Street, Rm. 403 Los Angeles, CA 90020

Re: LADWP Distribution Station 144 – APN 5164001903

The Los Angeles Department of Water and Power (LADWP) is preparing to build a new distribution center near Alameda Blvd. on Palmetto Street in downtown Los Angeles. Attached to this letter is a copy of the TOPO map showing the subject property as well as a more detailed Mapquest satellite map indicating the exact site.

LADWP is currently using this property as a storage/parking lot and there are no existing structures or buildings on the property. Research conducted at the South Central Coastal Information Center housed at California State University at Fullerton found that no prehistoric or historic sites have been previously documented at this location. The ArchaeoPaleo Resource Management, Inc. pedestrian reconnaissance did not encounter any surficial sites due to the ground being completely covered in gravel.

Your name was given to us by the Native American Heritage Commission. Since your ancestral homeland is part of this general vicinity, LADWP would like to know what significance this property has to you and your family. Please send your written responses to my attention at:

ArchaeoPaleo Resource Management, Inc. 13368 Beach Ave. Marina del Rey, CA 90292

Sincerely,

Robin Turner President/Principal

C: Mr. Jason Ricks Aspen Environmental Group

> 11368 Beach Ave. Marina del Rey, CA 90292



Ti'At Society Ms. Cindy Alvitre 6515 East Seaside Walk #C Long Beach, CA 90803

Re: LADWP Distribution Station 144 – APN 5164001903

The Los Angeles Department of Water and Power (LADWP) is preparing to build a new distribution center near Alameda Blvd. on Palmetto Street in downtown Los Angeles. Attached to this letter is a copy of the TOPO map showing the subject property as well as a more detailed Mapquest satellite map indicating the exact site.

LADWP is currently using this property as a storage/parking lot and there are no existing structures or buildings on the property. Research conducted at the South Central Coastal Information Center housed at California State University at Fullerton found that no prehistoric or historic sites have been previously documented at this location. The ArchaeoPaleo Resource Management, Inc. pedestrian reconnaissance did not encounter any surficial sites due to the ground being completely covered in gravel.

Your name was given to us by the Native American Heritage Commission. Since your ancestral homeland is part of this general vicinity, LADWP would like to know what significance this property has to you and your family. Please send your written responses to my attention at:

ArchaeoPaleo Resource Management, Inc. 13368 Beach Ave. Marina del Rey, CA 90292

Sincerely,

Robin Turner President/Principal

C: Mr. Jason Ricks Aspen Environmental Group

> 11368 Beach Ave. Marina del Rey, CA 90292



Gabrielino Tongva Indians of California Tribal Council Mr. John Tomy Rosas, Vice Chair/Environmental 4712 Admiralty Way, Suite 172 Marina del Rey, CA 90202

Re: LADWP Distribution Station 144 – APN 5164001903

The Los Angeles Department of Water and Power (LADWP) is preparing to build a new distribution center near Alameda Blvd. on Palmetto Street in downtown Los Angeles. Attached to this letter is a copy of the TOPO map showing the subject property as well as a more detailed Mapquest satellite map indicating the exact site.

LADWP is currently using this property as a storage/parking lot and there are no existing structures or buildings on the property. Research conducted at the South Central Coastal Information Center housed at California State University at Fullerton found that no prehistoric or historic sites have been previously documented at this location. The ArchaeoPaleo Resource Management, Inc. pedestrian reconnaissance did not encounter any surficial sites due to the ground being completely covered in gravel.

Your name was given to us by the Native American Heritage Commission. Since your ancestral homeland is part of this general vicinity, LADWP would like to know what significance this property has to you and your family. Please send your written responses to my attention at:

ArchaeoPaleo Resource Management, Inc. 13368 Beach Ave. Marina del Rey, CA 90292

Sincerely,

Robin Turner President/Principal

C: Mr. Jason Ricks Aspen Environmental Group

> 11368 Beach Ave. Marina del Rey, CA 90292



Gabrielino/Tongva Tribal Council Mr. Anthony Morales, Chairperson P. O. Box 693 San Gabriel, CA 91778

Re: LADWP Distribution Station 144 - APN 5164001903

The Los Angeles Department of Water and Power (LADWP) is preparing to build a new distribution center near Alameda Blvd. on Palmetto Street in downtown Los Angeles. Attached to this letter is a copy of the TOPO map showing the subject property as well as a more detailed Mapquest satellite map indicating the exact site.

LADWP is currently using this property as a storage/parking lot and there are no existing structures or buildings on the property. Research conducted at the South Central Coastal Information Center housed at California State University at Fullerton found that no prehistoric or historic sites have been previously documented at this location. The ArchaeoPaleo Resource Management, Inc. pedestrian reconnaissance did not encounter any surficial sites due to the ground being completely covered in gravel.

Your name was given to us by the Native American Heritage Commission. Since your ancestral homeland is part of this general vicinity, LADWP would like to know what significance this property has to you and your family. Please send your written responses to my attention at:

ArchaeoPaleo Resource Management, Inc. 13368 Beach Ave. Marina del Rey, CA 90292

Sincerely,

Robin Turner President/Principal

C: Mr. Jason Ricks Aspen Environmental Group

> 11368 Beach Ave. Marina del Rey, CA 90292



Mr. Craig Torres 713 E. Bishop Santa Ana,, CA 92701

Re: LADWP Distribution Station 144 - APN 5164001903

The Los Angeles Department of Water and Power (LADWP) is preparing to build a new distribution center near Alameda Blvd. on Palmetto Street in downtown Los Angeles. Attached to this letter is a copy of the TOPO map showing the subject property as well as a more detailed Mapquest satellite map indicating the exact site.

LADWP is currently using this property as a storage/parking lot and there are no existing structures or buildings on the property. Research conducted at the South Central Coastal Information Center housed at California State University at Fullerton found that no prehistoric or historic sites have been previously documented at this location. The ArchaeoPaleo Resource Management, Inc. pedestrian reconnaissance did not encounter any surficial sites due to the ground being completely covered in gravel.

Your name was given to us by the Native American Heritage Commission. Since your ancestral homeland is part of this general vicinity, LADWP would like to know what significance this property has to you and your family. Please send your written responses to my attention at:

ArchaeoPaleo Resource Management, Inc. 13368 Beach Ave. Marina del Rey, CA 90292

Sincerely,

Robin Turner President/Principal

C: Mr. Jason Ricks Aspen Environmental Group

> 11368 Beach Ave. Marina del Rey, CA 90292



Coastal Gabrielino Diegueno Mr. Jim Velasques 5776 42nd Street Riverside, CA 92509

Re: LADWP Distribution Station 144 – APN 5164001903

The Los Angeles Department of Water and Power (LADWP) is preparing to build a new distribution center near Alameda Blvd. on Palmetto Street in downtown Los Angeles. Attached to this letter is a copy of the TOPO map showing the subject property as well as a more detailed Mapquest satellite map indicating the exact site.

LADWP is currently using this property as a storage/parking lot and there are no existing structures or buildings on the property. Research conducted at the South Central Coastal Information Center housed at California State University at Fullerton found that no prehistoric or historic sites have been previously documented at this location. The ArchaeoPaleo Resource Management, Inc. pedestrian reconnaissance did not encounter any surficial sites due to the ground being completely covered in gravel.

Your name was given to us by the Native American Heritage Commission. Since your ancestral homeland is part of this general vicinity, LADWP would like to know what significance this property has to you and your family. Please send your written responses to my attention at:

ArchaeoPaleo Resource Management, Inc. 13368 Beach Ave. Marina del Rey, CA 90292

Sincerely,

Robin Turner President/Principal

C: Mr. Jason Ricks Aspen Environmental Group

> 11368 Beach Ave. Marina del Rey, CA 90292



Gabrielino/Tongva Council / Gabrielino Tongva Nation Ms. Linda Candelaria 501 Santa Monica Blvd., Suite 500 Santa Monica, CA 90401-2415

Re: LADWP Distribution Station 144 – APN 5164001903

The Los Angeles Department of Water and Power (LADWP) is preparing to build a new distribution center near Alameda Blvd. on Palmetto Street in downtown Los Angeles. Attached to this letter is a copy of the TOPO map showing the subject property as well as a more detailed Mapquest satellite map indicating the exact site.

LADWP is currently using this property as a storage/parking lot and there are no existing structures or buildings on the property. Research conducted at the South Central Coastal Information Center housed at California State University at Fullerton found that no prehistoric or historic sites have been previously documented at this location. The ArchaeoPaleo Resource Management, Inc. pedestrian reconnaissance did not encounter any surficial sites due to the ground being completely covered in gravel.

Your name was given to us by the Native American Heritage Commission. Since your ancestral homeland is part of this general vicinity, LADWP would like to know what significance this property has to you and your family. Please send your written responses to my attention at:

ArchaeoPaleo Resource Management, Inc. 13368 Beach Ave. Marina del Rey, CA 90292

Sincerely,

Robin Turner President/Principal

C: Mr. Jason Ricks Aspen Environmental Group

> 11368 Beach Ave. Marina del Rey, CA 90292

APPENDIX C Review of Geotechnical and Soil Compaction Reports, 560 South Alameda Street



GEOTECHNICAL CONSULTANTS, INC.

Geotechnical Engineering • Geology • Hydrogeology

MEMORANDUM

TO: Jason Ricks Aspen Environmental Group **DATE:** June 2, 2008

PROJECT NO.:

FROM: James Thurber

SUBJECT: Review of Geotechnical and Soil Compaction Reports, 560 South Alameda Street

We have reviewed four reference documents related to geotechnical investigations and remedial grading for the parcels located generally east of Alameda Street, south of Palmetto Street, and north of Factory Place in Los Angeles. We understand that Aspen is preparing the preliminary environmental analysis of a parcel that generally encompasses a portion of Lot 1 and all of Lots 2 through 6 as shown on the attached Parcel Map (Aspen Figure 2, Parcel Map). Our review of the available documents was focused on identifying the depth of overexcavation and thickness of artificial fill at the proposed Project site. The reference documents were provided to Aspen by LADWP and are reproduced from the files of City of Los Angeles Department of Building and Safety.

DISCUSSION

Reference: Leroy Crandall and Associates, Compaction Report, February 2, 1981.

Artificial fill and drilled piles were placed in February to April 1979 for a proposed addition to the existing Los Angeles Times warehouse. The addition is located on the south side of the existing building immediately north of Factory Place and near Alameda Street. The location of the existing and proposed addition was confirmed by the Phase I Environmental Site Assessment Report by Smith-Emery GeoServices, June 8, 2001.

• **Conclusion:** This location is about 150 feet southwest of the proposed Project site and, consequently, the information is not directly relevant.

Reference: Sladden Engineering, Inc., Geotechnical Investigation Report, 560 South Alameda Street, October 10, 2000.

Sladden drilled six borings in September 2000 as the site was actively undergoing demolition of existing buildings, including deep basements. Sladden concluded that due to the presence of uncertified fill and remnants of building structures, remedial grading consisting of removal of



Review of Geotechnical and Soil Compaction Reports 560 South Alameda Street

Page 2

loose artificial fill and native soils (overexcavation) and then placement as engineered or compacted fill (recompaction) is required.

• **Conclusion**: Sladden identified artificial fill throughout the larger site extending east of Alameda Street to near Colyton Street where an existing LADWP building is located. Sladden recommended overexcavation and recompaction of the site, particularly under the three proposed buildings. Our review of recent (2005) aerial photographs reveals that two buildings have been constructed; the third location is the currently undeveloped proposed Project site.

Reference: Sladden Engineering, Inc., Compaction Report, Proposed Industrial Complex, 560 South Alameda Street, June 7, 2001.

This report summarizes the soil compaction test results for the "Unnumbered Lot" at 560 South Alameda Street. Although this report is lacking a plan showing the locations of compaction tests and depths of overexcavation and resulting thickness of replacement fill (clarified by the April 2002 Interim Report, discussed below), it does provide evidence of soil compaction tests at elevations 4 to 11 feet below the finished grade.

• **Conclusion**: Sladden compaction tests within the proposed Project area (Lots 1 thru 6 of attached figure) and the adjacent lots to the south where the new building was constructed (Lots 18 thru 20), can be subdivided into three general locations as follows.

Proposed Project Site		East Property Line		New Building	
Test No.	Elevation	Test No.	Elevation	Test No.	Elevation
111	243	142	244	65	243
112	243	147	251	66	244
122	247.5	152	250	73	244.5
124	245	155	247	78	247
125	248	159	249	127	245.5
126	249	161	249.5	144	251

The compaction tests presented in the table are a select set of the tests with the lowest elevation. These tests indicate that artificial fill is likely present below the elevation of the test. A wall was discovered along the east property line that prevented the overexcavation to extend deeper due to concerns about undermining the adjacent LADWP structure. Tests within the proposed Project site indicate artificial fill extends to elevation 243 feet resulting in a fill thickness of about 11 feet below local grade (elevation 254 feet). Subsequent tests at higher elevation reflect the progress of fill placement.



Review of Geotechnical and Soil Compaction Reports 560 South Alameda Street

Page 3

Reference: Sladden Engineering, Inc., Interim Compaction Report, Portions of Lots 1 and 15 of Industrial Complex, 560 South Alameda Street, April 26, 2002. Although this report addresses the lots west of the proposed Project, it does provide the compaction test location plan missing from the June 2001 Compaction Report. The plan also indicates the bottom elevation of the overexcavation and the resulting fill thickness (see attached figure).

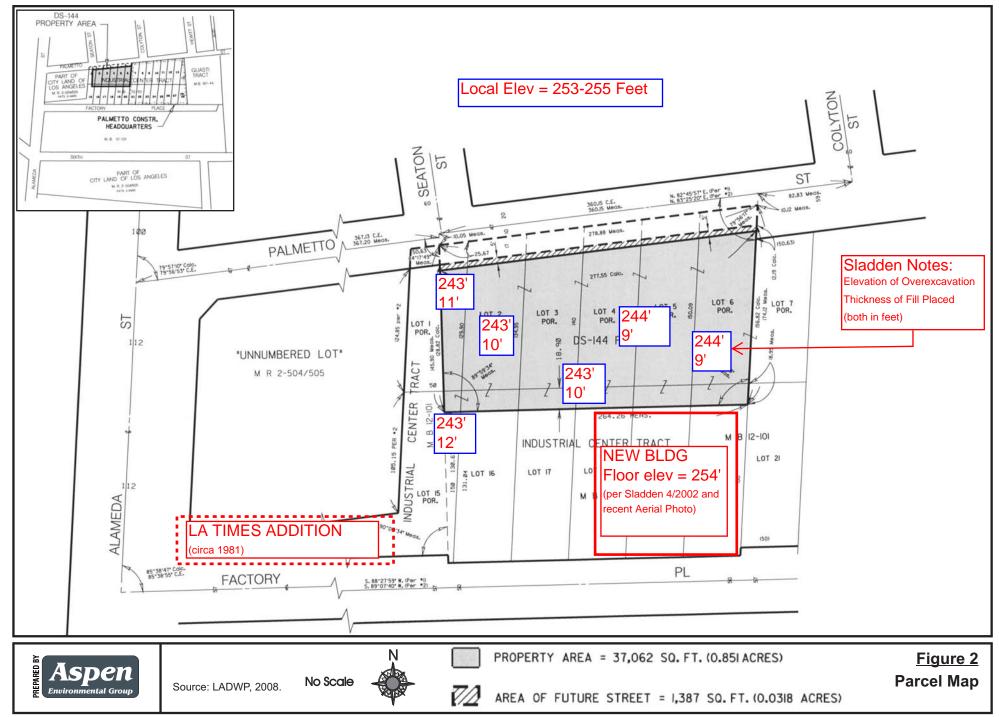
• **Conclusion:** The plan included in this Interim Compaction Report supports the conclusion from the Geotechnical Investigation (2000) that the overall site should undergo remedial grading consisting of overexcavation and recompaction of the soils. Labels within the proposed Project site indicate that overexcavation extended to elevation 242 to 244 feet and that fill of 9 to 11 feet are present throughout the Project site.

CONCLUSION

Based on our review of the referenced geotechnical investigation report (Sladden Engineering, 2000), we conclude that Sladden recommended overexcavation and removal of loose soils and replacement of the soil as compacted fill to support buildings and parking at the subject site. The two subsequent compaction reports (Sladden Engineering, 2001 and 2002) indicate that soil compaction tests were performed at elevations comparable to overexcavation depths of 9 to 10 feet in the area of the proposed Project site. Understanding that the site has been backfilled to match local grade (elevation 253 to 255 feet) and that compaction tests were performed and documented by Sladden, we conclude from these reports that the proposed Project site is underlain by 9 to 11 feet of compacted artificial fill placed from March to May 2001.

LIMITATIONS

Our analysis and conclusions are based on review of the referenced documents. GTC has not conducted our own field exploration, soil sampling or compaction testing. GTC makes no conclusions about the relative compaction test results or the adequacy of the compacted fill for the intended use.



APPENDIX D TRAFFIC IMPACT ANALYSIS

Traffic Study for the LADWP Distributing Station 144 Project

April 10, 2008

Prepared For

Aspen Environmental Group

30423 Canwood Street, Suite 215 Agoura Hills, CA 91301 p (818) 597-3407 f (818) 597-8001

Prepared by:



1055 Corporate Center Drive, Suite 300 Monterey Park, CA 91754-7668 p (323) 260-4703 f (323) 260-4705

JA71138

Table of Contents

١.	PROJECT OVERVIEW & ANALYSIS METHODOLOGY	.1
	A. Project Location and Concept B. Project Construction C. Traffic Analysis Methodology	. 1
	D. AGENCY COORDINATION.	
2.	TRAFFIC & PARKING ANALYSIS – PALMETTO STREET	.4
	A. DESCRIPTION OF LOCAL ROADWAYS B. TRAFFIC FLOW ISSUES DURING CONSTRUCTION C. ON-STREET PARKING SUPPLY ISSUES DURING CONSTRUCTION	. 7
3.	PROJECT ANALYSIS – SITE ACCESS	. 9
4.	CONCLUSIONS AND CEQA CONSIDERATIONS	10
	A. MAJOR IMPACT CONCLUSIONS	
	B. CEQA-Related Considerations and Responses	11
-		

List of Figures

FIGURE I – PROJECT LOCATION FIGURE 2 – PROPOSED SITE PLAN & PALMETTO STREET

Attachment

ATTACHMENT A - DAILY TRAFFIC COUNT ON PALMETTO STREET



 $\mathbf{2}$

 $\mathbf{5}$

I. Project Overview & Analysis Methodology

KOA Corporation was retained by Aspen Environmental Group to conduct a traffic analysis for the proposed Distributing Station 144 Project, on Palmetto Street east of Alameda Street in Los Angeles. The Project has been proposed by the City of Los Angeles Department of Water & Power (LADWP) for implementation at this site location. KOA served as a subconsultant to Aspen Environmental Group while conducting the traffic analysis.

A. Project Location and Concept

This report analyzes the potential traffic impacts of Project construction along Palmetto Street near the proposed site. A description of the planned LADWP Project follows.

The LADWP is proposing to construct DS-144 in order to meet growing demand and anticipated growth in the local industrial area. DS-37, located approximately 250 feet southwest of the proposed project site near the corner of Alameda Street and Factory Place, currently provides electricity to the area. However, electrical capacity at DS-37 cannot be increased because of physical limitations of the facility. Therefore, the proposed DS-144 facility has been designed to meet the current and future electricity demands in the area.

DS-144 would be constructed on a 0.88-acre parcel located at 1140 East Palmetto Street. The proposed site is located immediately to the west of an existing multi-story LADWP building. The site would span an approximate east-west breadth from the intersection of Seaton Street & Palmetto Street on the west to the existing LADWP building on the east.

The proposed distribution station would consist of capacitors, transformers, circuit breakers, and switches surrounded by a block wall. The proposed distribution station would connect to the existing power grid through underground street connections beneath Palmetto Street. The project site would be accessed from Palmetto Street. A staging area and lay down yard for equipment and stockpiles would be located on-site during the construction period.

B. Project Construction

Construction of the Project is planned to start in June 2009, and construction activities would continue for approximately 24 months. Construction activities would be scheduled for weekdays between 6:00 a.m. and 4:30 p.m.

Additionally, construction activities would include truck trips associated with supply delivery, transport of excavated soil from trenching, and transport of backfill and paving materials to the site. Discarded soil would be transported to the closest appropriate LADWP facility for reuse or ultimate disposal. It has been estimated by LADWP that such operations would require six daily round-trips by truck. On a typical workday, up to a maximum of 10 workers would travel directly to and from the site.

As details of the construction efforts required to connect the proposed distributing station to the local electrical grid have not been provided by LADWP assumptions have been made for this analysis. It is understood from the project description that such connections would be made to existing underground lines within the Palmetto Street right-of-way, although there are existing overhead utility lines on Palmetto Street. Construction efforts required to implement these connections were assumed to entail the closure of half of the width of Palmetto Street (parking areas along one curb and one adjacent travel lane).



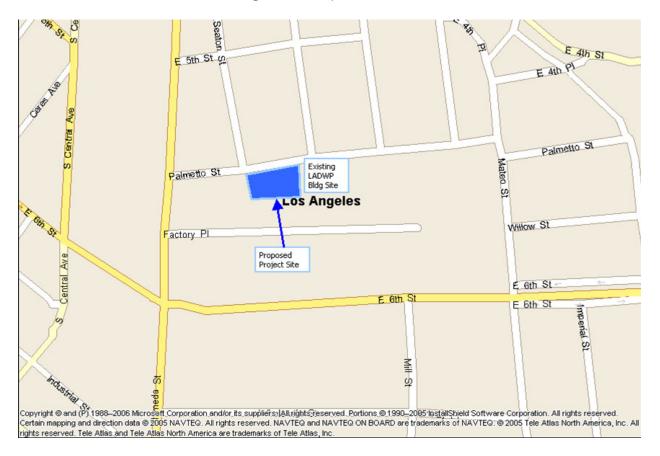


Figure I- Project Location

C. Traffic Analysis Methodology

As detailed construction and closure plans for the Project are not yet available, analysis was not conducted of specific locations that would be potentially impacted by Project construction traffic. Capacity would be constricted, in some form, along Palmetto Street during construction. It is not anticipated that construction closures for work areas within the Palmetto Street right-of-way would involve more than one travel lane.

Typical traffic impact mitigation measures would not be available for impacts caused by Project construction. The need for manual traffic control would be defined through work site plans developed for construction within the Palmetto Street right-of-way. These plans would be reviewed by LADOT prior to implementation along the Project corridor. True mitigations for traffic flow impacts could not be achieved within the work area extents, as capacity cannot be restored until construction is completed.

Therefore, analysis of level of service, significant impacts per established local thresholds, and potential physical mitigation measures was not undertaken for this Project traffic study. Effects to traffic flow would be temporary, and would occur within a limited construction zone within the Palmetto Street right-of-way. The analysis presented in this report was focused on the provision of proper traffic flow during construction closures.



The Project traffic analysis was based on the following:

- The use of collected daily volumes to analyze general roadway operations
- Analysis of lane closures at typical construction locations within the Project corridor, utilizing cross-sectional widths measured in the field
- Analysis of on-street parking area closures

Road closures for construction were analyzed by focusing on general issues associated with the closure of one travel lane of Palmetto Street during Project-related construction. It is assumed that one lane of travel would remain open during construction, for controlled one-way/reversible operation.

D. Agency Coordination

Coordination with the City of Los Angeles Department of Transportation (LADOT) would be necessary during the development, review, and approval of construction work zone and lane closure/transition plans. The plans would include temporary parking prohibition signs, lane closures and transitions, warning and merge signs, and changeable message/arrow signs, as applicable to the work zone. Properly implemented, these approved closure plans would remove all potentially-significant Project impacts to traffic flow during the Project construction period.

Construction activities and hauling truck movements within the City of Los Angeles should be scheduled per the Mayor's Directive Number 2, dated October 20, 2005. This directive states that road construction, outside of emergency repairs, cannot be conducted from 6:00 a.m. to 9:00 a.m. and from 3:30 p.m. to 7:00 p.m. The rule does state, however, that exemptions would be carefully considered for public works projects, as long as the proper mitigation measures are in place.



2. Traffic & Parking Analysis – Palmetto Street

This report section provides an analysis of potential Project impacts on Palmetto Street, in the vicinity of the Project site. The analysis presented here focuses on the general traffic impacts that could occur with Project construction-related closures along this roadway.

A. Description of Local Roadways

The Project site is located on the south side of Palmetto Street. The roadway has been constructed with two travel lanes (one in each direction), although a striped roadway centerline is not provided. On-street parking is generally prohibited, although parking is permitted within a wider portion of the roadway that is located adjacent to the existing LADWP building. The curb-to-curb width range from 20-35 feet, within three distinct segments:

- The roadway has an approximate curb-to-curb width of 20 feet on its western end near Alameda Street
- The roadway has an approximate curb-to-curb width of 35 feet in front of the existing LADWP building (apparently widened as part of required roadway dedication when the building was constructed)
- The roadway has an approximate curb-to-curb width of 20 feet near its eastern terminus at Mateo Street

The site plan extents, in relationship to Palmetto Street and other surrounding roadways, are illustrated within Figure 2. The parcel that is directly to the west of the Project site has recently been developed with a light industrial building. An existing LADWP building is located directly to the east of the Project site.



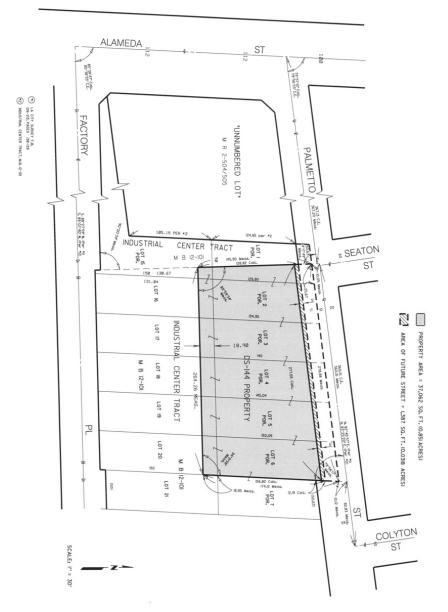


FIGURE 2 – PROPOSED SITE PLAN & PALMETTO STREET

The photographs below provide views of Palmetto Street in the vicinity of the Project site. Many of the parcels that front on Palmetto Street have on-site paved areas that blend into the roadway edge, providing the appearance of a wider roadway. The actual public roadway width is 20 feet, outside of the widened 35-foot wide segment in front of the existing LADWP building.





The photographs below provide views of Palmetto Street near Alameda Street (left photo) and Mateo Street north of Palmetto Street (right photo). As can be seen in the left photo, the roadway width near Alameda Street is relatively narrow, at 20 feet. Mateo Street, in the right photo, is located at the eastern terminus of Palmetto Street, providing north-south access within the local area at the eastern end of the local industrial area.



The photographs below provide views of Alameda Street at Palmetto Street. Although Project-related construction is not envisioned to occur on Alameda Street, the roadway is the closest arterial roadway to the site and would therefore provide access to and from Palmetto Street and the site for construction truck and worker trips. Four travel lanes are provided (two in each direction) with a striped centerline. On-street parking is generally prohibited in the vicinity of Palmetto Street.





B. Traffic Flow Issues During Construction

The existing Palmetto Street roadway has two travel lanes and permitted on-street parking in the vicinity of the Project site. Outside of the frontage of the LADWP building, the roadway is too narrow to provide legal on-street parking. Businesses at the eastern end of the roadway near Mateo Street have on-site paved areas that join the roadway pavement. On-street parking is therefore provided at many of these parcels, but the parked vehicles are technically on private property.

Construction within the Palmetto Street right-of-way to connect the distribution station to existing underground conduits would necessitate partial closures of the roadway. With the provision of one travel lane, there would not be any significant traffic impacts during the construction-related closures, if control via a flagperson is provided.

Average Daily Traffic (ADT) volumes were collected on Palmetto Street, at a point located immediately east of Alameda Street, in July 2007. The 24-hour count indicated that a total of 1,426 vehicles passed over the count point in both travel directions. The capacity of a two-lane collector roadway such as Palmetto Street is considered to be as high as 13,000 vehicles. Reduction of the roadway to single-lane operation within the extents of the work area would not necessarily cause roadway capacity issues.

The low existing vehicle and truck traffic volumes on Palmetto Street could continue to be accommodated without significant impacts during implementation of the approved construction closure plan. Public bus transit lines would not be affected by Project-related construction within roadway rights-of-way.



C. On-Street Parking Supply Issues During Construction

On-street parking usage along Palmetto Street is heavy at times, including the frequent double-parking of delivery and distribution trucks. Otherwise, on-street parking is prohibited along the segment to the west of the Project site.

Partial closure of Palmetto Street for the construction of Project connections to existing electrical conduits within the roadway right-of-way could potentially create localized on-street parking impacts. To mitigate potential significant Project parking impacts, the following measures should be implemented by LADWP:

- LADWP should ensure that LADWP employee and agency vehicles from the existing facility are not parked within the on-street parking area in front of the existing building during construction efforts within the Palmetto Street right-of-way.
- Construction worker vehicles should either be parked on the Project site, where construction staging would occur, or at an off-site location.

With proper implementation of these measures, any potentially significant parking impacts of the Project would be reduced to a level that is less than significant.



3. Project Analysis – Site Access

This report section provides information on the Project access issues (ingress and egress movements at the proposed site), both for construction-related truck trips and construction worker vehicle trips. Based on the project description, there would be six daily round-trip truck trips and up to 10 construction worker round trips on a daily basis during construction.

Construction Period Access

Ideally, the access point utilized for construction-related vehicles would be located as close as possible to the construction work area within the Palmetto Street right-of-way. Construction truck turning radii would need to be considered to provide some spacing between these areas, however. With these points in close proximity, flagperson control could be centralized for the coordination of oneway/reversible traffic flow on Palmetto Street and the movement of construction-related vehicles to and from the site.

If the Palmetto Street work area is separated from the site access point by a considerable distance, separate flagperson control may be necessary at the work area and at the construction access driveway. As the number of daily truck trips into and out of the site would be limited, the need for flagperson control of the site construction driveway would also be limited.

Access routes for construction truck trips via Alameda Street and Palmetto Street would be adequate, as Alameda Street is a four-lane arterial roadway and Palmetto Street is currently utilized as a local truck route.

Post-Project Roadway Configuration

The Palmetto Street Roadway would be widened at the southern curb line, within the Project site extents. This area is currently occupied by site area which contains s perpendicular parking area and a portion of an existing building.

The total curb-to-curb width of Palmetto Street, at the completion of Project construction, would then be 52 feet. The ultimate width of the roadway is 64 feet – the additional width would be dedicated during future development along the north curb of the roadway. The state of such development and the related dedication and widening is unknown at this point.



A. Major Impact Conclusions

Traffic Impacts

The Project would not result in any permanent traffic generating impacts on area roadways. As such, permanent physical or operations improvements to either study intersections or roadway segments are not required. However, the Project would create potentially significant short-term impacts on Palmetto Street during construction since all of the Project construction tasks would occur within that two-lane roadway while access to multiple local industrial parcels would continue to be necessary.

Any potential degradation in roadway operations during Project construction would be temporary in nature and as such should have no lasting impact on the study roadways or the adjacent roadway systems, including monitoring stations of the Los Angeles County Congestion Management Program on area arterials and freeways.

To mitigate potential Project traffic impacts to a level that is less than significant, the following measure should be implemented by LADWP:

 Construction closure plans should be developed to effectively provide a single lane of travel with a flagperson to control directional movements on Palmetto Street.

There would not be significant Project traffic impacts with the proper implementation of LADOTapproved construction closure plans for Palmetto Street.

The low existing auto and truck traffic volumes on Palmetto Street could continue to be accommodated without significant impacts during implementation of the approved construction closure plan. Significant traffic impacts are not anticipated with full implementation of applicable construction closure plans.

Parking Impacts

To mitigate potential significant Project parking impacts, the following measures should be implemented by LADWP:

- LADWP should ensure that LADWP employee and agency vehicles are not parked within the on-street parking area in front of the existing building during construction efforts within the Palmetto Street right-of-way.
- Construction worker vehicles should either be parked on the Project site, where construction staging would occur, or at an off-site location.

With proper implementation of these measures, any potentially significant parking impacts of the Project would be reduced to a level that is less than significant.



Construction Closure Plans

Typical traffic impact mitigation measures would not be available for impacts caused by Project construction. The need for manual traffic control, detours, and roadway/approach closures would be defined through traffic plans developed for construction within the Palmetto Street right-of-way. These plans would be reviewed by LADOT prior to implementation. True mitigations would not be achieved during the Project construction period, as capacity cannot be restored until construction is completed.

B. CEQA-Related Considerations and Responses

The traffic and transportation significance criteria for the Project's environmental documentation are based on the California Environmental Quality Act (CEQA) Guidelines and in consideration of applicability to public utility projects in California. Traffic and transportation impacts would be significant if one or more of the following conditions resulted from construction:

• <u>Criterion I</u>: Installation of the Project within, adjacent to, or across a roadway would reduce the number of, or the available width of, one or more travel lanes during the peak traffic periods, resulting in a temporary disruption to traffic flow and/or increased traffic congestion.

Response: The Project would, for brief periods of time, result in increased traffic from construction-related activities and reduced roadway capacities. The increased traffic from construction and reduced roadway capacities from construction-related closures would be temporary and traffic conditions would return to normal after construction is complete within each work area.

The Project's traffic impacts would occur during construction activities only. No traffic impacts are anticipated upon Project completion. The County Congestion Management Program level-of-service impact thresholds are not intended to be applied to construction activities. As such, the Project is not forecast to exceed the significant impact thresholds defined by the County Congestion Management Program or local jurisdictions.

• <u>Criterion 2</u>: A major roadway (arterial or collector classification) would be closed to through traffic as a result of construction activities and there would be no suitable alternative route available.

Response: It is not anticipated that the Project work area would cause the complete closure of Palmetto Street. Therefore, the Project would not result in any significant impacts under this criterion.

• <u>Criterion 3</u>: Construction activities would restrict access to or from adjacent land uses and there would be no suitable alternative access.

Response: It is anticipated that the Project work areas would be able to accommodate access to adjacent properties during the overall course of construction. There would not be any long-term effect on adjacent land use access. Therefore, there would not be any significant Project impacts under this criterion.



• <u>Criterion 4</u>: Construction activities would restrict the movements of emergency vehicles (police cars, fire trucks, ambulances, and paramedic units) and there would not be any reasonable alternative access routes available.

Response: As it is not anticipated that the Project work area within the Palmetto Street right-ofway would cause any complete closures, and traffic flow would therefore be reasonable under partial closures, there would be no significant Project impacts under this criterion.

• <u>Criterion 5</u>: Construction activities or staging activities would increase the demand for and/or reduce the supply of parking spaces and there would be no provisions for accommodating the resulting parking deficiencies.

Response: The Project, upon completion, would not result in a reduction of parking in the Project vicinity. The reduction in parking supply would be temporary and would last for a limited time. Significant on-street parking supply impacts are unlikely as the Project construction work zone on Palmetto Street is anticipated to be short in length and would not significantly affect on-street parking areas. As discussed in the recommendations, construction worker and LADWP employee vehicles should not utilize the on-street parking areas of Palmetto Street during the construction timeframe.

• <u>Criterion 6</u>: Construction activities would disrupt public transit service and there would be no suitable alternative routes or stops.

Response: There is no public bus transit service on Palmetto Street. There would not be any significant impacts to transit access or operations.

• <u>Criterion 7</u>: Construction activities of the Project would result in safety problems for vehicular traffic, pedestrians, transit operations, or trains.

Response: LADWP would prepare worksite traffic control and detour plans to best mitigate traffic impacts during construction activities. These plans would be reviewed and approved by LADOT prior to construction. Although the Project would result in potentially significant impacts during various construction phases as one travel lane would be closed, these removals would be for short time periods and with full implementation of the approved construction closure would be less than significant.

• <u>Criterion 8</u>: The Project would conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks).

Response: There is no public bus transit service on Palmetto Street. There would not be any significant impacts to transit access or operations.



ATTACHMENT A – DAILY TRAFFIC COUNT ON PALMETTO STREET



Volumes for: Monday, July 02, 2007

Peak Hour

Volume

P.H.F.

05:45

52

0.87

11:00

69

0.78

11:15

117

0.91

City: Los Angeles

13:30

59

0.82

12:45

71

0.81

13:30

119

0.78

Location: Palmotto						Los Angeles			ojoot "			
Location: Palmetto	E/o Alameda St. SB EB		WB			PM Period N	B SB	EE	3	WB		
00:00	3		0			12:00		14		18		
00:15	4		0			12:15		10		14		
00:30	2		1			12:30		11		21		
00:45	2	11	6	7	18	12:45		7	42	17	70	112
01:00	0		2			13:00		13		15		
01:15	2		3			13:15		7		17		
01:30	2		1			13:30		16		22		
01:45	1	5	1	7	12	13:45		11	47	11	65	112
02:00	1		2			14:00		14		12		
02:15	1		2			14:15		18		15		
02:30	0		3			14:30		8		21		
02:45	0	2	3	10	12	14:45		9	49	14	62	111
03:00	0		1			15:00		12		13		
03:15	1		3			15:15		8		18		
03:30	1		3			15:30		5		13		
03:45	1	3	3	10	13	15:45		4	29	7	51	80
04:00	0		3			16:00		14		12		
04:15	1		4			16:15		16		12		
04:30	3		2			16:30		9		18		
04:45	2	6	2	11	17	16:45		8	47	13	55	102
05:00	2		3			17:00		14		16		
05:15	4		3			17:15		6		14		
05:30	9		4			17:30		12		17		
05:45	15	30	4	14	44	17:45		9	41	9	56	97
06:00	15		8			18:00		4		9		
06:15	12		8			18:15		3		8		
06:30	10		10			18:30		6		11		
06:45	7	44	9	35	79	18:45		5	18	3	31	49
07:00	6		8			19:00		2		9		
07:15	7		14			19:15		5		2		
07:30	4		10			19:30		4		5		
07:45	12	29	7	39	68	19:45		1	12	5	21	33
08:00	10		4			20:00		3		6		
08:15	8		9			20:15		0		2		
08:30	9		4			20:30		1		2		
08:45	13	40	12	29	69	20:45		2	6	4	14	20
09:00	12		14			21:00		0		6		
09:15	6		17			21:15		0		5		
09:30	11		12			21:30		5		4		
09:45	12	41	10	53	94	21:45		0	5	4	19	24
10:00	9		26			22:00		1		6		
10:15	16		14			22:15		1		6		
10:30	10		13	,.		22:30		3		1		
10:45	13	48	11	64	112	22:45		1	6	1	14	20
11:00	9		22			23:00		1		2		
11:15	13		15			23:15		0		2		
11:30	12	47	20	10	11/	23:30		2	F	3	7	10
11:45	13	47	12	69	116	23:45		2	5	0	7	12
Total Vol.		306		348	654				307 465 Daily Totals EB WB		465	772
							NB	SB			WB	Combined
								30				
		AM							613 PN	n	813	1426
Split %		46.8%		52 2%	45.9%				39.8%		60.2%	54.1%
		JU.0/0		JJ.Z /0	-10.770				57.07	0	00.270	54.170