Department of Water and Power
City of Los Angeles

Mitigated Negative Declaration
AND CEQA Initial Study

REDMONT PUMP STATION
REPLACEMENT PROJECT

January 2008

Prepared by:

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

Technical Assistance Provided by:
Aspen Environmental Group
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Agoura Hills, CA 91301

MITIGATED NEGATIVE DECLARATION

Introduction

The City of Los Angeles Department of Water and Power (LADWP) proposes to replace the existing Redmont Pump Station, located in the in the community of Sunland of the City of Los Angeles, Los Angeles County, California (see Initial Study Figure 1-1). The existing Redmont Pump Station was constructed in 1955 and serves the communities of Sunland and Tujunga; it is located at 10503 Redmont Avenue, and is owned and operated by the LADWP. The station receives water from the existing Redmont Reservoir, an underground, covered reservoir located within the same property boundaries of the station, and pumps water to the Highway Highland and Apperson Tanks. The Highway Highland Tank is located approximately 3.5 miles southeast of the station, and the Apperson Tank is located approximately 2.0 miles east of the station.

The existing Redmont Pump Station site is approximately 2,000 square feet in size and includes the pump station itself and the existing Redmont Reservoir. The "footprint" of the existing pump station is approximately 625 square feet in size, and is approximately 20 feet high. Enclosed within the station there are five electric water pumps having a maximum operating rate of 1,900 gallons per minute (gpm) each, and an average operating rate of 1,800 gpm. On average two pumps are operated simultaneously, and three pumps are typically operated during peak water demand periods. Four water pipelines connect to the existing station; each pipeline is 20 inches in diameter and has a maximum operating pressure of 160 pounds per square inch gauge (psig). One pipeline supplies water to the pump station from the existing Redmont Reservoir, one pipeline supplies water from Foothill Pump Station, and the remaining pipelines transport water to the Highway Highland and Apperson Tanks.

During the summer months when water demands are high, the water elevation of the Redmont Reservoir drops and the existing pump station does not function efficiently. Due to reduced efficiencies under these circumstances it requires excessive system manipulation to distribute water to the communities of Sunland and Tujunga. Additionally, due to the age of the existing pump station (52 years), it routinely requires an inordinate level of maintenance and does not meet current control system standards and technology.

To correct the operational weaknesses and vulnerabilities of the existing Redmont Pump Station, the LADWP proposes to replace it. Due to the limited space available at the station's existing site, and the need to continue operating the station while a new station is constructed, the LADWP proposes to replace the existing station at a new site. To maintain the existing infrastructure of the existing Redmont Reservoir, including its associated water supply pipelines, a replacement site in close proximity to the existing station's site is preferred to a replacement site which is located any appreciable distance away. Additionally, the proposed replacement site would provide a better hydraulic elevation for the new pump intake.

Project Description

Under the proposed project, the LADWP would:

- Construct and operate a new water pump station to replace the existing Redmont Pump Station
- Construct and operate two new water pipelines, one water supply pipeline connecting the proposed replacement station to the existing water supply pipeline, and one water discharge pipeline connecting the proposed replacement station to the existing distribution pipelines

- Remove the existing Redmont Pump Station upon completion of the replacement pump station and its related pipelines.

The proposed replacement site for the Redmont Pump Station is located at 10709 North Tujunga Canyon Boulevard, also in the community of Sunland. The proposed replacement site is approximately 20,255 square feet in size and fronts both North Tujunga Canyon Boulevard and Hillrose Street. The existing Redmont Pump Station and Reservoir are located approximately 1,500 linear feet southeast of the proposed replacement site (see Initial Study Figure 1-2). As referenced above, two underground connecting water pipelines, approximately 1,500 linear feet in length each, would be placed in a shared Right-of-Way (ROW) between the proposed replacement pump station site and the existing Redmont Reservoir; the proposed ROW would traverse North Tujunga Canyon Boulevard.

The proposed replacement site is comprised of three vacant parcels that have been owned by the Los Angeles County Flood Control District since 1953. The proposed replacement site is approximately 20,255 square feet in size, with 129 linear feet of frontage along North Tujunga Canyon Boulevard and 180 linear feet of frontage along Hillrose Street.

The proposed replacement pump station would be approximately 2,500 square feet in size, and approximately 20 feet high. The façade of the new station would be designed to blend-in with the overall character of the surrounding community. The pump station would house five water pumps, a work and control room, switchgear mechanical control cabinets ("SWGR MCC"), and a restroom. On-site parking would be provided along Hillrose Street. A diesel fuel tank for emergency operation of the water pumps would additionally be constructed adjacent to the proposed replacement pump station.

Construction and Operation of the Proposed Replacement Pump Station. Construction of the proposed replacement pump station would take an estimated 12 months to complete. Table 1, below, provides a summary of the principal construction activities that would be required. A maximum construction crew of nine workers would be needed for an estimated 78 working days, and an average construction crew of six workers per working day would be needed throughout all construction phases. The proposed replacement pump station would additionally require electricity, which would be provided by the proposed project area's existing infrastructure.

Table 1. Summary of Construction for the Proposed Replacement Pump Station

Construction Activity	Total Duration (Working Days)	Maximum Construction Work Force	On-Site Construction Equipment Needs	
			Equipment Types	Number
Excavation and Fill	5	4	Backhoes, Dump Trucks	6
Curb and Gutter Construction	15	3	Cement trucks, Pickup Trucks	4
Concrete Footings Construction	20	9	Crane, Cement Trucks, Pickup Trucks	11
Concrete Walls Construction	78	9	Crane, Cement Trucks, Pickup Trucks	11
Structural Metal Roof Framing	10	4	Crane, Pickup Trucks	5
Metal Roof Decking	10	4	Crane, Pickup Trucks	5
Cold Form Roofing (metal)	5	4	Crane, Pickup Trucks	5
Installation of Mechanical Heating Ventilation and Air Conditioning (HVAC) System, Pumps, and Equipment	45	5	Forklift, Pickup Trucks	6
Installation of Electrical Equipment	45	5	Forklift, Pickup Trucks	6
Dry-walling	7	2	Pickup Trucks	2
Painting	20	4	Pickup Trucks	4
Paving	5	4	Paver, Dump Trucks, Pickup Trucks	6
Landscaping	15	3	Trencher, Pickup Trucks	4

Construction of the proposed replacement pump station would require the excavation of approximately 160 cubic yards (cy) of material, of which 80 cy would be removed for off-site disposal.

Following final inspections, testing and commissioning of the proposed replacement pump station and its associated pipelines, each of the five water pumps would have a maximum operating rate of 4,400 gpm, and an average operating rate of 2,200 gpm. The pumps would be electric, although diesel fuel would be used as an emergency means of operating the pumps. On average two pumps would run simultaneously, although three would be operated under peak demand periods. The proposed replacement station would continue to collect water from the existing Redmont Reservoir, and pump water to the Apperson and Highway Highland Tanks at the same rate as the existing station. The water supply service area of the proposed replacement project would not change as a result of its implementation.

Operational activities associated with the proposed replacement pump station would typically include one site visit per week by existing LADWP personnel for routine maintenance, repair and inspection. In comparison the existing pump station, the repair and maintenance activities which are associated with the replacement pump station would be reduced due to its improved design and engineering.

Construction and Operation of the Proposed Water Pipelines. The proposed replacement pump station would require two connecting pipelines to the existing water system, one for water supply and one for discharge to the existing pipelines which serve the Apperson and Highway Highland Tanks. The proposed pipelines would be 20 inches in diameter each and constructed of steel; they would have a maximum operating pressure of 195 psig. The proposed pipelines would be placed in a shared ROW along North Tujunga Canyon Boulevard; final placement of the pipelines within this roadway would be designed to avoid existing underground utilities and infrastructure. The proposed pipeline ROW would be approximately 1,500 feet long, four feet wide, and 60 inches deep.

Construction of the proposed pipelines would take an estimated 30 working days to complete, with multiple activities occurring simultaneously. Table 2, below, provides a summary of each principal activity associated with of pipeline construction, including the workforce needed.

Table 2. Summary of Construction for the Proposed Water Pipelines

Construction Phase	Total Duration (Working Days)	Maximum Construction Work Force	On-Site Construction Equipment Needs	
			Equipment Type	Number
Pipeline trenching	25	10	Excavator	1
			5-Yard Dump Truck	1
			Backhoe	1
			Backhoe Carrier	1
			Hydraulic Demolition Gun	1
			¾-Ton Truck	1
			Gang Truck	5
			10-Yard Dump Truck	(1-2 Trips)
Pipeline Stringing/Placement	25	8	Pitman Crane	1
			Pipe Truck	(1-2 Trips)
Backfilling/Compaction	20	4	Cement Truck	(10 Trips)
Resurfacing/Repaving	2	5	Gannon Roller	1
			Dump Truck	2
Post Construction Testing, Inspection and Commissioning	6	4	¾-Ton Trucks	(Variable)

Construction of the proposed pipelines would require the excavation of approximately 1,100 cy of material, all of which would be removed for off-site disposal. The pipeline construction zone would typically be an estimated 400 feet in length. An estimated 40 linear feet of the parallel pipelines would be

installed per day. One traffic lane along North Tujunga Canyon Boulevard would be provided for at all times.

Hydrostatic testing of the pipelines would be performed upon completion of all activities associated with pipeline installation. Approximately 24,500 gallons of hydrostatic water would be used in each pipeline, for a total of 49,000 gallons. The pipelines would be filled and pressurized, and then left for a period of 24 hours. After 24 hours the pipelines would be pressurized again. Upon completion of the test the water would be de-chlorinated and discharged into the existing storm drain system. Hydrostatic test water would be treated to meet the requirements of the proposed project's National Pollutant Discharge Elimination System (NPDES) permit.

Following construction, on-site activities associated with operation of the pipelines would include periodic inspection and testing, typically once per week, by existing LADWP personnel.

Demolition of the Existing Redmont Pump Station. Once the proposed replacement pump station is fully operational, the existing Redmont Pump Station would be removed. Removal of the existing station would take an estimated 15 working days to complete, with multiple activities occurring simultaneously. The primary removal activities and their related equipment and labor force needs are summarized in Table 3, below.

Table 3. Summary of Demolition of the Existing Redmont Pump Station

Removal Phase	Total Duration (Working Days)	Maximum Removal Work Force	On-Site Removal Equipment Needs	
			Equipment Type	Number
Removal of Pumps	5	4	Dump Trucks, Pickup Trucks	4
Removal of Piping	5	4	Dump Trucks, Pickup trucks	4
Removal of Mechanical Equipment	5	4	Dump Trucks, Pickup Trucks	4
Removal of Electrical Equip	5	4	Dump Trucks, Pickup Trucks	4
Roof and Wall Demolition	5	4	Dump Trucks, Pickup Trucks	4
Footings Demolition	5	6	Dump Trucks, Front-End Loaders	5

All materials that can be salvaged from the existing pump station would be transported to the LADWP West Valley District for recycling. An estimated 100 cy of remaining material would be hauled off site for permanent disposal at an appropriately licensed landfill. Following completion of proposed demolition, activities at the existing pump station site would include on-going inspection and maintenance of the Redmont Reservoir by existing LADWP personnel, typically once per week.

Availability of Documents

Copies of the Mitigated Negative Declaration (MND) and supporting Initial Study (IS) and other documents utilized in conducting the environmental assessment for the proposed project are on file at:

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

The electronic MND/IS is available for review on-line at the LADWP's website at the following address:

http://www.ladwp.com/ladwp/cms/ladwp004156.jsp
File Name: Redmont Replacement Pump Station Project

Printed copies of the MND/IS are also available for review at the following library:

Sunland – Tujunga Branch Library
7771 Foothill Boulevard
Tujunga, CA 91042
(818) 352-4481

Environmental Determination

A MND/IS was prepared to identify the potential effects on the environment from the proposed project and to evaluate the significance of these effects. Based on the findings of the MND/IS, the proposed project would have less than significant effects or no impacts related to the following issues:

- Aesthetics
- Agricultural Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Population and Housing
- Public Services
- Recreation
- Utilities and Service Systems

However, the environmental assessment presented in the MND/IS identifies environmental impacts in three issue areas that could be potentially significant unless mitigation measures are applied that can effectively reduce or avoid the impacts. These are in the areas of:

- Geology and Soils
- Noise
- Transportation and Traffic

Mitigation measures have been incorporated to effectively mitigate all of the potentially significant environmental impacts identified in the MND/IS. Implementation of these mitigation measures can avoid the impacts or reduce them to a less than significant level. The mitigation measures are presented below in the Mitigation Monitoring and Reporting Plan.

Mitigation Monitoring and Reporting Plan

The following mitigation measures and a program for their implementation and monitoring are proposed.

Project Impact	Mitigation Measure No.	Mitigation Measure	Implementation Phase(s)	Implementation Monitor and Compliance Oversight
The proposed project could potentially increase risks due to, or be at risk from, fault ruptures, seismic ground shaking, and seismic-related ground failure.	GEO-1	A geotechnical survey shall be performed for the proposed replacement pump station site and its associated pipeline alignment. The proposed replacement pump station and its pipelines shall be designed and constructed per the findings and recommendations of the geotechnical survey to minimize risks associated with predicted and potential fault ruptures, seismic ground shaking, and seismic-related ground failure.	Prior to and during construction.	The LADWP Construction Manager will be responsible for implementation and the LADWP Environmental Affairs will provide compliance oversight.

Project Impact	Mitigation Measure No.	Mitigation Measure	Implementation Phase(s)	Implementation Monitor and Compliance Oversight
Proposed construction activities could exceed allowable noise levels specified by the City of Los Angeles Municipal Code.	N-1	In accordance with Section 41.40 of the City of Los Angeles Municipal Code, all construction and demolition activities shall be limited to the hours between 7 a.m. and 9 p.m., Monday through Friday, and between 8 a.m. and 6 p.m. on Saturdays and national holidays. No construction or demolition activities shall occur on Sundays.	During construction.	The LADWP Construction Manager will be responsible for implementation and the LADWP Environmental Affairs will provide compliance oversight.
Operation of the proposed replacement pump station would significantly increase local noise levels.	N-2	Bi-weekly testing of the emergency generator shall be limited to the hours between 8:00 a.m. and 6:00 p.m., Monday through Friday. No testing shall occur on holidays.	During operation.	The LADWP Construction Manager will be responsible for implementation and the LADWP Environmental Affairs will provide compliance oversight.
	N-3	A hospital grade muffler shall be fitted to the generator to dampen-out the sound that it produces.	During construction and operation.	The LADWP Construction Manager will be responsible for implementation and the LADWP Environmental Affairs will provide compliance oversight.
	N-4	Finalization of the proposed replacement pump station's design and equipment specifications shall include an acoustical analysis of the facility's attributes to ensure that outdoor noise levels during operation do not exceed the 40 dBA criteria specified by the City of Los Angeles.	Prior to construction.	The LADWP Construction Manager will be responsible for implementation and the LADWP Environmental Affairs will provide compliance oversight
Proposed construction activities would significantly impact vehicle and pedestrian movement on local roadways, including emergency access.	T-1	A construction area traffic control plan shall be prepared for each location where construction and demolition activities would encroach into the right-of-way of a public roadway. The plan will include, but not be limited to such features as warning signs, lights, flashing arrow boards, barricades, cones, lane closures, parking restrictions and plating over the trench during non-working hours,	Prior to and during construction.	The LADWP Construction Manager will be responsible for implementation and the LADWP Environmental Affairs will provide compliance oversight
	T-2	Pipeline construction shall not occur at the following locations during the designated peak periods: the North Tujunga Canyon Boulevard/Hillrose Street intersection (PM peak period) and the North Tujunga Canyon Boulevard/Summitrose Street intersection (AM and PM peak periods). The AM peak period is from 7:00 to 9:00 a.m. and the PM peak period is from 4:00 to 6:00 p.m., or as specified by LADOT.	During construction.	The LADWP Construction Manager will be responsible for implementation and the LADWP Environmental Affairs will provide compliance oversight.
	T-3	A detour plan shall be prepared and implemented for locations where a public street would be blocked by construction and demolition activities (e.g. Hillrose Street, Fernglen Avenue, Mountair Avenue, and Summitrose Street at their intersections with North Tujunga Canyon Boulevard).	Prior to and during construction.	The LADWP Construction Manager will be responsible for implementation and the LADWP Environmental Affairs will provide compliance oversight

Project Impact	Mitigation Measure No.	Mitigation Measure	Implementation Phase(s)	Implementation Monitor and Compliance Oversight
	T-4	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.).	Prior to and during construction.	The LADWP Construction Manager will be responsible for implementation and the LADWP Environmental Affairs will provide compliance oversight
	T-5	Provide advance notification to affected property owners, businesses, residents, etc. regarding possible driveway blockages or other access obstructions, and implement alternate access and parking provisions where necessary. Ensure that emergency vehicle access would be available or rapidly implementable at all times to the properties along the pipelines' construction route.	Prior to and during construction.	The LADWP Construction Manager will be responsible for implementation and the LADWP Environmental Affairs will provide compliance oversight.

Department of Water and Power
City of Los Angeles

CEQA Initial Study

REDMONT PUMP STATION REPLACEMENT PROJECT

January 2008

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1. Project Information

1.1 Project Title

Redmont Pump Station Replacement 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 Initial Study Contact Person

Ms. Nadia Dale
Los Angeles Department of Water and Power
Environmental Services
111 North Hope Street, Room 1044
Los Angeles, CA 90012
Telephone: (213) 367-1745

1.4 Project Location

The proposed replacement site for the Redmont Pump Station is located at 10709 North Tujunga Canyon Boulevard in the community of Sunland of the City of Los Angeles, Los Angeles County, California. The proposed replacement site is approximately 20,255 square feet in size and fronts both North Tujunga Canyon Boulevard and Hillrose Street. The existing Redmont Pump Station is located approximately 1,500 linear feet southeast of the proposed replacement site at 10503 Redmont Avenue, also in the community of Sunland. Please refer to Figure 1-1 for a map of the existing and proposed replacement sites. Two underground connecting water pipelines, approximately 1,500 linear feet in length each, would be placed in a shared Right-of-Way (ROW) between the proposed replacement pump station site and the existing Redmont Reservoir; the proposed ROW would traverse North Tujunga Canyon Boulevard.

1.5 Council District

City of Los Angeles Council District Number 2.

1.6 Project Sponsor's Name and Address

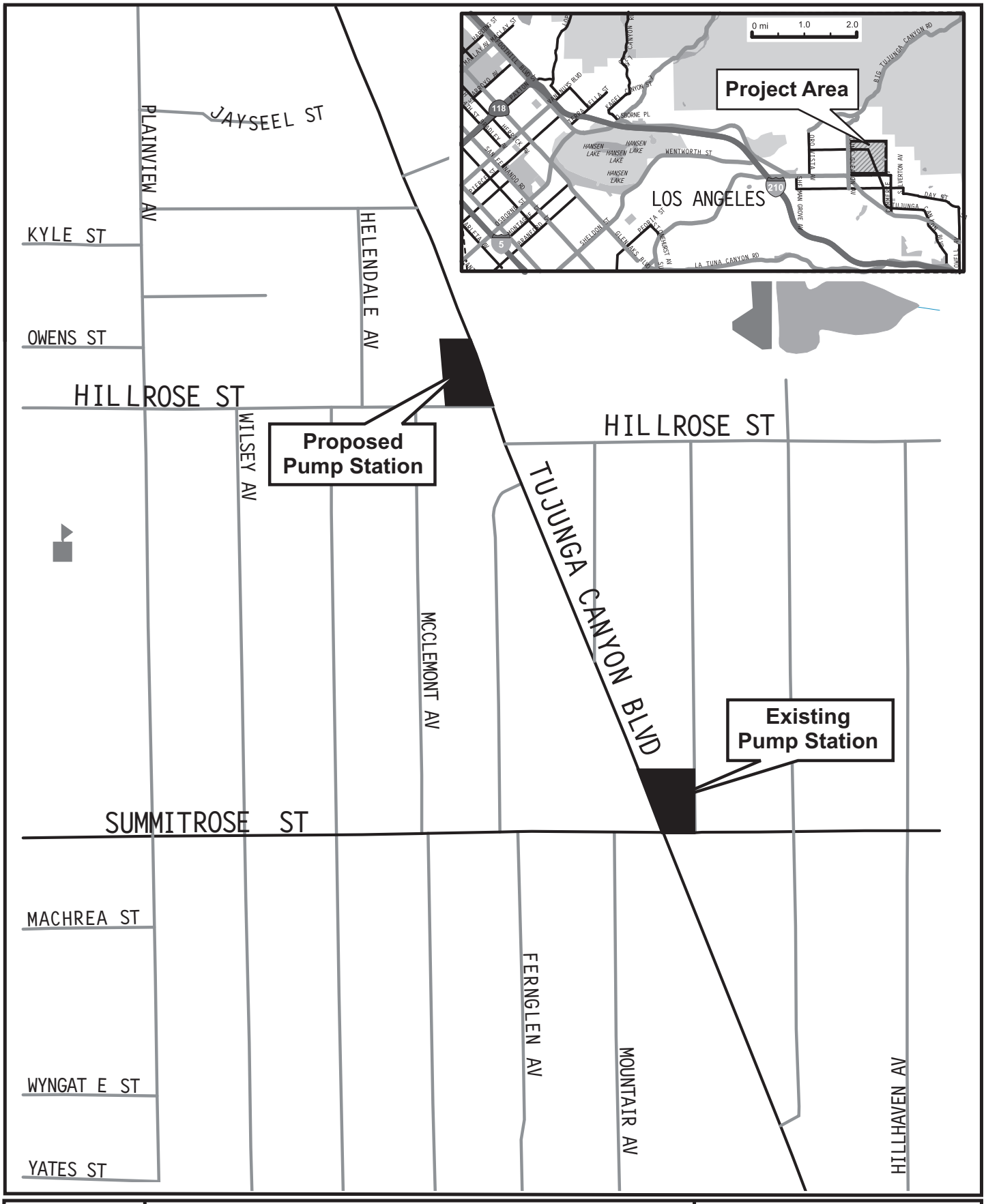
Andy Niknafs
Los Angeles Department of Water and Power
Project Planning and Development
111 North Hope Street, Room 1348
Los Angeles, CA 90012

1.7 General Plan Designation

Both the proposed replacement and existing Redmont Pump Station sites are located on lands designated Low Density Residential (Single Family) on the land use map for the Sunland-Tujunga-Lake View Terrace-Shadow Hills-East La Tuna Canyon Community Plan of the City of Los Angeles General Plan (City of Los Angeles, 2007a).

1.8 Zoning

The proposed replacement and existing Redmont Pump Station sites are both located on lands zoned R1-1 (Low Density Single Family Residential) by the City of Los Angeles (City of Los Angeles, 2007b).


Project Area
LOS ANGELES
JAYSEEL ST
PLAINVIEW AV
KYLE ST
OWENS ST
HELENDALE AV
HILLROSE ST
WILSEY AV
Proposed Pump Station
HILLROSE ST
TUJUNGA CANYON BLVD
MCCLEMONT AV
Existing Pump Station
SUMMITROSE ST
MACHREA ST
FERNGLEN AV
MOUNTAIR AV
HILLHAVEN AV
WYNGAT E ST
YATES ST
N
0 ft
300
600
©2006 Thomas Bros. Maps
Figure Prepared by Aspen Environmental Group
Figure 1-1
Project Location

1.9 Surrounding Land Uses and Environmental Setting

The proposed replacement site for the Redmont Pump Station consists of three undeveloped, contiguous parcels of land. Lands immediately adjacent to the site's north and west sides are comprised of single family residential homes. To the east, the site is paralleled by North Tujunga Canyon Boulevard; the majority of land along the east side of this roadway, across from the proposed replacement site, is open space, although single family residential homes are located along its northern boundary, and a neighborhood commercial market is located along its southern boundary, adjacent to the intersection of North Tujunga Canyon Boulevard and Hillrose Street. The south side of the proposed replacement site is paralleled by Hillrose Street; land uses along this street include one multi-family residential complex located at the southwest corner of North Tujunga Canyon Boulevard and Hillrose Street, and several single family residential homes westward from the complex.

The existing Redmont Pump Station is located at the northeast corner of the North Tujunga Canyon Boulevard and Summitrose Street intersection, and consists of the station itself and the Redmont Reservoir, which is a below-ground, covered water storage reservoir. All sides of the site are surrounded by single family residential homes.

Land uses flanking both sides of North Tujunga Canyon Boulevard along the proposed pipeline ROW are comprised of single family residential homes, with the exception of the neighborhood commercial market and multi-family residential complex referenced above, which are located along the east and west sides of the North Tujunga Canyon Boulevard and Hillrose Street intersection, respectively.

1.10 Land Use Consistency

The proposed replacement pump station would be a public facility (service) owned and operated by the Los Angeles Department of Water and Power (LADWP). It would supply water to the communities of Tujunga and Sunland. The proposed replacement pump station would be located on land that is zoned R1-1 (Low Density Single Family Residential). Per Section 14.00 (A) (6) of Article 4, Chapter 1 (General Provisions and Zoning) of the City of Los Angeles Municipal Code, the proposed replacement pump station is a permitted use within the Low Density Single Family Residential zoning designation (City of Los Angeles, 2007c). Therefore, the proposed replacement pump station would be consistent with adopted zoning.

The General Plan land use designation for the proposed replacement pump station is Low Density Residential (Single Family). Allowable uses on lands designated Low Density Residential (Single Family) are the same as those for its corresponding Low Density Single Family Residential zoning designation (City of Los Angeles, 2007a). Therefore the proposed replacement pump station would be consistent with the City of Los Angeles' adopted General Plan land use designation for the site. In addition, Chapter 9 (Infrastructure and Public Services) of the City of Los Angeles' "Citywide General Plan Framework - An Element of the City of Los Angeles General Plan," recognizes that the City's existing infrastructure, including its water supply infrastructure, needs to be evaluated on an on-going basis to determine its viability relative to its sustainability, and that existing facilities and infrastructure which have deteriorated due to their age, or have become obsolete, should be replaced (City of Los Angeles, 2001). Chapter 9 also identifies the need to provide adequate water supplies, storage facilities, and delivery systems to existing and future residents and businesses as a City-wide goal (Goal 9C) (City of Los Angeles, 2001). The proposed replacement pump station would modernize the design, functionality and efficiency of the existing Redmont Pump Station, and improve its service reliability to the communities of Tujunga and Sunland. Therefore, the proposed replacement pump station would be consistent with, and support, the public infrastructure and community development and sustainability goals, policies and objectives of the City of Los Angeles General Plan.

The proposed pipelines connecting the existing Redmont Reservoir to the proposed replacement pump station would be public service facilities located within an existing public ROW (North Tujunga Canyon Boulevard). Therefore, placement and operation of the proposed pipelines would be consistent with the adopted zoning and General Plan land use designations.

Removal of the existing Redmont Pump Station would not require any change to the site's General Plan land use designation (Low Density Residential [Single Family]) or zoning (Low Density Single Family Residential). Therefore, its removal would be consistent with adopted General Plan land use designations and zoning.

1.11 Project Description

1.11.1 Project History and Background

The existing Redmont Pump Station was constructed in 1955 and serves the communities of Sunland and Tujunga in the City of Los Angeles; it is located at 10503 Redmont Avenue in the community of Sunland and is owned and operated by the LADWP. The station receives water from the existing Redmont Reservoir, an underground, covered reservoir located within the same property boundaries of the station, and pumps water to the Highway Highland and Apperson Tanks. The Highway Highland Tank is located approximately 3.5 miles southeast of the station, and the Apperson Tank is located approximately 2.0 miles east of the station.

The existing Redmont Pump Station site is approximately 2,000 square feet in size and includes the pump station itself, the existing Redmont Reservoir, and on-site parking for an estimated two to three vehicles. The "footprint" of the existing pump station is approximately 625 square feet in size, and is approximately 20 feet high. Enclosed within the station there are five electric water pumps having a maximum operating rate of 1,900 gallons per minute (gpm) each, and an average operating rate of 1,800 gpm. On average two pumps are operated simultaneously, and three pumps are typically operated during peak water demand periods. Four water pipelines connect to the existing station; each pipeline is 20 inches in diameter and has a maximum operating pressure of 160 pounds per square inch gauge (psig). One pipeline supplies water to the pump station from the existing Redmont Reservoir, one pipeline supplies water from Foothill Pump Station, and the remaining pipelines transport water to the Highway Highland and Apperson Tanks.

During the summer months when water demands are high, the water elevation of the Redmont Reservoir drops and the existing pump station does not function efficiently. Due to reduced efficiencies under these circumstances it requires excessive system manipulation to distribute water to the communities of Sunland and Tujunga. Additionally, due to the age of the existing pump station (52 years), it routinely requires an inordinate level of maintenance and does not meet current control system standards and technology.

To correct the operational weaknesses and vulnerabilities of the existing Redmont Pump Station, the LADWP proposes to replace it. However, due to the limited space available at the station's existing site (approximately 2,000 square feet), and the need to continue operating the existing station while a new station is constructed, the LADWP proposes to replace the existing station at a new site. To maintain the existing infrastructure of the existing Redmont Reservoir, including its associated water supply pipelines, a replacement site in close proximity to the existing station's site is preferred to a replacement site which is located any appreciable distance away. Furthermore, the proposed replacement site would provide a better hydraulic elevation for the new pump intake.

1.11.2 Project Objectives

The objective of the proposed project is to replace the existing Redmont Pump Station to ensure continued water delivery to the communities of Tujunga and Sunland during both average and peak water demand periods. Additional objectives of the proposed project are to improve operational efficiencies, reduce maintenance and repair activities, and update control system design to meet current engineering standards and technology.

1.11.3 Proposed Project

Under the proposed project, the LADWP would:

- Construct and operate a new water pump station to replace the existing Redmont Pump Station
- Construct and operate two new water pipelines, one water supply pipeline connecting the proposed replacement station to the existing water supply pipeline, and one water discharge pipeline connecting the proposed replacement station to the existing distribution pipelines
- Remove the existing Redmont Pump Station upon completion of the replacement pump station and its related pipelines.

Sections 1.11.3.1 through 1.11.3.3, below, provide a description of the various attributes and activities associated with implementation of the proposed project.

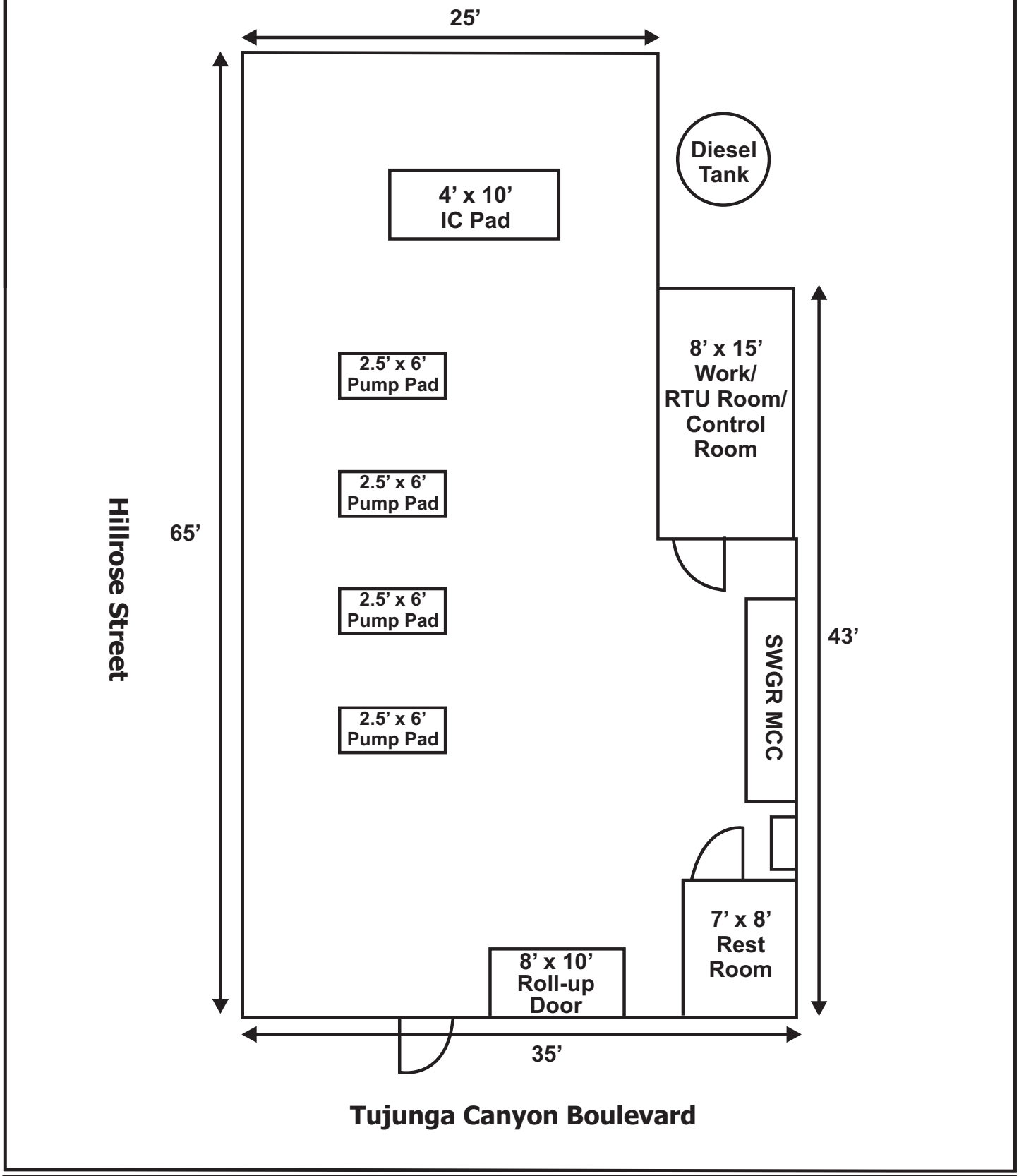
1.11.3.1 Design, Construction and Operation of the Replacement Pump Station

The proposed replacement pump station would be located at 10709 North Tujunga Canyon Boulevard in the community of Sunland of the City of Los Angeles. The proposed replacement site is comprised of three vacant parcels that have been owned by the Los Angeles County Flood Control District since 1953. The proposed replacement site is approximately 20,255 square feet in size, with 129 linear feet of frontage along North Tujunga Canyon Boulevard and 180 linear feet of frontage along Hillrose Street.

The proposed replacement pump station would be approximately 2,500 square feet in size, and approximately 20 feet high. The façade of the new station would be designed to blend-in with the overall character of the surrounding community. The pump station would house five water pumps, a work and control room, switchgear mechanical control cabinets ("SWGR MCC"), and a restroom. On-site parking would be provided along Hillrose Street. A diesel fuel tank for emergency operation of the water pumps would additionally be constructed adjacent to the proposed replacement pump station. Figure 1-2 provides a preliminary site plan for the proposed replacement pump station.

Construction of the proposed replacement station would take an estimated 12 months to complete. Table 1.11-1 provides a summary of the principal construction activities that would be required. A maximum construction crew of nine workers would be needed for an estimated 78 working days, and an average construction crew of six workers per working day would be needed throughout all construction phases. The proposed replacement station would additionally require electricity, which would be provided by the proposed project area's existing infrastructure.

Construction of the station would require the excavation of approximately 160 cubic yards (cy) of material, of which 80 cy would be removed for off-site disposal.



Aspen Environmental Group

Figure Prepared by Aspen Environmental Group

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Figure 1-2
Preliminary Site Plan

Table 1.11-1 Construction Summary – Proposed Replacement Pump Station

Construction Activity	Total Duration (Working Days)	Maximum Construction Work Force	On-Site Construction Equipment Needs	
			Equipment Types	Number
Excavation and Fill	5	4	Backhoes, Dump Trucks	6
Curb and Gutter Construction	15	3	Cement Trucks, Pickup Trucks	4
Concrete Footings Construction	20	9	Crane, Cement Trucks, Pickup Trucks	11
Concrete Walls Construction	78	9	Crane, Cement Trucks, Pickup Trucks	11
Structural Metal Roof Framing	10	4	Crane, Pickup Trucks	5
Metal Roof Decking	10	4	Crane, Pickup Trucks	5
Cold Form Roofing (metal)	5	4	Crane, Pickup Trucks	5
Installation of Mechanical Heating Ventilation and Air Conditioning (HVAC) System, Pumps, and Equipment	45	5	Forklift, Pickup Trucks	6
Installation of Electrical Equipment	45	5	Forklift, Pickup Trucks	6
Dry-walling	7	2	Pickup Trucks	2
Painting	20	4	Pickup Trucks	4
Paving	5	4	Paver, Dump Trucks, Pickup Trucks	6
Landscaping	15	3	Trencher, Pickup Trucks	4

Following final inspections, testing and commissioning of the proposed replacement pump station and its associated pipelines, each of the five water pumps would have a maximum operating rate of 4,400 gpm, and an average operating rate of 2,200 gpm. The pumps would be electric, although diesel fuel would be used as an emergency means of operating the pumps. On average two pumps would run simultaneously, although three would be operated under peak demand periods. The proposed replacement station would continue to collect water from the existing Redmont Reservoir, and pump water to the Apperson and Highway Highland Tanks at the same rate as the existing station. The water supply service area of the proposed replacement project would not change as a result of its implementation.

Operational activities associated with the proposed replacement station would typically include one site visit per week by LADWP personnel for routine maintenance, repair and inspection, and would not require any new LADWP employees. In comparison to the existing pump station, the repair and maintenance activities which are associated with the replacement pump station would be reduced due to its improved design and engineering.

1.11.3.2 Pipeline Design, Construction and Operation

The proposed replacement pump station would require two connecting pipelines to the existing water system, one for water supply and one for discharge to the existing pipelines which serve the Apperson and Highway Highland Tanks. The proposed pipelines would be 20 inches in diameter each and constructed of steel; they would have a maximum operating pressure of 195 psig. The proposed pipelines would be placed in a shared ROW along North Tujunga Canyon Boulevard; final placement of the pipelines within this roadway would be designed to avoid existing underground utilities and infrastructure. The proposed pipeline ROW would be approximately 1,500 feet long, four feet wide, and 60 inches deep.

Construction of the proposed pipelines would take an estimated 30 working days to complete, with multiple activities occurring simultaneously. Table 1.11-2 provides a summary of each principal activity associated with of pipeline construction, including the workforce needed.

Table 1.11-2 Construction Summary – Proposed Pipelines

Construction Phase	Total Duration (Working Days)	Maximum Construction Work Force	On-Site Construction Equipment Needs	
			Equipment Type	Number
Pipeline trenching	25	10	Excavator	1
			5-Yard Dump Truck	1
			Backhoe	1
			Backhoe Carrier	1
			Hydraulic Demolition Gun	1
			¾-Ton Truck	1
			Gang Truck	5
			10-Yard Dump Truck	(1-2 Trips)
Pipeline Stringing/Placement	25	8	Pitman Crane	1
			Pipe Truck	(1-2 Trips)
Backfilling/Compaction	20	4	Cement Truck	(10 Trips)
Resurfacing/Repaving	2	5	Gannon Roller	1
			Dump Truck	2
Post Construction Testing, Inspection and Commissioning	6	4	¾-Ton Trucks	(Variable)

Construction of the pipelines would require the excavation of approximately 1,100 cy of material, all of which would be removed for off-site disposal. The pipeline construction zone would typically be an estimated 400 feet in length. An estimated 40 linear feet of the parallel pipelines would be installed per day. One traffic lane along North Tujunga Canyon Boulevard would be provided for at all times.

Hydrostatic testing of the pipelines would be performed upon completion of all activities associated with pipeline installation. A hydrostatic test involves filling a pipeline with fresh water and increasing pressure to a predetermined level. Such tests are designed to prove that the pipe, fittings, and welded sections would maintain mechanical integrity without failure or leakage under pressure. Approximately 24,500 gallons of hydrostatic water would be used in each pipeline, for a total of 49,000 gallons. The pipelines would be filled and pressurized, and then left for a period of 24 hours. After 24 hours the pipelines would be pressurized again. Upon completion of the test the water would be de-chlorinated and discharged into the existing storm drain system. Hydrostatic test water would be treated to meet the requirements of the proposed project's National Pollutant Discharge Elimination System (NPDES) permit.

Following construction, on-site activities associated with operation of the pipelines would include periodic inspection and testing, typically once per week, by existing LADWP personnel.

1.11.3.3 Removal of the Existing Redmont Pump Station

Once the proposed replacement pump station is fully operational, the existing Redmont Pump Station, as described in Section 1.11.1, above, would be removed. Removal of the existing station would take an estimated 15 working days to complete, with multiple activities occurring simultaneously. The primary removal activities and their related equipment and labor force needs are summarized in Table 1.11-3.

All materials that can be salvaged from the existing pump station would be transported to the LADWP West Valley District for recycling. An estimated 100 cy of remaining material would be hauled off site for permanent disposal at an appropriately licensed landfill.

Table 1.11-3 Summary of Removal Activities – Existing Redmont Pump Station

Removal Phase	Total Duration (Working Days)	Maximum Removal Work Force	On-Site Removal Equipment Needs	
			Equipment Type	Number
Removal of Pumps	5	4	Dump Trucks, Pickup Trucks	4
Removal of Piping	5	4	Dump Trucks, Pickup trucks	4
Removal of Mechanical Equipment	5	4	Dump Trucks, Pickup Trucks	4
Removal of Electrical Equip	5	4	Dump Trucks, Pickup Trucks	4
Roof and Wall Demolition	5	4	Dump Trucks, Pickup Trucks	4
Footings Demolition	5	6	Dump Trucks, Front-End Loaders	5

1.12 Public Agencies Whose Approval May Be Required

Table 1-5, below, lists the permits and/or necessary approvals which may be required for project-related activities.

Table 1.12-1. Permits and Approvals Which May Be Required

Agency/Department	Permit/Approval	Description
State of California		
Division of Occupational Safety and Health (Formerly CAL OSHA)	Construction Permit	A permit is required for construction of trenches or excavations which are five (5) feet or deeper and into which a person is required to descend.
Regional Water Quality Control Board (RWQCB)	NPDES Permit for construction	RWQCB approval is needed for general construction runoff and/or construction dewatering discharges under the National Pollutant Discharge Elimination System (NPDES).
	NPDES Permit for hydrostatic test water discharge	Approval is needed for discharge of hydrostatic test water into any surface water of the State of California.
	Groundwater Permit (if required)	Section 402 of the Clean Water Act of 1977, as amended (33 U.S.C. 1342 et seq.) requires a NPDES permit (No. CAG994001) for groundwater discharges associated with construction activities to regulate discharges of treated groundwater from construction and other projects dewatering to surface waters in the Region.
California Department of Toxic Substances Control (DTSC)	Approval as necessary	Coordinate with DTSC, as needed, to address the classification and disposal of contaminated soils if encountered during construction.
Regional		
South Coast Air Quality Management District (SCAQMD)	Compliance with SCAQMD Rule 1470	Track testing of the diesel-fueled emergency generator in a Emergency Engines Usage Log, as established by the SCAQMD, to comply with requirements for stationary diesel-fueled internal combustion and other compression engines.
City of Los Angeles		
Department of Building and Safety	Building Permits	Building Permits are required for grading, electrical, plumbing, and mechanical work associated with the proposed replacement pump station.
Department of Public Works, Bureau of Engineering	Excavation Permit	An Excavation Permit must be obtained from the Bureau of Engineering for any trench excavation activities.
Department of Public Works, Bureau of Sanitation	Sanitation Application Form for Discharging to Sewer System (if required)	Approval for discharging hydrostatic test water to the sewer system, if required, must be obtained from the Bureau of Sanitation.

Agency/Department	Permit/Approval	Description
Department of Transportation	Traffic Management Plan	Approval is needed for temporary lane closures and traffic/transportation – related issues during construction.

2. Environmental Determination

Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by that 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 Significance	

Determination (To be completed by the Lead Agency)

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.

Charles C. Holloway — Jan. 7, 2008

Signature — Date

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

3. Evaluation of Environmental Impacts and Mitigation Measures

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?	☐	☐	☒	☐
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☒	☐
c. Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐
d. Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

Response to Questions:

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

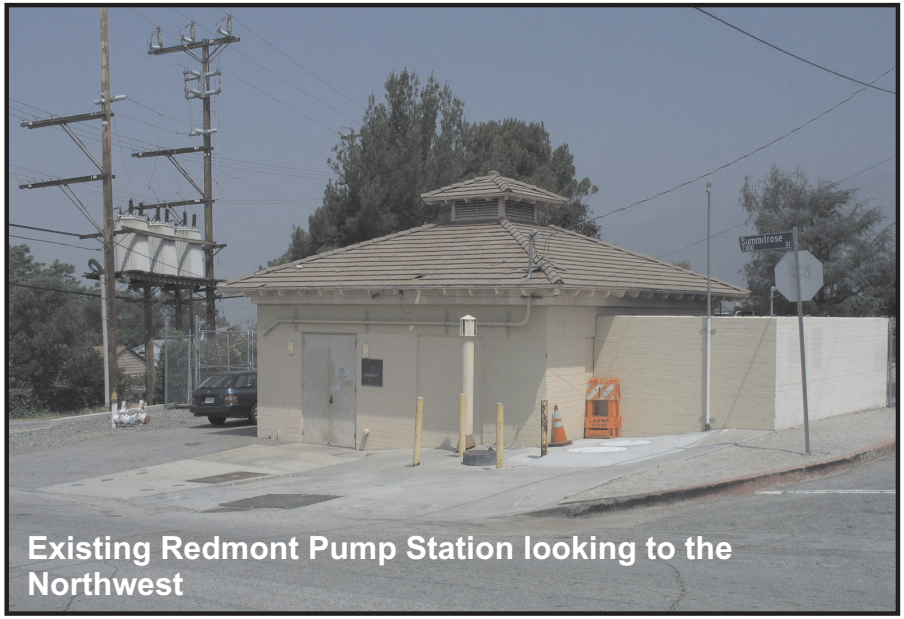
LESS THAN SIGNFICANT IMPACT. Scenic vistas are those that offer high-quality views of the natural environment. The proposed project area (including the existing pump station, the proposed replacement pump station, and the proposed connecting pipelines) is located within a fully developed residential area. The majority of this development is single family residential homes, although a multi-family residential complex and a local market are located at the intersection of North Tujunga Canyon Boulevard and Hillrose Street, and an undeveloped open space area is located along the east side of North Tujunga Canyon Boulevard across from the proposed replacement site. Figure 3.1-1 provides photos of the proposed replacement site, the open space area located to its east, and the existing Redmont Pump Station. None of the sites associated with the proposed project are located within the boundaries of the San Gabriel/Verdugo Mountains Scenic Preservation Specific Plan (City of Los Angeles, 2007).

Construction of the proposed replacement pump station is anticipated to take up to 12 months to complete, during which construction equipment, vehicles and activities would result in short-term visual disruptions of the site itself and of views of the open space area from points west and south/southwest of the site. However, these impacts would be temporary in nature, with maximum construction activities occurring for an estimated 78 working days. Due to their short-term nature, these effects would be less than significant. Following construction, the proposed replacement station would be approximately 2,500 square feet in size, approximately 20 feet high, and its façade would be designed and painted to blend-in with the overall character of the surrounding neighborhood. The proposed replacement station would be similar in height and bulk to the existing single family residential homes surrounding it, and substantially smaller in height and bulk than the multi-family residential complex which is located immediately to the south (see Figure 3.1-1). Permanent views of the open space area would be partially obscured for a limited number of residents located to the west and south/southwest due to the proposed replacement pump station; however, the northern and southern boundaries of the open space area extend beyond the boundaries of the proposed replacement pump station boundaries and, therefore, affected residential views of the open space area would not be fully blocked. As such, operational impacts would be less than significant.

Proposed replacement site looking to the Northwest

Proposed replacement site looking to the Southwest

Open space area located to the East of North Tujunga Boulevard and the Proposed Replacement Site



Existing Redmont Pump Station looking to the Northwest

Aspen Environmental Group

Figure Prepared by Aspen Environmental Group

Figure 3.1-1
Photos

Construction of the proposed connecting pipelines would occur along North Tujunga Canyon Boulevard between Summitrose and Hillrose Streets. The distance of the proposed pipeline Right-of-Way (ROW) is approximately 1,500 linear feet in length, four feet wide, and five feet deep. North Tujunga Canyon Boulevard is a two-way artery with one lane of traffic in both directions. The roadway is flanked by single family residences with the exception of the above-referenced open space area, multi-family residential complex and community market. Construction of the pipelines would take approximately 30 working days to complete, with multiple activities occurring simultaneously (i.e., trenching, pipeline stringing/placement, backfilling and road resurfacing). These activities would result in temporary visual effects to local residents and the drivers of vehicles on North Tujunga Canyon Boulevard and its intersecting streets due to the presence of construction equipment, vehicles and related activities. However, due to the short-term nature of these activities, impacts would be less than significant. Following construction, the proposed pipelines would be underground and no visual effects would result.

The existing Redmont Pump Station is surrounded by single family residences. The "footprint" of the existing pump station is approximately 625 square feet in size, and is approximately 20 feet high. Its bulk is similar to a two-vehicle garage, and its exterior is painted a neutral beige (please refer to Figure 3.1-1). Removal of the existing station would take an estimated 15 days to complete, with multiple activities occurring simultaneously (i.e., removal of interior equipment, wall and roof demolition, removal of footings, final grading and resurfacing). As with construction of the proposed replacement pump station, these activities would result in short-term visual impacts due to the presence of heavy equipment, vehicles and crews. However, due to the limited time of these activities, impacts would be less than significant. Following all removal activities, the site's surface would be at grade with the exception of the existing Redmont Reservoir, which is an underground reservoir covered with a light-gray graveled roof, beige painted pipelines, and related near-ground level beige and gray colored equipment and facilities. Removal of the existing pump station would lessen the visual bulk and height of the site overall, and the increased visibility of the existing reservoir would not result in any new visual impacts due to its coloring and near-ground height. Impacts would be less than significant or none.

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

LESS THAN SIGNFICANT IMPACT. The proposed project area is located within a fully developed residential community. There are no designated State Scenic Highways located in view of, or in close proximity to, the proposed project area; the closest designated State Scenic Highway is Highway 2, which is located approximately five and one-half to six miles east of the proposed project area (California Department of Transportation, 2007).

An open space area located east of North Tujunga Canyon Boulevard, across from the proposed replacement site, contains some mature tress and shrubs (please see Figure 3.1-1); however, this vegetation would not be either permanently or temporarily removed due to proposed construction and operational activities. No natural rock outcroppings, historic buildings, or other scenic resources are contained in this open space area. As addressed in response to Initial Study Question 3.1(a), above, construction and operation of the proposed replacement station would result in some temporary and permanent impacts to views of this open space area; however, these impacts would be less than significant due to the limited duration of construction and the limited breadth of permanent viewshed obstructions from areas south/southwest of the proposed project site.

The two remaining sites associated with the proposed project area (the existing Redmont Pump Station and the proposed underground pipelines) are predominantly surrounded by single family residences with ornamental landscaping. No natural rock outcroppings, historic buildings or other scenic

resources are located in close proximity to these sites. As discussed in response to Initial Study Question 3.1(a), above, construction of the proposed pipelines and demolition of existing Redmont Pump Station would result in temporary visual impacts due to the presence of heavy equipment, vehicles and crews; however, these impacts would be short-term in nature, and thus less than significant. No visual impacts related to the proposed underground pipelines would result following their construction, and post-construction visual impacts related to the existing Redmont Pump Station would be less than significant or none (see response to Initial Study Question 3.1[a], above).

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

LESS THAN SIGNFICANT IMPACT. As addressed in response to Initial Study Question 3.1(a), above, construction of the proposed replacement pump station and its associated pipelines, and demolition of the existing Redmont Pump Station would create temporary visual impacts due to the presence of heavy equipment and vehicles, the stock-piling of materials which are either required for construction or generated by demolition, work crews, and associated construction- and demolition-related activities. However, these impacts would not be expected to occur for more than a maximum of 14 months total (12 months for construction of the proposed replacement pump station, one month for pipeline construction, and 15 days for demolition of the existing pump station). Due to their localized and short-term nature, these impacts would be less than significant.

Once constructed, the proposed replacement pump station would occupy a site that is currently undeveloped (see Figure 3.1-1). However, the height (approximately 20 feet) and bulk (approximately 20,255 square feet) of the proposed pump station would be appropriate in scale to the size of the site and similar to the single-family residences that surround it. In addition, the proposed replacement pump station would have an exterior façade and color designed to blend in with the surrounding community. Consequently, the overall visual character and quality of the proposed replacement site and its surroundings would not be substantially degraded.

Following construction of the proposed pipelines, no new features to the landscape would be visible, as these facilities would be located underground. No permanent change to the pipeline corridor's visual character or quality would occur.

Following demolition of the existing Redmont Pump Station, the site's overall visual bulk would be reduced, thereby creating a potentially beneficial visual impact to the site and its surrounding area. The remaining features of the site would include the existing underground reservoir, which is covered with a light-gray graveled roof, beige painted pipelines, and related near-ground level beige and gray colored equipment and facilities. Although the visibility of these existing features may be slightly increased by removal of the existing station, no new features or facilities are proposed that could substantially degrade the site's visual character or quality or 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 SIGNFICANT IMPACT. During proposed construction and removal activities, heavy equipment, vehicles, and material surfaces and/or parts that are reflective could create a new source of daytime glare. However, it is not anticipated that these sources of glare would be substantial due to the limited duration of construction- and demolition-related activities. Nighttime construction and demolition are not proposed, and thus would not impact nighttime views.

Following construction, the periphery of the proposed replacement pump station would likely be fenced with either low-glare chain-linked fencing or some other type of fencing which blends in with the overall character of the surrounding community. Additionally, the proposed replacement pump station would be painted in a neutral color that blends in with the surrounding community. No highly

reflective materials that could introduce a substantial source of light or glare during the day would be used. Nighttime lighting of the proposed replacement pump station would be similar in wattage to the lighting at the existing pump station, and specifically designed to be consistent with a single-family residential community. Nighttime sources of light and adverse effects on nighttime views would be minimal.

The proposed connecting pipelines would be located underground, and thus would not create any new permanent source of above-ground light or glare. No impacts due to light or glare would occur due to their operation.

As addressed in response to Initial Study Questions 3.1(a) and 3.1(c), above, removal of the existing Redmont Pump Station would reduce the site's physical bulk. No additional facilities or activities are proposed for the existing site which would introduce any new sources of light or glare. As the result of demolition, some sources of nighttime lighting would be eliminated, thereby resulting in a slightly beneficial nighttime viewing effect to the surrounding area.

3.2 Agricultural Resources

AGRICULTURAL RESOURCES - In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agricultural farmland. Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. 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?	☐	☐	☐	☒
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c. Involve other changes in the existing environment, which, due to their location or nature, could individually or cumulatively result in loss of Farmland, to non-agricultural use?	☐	☐	☐	☒

Response to Questions

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. No part of the proposed project is 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 of the California Resources Agency (California Department of Conservation [DOC], 2007a). According to the California Department of Conservation, the California Resources Agency tasked with overseeing Farmland conservation efforts, the area of the proposed project is not mapped and therefore cannot be considered Farmland (DOC, 2007a).

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

NO IMPACT. No part of the proposed project area is located on or near land zoned for agricultural use or subject to a Williamson Act contract (DOC, 2007b).

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 would replace and upgrade the existing Redmont Pump Station, and respond to the current water demands of the proposed project area. Therefore, the proposed

project would not induce growth, which could result in the conversion of Farmland to non-agricultural use. Land uses within and adjacent to the existing and proposed replacement pump station and the proposed pipeline ROW primarily include residential, commercial and open space; no agricultural lands or operations are in close proximity to the proposed project area. The proposed project would not involve any changes in the existing environment, which, due to their location or nature, could 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
a. Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒
b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☐	☒
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?	☐	☐	☐	☒
e. Create objectionable odors affecting a substantial number of people?	☐	☐	☐	☒

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 re-designated 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, sulpher dioxide (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 (CO_2), methane, nitrous oxides (N_2O), chlorofluorocarbons (CFCs), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF_6), 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. 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 most single projects do 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 SCAB is currently designated non-attainment for some air quality standards that have been established at State and federal levels, including ozone, PM_{10}, and CO. The SCAB has been making consistent progress towards reaching attainment with the majority of emissions that influence global climate change (California Environmental Protection Agency, 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 the 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]).

Response to Questions

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

NO IMPACT. The proposed project's impacts within the SCAB would be almost entirely limited to the emissions generated during proposed construction and demolition activities. The air quality analysis indicates that construction and demolition emissions would not exceed any of the SCAQMD's Thresholds of Significance for new project construction. Appendix A provides a memorandum summarizing the methodology used for proposed project's air quality analysis, including its air quality calculations. Table 3.3-1 details the worst-case emissions related to construction and demolition for the proposed project on a localized scale (i.e., the emissions that would occur in the immediate project vicinity).

Table 3.3-1 Total Worst-Case On-Site Air Quality Emissions

Project Activity	Emissions (Pounds per Day)			
	CO	NO_X	PM_{10}	$PM_{2.5}$
Site Preparation	0.0	0.0	0.0	0.0
Grading	10.9	22.4	3.6	1.9
Building Construction*	13.3	25.9	1.8	1.7
Asphalt Paving	13.9	27.3	2.0	1.8
Localized Significance Threshold	449.0	126.0	4.0	3.0
Exceed Threshold?	No	No	No	No

* "Building Construction" includes activities associated with construction of the proposed replacement pump station, its associated pipelines, and demolition of the existing pump station.

Table 3.3-1 shows the localized (on-site) emissions generated by different phases of construction. The emissions for the individual phases are shown for CO, NOx, PM_{10} and $PM_{2.5}$. The table also shows the Localized Significance Threshold (LST) for the various pollutants. In all cases, the pollutant emissions are well below their corresponding LST. The emissions from the different phases are not combined because they are discrete phases of construction and do not occur simultaneously.

Table 3.3-2 details the worst-case emissions related to construction and demolition of the proposed project at a regional scale. The emissions for the individual phases are shown for CO, NO_X, PM_{10} and $PM_{2.5}$, as well as sulphur oxides (SO_X) and volatile organic compounds (VOC). Table 3.3-2 also shows the SCAQMD's Regional Significance Threshold for the various pollutants. In all cases, the pollutant emissions are well below the Regional Significance Thresholds. Again, the emissions from the different phases are not combined because they are discrete phases of construction and do not occur simultaneously.

Table 3.3-2 Total Worst-Case Regional Air Quality Emissions

Project Activity	Emissions (Pounds per Day)					
	CO	NO_X	PM_{10}	$PM_{2.5}$	SO_X	VOC
Site Preparation	0.0	0.0	0.0	0.0	0.0	0.0
Grading	15.9	33.9	4.2	2.4	0.0	4.3
Building Construction*	30.3	70.6	4.0	3.6	0.1	8.0
Asphalt Paving	19.7	41.6	2.6	2.4	0.1	7.5
Regional Significance Threshold	550	100	150	55	150	75
Exceed Threshold?	No	No	No	No	No	No

* "Building Construction" includes activities associated with construction of the proposed replacement pump station, its associated pipelines, and demolition of the existing pump station.

Once operational, project-related impacts would be essentially non-existent because there would be minimal on-site combustion of fossil fuels; routine maintenance activities would be relocated to the proposed replacement pump station site using the same LADWP labor force and thus would not change existing conditions. The proposed project's energy requirements would be fed almost entirely by electricity; the only non-electrical on-site energy use would be a bi-weekly test of emergency diesel generator equipment, as addressed below.. Once the proposed replacement pump station is on-line, the old pump station would be taken off-line.

The emergency generator would be rated 750 kilowatts (kW) and tested once every two weeks for approximately 45 to 50 minutes. A 750 kW generator requires a diesel engine that would deliver approximately 1,100 to 1,237 of horsepower. For a worst-case analysis of a 50-minute test, the highest horsepower rating was used, along with the emission factors which are found in Table 3.4.1 (Gaseous Emission Factors for Large Stationary Diesel and All Stationary Dual-Fuel Engines) of Section 3.4 of the U.S. EPA's AP-42 documents. Table 3.3-3, below, provides the emissions which would be generated by the generator's bi-weekly testing. As indicated in Table 3.3-3, emissions due to testing of the emergency generator would not exceed the SCAQMD's regional thresholds. Additionally, it is noted that the testing would not occur on a daily basis, and that the LADWP would comply with the SCAQMD's Rule 1470, which specifies the requirements for stationary diesel-fueled internal combustion and other compression ignitions. As addressed in response to Initial Study question 3.7(c) (Hazards and Hazardous Materials), the emergency generator would not be located within 500 feet or less of an existing school.

Table 3.3-3 Diesel Emergency Generator Testing Emissions

Emission Factors/Peak Emissions/Thresholds	Emissions (Pounds Per Day)							
				NO_X		Total Organic Compounds (TOC)		
	CO	SO_X	PM	Uncontrolled	Controlled	Total	Methane	Non-Methane
Emission Factor (Pounds Per Horsepower Hour)	0.0055	0.00809	0.0007	0.024	0.013	0.000705	9% of TOC	91% of TOC
Peak Emissions Per Day (Pounds)	5.7	8.3	0.7	24.7	13.4	0.7	0.1	0.7
Regional Significance Thresholds	550.0	150.0	150.0	55.0	55.0	55.0	N/A	N/A
Exceed Threshold?	No	No	No	No	No	No	N/A	N/A

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

NO IMPACT. As addressed in response to Initial Study Question 3.3(a), above, impacts related to proposed construction and demolition would not exceed the SCAQMD's Thresholds of Significance for new construction projects. In addition, operation of the proposed replacement pump station and its associated pipelines would not result in an appreciable increase in any pollutant emissions over

existing conditions. Therefore, the proposed project would not violate any air quality standard or contribute substantially to an existing or projected air quality violation.

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)?

NO IMPACT. As addressed in response to Initial Study Question 3.3(a), above, except for air quality emissions related to construction and demolition, the proposed project would not generate any new pollutant emissions within the SCAB. Project-generated construction emissions would be below the SCAQMD's Thresholds of Significance for new construction projects.

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

NO IMPACT. The proposed project area is directly adjacent to sensitive residential receptor locations. Despite the proximity of the proposed project to residents, it would not expose the nearby residents to substantial pollutant concentrations because it would not generate any pollutant emissions within the SCAB other than the occasional testing of the proposed replacement pump station's emergency diesel generator equipment. Additionally proposed construction and demolition activities would be completed in compliance with all applicable SCAQMD rules and regulations, which may include: Rule 401 Visible Emissions; Rule 402 Nuisance; Rule 403 Fugitive Dust; and, Rule 1110.2 Emission from Gaseous- and Liquid-Fueled Engines. Therefore, the proposed project would not expose sensitive receptors to substantial pollutant concentrations.

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

NO IMPACT. Any odors (e.g., odors from construction and demolition vehicle emissions, repaving, etc.) that would be generated would be controlled in accordance with SCAQMD Rule 402 (Nuisance Emissions). There are no activities anticipated to occur, other than normal construction and demolition activities, or materials or chemicals that would be stored, which would have the potential to cause significant odor impacts. Once operational, the proposed replacement pump station and associated pipelines would require only periodic maintenance, inspection and testing, none of which would include appreciable odor causing activities.

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?	☐	☐	☒	☐
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒

BIOLOGICAL RESOURCES - Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
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?	☐	☐	☐	☒

The following discussion includes a description of the biological resources found in the proposed project area. Information used in preparing this discussion and its subsequent impact analysis was derived from:

- Records of sensitive species locations from the California Natural Diversity Database (CNDDB) (CDFG 2007)
- Inventory of Rare and Endangered Plants from the California Native Plant Society (CNPS 2001)
- Reconnaissance-level field survey of the proposed project area conducted in May 2007
- Species known to occur within the proposed project area, based on historic range and field observations
- Species likely to occur within the proposed project area, based on the distribution of the species and known habitat suitability
- Species that could be affected by the proposed project, because of their presence in areas adjacent to the proposed project area.

Biological resources located in the proposed project area are typical of species common to the urbanized areas of southern California. While historically the area likely supported a diverse assemblage of plant and wildlife species, urban development has removed the majority of habitat that once occurred. Currently, the proposed project area is limited to disturbed ruderal habitat, landscaped open space areas, and residential and commercial development.

Wildlife and Vegetation. The proposed project area is located entirely within the urbanized community of Sunland in the City of Los Angeles. The vegetative cover, where present, consists of ornamental roadside trees and other cultivated species, including Peruvian pepper (*Schinus molle*), gum (*Eucalyptus* sp.), and various pines (*Pinus* spp.). Ruderal species, which are those that thrive in disturbed areas, are present at the proposed replacement pump station site, as well as along adjacent roadways. These species consist of both native and exotic weeds dominated by ragweed (*Ambrosia acanthicarpa*), shortpod mustard (*Hirschfeldia incana*), Russian thistle (*Salsola iberica*), and horseweed (*Conyza candensis*). Red-stemmed filaree (*Erodium cicutarium*) and telegraph weed (*Heterotheca grandiflora*) are also common. Several non-native annual grasses are scattered throughout the proposed project area, including wild oat (*Avena fatua*), barley (*Hordeum leporinum*), and brome grass (*Bromus* sp.) The adjacent flood control easement (open space area) to the east of the proposed replacement pump station site, across from North Tujunga Canyon Boulevard, is dominated by Peruvian pepper trees and a few coast live oaks (*Quercus agrifolia*), which appear to have been planted along the easement. The understory in this open space area is dominated by brome grass intermixed with patches of bare ground.

Disturbed vegetation communities in urban environments typically support a limited variety of common wildlife species. Although the trees located along the city streets and the flood control easement likely provide some habitat for foraging and nesting, none was noted during the reconnaissance survey.

Birds were the most common species observed during the filed survey and consisted of those well adapted to urbanized areas. Some of the species noted during the survey included American crow (*Corvus brachyrhynchos*), western scrub jay (*Aphelocoma coerulescens*), mourning dove (*Zenaida macroura*), and house sparrow (*Passer domesticus*). Other common birds that may occur in the proposed project area include red-tailed hawk (*Buteo jamaicensis*), turkey vulture (*Cathartes aura*), European starling (*Sturnus vulgarus*), and rock dove (*Columba livia*). Although raptor species could potentially soar over the proposed project area, they were not observed during the survey and are highly unlikely to forage or nest within or adjacent to the proposed project's construction and demolition sites.

Mammals were not observed during the survey and larger mammals would not be expected to frequent the proposed project area. However, species that are commonly found in vacant lots similar to the proposed replacement pump station site include Bottas' pocket gopher (*Thomomys bottae*) and California ground squirrel (*Spermophilus beecheyii*). Other species that are well adapted to urbanized areas and could potentially occur in the proposed project area include raccoon (*Procyon lotor*), striped skunk (*Mephitis mephitis*), and Virginia possum (*Didelphis virginiana*). The proposed project area is also likely used by domestic animals such as house cats (*Felis catus*) and dogs (*Canis familiaris*).

Two reptile species were observed during the reconnaissance survey including side-blotched lizard (*Uta stansburiana*) and western fence lizard (*Sceloporus occidentalis*). However, as the proposed project area is largely urbanized, few other reptile species would be expected to occur.

Special Status Species. 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.

A records search of the CNDDB and CNPS "Rare Find" database identified three sensitive plant species as occurring within two miles of the proposed project area. These species included: the slender-horned spineflower (*Dodecahema leptoceras*), a federally and State endangered and CNPS List 1B species; Greata's aster (*Aster greatae*), a CNPS List 1B species; and, Davidson's bush mallow (*Malacothamnus davidsonii*), a CNPS List 1B species. These species are closely associated with chaparral and/or coastal sage scrub habitats occurring in the foothills of the San Gabriel Mountains north of the proposed project area, but would not be expected to occur in or near the areas proposed for construction and demolition activities.

The records search and assessment of habitat in the proposed project area did not identify any recent occurrences of sensitive wildlife species within two miles of the proposed project area. A single Cooper's hawk (*Accipiter cooperii*), a California Species of Special Concern, was observed foraging above the foothills to the northeast of the proposed project area; however, this occurrence was a considerable distance away from the sites proposed for construction and demolition activities.

Response to Questions

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?

LESS THAN SIGNIFICANT IMPACT. The proposed project area is located within a highly developed urban area. There are no special status plant or wildlife species that have been observed or are known to occur in the immediate vicinity. Habitat in the proposed project area is generally unsuitable to support sensitive plant and wildlife species and no or less than significant impacts during proposed construction and demolition activities would be expected to occur. Operation of the proposed replacement pump station and its associated pipelines would be limited to periodic inspections, maintenance and repair activities by LADWP personnel, typically once per week. Similarly, continued operation of the existing Redmont Reservoir would be limited to on-going inspections, maintenance and repair activities at an average of once per week. These minor activities would not be anticipated to impact any species identified as a candidate, sensitive, or special status species.

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 area is located in a highly urbanized area within which riparian and other sensitive natural communities do not occur. Proposed construction and demolition activities would not result in the permanent or temporary removal of any riparian or sensitive natural community identified in local or regional plans, polices, or regulations, or any habitat identified by the CDFG or United States Fish and Wildlife Service (USFWS). Temporary and permanent impacts from proposed construction and demolition activities would be limited to previously disturbed, developed, or landscaped areas.

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?

LESS THAN SIGNFICANT IMPACT. The proposed project area does not contain any federally protected wetlands, including wetlands, vernal pools, marsh, or riverine habitats. There is slight potential for materials associated with proposed construction and demolition activities, such as concrete slurry, fuels or loose dirt to spill and wash into low lying areas that support some wetlands. However, all proposed activities would adhere to the Best Management Practices (BMPs) specified in the proposed project's Stormwater Pollution Prevention Plan (SWPPP), thereby minimizing the potential for run-off during proposed construction and demolition activities. Operational activities of the proposed replacement pump station, its associated pipelines, and the existing Redmont Reservoir would be limited to periodic inspections, maintenance and repairs. These on-site operational activities would not be expected to have any adverse effects on federally protected wetlands, either individually or in combination with other activities.

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 area is located in a highly developed urban area that does not support suitable habitat for sensitive plant or wildlife species. The sites proposed for demolition, construction and operational activities are dominated by disturbed habitat and residential and limited

commercial development. The proposed project sites are not located within a contiguous open space area that could function as either a wildlife corridor or nursery site.

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

NO IMPACT. Proposed construction, demolition and operational activities would not directly eliminate or indirectly impact mature native or ornamental trees within the City of Los Angeles; therefore, the proposed project would not conflict with any tree preservation policy or ordinance.

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. There are no adopted Habitat Conservation Plans or Natural Community Conservation Plans applicable to (within the boundaries of) the proposed project area or any areas immediately surrounding it. Therefore, proposed construction, demolition and operational activities would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Communities Conservation Plan, or other approved local, regional, or State habitat conservation plan.

3.5 Cultural Resources

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

A Phase I Cultural Resource Assessment and a Paleontologic Assessment were completed for the proposed project, including all activities associated with construction of the proposed replacement pump station and its associated pipelines and demolition of the existing Redmont Pump Station (ArchaeoPaleo Resource Management, Inc., 2007). Evaluation of the subject properties included conducting cultural resource and paleontologic records and literature searches, a thorough review of existing published and unpublished references on local prehistory and history, Native American consultation, and completion of intensive cultural resource and paleontologic field surveys. A copy of the full Phase I Cultural Resource Assessment and Paleontologic Assessment Report (Report) is on file with the LADWP. The following discussion is based upon the information contained in the Report (ArchaeoPaleo Resource Management, Inc., 2007).

Response to Questions

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

NO IMPACT. An intensive pedestrian survey of the proposed project area was conducted on May 30, 2007 (ArchaeoPaleo Resource Management, Inc., 2007). As a whole, the proposed project area has experienced substantial historic and modern surficial ground disturbance. Ground disturbance observed at the proposed replacement pump station site included visually obvious surficial grubbing and light grading activities. The native topography suggests a downward slope to the west, yet soil

from an unknown location was deposited over the native sediment on the western section of the property in order to raise the elevation level to that of the eastern property boundary. The soil fill material was deposited along the eastern and southern boundaries to roughly form a two-foot high berm. Approximately ninety-five percent of this site lacks any native vegetation except various intrusive grasses. he proposed pipeline alignment along North Tujunga Canyon Boulevard and the existing Redmont Pump Station site have also been substantially disturbed due to previous development (construction of North Tujunga Canyon Boulevard and the existing Redmont Pump Station and Reservoir). The pedestrian survey did not identify any prehistoric or historic cultural resources.

A cultural archival records and literature search was conducted for the proposed project at the California Historical Resources Information System (CHRIS) legal repository located at the South Central Coastal Information Center at California State University, Fullerton (ArchaeoPaleo Resource Management, Inc., 2007). The research conducted at the CHRIS facility consisted of a review of the existing published and unpublished references on local prehistory and history. The research indicates that no previously recorded prehistoric or historic archaeological sites are known to be present within the proposed project area, but that it has never been surveyed by archaeologists. However, a search of historical publications and archival maps for cultural resources in the proposed project area, which included the California State Historic Resources Inventory, the National Registry of Historic Places, California Historical Landmarks (1990), and California Points of Historical Interest (1992), contained negative findings as well. In addition, the archival records research determined that no prehistoric cultural resources, only four historic cultural resources, and ten archaeological sites have been recorded within a one mile radius of the proposed project area. The cultural resources previously recorded include one historic single story residence dating from the 1930s or 1940s, the Community Christian Church of the Foothills constructed in 1956, a 500 gallon corrugated metal tank constructed after 1945, and a historic paved road circa late 1940s. In sum, the archival records search and literature review indicate that the proposed project area is situated within an area of low sensitivity for prehistoric resources and within an area of moderate sensitivity for important historic resources.

Based upon the above, construction of the proposed replacement pump station and its connecting pipelines, and demolition of the existing Redmont Pump Station would not cause a substantial adverse change in the significance of an historical resource as defined in Section 15064.5 of the California Environmental Quality Act Guidelines. Operation of the proposed replacement pump station and its associated pipelines would be limited to routine maintenance, inspection and testing that would not typically involve any earth disturbing activities.

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

NO IMPACT. As addressed in response to Initial Study Question 3.5(a), above, the Phase I Cultural Resource Assessment completed for the proposed project indicates that no previously recorded prehistoric or historic archaeological sites are known to be present within the proposed project area, and only ten archaeological projects have been recorded within a one mile radius of the proposed project area (ArchaeoPaleo Resource Management, Inc., 2007). Operational activities would be limited to periodic maintenance, inspection and testing which would not typically involve any earth disturbing activities.

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

LESS THAN SIGNFICANT IMPACT. Two pedestrian surveys of the proposed project area were conducted in May and June of 2007 for observable paleontological remains; the surveys did not identify any fossil remains (ArchaeoPaleo Resource Management, Inc., 2007). In addition, a

paleontological records search was conducted at the Natural History Museum of Los Angeles County, Vertebrate Paleontology Section, in June 2007. Results of the search indicate that there are no known vertebrate fossil deposits that lie beneath the proposed project sites (ArchaeoPaleo Resource Management, Inc., 2007).

Construction activities are not anticipated to involve any deep excavation which would directly or indirectly destroy a unique paleontological resource or site, or unique geologic features. The potential for encountering paleontological resources during proposed construction and demolition activities is considered low.

Operation of the proposed project would be limited to periodic maintenance, inspection and testing activities which would not be anticipated to involve any deep excavation which would directly or indirectly destroy a unique paleontological resource or site, or unique geologic features.

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

LESS THAN SIGNFICANT IMPACT. No formal cemeteries have been identified within the proposed project area, and no human remains have been reported within the proposed project sites based on the records search conducted at the CHRIS facility (ArchaeoPaleo Resource Management, Inc., 2007). Additionally, the Native American Heritage Commission performed a record search of its Sacred Lands File (SLF) for the proposed project area; the SLF search did not identify the presence of any Native American cultural resources in the immediate vicinity of the proposed project area, although it was noted that the "absence of specific site information in the SLF does not guarantee the absence of cultural resources in any 'area of potential effect' (APE)" (ArchaeoPaleo Resource Management, Inc., 2007).

Although the potential to disturb human remains during proposed construction and demolition activities is considered very low, in the event that such remains are discovered the LADWP would fully comply with State law which requires notification to the Los Angeles County Coroner, as well as the provisions of Section 5097.98 of the Public Resources Code (PRC) if the remains are found to be of Native American origin.

Operation of the proposed replacement pump station and its associated pipelines would be limited to routine maintenance, inspection and testing activities which would not typically involve any earth disturbing activities; consequently, once operational, the proposed project would not be expected to disturb any human remains, including those interred outside of formal cemeteries.

3.6 Geology and Soils

GEOLOGY AND SOILS - Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Expose people or structures to potential substantial 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.	☐	☒	☐	☐
ii) Strong seismic ground shaking?	☐	☒	☐	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☒	☐	☐
iv) Landslides?	☐	☐	☒	☐
b. Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐

GEOLOGY AND SOILS - Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒

Response to Questions

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.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED. The proposed project area lies outside of a mapped Alquist-Priolo Earthquake Fault Zone, as delineated by the California Department of Conservation (DOC), Division of Mines and Geology (DOC, 2000); additionally, a Parcel Profile Report obtained from the City of Los Angeles confirms that the proposed project area does not lie within an Alquist-Priolo Fault Zone (City of Los Angeles, 2007). However, the proposed project area is located in close proximity to several Alquist-Priolo Earth Quake Fault Zones, including the Sierra Madre Fault Zone, and Exhibit A of the City of Los Angeles General Plan Safety Element indicates that the proposed project area may lie within a Fault Rupture Study Area (City of Los Angeles, 1996a). Due to the close proximity of these active earthquake fault zones, potential fault rupture could adversely impact the proposed replacement pump station and its associated pipelines. However, with the implementation of Mitigation Measure GEO-1, below, impacts would be reduced to a less than significant level.

GEO-1 A geotechnical survey shall be performed for the proposed replacement pump station site and its associated pipeline alignment. The proposed replacement pump station and its pipelines shall be designed and constructed per the findings and recommendations of the geotechnical survey to minimize risks associated with predicted and potential fault ruptures, seismic ground shaking, and seismic-related ground failure.

Demolition of the existing pump station would remove an existing structure and thus would not have any adverse effects due to fault ruptures risks.

ii) Strong seismic ground shaking?

LESS THAN SIGNIFICANT WITH MITIGATION INCOPORATED. The proposed project area could be subject to strong seismic ground shaking due its proximity to several active faults, including the San Andreas, San Gabriel, Santa Susana, Sierra Madre, and Raymond Faults. Strong seismic ground shaking from one of the nearby faults could expose proposed project structures (the replacement pump station and its associated pipelines) to potential adverse effects. However, with implementation of Mitigation Measure GEO-1, as described above in response to Initial Study Question 3.6 a(i), impacts

would be reduced to a less than significant level. Demolition of the existing pump station would remove an existing structure and thus would not be affected by strong seismic ground shaking.

iii) Seismic-related ground failure, including liquefaction?

LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED. According to a Parcel Profile Report obtained from the City of Los Angeles, the proposed project area does not lie within an area that is susceptible to liquefaction (City of Los Angeles, 2007). However, the City of Los Angeles General Plan Safety Element Exhibit B shows that the proposed project area is very near a Liquefiable Area (City of Los Angeles, 1996b). Due to the close proximity of both liquefiable areas and active fault zones, there is a potential for proposed project features (the proposed replacement pump station and its associated pipelines) to be adversely impacted by seismic-related ground failure. However, with the implementation of Mitigation Measure GEO-1, described in response to Initial Study Questions 3.6 a(i), above, impacts would be reduced to a less than significant level. Demolition of the existing pump station would remove an existing structure and thus would not result in, or be impacted by, seismic-related ground failure or liquefaction.

iv) Landslides?

LESS THAN SIGNIFICANT IMPACT. None of proposed project sites lie within an area that is susceptible to landslides, as shown by the City of Los Angeles General Plan Safety Element Exhibit C (City of Los Angeles, 1996c). A Parcel Profile Report obtained from the City of Los Angeles confirms that the proposed project area is not susceptible to landslides (City of Los Angeles, 2007). Grading, excavation and demolition activities would not result in substantially deep excavations or tall stockpiles. Therefore, the proposed project is not expected to be impacted by landslides, nor is it expected to create a landslide hazard.

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

LESS THAN SIGNIFICANT IMPACT. The proposed project would include trenching and excavation along the proposed pipeline alignment, as well as excavation and grading at the proposed replacement pump station site and the existing pump station site. The proposed pipelines would be placed within a public ROW beneath North Tujunga Canyon Boulevard. Following construction, the pipeline trench would be backfilled and re-paved. The proposed pipeline would not result in an increase in the potential for erosion or the loss of topsoil. The proposed replacement pump station would be constructed on currently vacant land. While excavation, grading and demolition could temporarily increase the potential for erosion, implementation of the requirements stipulated by the project's SWPPP would reduce these impacts to less than significant. Proposed operational activities at the proposed replacement pump station site, along the proposed pipeline alignment, and at the existing Redmont Reservoir would be limited to periodic inspections, maintenance and repairs, as needed. These activities would not typically be expected to involve earth-disturbing activities which would result in substantial erosion or the loss of topsoil.

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?

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED. As addressed in response to Initial Study Questions 3.6 a(iii) and 3.6a(iv), above, the proposed project area is not located on soil that is susceptible to liquefaction, nor is it susceptible to landslide. However, due to the close proximity of active fault zones as well as liquefiable soils, there is a potential that unstable soils exist along the proposed pipeline alignment and within the proposed replacement pump station site. However, with implementation of Mitigation Measure GEO-1, as described in response to Initial Study Question 3.6 a(i), above, impacts due to unstable soils would be reduced to a less than

significant level. Demolition of the existing pump station would remove an existing structure and thus would not result in, or be impacted by, onsite or offsite landslides, lateral spreading, subsidence, liquefaction, or collapse.

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. Guidelines for trench backfill in the Engineering Standards Manual, Water Operating Division, Department of Water and Power, City of Los Angeles, Second Edition, Effective August 3, 1992, Chapter 7, Section 7.12 indicate that only suitable native soil, sand-cement slurry, or suitable sand shall be used as bedding and trench backfill. The use of select bedding material and approved trench spoil material would prevent impacts from expansive soil. Additionally, the proposed replacement pump station would be designed and constructed to meet all applicable Uniform Building Codes to avoid any substantial risks to life or property from expansive soils. Demolition of the existing pump station would remove an existing structure and thus would not result in, or be impacted by, expansive soils.

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. Although the proposed replacement pump station would include a restroom, the restroom would be connected to proposed project area's existing sanitary sewer system infrastructure. The proposed project would not include a septic tank or alternative wastewater disposal system. Construction and operation of the proposed project would not affect any existing, or hinder any future, septic tanks or alternative wastewater disposal systems, or the soils that would adequately support those systems. Demolition of the existing pump station would remove an existing structure and does not involve the need for any type of wastewater disposal system.

3.7 Hazards and Hazardous Materials

HAZARDS AND HAZARDOUS MATERIALS - Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
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?	☐		☒	☐
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒
g. Impair implementation of or physically interferes with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐

HAZARDS AND HAZARDOUS MATERIALS - Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	☐	☐	☐	☒

Response to Questions

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. Proposed construction and demolition activities would involve the excavation and transport of paving materials (e.g., asphalt, concrete, and road bed fill materials from roadway trenching) and soils that could possibly be contaminated by vehicle-related pollution (e.g., oil, gasoline, diesel, and other automotive chemicals). All such paving, road bed materials and soils would be transported and disposed of in accordance with applicable codes and regulations of the U.S. Department of Transportation, U.S. EPA, California Department of Toxic Substances Control, California Highway Patrol, and California State Marshal. Such transport and disposal would not be expected to create a significant hazard to workers or the surrounding community.

During proposed construction and demolition activities small quantities of hazardous materials, such as petroleum hydrocarbons and their derivatives (e.g., gasoline, oils, lubricants, and solvents), would be required to operate heavy equipment (e.g., compactors, forklifts, excavators, etc.). These materials would be contained within vessels engineered for safe storage. Storage of substantial quantities of these materials would not be anticipated. All construction and demolition staging would occur within the existing and proposed pump station sites. Construction vehicles would require on-site 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 large enough or stored in a manner that would pose a significant hazard to the public or the construction and demolition workers themselves.

The proposed replacement pump station's water pumps would be electric, although diesel fuel would be used as an emergency means of operation. The transport, storage and use of diesel fuel would adhere to all applicable federal, State and local regulations, thereby minimizing public and environmental exposures to hazardous materials. Operation of the two proposed underground water pipelines would not result in the release of hazardous materials. Following demolition of the existing Redmont Pump Station, no new facilities or activities would occur at the site that would increase the risk of a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

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 SIGNFICANT IMPACT.

Construction and Demolition. As addressed in response to Initial Study Question 3.7(a), above, proposed construction and demolition activities would not involve the use of substantial quantities of hazardous materials that would pose a risk to the public. Prior to any earth disturbing activities the construction contractor would be required to obtain an "Underground Service Alert Identification Number." To minimize potential damage to any existing utilities, the contractor would not be allowed to excavate until all utility owners are notified, and all substructures are clearly identified. Additionally, as part of the construction and demolition activities, the LADWP would require the

construction contractor to develop a plan for all proposed activities and contingencies, including emergency response, hazardous materials storage, and hazardous materials spill prevention and containment. Furthermore, the LADWP would require the construction contractor to have available adequate spill containment and cleanup resources on site at all times and be prepared to contain, control, clean up, and dispose of any potential fuel spill quickly and completely. During all proposed construction and demolition activities, project personnel would be required to follow all applicable rules and regulations governing the storage, transportation, use, handling, and disposal of hazardous materials.

Operation. As addressed in response to Initial Study Question 3.7(a), above, emergency operation of the proposed replacement pump station would involve the use of a diesel-fueled generator. However, the transport, storage and use of diesel fuel would adhere to all applicable federal, State and local regulations, thereby minimizing the potential for upset or accident conditions involving the release of hazardous materials into the environment. In the event of an accidental spill or release of diesel fuel the LADWP would follow standard emergency containment and cleanup practices, including immediate notification to all applicable agencies. The diesel fuel tank for the backup generator would be in a double walled tank placed in an underground secondary containment area Therefore, operation of the proposed replacement pump station would not be anticipated to 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.

Operation of the proposed underground pipelines would involve the transport of water at a maximum operating pressure of 195 psig. The accidental release of water would not, in itself, create a significant hazard to the public or environment involving the release of a hazardous material. However, in the event of a pipeline failure the LADWP would follow established emergency response procedures, including emergency pipeline shutdown, if warranted, the identification and isolation of all damaged pipeline sections, and subsequent pipeline repair.

Following demolition of the existing Redmont Pump Station, no new facilities or activities would occur at the site which would increase the potential for upset or accident conditions involving the release of hazardous materials into the environment. Operation would typically be limited to routine inspections and maintenance of the existing Redmont Reservoir.

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. Two schools exist within one-quarter mile of the proposed replacement pump station and portions of the proposed pipeline alignment, including:

- Verdugo Hills High School (10625 Plainview Avenue, Tujunga), approximately 1,000 feet west of the proposed pipeline route
- Plainview Avenue Elementary School (10819 Plainview Avenue, Tujunga), approximately 1,100 feet northwest of the proposed replacement pump station.

A search of the Los Angeles Unified School District (LAUSD) new school construction list identified no proposed new school facilities within one-quarter mile of the proposed replacement pump station site or its associated pipelines.

As discussed in response to Initial Study Questions 3.7(a) and 3.7(b), above, the proposed project would not involve the use of substantial quantities of hazardous materials that would pose a risk to the public. Proposed construction and demolition activities would involve the excavation and transport of paving materials (e.g., asphalt, concrete, and road bed fill materials) and soils that could possibly be contaminated by vehicle-related pollution (e.g., oil, gasoline, diesel, and other automotive chemicals). All such materials would be transported and disposed of in accordance with applicable codes and

regulations. Such transport and disposal is not expected to involve acutely hazardous materials, substances or waste. Operation of construction and demolition equipment would produce air contaminant emissions. However, as addressed in response to Initial Study Question 3.3(d) (Air Quality), these emissions would not be generated at levels that are considered hazardous. Therefore, proposed construction and demolition activities would not be anticipated to have an adverse effect on nearby schools.

Operation of the proposed replacement pump station would require the periodic testing of its emergency diesel generator equipment. However, as addressed in response to Initial Study Question 3.3(d) (Air Quality), testing would not create air quality emissions at levels that are considered hazardous. Additionally, as addressed in response to Initial Study Question 3.7(b), above, if a diesel fuel spill at the proposed replacement pump station occurred, the LADWP would immediately implement its emergency response, containment and cleanup practices to minimize potential hazardous materials exposures. Therefore, operation of the proposed replacement pump station would not be expected to adversely affect students attending the above-referenced schools.

Following demolition of the existing Redmont Pump Station, no new facilities or activities would occur at the site which would increase hazardous emissions or handling of hazardous or acutely hazardous materials, substances, or waste. Operation would typically be limited to routine inspections and maintenance of the existing Redmont Reservoir. Therefore, no impacts to students attending schools within one-quarter mile of the existing Redmont Pump Station Site would be anticipated to occur.

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?

NO IMPACT.

A Phase I Environmental Site Assessment (Phase I ESA) was prepared for the proposed project area in January 2007, and is included as Appendix B of this Initial Study (Essentia Management Services, 2007). The purpose of a Phase I ESA was to conduct a baseline environmental evaluation of the proposed replacement pump station property in anticipation of a potential property transaction (e.g., sale of the property). The Phase I ESA was performed in accordance with the American Society for Testing and Materials (ASTM) Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, Designation E 1527-05. This version of the ASTM standard complies with the Federal All Appropriate Inquiry (AAI) rule (40 CFR Part 312 – Standards and Practices for All Appropriate Inquiries).

Included as part of the Phase I ESA, a government records search was conducted for a one-mile radius of the existing and proposed pump station sites and their associated pipeline alignment; the search identified hazardous materials sites listed pursuant to Government Code Section 65962.5. The report presents the results of a search of 28 federal and 23 State and local databases, along with a description of each database that lists the addresses of sites of known: Underground Storage Tanks (USTs); landfills; hazardous waste generation or treatment, storage and disposal facilities; and, subsurface contamination. Results of the search identified the following sites within one mile of the proposed project area:

- One Resource Conservation and Recovery Act (RCRA) Large Quantity Generator of hazardous waste (RCRA-LQG) has been identified within 0.25 mile of the proposed project area. The RCRA-LQG is identified as Verdugo Hills High School, located at 10625 Plainview Avenue. The hazardous waste is identified as "other inorganic solid waste."

- One RCRA Small Quantity Generator of hazardous waste (RCRA-SQG) has been identified within 0.25 mile of the target property. The RCRA-SQG is identified as John L. Ritter, located at 10807 Tujunga Canyon Boulevard. The type of hazardous waste is not identified.

The proposed project area, including the proposed replacement pump station site and its associated pipelines, was not listed on any databases. Therefore, the proposed project would not be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. The proposed project would not be expected to 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 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 area is the Bob Hope Airport, located approximately six miles southeast of the proposed project area in Burbank (Thomas Brothers, 2007). Due to the distance of the proposed project area to the nearest airport, no aviation safety hazards would be expected to occur. Once operational, the proposed replacement pump station and its associated pipelines would typically be unmanned, and would not interfere with, nor be affected by, airport operations. Following demolition of the existing Redmont Pump Station activities at the site would be limited to periodic inspections and maintenance of the existing Redmont Reservoir.

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 area is not located within the vicinity of a private airstrip (Thomas Brothers, 2007). Therefore, proposed construction and demolition activities would not impact any private airstrips. Similarly, operation of the proposed replacement pump station and its associated pipelines, as well as continued operation of the existing Redmont Reservoir, would typically be limited to routine inspection and maintenance activities which would not be located in close proximity to a private airstrip.

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 be expected to substantially impair or physically interfere with an adopted emergency response plan or a local, State, or federal agency's emergency evacuation plan. Proposed pipeline construction along North Tujunga Canyon Boulevard would temporarily close one lane of traffic for up to one month. However, prior to any pipeline construction activities a traffic control plan in coordination with the Los Angeles Department of Transportation (LADOT) would be prepared to detour and delineate the traffic lanes around the work area(s). Additionally, with implementation of Mitigation Measures T-1, T-3, T-4 and T-5, as addressed in Initial Study Section 3.15 (Transportation and Traffic), potential interferences with emergency response services would be reduced to a level of less than significant.

As described above in response to Initial Study Questions 3.7(b), above, the LADWP has specific safety measures and protocols in the event of any pipeline or onsite pump station equipment failures. Thus, operation of the proposed replacement pump station and its associated pipelines would not interfere with emergency response or evacuation plans. Following demolition of the existing Redmont Pump Station no new facilities or activities would be implemented at its site which could interfere with an emergency response or evacuation plan.

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?

NO IMPACT. The proposed project area is not designated by the City of Los Angeles as being located within a Mountain Fire District, Fire Buffer Zone, or Very High Severity Fire Hazard Zone (City of Los Angles, 2007). Therefore, proposed construction, demolition and operational activities would not expose any 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?	☐	☐	☒	☐
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)?	☐	☐	☒	☐
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?	☐	☐	☒	☐
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?	☐	☐	☒	☐
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?	☐	☐	☒	☐
f. Otherwise substantially degrade water quality?	☐	☐	☒	☐
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?	☐	☐	☐	☒
h. Place within a 100-year floodplain structures that would 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?	☐	☐	☒	☐
j. Inundate by seiche, tsunami, or mudflow?	☐	☐	☐	☒

Response to Questions

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

LESS THAN SIGNIFICANT IMPACT. Proposed construction and demolition activities would require water, as necessary, to control fugitive dust. Fugitive dust emissions 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 adjacent to the proposed replacement pump station site, the existing pump station site, and along the proposed pipeline alignment.

In addition to daily construction and demolition water needs, dewatering may be needed if construction occurs in areas with high groundwater levels. The groundwater would be removed during excavation, usually by pumping it from the ground through dewatering wells. The extracted groundwater would first be treated for any contaminants, if present, before being pumped into storm drains located nearby.

Following construction, the proposed pipelines would require hydrostatic testing. A hydrostatic test involves filling a test section of a pipeline with fresh water and increasing pressure to a predetermined level. Such tests are designed to prove that the pipe, fittings, and weld sections would maintain mechanical integrity without failure or leakage under pressure. Each of the two proposed pipelines would be tested with an estimated 24,500 gallons of water, for a total of 49,000 gallons. The pipelines would be filled with water and pressurized. After 24 hours the pressure would be tested again. Following testing the water would be de-chlorinated and discharged into nearby storm drains. Test water would be obtained from the LADWP.

The discharge water from dewatering, if needed, would not be expected to contain contaminants that would cause its release to violate any water quality standards or waste discharge requirements. Water discharge from dewatering activities would be carried out in accordance with, and would adhere to, the proposed project's SWPPP, as required by its required NPDES permit. The SWPPP would be submitted to the Los Angeles Regional Water Quality Control Board (RWQCB) for review and approval prior to proposed construction and demolition activities. Compliance with the SWPPP would ensure that the potential for violating water quality standards would be less than significant.

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. As addressed in response to Initial Study Question 3.8(a), above, dewatering during proposed construction and demolition activities may be needed if areas with high groundwater levels (i.e., shallow depth to groundwater) are encountered. The water would be discharged into storm drains located nearby. In the event that dewatering is required, it is not expected to occur in quantities that would substantially deplete groundwater supplies or interfere significantly with groundwater recharge. Less-than-significant impacts to groundwater supplies would be expected to occur.

The proposed pipeline alignment would be placed in an existing asphalt paved road which is already impervious. No loss of permeable surface would occur due to construction and operation of the proposed pipelines. The proposed site for the replacement pump station is currently vacant land. Construction of the proposed replacement pump station would result in the loss of some permeable surface area; however, this loss will be minimal (approximately 20,255 square feet) and thus would not be expected to significantly affect groundwater supplies or recharge. The existing Redmont Pump Station is fully asphalted or paved and does not provide a means for groundwater recharge. Following demolition of the existing Redmont Pump Station the footprint of the facility would be resurfaced with concrete or asphalt.

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. Implementation of the proposed project would not substantially alter the existing drainage pattern of the proposed project area. The majority of the proposed project area is developed with residential uses, and its drainage pattern is defined primarily by roadways and storm drains. Proposed construction and demolition activities may result in minor short-term alterations to overland flow; however all drainage flows would be routed to the existing stormwater infrastructure along local roadways. Additionally, no streams or rivers are located in or near the proposed project area. Compliance with the proposed project's SWPPP during proposed construction and demolition activities would ensure that the impacts related to erosion or siltation, on- or off-site, would be less than significant.

The proposed replacement pump station site would be fully surfaced with concrete and/or asphalt. Final design of the proposed replacement pump station would include appropriate drainage plans for surface water flow to be directed to the existing street drainage system and storm drain infrastructure. Following construction of the proposed pipelines and demolition of the existing Redmont Pump Station, all existing street drainage systems and storm drains that may be affected would be restored.

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. As addressed in response to Initial Study Question 3.8(c), above, proposed construction and demolition activities would not substantially alter the existing drainage pattern of the proposed project area, and overland flow would continue to be directed to nearby stormdrains. There are no stream or river courses in the proposed project area which would be affected. In addition, if dewatering is required, water would be pumped and discharged into storm drains located nearby, avoiding erosion and surface run-off. Compliance with the proposed project's SWPPP during proposed construction and demolition activities would ensure that impacts related to flooding, on- or off-site, would be less than significant.

Following the completion of all proposed construction and demolition activities, all existing street drainage systems and storm drains which may be affected would be restored. Additionally, final design of the proposed replacement pump station would include appropriate drainage plans for surface water flow to be directed to the existing street drainage system and storm drain infrastructure. Therefore, upon completion of all proposed construction and demolition activities, no permanent alternations to the proposed project area's existing drainage pattern would occur that could substantially increase the rate or amount of surface runoff or result in flooding on- or off-site.

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. As addressed in response to Initial Study Question 3.8(a), above, discharge from dewatering, if needed, would be minimal, and would not be expected to exceed the existing or planned capacity of the local stormwater drainage system. All dewatering discharges would be carried out in accordance with the proposed project's SWPPP, as required by its NPDES permit.

Fugitive dust emission at the proposed construction and demolition 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 within the proposed project area. Therefore, the impact of dust control water on water quality and runoff would be less than significant.

Hydrostatic test water would become construction waste, and could potentially provide a source of polluted discharge into the existing stormwater drainage system. However, all hydrostatic test water would be treated for contaminants and toxic substances to meet the NPDES hydrostatic test permit before being discharged, as approved by the local Regional Water Quality Control Board or Bureau of Sanitation. All hydrostatic test water that does not meet the NPDES hydrostatic test permit requirements would be discharged to an appropriate waste handling facility and not to storm drains which lead to surface waterbodies. Operation of the proposed replacement pump station and its associated pipelines would typically be limited to routine inspections and maintenance. Little or no water requiring discharge into the proposed project area's existing stormwater drainage system would occur. No new facilities or activities at the existing Redmont Pump Station site would occur following proposed demolition. Continued inspections and maintenance of the existing Redmont

Reservoir would require little or no water discharges into the proposed project area's existing stormwater drainage system. Therefore, operation of the proposed project would not be expected to contribute to runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.

f. Otherwise substantially degrade water quality?

LESS THAN SIGNIFICANT IMPACT. Proposed construction and demolition activities could slightly increase for erosion potential at a local scale due to grading and excavation. However, the increased potential would be temporary in nature, and compliance with the proposed project's SWPPP would reduce related impacts to a level of less than significant.

Construction and demolition equipment and trash containers may potentially leak contaminants, thereby increasing the possibility of washing contaminated runoff into nearby stormwater drains. However, the amount of contaminants that would leak from trash containers would be anticipated to be negligible. Potential sources of water quality contamination from heavy equipment spills at staging and refueling sites would have a higher risk, as leaked or spilled pollutants could wash into a stormwater drains during a storm event and degrade the water quality. However, compliance with the proposed project's SWPPP, potential impacts associated with water contamination during proposed construction and demolition activities would be expected to be less than significant.

Operation of the proposed replacement pump station and its associated pipelines would typically be limited to routine inspections and maintenance. Little or no water requiring discharge into the proposed project area's existing stormwater drainage system would occur. No new facilities or activities at the existing Redmont Pump Station site would occur following proposed demolition. Continued inspections and maintenance of the existing Redmont Reservoir would require little or no water discharges into the proposed project area's existing stormwater drainage system. Therefore, operation of the proposed project would not be expected to substantially degrade water quality.

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 involves construction and operation of the proposed replacement pump station and its associated pipelines and demolition of the existing Redmont Pump Station; it does not include the development of any housing. The proposed replacement pump station, its associated pipelines, and the remaining Redmont Reservoir (located at the existing Redmont Pump Station site) would all be unmanned, and would require only periodic visits by LADWP personnel for inspection and maintenance activities. Additionally, 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. As addressed in response to Initial Study Question 3.8(g), above, the proposed project area does not fall within a 100-year flood area as depicted on the Los Angeles Flood Hazard Map (BOE, 2002). The proposed project involves construction and operation of a replacement water pump station and its associated pipelines, and demolition of the existing Redmont Pump Station. No aspect of the proposed project would place a structure or structures within a 100-year flood area that could 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?

LESS THAN SIGNIFICANT IMPACT. The proposed project area in not located within a 100-year or 500-year flood zone, and does not include the construction of, or improvements to, a dam or levee. In the unlikely event that one of the proposed pipelines between the existing Redmont Reservoir and

the proposed replacement pump station fails, localized flooding could occur. However, under such a scenario, LADWP's emergency response procedures would be followed. The pipeline's pumps would be shut off and/or safety valves would be closed in order to isolate the break in the pipeline. The volume of water released in such an event would be limited to the amount of water contained in the isolated section of ruptured pipeline located between shut-off valves, which would not be expected to yield enough water to pose a significant threat to life or property. Following demolition of the existing Redmont Pump Station no new facilities or activities at its site would occur that increase the exposure of people or structures to flooding.

j. Inundation by seiche, tsunami, or mudflow?

NO IMPACT. The proposed project area is more than 20 miles from the nearest shoreline, the Santa Monica Bay, and it is 1,645 feet above mean sea level (Google, 2007). As such, the proposed project area is not at risk of inundation by tsunami. Additionally, the Los Angeles General Plan Safety Element Exhibit G confirms that the proposed project area in not at risk of inundation due to tsunami and that is does not lie within a Potential Inundation Area (City of Los Angeles, 1996d). Although the proposed replacement pump station and its associated pipelines would connect to the existing Redmont Reservoir, there would be no risk of inundation due to seiche because the reservoir is covered and entirely underground. As addressed in response to Initial Study Question 3.6(a)(iv), no element of the proposed project would be at risk due to inundation by mudflow because the surrounding area is not at risk of landslide, and much of the surrounding land is either paved or occupied by residential structures.

3.9 Land Use and Planning

LAND USE AND PLANNING – Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Physically divide an established community?	☐	☐	☐	☒
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?	☐	☐	☐	☒

Response to Questions

a. Would the project physically divide an established community?

NO IMPACT. The proposed project area is located in the community of Sunland, within the jurisdictional boundaries of the City of Los Angeles. The proposed replacement pump station site would be located on three contiguous, undeveloped parcels of land at the northwest corner of the North Tujunga Canyon Boulevard and Hillrose Street intersection. The proposed site is surrounded by single family residential homes to the north and west. The south side of the proposed replacement site is paralleled by Hillrose Street; land uses along this street include one multi-family residential complex located at the southwest corner of North Tujunga Canyon Boulevard and Hillrose Street intersection, and several single family residential homes to the west from the complex. The majority of land to the east of the proposed replacement site is an open space area (flood control), although single family residential homes are located along its northern boundary and a neighborhood commercial market is located to its south, adjacent to the intersection of North Tujunga Canyon

Boulevard and Hillrose Street. Please refer to Figure 3.1-1 for photos of both the proposed replacement and existing pump station sites.

The existing Redmont Pump Station is located at the northeast corner of the North Tujunga Canyon Boulevard and Summitrose Street intersection, and consists of the station itself and the Redmont Reservoir, which is a below-ground, covered water storage reservoir. All sides of the site are surrounded by single family residential homes.

Land uses flanking both sides of North Tujunga Canyon Boulevard, along the proposed pipeline ROW, are comprised of single family residential homes, with the exception of the neighborhood commercial market and multi-family residential complex referenced above, which are located along the east and west sides of the North Tujunga Canyon Boulevard and Hillrose Street intersection, respectively.

Construction of the proposed project (construction of the proposed replacement pump station and its associated water pipelines, and demolition of the existing Redmont Pump Station) would be temporary in nature and would not divide an established community. Additionally, the proposed replacement pump station would be located on land that is currently undeveloped, the proposed water pipelines would be located below ground in a public roadway, and the existing site is currently occupied by the Redmont Pump Station and Reservoir.

Once operational, the proposed replacement pump station and associated pipelines would require only periodic inspection and maintenance activities by existing LADWP personnel. Similarly, continued operation of the Redmont Reservoir would only require the same type of periodic inspection and maintenance. No long-term activities or structures that could physically divide the surrounding community, locally or regionally, would occur.

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?

NO IMPACT. The proposed replacement pump station would be a public facility (service) owned and operated by the LADWP. The proposed replacement pump station would be located on land that is zoned R1-1 (Low Density Single Family Residential) (City of Los Angeles, 2007a). Per Section 14.00 (A) (6) of Article 4, Chapter 1 (General Provisions and Zoning) of the City of Los Angeles Municipal Code, the proposed replacement pump station is a permitted use within the Low Density Single Family Residential zoning designation (City of Los Angeles, 2007b). Therefore, the proposed replacement pump station would be consistent with adopted zoning.

The General Plan land use designation for the proposed replacement pump station is Low Density Residential (Single Family) (City of Los Angeles, 2007c). Allowable uses on lands designated Low Density Residential (Single Family) are the same as those for its corresponding Low Density Single Family Residential zoning designation (City of Los Angeles, 2007c). Therefore the proposed replacement pump station would be consistent with the City of Los Angeles' adopted General Plan land use designation for the site. In addition, Chapter 9 (Infrastructure and Public Services) of the City of Los Angeles' "Citywide General Plan Framework - An Element of the City of Los Angeles General Plan," recognizes that the City's existing infrastructure, including its water supply infrastructure, needs to be evaluated on an on-going basis to determine its viability relative to its sustainability, and that existing facilities and infrastructure that have deteriorated due to their age, or have become obsolete, should be replaced (City of Los Angeles, 2001). Chapter 9 also identifies the need to provide adequate water supplies, storage facilities, and delivery systems to existing and future residents and businesses as a City-wide goal (Goal 9C) (City of Los Angeles, 2001). The proposed

replacement pump station would modernize the design, functionality and efficiency of the existing Redmont Pump Station, and improve its service reliability to the communities of Tujunga and Sunland. Therefore, the proposed replacement pump station would be consistent with and support the public infrastructure and community development and sustainability goals, policies and objectives of the City of Los Angeles General Plan.

The proposed pipelines connecting the existing Redmont Reservoir to the proposed replacement station would be public service facilities located within an existing public ROW (North Tujunga Canyon Boulevard). Therefore, placement and operation of the proposed pipelines would be consistent with the adopted Zoning Ordinances and General Plan land use designations of the City of Los Angeles (City of Los Angeles, 2007d).

Removal of the existing Redmont Pump Station would not require any change to its site's General Plan land use designation (Low Density Residential [Single Family]) or zoning (Low Density Single Family Residential). Therefore, its removal would be consistent with adopted City of Los Angeles General Plan and Zoning Ordinances.

As summarized in Initial Study Section 3.17 (Mandatory Findings of Significance), all potentially significant environmental impacts associated with implementation of the proposed project can be avoided or mitigated to a level of less than significant. Therefore, no conflicts with adopted land use plans, policies or regulations for the avoidance or mitigation of environmental effects would occur.

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

NO IMPACT. The proposed project area is located in the fully developed residential community of Sunland. The proposed project sites (the proposed replacement pump station site, the proposed water pipelines alignment, and the existing Redmont Pump Station site) are not located within the boundaries of any adopted Habitat Conservation Plans or Natural Community Conservation Plans (City of Los Angeles, 2007e). The closest designated natural preserve is Tujunga Wash, which is located a minimum distance of one mile away from (north/northwest of) the proposed project area (City of Los Angeles, 1995).

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?	☐	☐	☐	☒
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?	☐	☐	☐	☒

Response to Questions

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?

NO IMPACT. The California Geologic Survey (previously known as the California Division of Mines and Geology) has classified urbanizing lands according to the presence or absence of significant sand, gravel, or stone deposits that are suitable as sources of aggregates. These areas are called Mineral Resources Zones (MRZ). The classification system is intended to ensure that through appropriate lead agency policies and procedures, mineral deposits of statewide or regional significance are considered in agency decisions.

The MRZ-2 Mineral Resource Zone classification includes those areas where adequate information indicates that significant mineral deposits are present, or there is a high likelihood for their presence and development should be controlled. According to mapped MRZ-2 Zones contained in the City of Los Angeles General Plan, the proposed project area is not located in a designated as MRZ-2 Zone (City of Los Angeles, 2001). Therefore, impacts to a known mineral resource that would be of value to the region and its residents would not occur.

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. The proposed project area is not located in an area designated as containing locally important mineral resources (City of Los Angeles, 2001). Therefore, no aspect of the proposed project would result in the loss of availability of a locally important mineral resource recovery site.

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?	☐	☒	☐	☐
b. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☒	☐	☐
c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☒	☐	☐
d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☒	☐	☐
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒

To characterize existing noise conditions in the proposed project area, noise measurements were taken at eight sites on July 10, 2007 between the hours of 11:00 a.m. and 3:00 p.m. Measurements at all eight sites were performed using a Brüel & Kjær Model 2236 automated digital noise data acquisition system and sound meter mounted on a sturdy tripod. During the noise measurements, a large windscreen covered the sound meter's microphone to dampen-out the effect of unwanted wind-generated noise. At each site 15 minutes of data were collected and stored internally within the sound meter for subsequent downloading and post-processing on a computer. Both before and after each set of measurements were taken, a Brüel & Kjær calibrator with calibrations traceable to the National Institute of Standards and Technology was used to calibrate the sound meter to ensure that the measured sound levels readings were accurate. Sound level data samples were recorded at one-second intervals. At the conclusion of each set of measurements the values for Equivalent Noise Level (Leq), minimum sound level (Lmin), maximum sound level (Lmax), and three percentile noise levels (L_{10}, L_{50} and L_{90}) for the full 15-minute period were written down on a data sheet; a buffer was then placed on the sound meter and it was reset to prepare for the measurements to be taken at the next site. Prevailing weather conditions were noted along with any other factors that might adversely affect the noise measurements. Figure 3.11-1 provides an aerial photograph identifying the location of the measurement sites. Table 3.11-1, below, provides a summary of the noise measurement taken at each site.

Table 3.11-1 Existing Noise Measurements (in dBA)*

Site No. and Location	Time	Leq	Lmax	Lmin	L_{10}	L_{50}	L_{90}
Site 1. Intersection of Summitrose Street and North Tujunga Canyon Boulevard (northwestern corner)	11:23	65.0	85.4	41.2	67.0	56.5	47.5
Site 2. Intersection of Summitrose Street and Redmont Avenue (northeastern corner)	11:41	60.3	82.3	42.8	60.0	51.0	44.5
Site 3. West Side of Redmont Avenue (just northeast of the Redmont Reservoir)	12:01	51.6	64.6	37.8	55.0	47.5	41.0
Site 4. North Side of Hillrose Street (southwestern tip of proposed replacement site)	12:28	60.0	73.2	41.3	64.0	54.0	46.0
Site 5. West Side of North Tujunga Canyon Boulevard (northeastern tip of proposed replacement site)	12:49	57.9	72.2	39.9	62.5	50.5	44.0
Site 6. South Side of Hillrose Street (across the street from the proposed replacement site)	13:09	58.8	78.3	38.4	61.5	51.0	41.5
Site 7. North Tujunga Canyon Boulevard (just northwest of the northwestern speed bump)	13:32	59.4	77.6	43.2	62.0	51.5	46.0
Site 8. North Tujunga Canyon Boulevard (at the intersection with Mountain Avenue)	14:27	59.7	77.6	37.0	63.5	50.0	40.5

* dBA equals "A-weighted" decibels.

Site 1. The highest average noise level with a Leq value of 65.0 dBA, and the highest maximum noise level with a Lmax value of 85.4 dBA was recorded at Site1. This site is located directly across Tujunga Canyon Boulevard from the existing pump station in a residential area. The high noise measurement recorded at this site was due to the large amount of traffic that flowed through the Summitrose Street and North Tujunga Canyon Boulevard intersection during the measurement period. Although the intersection seemed particularly busy, it appeared that the traffic volume experienced during the 15-minute measurement period was typical for this time of day. Many loud vehicles including a fire engine (without sirens) passed through the intersection. The traffic noise completely masked the low-volume humming sound that emanated from the existing Redmont Pump Station across the street.

Site 2. Like Site 1, Site 2 was also across the street from the existing pumping station, but located on the northeast side of Redmont Avenue. The sound meter was placed about 50 feet away from the existing Redmont Pump Station. This site had the second highest average noise level with an Leq value of 60.3 dBA. The Lmax value here was also the second highest, with a value of 82.3 dBA. Again, the noise generated at Site 2 was due to the traffic flowing through the Summitrose Street and North Tujunga Canyon Boulevard intersection, which was approximately 120 feet away. A loud school bus produced particularly high noise levels as it passed by. As with Site 1, the ambient traffic noise experienced at Site 2 masked most of the noise generated by the existing Redmont Pump Station, even though Site 2 is closer to the station. The fact that the distance between Site 2 from the existing pump station is actually less than the distance from Site 1, but the Leq value measured at Site 2 was 4.7 dBA less, is consistent with the observation that the source of the majority of noise occurring at both Site 1 and Site 2 is not due to the pump station itself but rather the traffic traveling through the Summitrose Street and North Tujunga Canyon Boulevard intersection. A better measure of the sound emanating from the existing pumps is the ambient background noise that exists in the absence of traffic noise events. The Lmin value provides a better metric of the noise associated with the existing pump station. Site 2 had the second highest Lmin value, which was recorded at 42.8 dBA. Assuming that the existing pumps produce a consistently steady volume of noise during their operations (an assumption which is only partially true), 42.8 dBA should represent the upper limit for the noise level produced by the existing pumps at the property line of the nearest residence.

Aspen Environmental Group

Source: Mestre Greeve Associates, 2007.

Figure 3.11-1
Noise Measurement Site Location Map

Site 3. Site 3 was located on Redmont Avenue at the northeastern tip of the existing Redmont Reservoir. Although this site was only about 80 feet further away from the Summitrose Street and North Tujunga Canyon Boulevard intersection than Site 2, the average noise level measured at Site 3 dropped-off precipitously, being a significant 8.7 dBA less. This reduction in noise is greater than what could be accounted for due to increased distance alone. The reason for such a great attenuation in noise is due to the blocking of the line-of-site from Site 3 to the intersection by trees and the existing Redmont Reservoir and Pump Station. Site 3 had the quietest average noise level of all eight measuring sites with an Leq value of 51.6 dBA. The Lmax value at this site was also the lowest with a value of 64.6 dBA, and the Lmin was the second lowest. No noise could be heard coming from the reservoir itself.

Site 4. Site 4 is located at the southwestern tip of the proposed replacement pump station site, facing Hillrose Street. Hillrose Street experienced a higher than expected amount of traffic, which gave Site 3 the third highest average noise level with an Leq value of 60.0 dBA. Traffic noise was the main source of noise.

Site 5. Site 5 is located on the northeastern tip of the proposed site for the replacement pump station, North Tujunga Canyon Boulevard. The closest street to Site 5 experienced quite a bit of traffic for brief instances; however, there were periods of time during the measurement period when traffic was at a lull. These periods of reduced traffic activity caused the Leq value to drop a few of decibels from the value that was measured at Site 4. The Leq value measured at Site 5 was 57.9 dBA, giving this site the second quietest average noise level. The Lmax of 72.2 dBA was due to a passing school bus.

Site 6. As with Site 4, Site 6 is located on Hillrose Street. However, Site 6 is located across the street from the proposed project site on the southeast side of Hillrose Street, adjacent to the side of the apartment building which fronts North Tujunga Canyon Boulevard. The Leq value of 58.8 dBA that was measured at Site 6 was slightly more than one dBA less than the Leq that was measured across the street at Site 4. A passing driver that saw the sound meter revved his engine to produce the third highest Lmax value.

Site 7. Site 7 is located southeast of the apartment complex on the southwest side of North Tujunga Canyon Boulevard, and northwest of a speed bump that is slightly southeast of Hillrose Street. Traffic traveling along North Tujunga Canyon Boulevard slowed down for the speed bump. The Leq value of 59.4 dBA measured at Site 7 was close to the value that was measured further up the road at Site 6. This site happened to have the highest Lmin of all eight sites. The high Lmin value is due to the topography of North Tujunga Canyon Boulevard near Site 7, and the fact that the cars that passed by this site had to slow down for the speed bump. Going northwest, North Tujunga Canyon Boulevard widens slightly just prior to reaching Site 7. Cars appeared to be slowing down when the noise meter came into view at this site. The noise generated by the slowly passing vehicles was higher than the ambient noise that would have resulted from non-traffic related sounds. This higher than average noise that was always present explains why the Lmin for this site was the higher than for the other seven sites.

Site 8. Site 8 is located further southeast on North Tujunga Canyon Boulevard, on the northeastern side of the road where it intersects Mountain Avenue. The location of Site 8 is also near a speed bump, although a different speed bump than the one located at Site 7. The Leq of 59.7 dBA that was measured at Site 8 is only 0.3 dBA different from the Leq that was measured at Site 7, which was 325 feet away. In contrast to Site 7, which had the highest Lmin, Site 8 had the lowest Lmin.

Response to Questions

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 WITH MITIGATION INCORPORATED. The City of Los Angeles Noise Element specifies indoor noise standards for various land uses impacted by transportation noise sources. The City's noise standards are consistent with the State of California's noise standards. The interior noise standards are in terms of the Community Noise Equivalent Level (CNEL). The standards state that for residential land use, the interior noise exposure level shall not exceed 45 dBA. It should be noted that the noise standards contained in the Noise Element are for projects impacted by transportation sources of noise. The proposed replacement pump station would have to be able to comply with the noise ordinance, which is discussed below.

The community of Sunland is under the jurisdiction of the City of Los Angeles; therefore, the noise ordinance of the City of Los Angeles applies. The City of Los Angeles noise ordinance is specified in terms of the presumed minimum ambient noise levels. These noise levels for residential neighborhoods are shown in Table 3.11-2. The noise levels in Table 3.11-2 should not be exceeded by the noise source as measured in the affected residential lot.

Table 3.11-2 City of Los Angeles Ambient Noise Levels (in dBA)*

Land Use Noise Standards	Daytime 7:00 a.m. to 10:00 p.m.	Nighttime 10:00 p.m. to 7:00 a.m.
Residential	50	40

* dBA equals "A-weighted" decibels.

Additionally, the noise ordinance specifies that no person shall operate machinery or engage in any activity which would cause the noise level on the premises of any other occupied property within any adjoining unit to exceed the ambient noise level by more than five (5) decibels.

Section 41.40a of the municipal code of the City of Los Angeles addresses construction-related activities and states that "No person shall, between the hours of 9:00 p.m. and 7:00 a.m. of the following day, perform any construction or repair work of any kind upon, or any excavating for, any building or structure, where any of the foregoing entails the use of any power driven drill, riveting machine excavator or any other machine, tool, device or equipment which makes loud noises to the disturbance of persons occupying sleeping quarters in any dwelling hotel or apartment or other place of residence. In addition, the operation, repair or servicing of construction equipment and the job-site delivering of construction materials in such areas shall be prohibited during the hours herein specified."

The City of Los Angeles also limits the maximum noise levels of powered equipment and powered hand tools. Section 112.05 of the municipal code states that "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, no person shall operate or cause to be operated any powered equipment or powered hand tool that produces a maximum noise level exceeding the following limits at a distance of 50 feet:

a. 75 dB(A) for construction, industrial, and agricultural machinery including crawler-tractors, dozers, rotary drills and augers, loaders, power shovels, cranes, derricks, motor graders, paving compressors and pneumatic or other powered equipment.

b. 75 dB(A) for powered equipment of 20 HP or less intended for infrequent use in residential areas, including chain saws, log chippers and powered hand tools.

c. 65 dB(A) for powered equipment intended for repetitive use in residential areas, including

lawn mowers, backpack blowers, small lawn and garden tools and riding tractors."

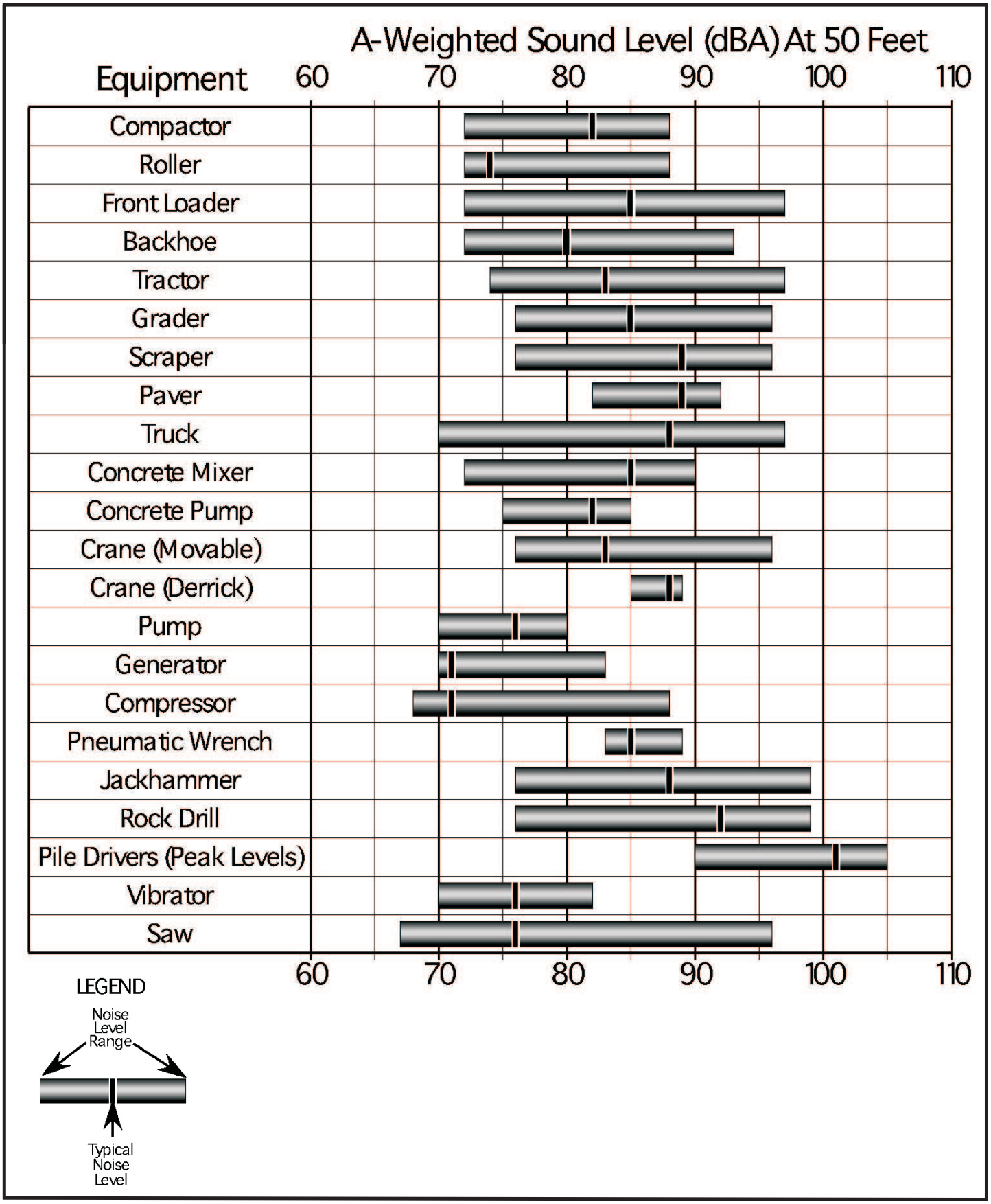
Section 41.40c of the municipal code specifies that "No person, other than an individual homeowner engaged in the repair or construction of his single-family dwelling shall perform any construction or repair work of any kind upon, or any earth grading for, any building or structure located on land developed with residential buildings under the provisions of Chapter I of this Code, or perform such work within 500 feet of land so occupied, before 8:00 a.m. or after 6:00 p.m. on any Saturday or national holiday nor at any time on any Sunday. In addition, the operation, repair or servicing of construction equipment and the job-site delivering of construction materials in such areas shall be prohibited on Saturdays and on Sundays during the hours herein specified. The provisions of this subsection shall not apply to persons engaged in the emergency repair of:

1. Any building or structure.
2. Earth supporting or endangering any building or structure.
3. Any public utility.
4. Any public way or adjacent earth."

Noise generated by construction equipment, including trucks, graders, bulldozers, concrete mixers and portable generators can reach high levels. Worst-case examples of construction noise at a distance of 50 feet are presented in Figure 3.11-2. The peak noise level for most of the equipment that would be used during proposed construction and demolition activities is estimated to be 70 to 95 dBA at a distance of 50 feet. Noise levels at further distances would be less. Noise levels generated by commonly used grading equipment (i.e. loaders, graders and trucks) generate noise levels that typically do not exceed the middle of the range shown in Figure 3.11-2. However, the noise levels shown in Figure 3.11-2 have been used for the purpose of this analysis and represent a "worst-case" estimate.

Construction of the proposed replacement pump station is anticipated to take 12 months to complete. As detailed in Initial Study Section 1.11.3 (Proposed Project), construction would involve excavation, concrete construction, structural metal roof framing, installation of a Mechanical Heating Ventilation and Air Conditioning (HVAC) system, installation of the electrical system, dry-walling, painting, paving and landscaping. While not all of these activities would produce significantly high noise levels, other activities would. The nearest existing residential areas are located a minimum of 20 feet from the proposed replacement site. Based on this distance, the nearest homes may experience worst-case unmitigated peak construction noise levels up to 100 dBA during grading operations. The average noise levels would be typically 5 to 15 dBA lower than peak noise levels. Average noise levels at the nearest residences could be in the range of 85 dBA (Leq). Occupants of the apartment complex located across the street from the proposed project site would also experience increased noise levels, as would the single family residences adjacent to the complex.

Construction of the two proposed pipelines is anticipated to take 30 days to complete. Construction of the proposed pipelines would require jackhammers, trenchers, frontloaders and graders, as well as other equipment to excavate North Tujunga Canyon Boulevard, install the two pipelines, and resurface the street. These pieces of construction equipment could generate noise levels in excess of 98 dBA at 50 feet. North Tujunga Canyon Boulevard is approximately 50 feet wide; therefore, the centerline of the road is approximately 25 feet from the property line of residences fronting North Tujunga Canyon Boulevard. Noise levels at these property lines could exceed 100 dBA.



Source: Mestre Greeve Associates, 2007.

Figure 3.11-2
Construction Equipment Noise Levels

Demolition of the existing Redmont Pump Station is scheduled to take 15 days to complete. Demolition would involve removal and salvaging of existing equipment, and demolition of the pump station itself. Bulldozers and graders may be used in the demolition process. These pieces of equipment produce noise levels of about 97 dBA at 50 feet. The existing pump station is located on two corners: North Tujunga Canyon Boulevard and Summitrose Street; and, Summitrose Street and Redmont Avenue. The location of the nearest residence to the existing pump station is about 50 feet; consequently, the maximum noise levels could reach 97 dBA and the average could be in the range of 82 dBA.

During proposed construction and demolition activities, adjacent residences would be exposed to potentially significant noise levels. Increased noise levels from off-site construction and demolition related traffic (delivery trucks, automobiles, and haul trucks) would also be potentially adverse (approximately 70 dBA to 80 dBA at 50 feet). However, with implementation of Mitigation Measure N-1, below, project-related activities would not be expected to result in the 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.

N-1 In accordance with Section 41.40 of the City of Los Angeles Municipal Code, all construction and demolition activities shall be limited to the hours between 7 a.m. and 9 p.m., Monday through Friday, and between 8 a.m. and 6 p.m. on Saturdays and national holidays. No construction or demolition activities shall occur on Sundays.

Once the proposed replacement pump station is in operation, it would generate noise from the water pumps and the diesel generator contained within it. The LADWP has estimated that each pump would produce noise levels of 85 dBA at five (5) feet. The proposed replacement pump station would include five pumps. Under normal operating conditions, all five pumps would not be expected to be operating at the same time. However, during high water demand periods, all five pumps may operate simultaneously. Under this scenario, at a distance of five (5) feet from the five operating pumps sound levels would reach 91 dBA. If a typical concrete block building is used, the noise levels just outside of the building would be approximately 66 dBA. If a standard concrete block building were to be used, it would provide at least 25 dBA indoor to outdoor attenuation. The preliminary site plan for the proposed replacement pump station shows that the nearest residence's property line is about 20 feet to the west of the pump station. At this distance, unprotected noise levels at the nearest residence could be as high as 54 dBA, which would exceed the City of Los Angeles ambient noise levels for residential areas (see Table 3.11-2, above).

The proposed replacement pump station would also include a diesel-fueled emergency generator. The emergency generator would not operate continuously; it would run as a backup during an emergency or during its regularly scheduled bi-weekly test, during which time it would run for no more than one hour. Although the LADWP has not yet identified the specific emergency generator to be used; when the generator is in operation it would generate noise, adding to the existing noise levels would be produced by the proposed replacement pumps. Without some form of upgrade to the proposed replacement pump station to increase its indoor to outdoor sound attenuation, unmitigated sound levels would be expected to result in a significant noise impact to nearby residences exceed the City of Los Angeles ambient noise levels for residential areas.

As discussed above, the design of the building that houses the proposed diesel-fueled emergency generator and water pumps would affect the noise levels that are emitted from the building. The walls, roof, mufflers, and acoustic louvers could all be upgraded to minimize the sound emanating from the building. A 40 dBA indoor to outdoor attenuation is roughly the maximum that the building could achieve. With this level of attenuation, the noise level at the nearest residence would be just under 40 dBA and would be compliant with the City of Los Angeles noise ordinance.

With implementation of Mitigation Measures N-2 through N-4, below, operational effects of the proposed replacement pump station would not be anticipated to result in the 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.

N-2 Bi-weekly testing of the emergency generator shall be limited to the hours between 8:00 a.m. and 6:00 p.m., Monday through Friday. No testing shall occur on holidays.

N-3 A hospital grade muffler shall be fitted to the generator to dampen-out the sound that it produces.

N-4 Finalization of the proposed replacement pump station's design and equipment specifications shall include an acoustical analysis of the facility's attributes to ensure that outdoor noise levels during operation do not exceed the 40 dBA criteria specified by the City of Los Angeles.

Operation of the proposed pipelines would be limited periodic inspections and infrequent testing; these activities would not be expected to result in the 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.

Following demolition of the existing Redmont Pump Station, site-specific operational activities would be expected to decrease slightly due to the facility's removal. Only routine inspection and maintenance of the existing Redmont Reservoir would continue, which would not be anticipated to result in the 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.

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

LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED. Vibration levels from heavy equipment transport and operation, excavation, trenching, and jack hammering may be perceptible to nearby residential and commercial uses immediately adjacent to active and demolition construction zones. The peak vibration levels from proposed construction and demolition activities could produce perceptible vibration within about 50 feet of active demolition and construction zones. Although the detectibility of groundborne vibration is highly dependent on the soil types within the vicinity of the proposed project area, the type of equipment used, and the type of receptor structure, generated vibration could cause annoyances to sensitive receptors located within 50 feet of active construction and demolition zones. Implementation of Mitigation Measure N-1, above, would restrict the hours and days that adjacent properties would be subject to construction and demolition activities, thereby alleviating potential nuisances from vibration.

Operation of the proposed replacement pump station could potentially increase groundborne vibration and noise in the immediate vicinity of the facility. However, implementation of Mitigation Measures N-2 through N-4, above, would minimize potential effects on surrounding residences.

Operation of the proposed underground pipelines would not create any groundborne vibrations or groundborne noise. Following demolition of the existing Redmont Pump Station no project-related facilities at its site would generate groundborne vibration or noise.

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 SIGIFICANT WITH MITIGATION INCORPORATED. As detailed in response to Initial Study Question 3.11(a), above, operation of the proposed replacement pump station would

permanently increase ambient noise levels in its immediate vicinity. However, with implementation of Mitigation Measures N-2 through N-4 impacts would be reduced to a level of less than significant.

Operation of the proposed underground pipelines would not result in a permanent increase in ambient noise levels; activities would be limited to periodic maintenance and inspection activities that would not involve the use of any heavy equipment. Following demolition of the existing Redmont Pump Station no new facilities or activities at the site would occur that could permanently increase ambient noise levels above existing levels.

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 WITH MITIGATION INCORPORATED. As detailed in response to Initial Study Question 3.11(a), above, proposed construction and demolition activities would result in temporary increases in the ambient noise levels of the proposed project area above existing levels. Although peak noise level increases would be intermittent, the predominant land use in and adjacent to the proposed project area is residential, which would be expected to be sensitive to any substantial increase in existing ambient noise levels. Additionally, the duration of construction-related activities at the proposed replacement pump station site would be 12 months, which would affect surrounding residences for a relatively long period of time. At this site, the nearest homes may experience worst-case unmitigated peak construction noise levels up to 100 dBA during grading operations and average noise levels (Leq) at the nearest residences could be in the range of 85 dBA (Leq). Occupants of the apartment complex and adjacent single-family residences on the south side to Hillrose Street would be affected as well. However, with implementation of Mitigation Measure N-1 at all proposed construction and demolition sites, potential impacts would be reduced to a level of less than significant

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. As addressed in response to Initial Study Question 3.7(e) (Hazards and Hazardous Materials), the nearest airport to the proposed project area is the Bob Hope Airport, located approximately 6 miles southeast of the proposed project site in Burbank. The proposed project would have no impact on people residing within the boundaries of an airport land use plan or within two miles of a public airport or public use airport.

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. As addressed in response to Initial Study Question 3.7(f) (Hazards and Hazardous Materials), the proposed project area is not located within the vicinity of a private airstrip. Therefore, the proposed project would have no impact on any private airstrips or people residing within the vicinity of private airstrip.

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)?	☐	☐	☐	☒
b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

POPULATION AND HOUSING - Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Response to Questions

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. 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.

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

Location	Population	Housing Units		Employment	
		Total Units	Vacancy	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%)

Source: U.S. Census Bureau, 2007.
Note(s): a. Accounts for population greater than 16 years of age and in Labor Force.

As summarized in Table 1.11-1 (Construction Summary – Proposed Replacement Pump Station), construction of the proposed replacement pump station would require a maximum construction crew of nine workers would be needed for an estimated 78 working days. As summarized in Table 1.11-2 (Construction Summary – Proposed Pipelines), proposed pipeline construction would require a maximum construction crew of 10 workers for an estimated 30 working days; and, as summarized in Table 1.11-3 (Summary of Removal Activities – Existing Redmont Pump Station) proposed demolition of the existing Redmont Pumping Station would require a maximum construction crew of five workers for an estimated 15 working days. In order to maintain water supplies to the existing Redmont Pump Station's service area, proposed demolition of the station would not occur until after the proposed replacement pump station and its associated pipelines are operational. Therefore, implementation of the proposed project would result in a maximum workforce of 19 persons if construction of the proposed pipelines and replacement pump station occur simultaneously.

It is assumed that required construction and demolition personnel would come from within Los Angeles County, and specifically within the City of Los Angeles; it is additionally assumed that the required workforce would be within commuting distance of the proposed project area. A maximum workforce of 19 persons would account for 0.03 percent of the available construction workforce within the City of Los Angeles according to the Year 2000 US Census. Therefore, the maximum construction and demolition workforce that may be needed would not permanently increase population levels or result in a decrease in available housing. Proposed construction or demolition activities would not impact existing or projected future population growth.

Operational activities associated with the proposed replacement pump station and its associated pipelines would typically include one site visit per week by LADWP personnel for routine maintenance, repair and inspection; no new LADWP employees would be required. Similarly,

following demolition of the existing Redmont Pump Station, activities at its site would be limited to continued inspection and maintenance of the existing Redmont Reservoir, which would not require any new LADWP employees. As such, implementation of the proposed project would not generate a direct increase in the permanent population of the proposed project area, or cumulatively exceed regional or local population projections.

The purpose of the proposed project is to replace the existing Redmont Pump Station to ensure continued water delivery to the communities of Tujunga and Sunland during both average and peak water demand periods. While the proposed replacement pump station would have a greater capacity than the existing Redmont Pump Station, it is intended only to meet existing and currently projected future demands; it is not considered growth serving or 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. There are no residential properties contained within the proposed replacement pump station site, the proposed pipeline ROW, or the existing Redmont Pump Station site. No housing or persons would be displaced by implementation the proposed project.

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

NO IMPACT. As addressed in the response to Initial Study Question 3.12(b), above, there is no existing housing contained within either the proposed replacement pump station site, the proposed pipeline ROW, or the existing Redmont Pump Station site.

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?	☐	☐	☐	☒
ii) Police protection?	☐	☐	☐	☒
iii) Schools?	☐	☐	☐	☒
iv) Parks?	☐	☐	☐	☒
v) Other public facilities?	☐	☐	☐	☒

Response to Questions

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?

NO IMPACT. Within the City of Los Angeles, the Los Angeles Fire Department (LAFD) provides fire prevention and suppression services and emergency medical services. The nearest LAFD station to the proposed project area is LAFD Station 24, located at 9411 Wentworth Street, approximately 2.5 miles west of the proposed project area in Sunland.

Fire protection could be required at any given construction or demolition site in the event of an accident. However, the likelihood of an accident requiring such a response would be low. As described above in response to Initial Study Checklist Question 3.7(h) (Hazards and Hazardous Materials), proposed project construction and demolition activities would not occur in areas of high fire danger. Therefore, the service capacities of local fire departments would not be anticipated to be adversely affected by proposed construction and demolition activities. Additionally, as discussed in response to Initial Study Question 3.15(e) (Transportation and Traffic), potential impacts related to emergency access during construction of the proposed pipelines can be mitigated to a level of less than significant with implementation of Mitigation Measures T-4 and T-5.

Operation of the proposed replacement pump station and its associated pipelines would not pose a substantial fire risk, since the proposed replacement station would be an unmanned facility requiring only periodic inspection and maintenance, and the proposed underground pipelines would only convey water under pressure. Following demolition of the existing Redmont Pump Station activities at its site would be limited to continued periodic inspection and maintenance of the existing Redmont Reservoir. Because the proposed project does not include the construction of residential housing, and would not require additional LADWP employees (refer to Initial Study Section 3.12, Population and Housing), operation of the proposed project would not reduce officer to population ratios or place additional demand on the public services of the LAFD.

ii) Police protection?

NO IMPACT. The City of Los Angeles Police Department (LAPD) provides police service to the Sunland area within the City of Los Angeles. The nearest LAPFD station to the proposed project area is the Foothill Community Police Station, located at 12760 Osborne Street, approximately six miles northwest of the proposed project area in the City of Pacoima (LAPD, 2007). During proposed construction and demolition activities security features such as controlled construction access and nighttime security lighting would be implemented, which would reduce the demand for police protection. Additionally, as discussed in response to Initial Study Question 3.15(e) (Transportation and Traffic), potential impacts related to emergency access during construction of the proposed pipelines can be mitigated to a level of less than significant with implementation of Mitigation Measures T-4 and T-5.

As addressed in response to Initial Study Question 3.13(a), above, once operational the proposed replacement pump station would be an unmanned facility requiring only periodic inspection and maintenance, and the proposed underground pipelines would only convey water under pressure. Following demolition of the existing Redmont Pump Station activities at its site would be limited to continued periodic inspection and maintenance of the existing Redmont Reservoir. Because the proposed project does not include the construction of residential housing, and would not require the need for additional LADWP employees (refer to Initial Study Section 3.12, Population and Housing), the proposed project would not reduce existing officer to population ratios or place additional demand on public police services of the LAPD.

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 Initial Study Section 3.12 (Population

and Housing), the proposed project would not induce population growth through the need for new employees or result in new housing, either directly or indirectly. Thus, implementation of the proposed project would not increase the need for new or expanded school facilities.

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 Initial Study Section 3.12 (Population and Housing), the proposed project would not induce population growth through the need for new employees or result in new housing, either directly or indirectly. Therefore, the proposed project would not increase the need for new or expanded park facilities. Please refer to Initial Study Section 3.14 (Recreation) for additional analysis on local and regional parks.

v) Other public facilities?

NO IMPACT. The demand for new or expanded hospital, library, power and data lines, and roadways is generally associated with an increase in housing or population. As addressed above and in Initial Study Section 3.12 (Population and Housing), the proposed project would not induce population growth through the need for new employees or result in new housing, either directly or indirectly. Consequently, implementation of the proposed project would not increase the need for new or expanded public facilities or require new or altered public utilities or infrastructure services above existing conditions. The purpose of the proposed project is to maintain water delivery to the area currently serviced by the existing Redmont Pump Station.

3.14 Recreation

RECREATION	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No 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 construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	☐	☐	☐	☒

Response to Questions

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. Local and regional public parks and recreational facilities located within a two mile radius of the proposed project area are listed in Table 3.14-1. In addition to these parks and facilities, an open space area which is used primarily for the purpose of flood control but is accessible to the public for passive recreational uses is located on the east side of North Tujunga Canyon Boulevard, across from the proposed replacement pump station site. The boundary of Angeles National Forest is located north, northeast and east of the proposed project area at a distance of approximately one mile away or greater (Rand McNally, 2006).

Table 3.14-1 Local Public Parks and Recreational Facilities

Park/Facility Name	Address	Approximate Distance from Project Area	Summary of Park/Facility Attributes
Howard Finn Park	7747 Foothill Boulevard, Sunland	0.5 mile (southwest)	Children's play area, picnic tables, volleyball courts, community garden.
Sunland Park and Recreation Center	8651 Foothill Boulevard, Sunland	1.5 miles (east)	Auditorium, gymnasium, multiple types of lighted and unlighted playing fields and courts, community room, skate park, multiple sports and fine and performing arts programs, related senior citizen center.
McGroarty Park (formerly Pasko Park) and Cultural Arts Center	7570 McGroarty Terrace, Sunland	0.75 mile (south/southwest)	Children's play area, picnic tables, tennis courts, open space, cultural arts center for fine and performing arts programs and performances.
Haines Canyon Park	Southern terminus of Canyon Avenue, Tujunga	1.5 miles (southeast)	Undeveloped open space park not recommended for public use but open from dawn to dusk.

Source: City of Los Angeles Recreation and Parks Department, 2007.

Construction of the proposed project (construction of the proposed replacement pump station and associated pipelines, and demolition of the existing Redmont Pump Station) is anticipated to take a maximum of 14 months. As addressed in response to Initial Study Question 3.12(a) (Population and Housing), the workforce required for construction would be anticipated to be within commuting distance of the proposed project area and thus would not be expected to result in a temporary increase in the local area's population. Once operational, the facilities associated with the proposed project would be inspected and maintained by the LADWP's existing workforce, and thus would not result in a permanent in-migration of new residents to the local area. Because the proposed project would not increase the local population, there would be no corresponding increase, temporarily or permanently, in the use of existing neighborhood or regional parks and recreational facilities which could lead to or accelerate their physical deterioration.

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 is limited to the construction and operation of the replacement Redmont Pump Station and its associated connecting pipelines, and demolition of the existing Redmont Pump Station. The proposed project does not include either the construction of any new recreational facilities, or the expansion of any existing recreational facilities which could have an adverse physical effect on the environment.

3.15 Transportation and Traffic

TRANSPORTATION/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)?	☐	☒	☐	☐
b. Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	☐	☐	☒	☐

TRANSPORTATION/TRAFFIC - Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	☐	☐	☐	☒
d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☒	☐	☐
e. Result in inadequate emergency access?	☐	☒	☐	☐
f. Result in inadequate parking capacity?	☐	☐	☒	☐
g. Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	☐	☐	☐	☒

Response to Questions

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 and demolition traffic on the roadways that provide access to the proposed project sites, including trucks delivering materials to the proposed sites, trucks transporting waste material away from the proposed project sites, and construction workers' vehicles commuting to and from the proposed project area. The second category of traffic impacts would be the physical impacts of the proposed pipeline construction activities that would occur within the ROW of the affected public roadways (i.e., lane closures, detours, driveway blockages, loss of parking, and disruptions to traffic and pedestrian movements). The third category of traffic impacts would be the impacts associated with operation of the proposed replacement pump station and its associated pipelines after their construction is complete. The traffic impacts associated with each of these construction and operation categories have been evaluated for the affected streets and intersections.

Existing Conditions. The roadways and intersections that would be most-directly affected by the project are shown in Table 3.15-1. The intersections listed are the intersections through which the proposed pipeline would be constructed. All of these roadways and intersections are within the jurisdiction of the City of Los Angeles.

Table 3.15-1 Affected Roadways and Intersections

Affected Roadways	Number of Lanes – Speed Limit
Redmont Avenue – North of Summitrose Street	2 – 25 mph
Summitrose Street – Between North Tujunga Canyon Blvd and Redmont Ave	2 – 25 mph
Tujunga Canyon Boulevard – Between Summitrose St and Hillrose St	2 – 30 mph
Hillrose Street – West of North Tujunga Canyon Boulevard	2 – 30 mph
Affected Intersections	**Intersection Control**
North Tujunga Canyon Boulevard at Summitrose Street	4-Way Stop Signs
North Tujunga Canyon Boulevard at Mountair Avenue	Stop Sign on Mountair
North Tujunga Canyon Boulevard at Fernglen Avenue	Stop Sign on Fernglen
North Tujunga Canyon Boulevard at Hillrose Street (Off-Set Intersection)	4-Way Stop Signs

To quantify the existing baseline traffic conditions, the proposed project area intersections were analyzed to determine their operating conditions during the morning and afternoon peak hours. Based on the peak hour traffic volumes, the turning movement counts, and the existing number of lanes at each intersection, the volume/capacity (V/C) ratios and levels of service (LOS) were determined for each intersection, as summarized in Table 3.15-2.

Table 3.15-2 Existing Intersection Levels of Service

Intersection	V/C Ratio & Level of Service	
	AM Peak Hour	PM Peak Hour
North Tujunga Canyon Blvd at Hillrose Street	0.313 – A	0.380 – A
North Tujunga Canyon Blvd at Fernglen Avenue	0.270 – A	0.320 – A
North Tujunga Canyon Blvd at Mountair Avenue	0.260 – A	0.333 – A
North Tujunga Canyon Blvd at Summitrose Street	0.427 – A	0.547 – A

The V/C ratio is a measure of an intersection's traffic volumes as compared to the theoretical capacity of the intersection. LOS is a qualitative indicator of an intersection's operating conditions that is used to represent various degrees of congestion and delay. It is measured from LOS A (excellent conditions) to LOS F (extreme congestion), with LOS A through D typically considered to be acceptable. The relationship between V/C ratios and LOS is as follows:

V/C RATIO	LOS
0 to 0.600	A
>0.600 to 0.700	B
>0.700 to 0.800	C
>0.800 to 0.900	D
>0.900 to 1.000	E
>1.000	F

As shown in Table 3.15-2, all of the proposed project's study area intersections currently operate at LOS A during the morning and afternoon peak hours. The traffic counts used to determine these levels of service were taken on Thursday, July 26, 2007.

According to the City of Los Angeles Department of Transportation's (LADOT's) "Traffic Study Policies and Procedures," a transportation impact at an intersection shall be deemed significant in accordance with the criteria outlined in Table 3.15-3, below. A project would not result in a significant impact at an intersection if the intersection were projected to operate at LOS A or B. The criteria also state that a project's impacts would not be significant and that a detailed traffic analysis would not be required if the project would generate fewer than 500 daily trips or fewer than 43 vehicle trips during the peak hour.

Table 3.15-3 Significance Criteria for Traffic Impacts

Level of Service	Final V/C Ratio	Project-Related Increase in V/C
C	> 0.700 – 0.800	Equal to or greater than 0.040
D	> 0.800 – 0.900	Equal to or greater than 0.020
E, F	> 0.900	Equal to or greater than 0.010

In addition, a project's impacts would be considered significant if a roadway would be closed to traffic as a result of construction activities.

Impacts. As stated previously, the first category of potential impacts relates to the level of traffic that would be generated by proposed construction and demolition activities. The anticipated truck volumes as well as the volume of traffic generated by construction workers and miscellaneous trips have been quantified, as shown in Table 3.15-4. The trip generation characteristics are based on work force estimates and quantities of material that would be transported to and from the proposed project area on a typical day. As the number of trips generated by proposed construction and demolition activities would fluctuate from day to day and from week to week throughout the duration of proposed activities, the traffic volumes shown in the Table 3.15-4 represent ranges in the levels of traffic that would be generated. The upper end of the range represents the time period during which proposed construction activities for the replacement pump station and its associated pipelines would be occurring simultaneously, which represents approximately 25 working days. The lower end of the range represents the time periods during which the replacement pump station would be under construction (before or after the overlap with proposed pipeline construction activities) or when the existing Redmont Pump Station would be removed.

Table 3.15-4 Generated Traffic During Construction

Traffic Category	Daily Traffic	Peak Hour Traffic	
		AM Peak Hour	PM Peak Hour
Trucks	20 to 40	4 to 8	4 to 8
Autos/Light-Duty Vehicles	60 to 120	15 to 30	15 to 30
Total	80 to 160	19 to 38	19 to 38

Table 3.15-4 indicates that proposed construction and demolition activities would generate from 19 to 38 vehicle trips during the morning and afternoon peak hours and from 80 to 160 trips per day. As the peak hour traffic volumes that would be generated by the proposed project would be below the LADOT's thresholds of 500 daily trips and 43 vehicle trips per hour, proposed construction- and demolition-generated traffic volumes would not require a detailed traffic impact analysis and potential impacts would be less than significant.

The evaluation of proposed construction and demolition impacts also includes the physical impacts associated with pipeline construction in public streets, which constitutes the second category of traffic impacts outlined above. This analysis characterizes the traffic impacts that would most likely occur as a result of the traffic disruptions and lane blockages within the street along the proposed pipeline alignment. The streets and intersections that would be impacted by these construction activities were listed previously in Table 3.15-1 (i.e., North Tujunga Canyon Boulevard).

Construction of the proposed pipelines would typically require a construction zone that ranges from 20 to 30 feet in width and from 200 to 400 feet in length to accommodate the activities of digging a trench, installing the pipes, back-filling, compacting the fill material, and reconstructing/paving the surface area. It is anticipated that the construction zone would advance linearly along the proposed route at an average rate of 40 to 80 feet per day. Any particular location would be directly impacted by the construction activities for a duration of one to five days under typical conditions.

The proposed alignment of the pipelines would result in the temporary blockage of at least one travel lane at each location where construction would be occurring. As North Tujunga Canyon Boulevard has only two travel lanes (one in each direction), the LADWP would ensure that sufficient width would be provided to accommodate one travel lane through the construction zone at all times. The use of flaggers would be required to control the two directions of travel through the single available lane. Although the lateral placement of the pipelines within the street has not yet been determined, it is anticipated that a travel lane and a shoulder would be impacted by proposed construction activities.

While the final alignment of the proposed pipelines has not yet been determined, proposed construction activities could also impact Hillrose Street, Summitrose Street, and Redmont Avenue. Construction impacts and issues for these streets would be the same as for North Tujunga Canyon Boulevard because they are also two lane roadways with parking along their shoulders.

To quantify the impacts of the pipelines' construction on the proposed project area's traffic conditions, the intersection levels of service were re-calculated using the assumption that only one lane of traffic would be provided through the intersections in the north-south direction while the construction zone was at the affected intersections. It was also assumed that the east-west traffic would be blocked by the construction zone in one of the directions (i.e., the direction with the lower traffic volume). The resulting intersection impacts are shown on Table 3.15-5. The table indicates that the intersection of North Tujunga Canyon Boulevard at Hillrose Street would be significantly impacted during the afternoon peak hour, and that the intersection of North Tujunga Canyon Boulevard at Summitrose Street would be significantly impacted during both the morning and afternoon peak hours. The other two intersections would not be significantly impacted if construction were to occur at these locations during peak periods.

Table 3.15-5 Project Impacts on Intersection Levels of Service

Intersection	V/C Ratio & Level of Service			
	Without Project	With Project	Project Impact	Significant?
North Tujunga Canyon/Hillrose				
AM Peak Hour	0.313 – A	0.560 – A	0.247	No
PM Peak Hour	0.380 – A	0.707 – C	0.327	Yes
North Tujunga Canyon/Fernglen				
AM Peak Hour	0.270 – A	0.533 – A	0.263	No
PM Peak Hour	0.320 – A	0.640 – B	0.320	No
North Tujunga Canyon/Mountair				
AM Peak Hour	0.260 – A	0.520 – A	0.260	No
PM Peak Hour	0.333 – A	0.660 – B	0.327	No
North Tujunga Canyon/Summitrose				
AM Peak Hour	0.427 – A	0.773 – C	0.346	Yes
PM Peak Hour	0.547 – A	1.040 – F	0.493	Yes

Potentially significant impacts could be mitigated by prohibiting pipeline construction during the afternoon peak period (4:00 p.m. to 6:00 p.m.) at the North Tujunga Canyon Boulevard/Hillrose Street intersection, and by prohibiting pipeline construction during both peak periods (7:00 a.m. to 9:00 a.m. and 4:00 p.m. to 6:00 p.m.) at the North Tujunga Canyon Boulevard/Summitrose Street intersection.

Proposed pipeline construction project would potentially result in the closure of a roadway to traffic because the construction zone could block Summitrose Street, Mountair Avenue, Fernglen Avenue, and/or Hillrose Street at the intersection of these streets at North Tujunga Canyon Boulevard, which would constitute a significant impact. The impact could be mitigated by preparing a detour plan to re-route traffic around the construction zone for the locations where a roadway would be blocked. North Tujunga Canyon Boulevard would not be totally blocked because a lane would be provided at all times during proposed construction.

The third category of potential impacts would be operation of the proposed replacement pump station and its associated pipelines. These impacts would be negligible because the completed replacement pump station and pipelines would rarely result in the generation of vehicular traffic. The only operational traffic associated with the completed project would be the traffic associated with periodic inspection, maintenance, and repair. Theses proposed activities would generate approximately one

trip per week, while the traffic generated by maintenance and repair activities would range from one to five vehicles during the peak periods and up to ten (10) vehicles per day. As these traffic volumes are well below the LADOT thresholds outlined above, operational impacts would be less than significant.

In summary, the proposed project would result in a significant impact at several locations relative to the traffic load and capacity of the affected street system without mitigation. However, with implementation of the following mitigation measures, potential impacts would be less than significant.

T-1 A construction area traffic control plan shall be prepared for each location where construction and demolition activities would encroach into the right-of-way of a public roadway. The plan will include, but not be limited to such features as warning signs, lights, flashing arrow boards, barricades, cones, lane closures, parking restrictions, and plating over the trench during non-working hours.

T-2 Pipeline construction shall not occur at the following locations during the designated peak periods: the North Tujunga Canyon Boulevard/Hillrose Street intersection (PM peak period) and the North Tujunga Canyon Boulevard/Summitrose Street intersection (AM and PM peak periods). The AM peak period is from 7:00 to 9:00 a.m. and the PM peak period is from 4:00 to 6:00 p.m., or as specified by LADOT.

T-3 A detour plan shall be prepared and implemented for locations where a public street would be blocked by construction and demolition activities (e.g. Hillrose Street, Fernglen Avenue, Mountair Avenue, and Summitrose Street at their intersections with North Tujunga Canyon Boulevard).

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)[1] 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. As detailed in response to Initial Study Question 3.15(a), above, proposed construction and demolition activities would generate up to 38 trips during the peak hour, and operation of the proposed project would generate up to five trips during the peak hour. As these traffic volumes are well below the CMP thresholds, a detailed CMP analysis is not required and the proposed project would not have a significant impact at a CMP intersection or on the freeway network. The proposed project would not, therefore, 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. As addressed in response to Initial Study Questions 3.7(e) and 3.7(f) (Hazards and Hazardous Materials), there are no public of private airports or air strips within the proposed project area. The closest airport to the proposed project area is the Bob Hope Airport, located approximately six miles southeast of the proposed project area in Burbank. Therefore, the proposed project would have no impacts on air traffic patterns or safety.

[1] Congestion Management Program for Los Angeles County, LA County Metropolitan Transportation Authority, July 22, 2004.

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 pipelines within public streets would potentially result in increased hazards to motorists, bicyclists, and pedestrians because construction activities would occur within the travel lanes and shoulders of public roadways, as detailed in response to Initial Study Question 3.15(a). In addition, during non-construction hours (i.e., at night and on weekends and holidays), the trench may remain unfilled and rough pavement conditions may exist within the construction zone. These situations could result in safety risks; however, potential impacts would be less than significant with implementation of Mitigation Measure T-1, above. There would be no substantial safety impacts associated with the operation of the proposed project.

e. Would the project result in inadequate emergency access?

LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED. The proposed project would potentially result in a significant impact relative to emergency access because pipeline construction activities within public streets could increase the response times for emergency vehicles (police, fire, and ambulance/paramedic units) and block or disrupt access to adjacent properties. Potential impacts would be significant if proposed construction activities would restrict access to or from adjacent land uses with no suitable alternative access and/or if the proposed construction activities would restrict the movements of emergency vehicles (police vehicles, fire vehicles, and ambulance/paramedic units) and there would be no reasonable alternative access routes available. However, with implementation of Mitigation Measures T-1 and T-3, as presented in response to Initial Study Question 3.15(a), above, and in conjunction with Mitigation Measures T-4 and T-5, below, potential impacts on emergency access would be less than significant.

T-4 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.).

T-5 Provide advance notification to affected property owners, businesses, residents, etc. regarding possible driveway blockages or other access obstructions, and implement alternate access and parking provisions where necessary. Ensure that emergency vehicle access would be available or rapidly implementable at all times to the properties along the pipelines' construction route.

f. Would the project result in inadequate parking capacity?

LESS THAN SIGNIFICANT IMPACT. The proposed project would result in temporary parking restrictions along the shoulder of North Tujunga Canyon Boulevard during the times when proposed construction and demolition activities would occur at each affected location. However, potential impacts would be less than significant because the duration of the parking displacement at any particular location would be short-lived (from one to five days), and because alternative parking would be available outside the limits of active construction and demolition zones. Proposed construction and demolition activities would also generate a parking demand associated with construction and demolition workers and equipment. However, the impacts of this parking demand would be less than significant because the proposed replacement pump station site and existing Redmont Pump Station site would provide for off-street staging. Following completion of all proposed construction and demolition activities on-site parking at both the proposed replacement pump station site and existing Redmont Pump Station site would be provided for all proposed operational activities (e.g., periodic inspections, maintenance and repair work by LADWP personnel.)

g. Would the project conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?

NO IMPACT. There are no transit lines currently operating on the roadways in the proposed project area. The proposed project would not, therefore, result in an impact on bus routes, access, or operations, and would not conflict with adopted policies, plans, or programs supporting alternative transportation.

3.16 Utilities and Service Systems

UTILITIES 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?	☐	☐	☒	☐
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?	☐	☐	☒	☐
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?	☐	☐	☒	☐
d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	☒
e. Result in a determination by the wastewater treatment provider, which serves or may serve the project determined that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐
f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐
g. Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☒

Response to Questions

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

LESS THAN SIGNIFICANT IMPACT. The sanitary sewer system that serves the proposed project area is operated under the jurisdiction of the City of Los Angeles Department of Public Works, Bureau of Sanitation.

For the City of Los Angeles, the Hyperion Treatment Plant (HTP) provides wastewater treatment needs. The Year 2006 daily average dry weather flow capacity of the HTP is 450 million gallons per day (mgd); it currently treats an average dry weather flow of approximately 362 mgd (City of Los Angeles Bureau of Sanitation, 2007). Wastewater collected in the proposed project area is conveyed to the HTP by major interceptor seewers that are fed by smaller collector systems.

During proposed construction and demolition activities, the amount of wastewater generated, including releases of hydrostatic test water for the proposed new pipelines, into the Los Angeles City sanitary sewer system would be considered a short-term minimal impact and would not result in a permanent increase to the HTP that would receive the wastewater.

Upon completion of the proposed project, little or no further wastewater would be generated. The proposed replacement pump station and its associated pipelines would be unmanned and would typically require only periodic maintenance and inspection. The proposed replacement pump station

would include restroom facilities for LADWP personnel that would access the facility an average of once per week. Following demolition of the existing Redmont Pump Station, activities would be limited to continued inspection and maintenance of the existing Redmont Reservoir.

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 addressed in response to Initial Study Question 3.16(a), above, the capacity of the HTP that serves the proposed project area would be adequate to provide wastewater services for proposed demolition and construction activities, as well as during proposed operational activities.

The LADWP is responsible for supplying, conserving, treating, and distributing potable water for the City of Los Angeles, including existing operations of the existing Redmont Pump Station and proposed operation of the replacement pump station. The LADWP obtains water from wells in local groundwater basins and the Los Angeles Aqueduct System, purchases water from the Metropolitan Water District of Southern California, and also receives recycled water from treatment and reclamation plants.

The proposed project would require water during proposed construction and demolition activities for dust suppression purposes, and for hydrostatic testing of the proposed pipelines, which would require an estimated 49,000 gallons of water. Due to the short-term nature of proposed construction and demolition activities, the water consumed would be considered less than significant and would not impact the local water supply.

The existing Redmont Pump Station contains five electric water pumps having a maximum operating rate of 1,900 gpm each, and an average operating rate of 1,800 gpm. The proposed replacement station would contain five water pumps having a maximum operating rate of 4,400 gpm, and an average operating rate of 2,200 gpm. The additional water would come from the LADWP's existing potable water system. While the proposed project would result in an increase to the amount of water delivered to the area, the objective of the proposed project is to replace the existing Redmont Pump Station to ensure continued water delivery to the communities of Tujunga and Sunland during both average and peak water demand periods. Therefore, while the amount of water delivered would increase, the amount of water provided would serve existing demands and would not require or result in the construction of new water treatment facilities or the expansion of existing facilities. As addressed in this Initial Study, construction and operation of the proposed replacement pump station and its associated pipelines would not cause any significant environmental effects that cannot be mitigated to a level of less than significant.

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. Proposed construction and demolition activities would require trenching and excavation within or adjacent to local streets that contain stormwater drainage facilities. Any disruptions to these facilities would be considered short-term and temporary. Additionally, the LADWP construction contractor would be required to install any necessary facilities to maintain adequate stormwater flow and drainage for the duration of proposed construction and demolition activities. Any existing stormwater drainage facilities that are affected would be replaced or repaired, but no new stormwater drainage facilities would be required. Replacement activities would be part of proposed construction and would occur in existing roadways. As addressed in this Initial Study, proposed construction activities would not be expected to result in any significant environmental effects that cannot be mitigated to a level of less than significant.

Once operational the proposed replacement pump station and its associated pipelines would require only periodic inspection, maintenance and testing. Following demolition of the existing Redmont Pump Station activities at its site would be limited to continued periodic inspection and maintenance of the existing Redmont Reservoir. Local stormwater drainage facilities would not be affected by these activities.

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

NO IMPACT. As addressed in response to Initial Study Question 3.16(b), above, the LADWP obtains water from wells in local groundwater basins and the Los Angeles Aqueduct System, purchases water from the Metropolitan Water District of Southern California, and also receives recycled water from treatment and reclamation plants. The LADWP would provide all water supplies required for proposed construction and demolition activities, including the water required for hydrostatic testing of the proposed pipelines (a maximum of 49,000 gallons), with its existing entitlements and resources.

Once operational the proposed replacement pump station and its associated pipelines would require only periodic inspection, maintenance and testing which would typically require negligible amounts of water. Following demolition of the existing Redmont Pump Station activities at its site would be limited to continued periodic inspection and maintenance of the existing Redmont Reservoir, which also would require negligible amounts of water. Although the proposed replacement pump station would have a larger operational capacity than the existing Redmont Pump Station, the maximum water supply that it may be capable of delivering would be met by the LADWP's existing entitlements and resources.

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. The existing wastewater treatment facility (the HTP) serving the proposed project area is anticipated to continue to provide wastewater services for the area. The proposed project involves the construction and operation of a replacement pump station and its associated underground water pipelines, and demolition of the existing Redmont Pump Station. As addressed in response to Initial Study Question 3.16(a), above, neither proposed construction and demolition activities nor proposed operational activities are anticipated to substantially affect the short- or long-term capacity or operation of the HTP.

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 identifies the landfill facility (Sunshine Canyon) that most likely serves the proposed project area, as well its permitted disposal rate, daily disposal rate, remaining capacity, and permit status. In addition, four unclassified (inert waste) landfills in Los Angeles County are permitted to accept inert waste, including construction and demolition debris. The most recent permitted disposal capacity, daily disposal rate, remaining capacity, and permit status for each of the unclassified landfills serving the proposed project area are also shown in Table 3.16-1.

The proposed project would generate demolition and construction debris, primarily in the form of demolition of the existing Redmont Pump Station and soil spoils from proposed pipeline trenching. Construction of the proposed replacement pump station would require the excavation of approximately 160 cubic yards (cy) of material, of which 80 cy would be removed for off-site

disposal. Construction of the proposed pipelines would require the excavation of approximately 1,100 cy of material, all of which would be removed for off-site disposal. All materials that can be salvaged from the existing Redmont Pump Station would be transported to the LADWP West Valley District for recycling. An estimated 100 cy of remaining material would be hauled off site for permanent disposal at unclassified landfill(s).

Table 3.16-1. Existing Landfills Available to the Project Site

Name	Location	Permitted Daily Disposal (Tons/Day)	Remaining Capacity (Cubic Yards/Thousands)	Permit Expiration Date
Sunshine Canyon (Class III)	Sylmar	6,600	17.05	2013
Azuza Land and Reclamation (Unclassified)	Azuza	6,500	48.93	Project Completion
Nu-Way Live Oak (Unclassified)	Irwindale	6,000	N/A	Project Completion
Peck Road Gravel Pit (Unclassified)	Monrovia	1,210	2.38	Project Completion
Reliance Pit No. 2 (Unclassified)	Irwindale	6,000	N/A	Project Completion

N/A: Data Not Available.
Sources: California Integrated Waste Management Board, California Waste Facilities, Sites, & Operations Database, downloaded July 3, 2007 from http://www.ciwmb.ca.gov/SWIS/.

As described above, a total of 1,280 cy of construction and demolition waste would require disposal. Table 3.16-1 lists the four unclassified landfills likely to be used for disposal of demolition and construction debris. As the density of the construction waste is unknown, it is not possible to convert cy to tons in terms of measurement to compare to daily capacities of the landfills identified in Table 3.16-1. However, while the proposed project would increase solid waste generation as a result of construction and demolition activities, it is not anticipated that the 1,280 cy of waste generated would account for a significant percent of the total combined permitted daily disposal capacity of the unclassified landfills identified in Table 3.16-1. The generated 1,280 cy of waste would only account for 0.02 percent of the remaining capacity of the published Azuza Land/Reclamation and Peck Road Gravel Pit Unclassified Landfills. Therefore, waste generated by proposed demolition and construction activities would likely not exceed the available capacity at the unclassified landfills serving the proposed project area, and they would likely accept the construction and demolition debris generated by the proposed project activities. Additionally, recycling and on-site re-use of construction materials would further minimize the amount of construction and demolition solid waste generation. Solid waste impacts related to proposed construction and demolition would be short-term and less than significant.

Upon completion of the proposed project, no permanent increase in solid waste generation would occur. Operation of the proposed replacement pump station and its associated pipelines would typically require inspection, maintenance and testing activities once per week and would not necessitate any additional staff to oversee facility operations (refer to Initial Study Section 1.11, Project Description). Following removal of the existing Redmont Pump Station, activities at its site would be limited to continued maintenance and inspection of the existing Redmont Reservoir by existing LADWP personnel. Therefore, there would be no net increase in solid waste that would require disposal at the Sunshine Canyon Landfill.

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

NO IMPACT. The existing solid waste facilities serving the proposed project area (refer to Table 3.16-1, above) are anticipated to continue providing solid waste services in compliance with existing federal, State, and local statutes and regulations applicable to solid waste. The 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 proposed construction and demolition activities, but would not, directly or indirectly, affect the standard solid waste operations of any landfill facility. Proposed recycling activities during construction and demolition would ensure that the proposed 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.

As addressed in response to Initial Study Question 3.16(f), upon completion of all proposed construction and demolition activities, no permanent increase in solid waste generation would occur.

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

Response to Questions

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 WITH MITIGATION INCORPORATED. The proposed project (construction and operation of the replacement Redmont Pump Station and its associated pipelines and demolition of the existing Redmont Pump Station) would result in temporary impacts related to noise and transportation and traffic. However, all temporary impacts due to proposed construction and demolition activities can be mitigated to a level of less than significant, as addressed in Initial Study Sections 3.11 (Noise) and 3.15 (Transportation and Traffic). As addressed in Initial Study Section 3.4 (Biological Resources), all potential impacts related to the habitat of fish or wildlife species, reductions in fish or wildlife population below self-sustaining levels, the elimination of a plant or animal community, or reductions or restrictions in the number or range of a rare or endangered plant or animal would be less than significant or none.

Operation of the proposed replacement pump station and its associated pipelines could potentially result in risks due to, or be at risk from, fault ruptures, seismic ground shaking, and seismic-related ground failure. However, with implementation of Mitigation Measure GEO-1, as addressed in Initial Study Section 3.6 (Geology and Soils), long-term impacts related to these risks can be mitigated to a level of less than significant. The proposed replacement pump station would also result in long-term

increased noise levels due to operation of the proposed water pumps and their related equipment, as well as bi-weekly testing of the proposed emergency generator. However, with implementation of Mitigation Measures N-2 through N-4, as presented in Initial Study Section 3.11 (Noise), impacts related to these operational activities would be reduced to a level of less than significant. No other short- or long-term impacts which could have the potential to degrade the quality of the environment would be anticipated to occur due to implementation of the proposed project.

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 WITH MITIGATION INCORPORATED. A significant cumulative impact may occur if the proposed project, in conjunction with other related projects, results in impacts that are less than significant when viewed separately but significant when viewed together. The most currently available listing of proposed projects from the City of Los Angeles Planning Department indicates that that there are approximately sixteen proposed projects within a two mile radius of the proposed project area (City of Los Angeles, 2007). The majority of these proposed projects are located at least one mile from the proposed project area in the vicinity of south Tujunga, near Foothill Boulevard. Additionally the majority of these proposed projects relate to either relatively small residential or commercial development or redevelopment, or requests for zoning and/or related land use modifications. No other public utility water supply projects are known to be proposed within the vicinity of the proposed project area.

As described in Initial Study Sections 3.11 (Noise), and 3.15 (Transportation and Traffic) proposed construction and demolition activities would potentially result in some significant but temporary impacts. However, all identified impacts can be reduced to less than significant levels with the implementation of the mitigation measures identified for these resource/issue-specific areas. As outlined in response to Checklist Question 3.3 (c) (Air Quality), the proposed project would not result in a cumulatively considerable net increase of any criteria pollutant for which the proposed project region is in non-attainment under an applicable federal or State ambient air quality standard.

Once operational, the proposed project would result in increased noise levels, and could potentially increase risks due to, or be at risk from, fault ruptures, seismic ground shaking, and seismic-related ground failure. However, as addressed in Initial Study Section 3.11(Noise) long-term impacts related to noise would be highly localized and can be mitigated to a level of less than significant; therefore, the proposed project's incremental contribution to cumulative noise effects would be less than significant. Similarly, as addressed in Initial Study Section 3.6 (Geology and Soils), impacts related to fault ruptures, seismic ground shaking, and seismic-related ground failure can be mitigated to a level of less than significant through appropriate design and construction per the recommendations of a geotechnical survey. Consequently, the proposed project's incremental contribution to cumulative effects due to fault ruptures, seismic ground shaking, and seismic-related ground failure would be less than significant.

All other short- and long-term impacts, including impacts related to aesthetics, agricultural resources, air quality, biological resources, cultural resources, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, population and housing, public services, recreation, and utilities and service systems would be less than significant or none. Therefore, the proposed project's incremental contribution to these cumulative impacts would be less than significant or none.

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

LESS THAN SIGNFICANT IMPACT WITH MITIGATION INCORPORATED. Proposed construction and demolition activities would result in temporary impacts related to noise and transportation and traffic, which would affect human beings in close proximity to the proposed project sites. However, as addressed in response to Checklist Questions 3.17 (a) and 3.17(b), above, all of these impacts can be mitigated to a level of less than significant. Please refer to Initial Study Sections Study Sections 3.11 (Noise), and 3.15 (Transportation and Traffic) for a discussion of these temporary impacts and the mitigation measures that have been identified to reduce them to a level of less than significant. Following completion of all proposed construction and demolition activities, operation of the proposed replacement pump station and its associated pipelines would not result in any impacts that cannot be mitigated to a level of less than significant. Please refer to Initial Study Sections 3.6 (Geology and Soils) and 3.11 (Noise) for a discussion of all identified impacts related to fault ruptures, seismic ground shaking, and seismic-related ground failure and noise which may occur during operation, and the mitigation measures that have been identified to reduce them to a level of less than significant. With implementation of the mitigation measures identified in this Initial Study, as referenced above, no short- or long-term environmental effects which would cause substantial adverse effects on human beings, either directly or indirectly, would be anticipated to occur.

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3.17 Mandatory Findings of Significance

City of Los Angeles. 2007. North Valley Planning Area Cases Accepted for Department of City Planning Review (January 1 through March 31, 2007). http://cityplanning.lacity.org/. Accessed August 21, 2007.

5. List of Preparers and Reviewers

Table 5-1 List of Preparers and Reviewers

Name/Organization	Project Role
Los Angeles Department of Water and Power	
Nadia Dale	Project Manager
Charles Holloway	Supervisor of Environmental Assessment
Victor Vargas	Civil Engineering Associate
Lillian Kawasaki	Assistant General Manager of Environmental Affairs
Aspen Environmental Group	
Sue Walker	Project Manager, Project Description, Aesthetics, Land Use and Planning, Recreation, Mandatory Findings of Significance
Jamison Miner	Biological Resources
Chris Huntley	Biological Resources
Scott DeBauche	Agricultural Resources, Hazards and Hazardous Materials, Mineral Resources, Population and Housing, Public Services, Utilities and Service Systems
Mathew Long	Geology and Soils, Hydrology and Water Quality
Judy Spicer	Document Coordination and Production
Kati Simpson	Graphics
Garland Associates, Inc.	
Richard Garland	Transportation and Traffic
Mestre Greve Associates	
Fred Greve	Air Quality
Tim Reid	Noise
ArchaeoPaleo Resource Management, Inc.	
Robin Turner	Cultural and Paleontological Resources
Michael D. Richards	Cultural Resources

Appendix A.

Redmont Pump Station Air Quality Methodology and Calculations

MESTRE GREVE ASSOCIATES

Memorandum

Date: August 13, 2007

To: Susan Walker, Aspen

From: Marty Beal/Fred Greve

Subject: Redmont Pump Station Air Quality Methodology (Report #07-157)

The purpose of this memo is to detail the methodology underlying the air quality analysis of the Redmont Pump Station Replacement Project (Mestre Greve Associates, August 10, 2007).

As part of the South Coast Air Quality Management District's (SCAQMD) environmental justice program, attention was focused on localized effects of air quality. In accordance with Governing Board direction, staff developed localized significance threshold (LST) methodology and mass rate look-up tables by source receptor area (SRA) that can be used to determine whether or not a project may generate significant adverse localized air quality impacts. LST's represent the maximum emissions from a project that will not cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard, and are developed based on the ambient concentrations of that pollutant for each source receptor area and weather conditions in that area. The LST methodology is described in "Final Localized Significance Threshold Methodology" dated June 2003 by the SCAQMD and is available at the SCAQMD website (http://aqmd.gov/ceqa/handbook/LST/LST.html).

The LST mass rate look-up tables provided by the SCAQMD allow one to determine if the daily emissions for proposed construction or operational activities could result in significant localized air quality impacts. If the calculated on-site emissions for the proposed construction or operational activities are below the LST emission levels found on the LST mass rate look-up tables, and no potentially significant impacts are found to

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be associated with other environmental issues, then the proposed construction or operation activity is not significant for air quality.

The LST mass rate look-up tables are applicable to the following pollutants only: oxides of nitrogen (NO_x), carbon monoxide (CO), respirable particulate matter (PM_{10}), and fine particulate matter ($PM_{2.5}$). LST's are derived based on the location of the activity (i.e., the source/receptor area); the emission rates of NO_x, CO, PM_{10}, and $PM_{2.5}$; and the distance to the nearest exposed individual. This distance is based upon the uses around the project and the Ambient Air Quality Standard (AAQS) averaging times for the pollutants of concern. The shortest AAQS averaging time for CO and NO_2 are for one-hour and the nearest exposed individual is the location where a person could expect to remain for 1-hour. The shortest averaging time for the PM_{10} and $PM_{2.5}$ AAQS is 24 hours and the nearest exposed individual is the location where a person could expect to remain for 24-hours. Typically, this is the nearest residential use.

The LST methodology document presents mass emission rates for each SRA, project sizes of 1, 2, and 5 acres, and nearest receptor distances of 25, 50, 100, 200, and 500 meters. For project sizes between the values given, or with receptors at distances between the given receptors, the methodology uses linear interpolation to determine the thresholds.

The Redmont Pump Station Replacement Project site is located in SRA 8 and is approximately 0.46 acres in size. There are residences located adjacent to the project site where persons could be located for 24 hours. The LST methodology states that the threshold for the 25-meter distance should be used in this situation. Therefore, a 25-meter receptor distance was used to establish the thresholds. The thresholds for the 1 meter project size was used to estimate the thresholds for an 0.46 acre site. Based on these factors, the LST thresholds specific for the proposed project were calculated and are presented in 0. A project with daily emission rates below these thresholds is considered to have a less than significant effect on local air quality.

SCAQMD Localized Significance Thresholds for Construction

	Pollutant Emissions (lbs/day)			
	CO	NO_x	PM_{10}	$PM_{2.5}$
Construction	449	126	4	3

Emissions during the primary phases of construction were calculated using the methodology presented in SCAQMD's "Sample Construction Scenarios for Projects Less than Five Acres in Size" (February 2005). The assumptions used for each construction phase are described below and specific details are presented in worksheets in the appendix. Data for the five acre sample were scaled down to the 0.46 acre project site and specific construction activity information was obtained from the project applicant.

$PM_{2.5}$ emissions were calculated using the methodology presented in SCAQMD's "Final Methodology to Calculate Particulate Matter (PM) 2.5 and PM 2.5 CEQA Significance

Thresholds" (October 2006). The PM_{10} emissions were calculated using the above methodologies and then multiplying the PM_{10} emissions by the applicable $PM_{2.5}$ fraction derived from emission source, using PM profiles in the California Emission Inventory Data and Reporting System (CEIDRS) developed by CARB shown in Table 2 below.

$PM_{2.5}$ Fraction of PM_{10} Used to Calculate Construction $PM_{2.5}$ Emissions

Source	$PM_{2.5}/PM_{10}$ Fraction
Passenger Vehicles	0.928
Delivery Trucks	0.964
Heavy Trucks	0.920
Off-Road Equipment	0.920
Fugitive Dust	0.208
Demolition	0.208

Construction Activities

An estimate of construction phasing and duration was provided by the project applicant. This estimate also included estimates of equipment and manpower used during the construction. Construction of the Redmont Pump Station Replacement Project is anticipated to begin in 2008. The project's construction is expected to last approximately 12 months. There is no allotment of time for site preparation as the site is already vacant and flat. Grading and excavation will take 5 days. After grading and excavation, construction of the project will begin. The construction activities for which emissions have been calculated and the activity levels during each of these activities are described in the following paragraphs.

Demolition of Existing Facilities is the demolition of the existing buildings and hardscape. No demolition of existing facilities is required for the project because there are no facilities on the project site.

Grading and Excavation is the final grading and excavation of the project site. This work will occur over the entire site. Equipment assumed to be used in the grading of the project includes (2) scrapers, (1) rubber tired dozer, and (3) tractor/loader/backhoe. The calculations include emissions from (4) daily haul truck trips with a one-way trip length of 20 miles (0.1 miles on-site) and (4) workers generating (12) daily worker vehicle trips with a one-way trip length of 12 miles (0.1 miles on site). Emissions from (1) water truck and (1) street sweeper are included in the calculations.

Building Construction is the construction building proposed by the project. As discussed above, building construction will begin when the final site grading and excavation is completed. Building construction emissions were calculated for the portion of construction with the greatest amount of activity that will result in the highest emissions. The emission calculations assume (30) daily material truck trips with an average trip length of 15 miles (0.1 miles on-site) and (9) workers generating (27) daily worker

vehicle trips with a one-way trip length of 12 miles (0.1 miles on site). Equipment assumed to be used in the construction includes (1) forklifts, (4) tractor/loader/backhoe, (1) generator set, (1) welder and (1) crane. Calculations for the building construction also include emissions from a water truck and street sweeper.

Asphalt Paving is a construction activity that can generate considerable ROG (reactive organic gas) emission due to off-gassing from the asphalt pavement. This would not occur concurrently with the building construction. Equipment assumed to be used in the asphalt paving was estimated based on the URBEMIS2002 manual and includes (1) paver, (1) paving equipment, (1) roller, (1) cement/mortar mixer, and (1) tractor/loader/backhoe. The emission calculations assume (9) daily material truck trips with an average trip length of 15 miles (0.1 miles on-site) and (4) workers generating (12) daily worker vehicle trips with a one-way trip length of 12 miles (0.1 miles on site).

On-Site Construction Emissions

Table 3 presents the results of the on-site emissions calculations for the construction activities discussed above. The emissions presented in Table 1 are those that will be emitted from activity within the project site. These emissions are compared to the AQMD's Localized Significance Thresholds (LST). Worksheets showing the emission calculations are presented in the appendix.

Table 3
On-Site Emissions By Construction Activity

	Emissions (lbs/day)			
Activity	**CO**	**NO_x**	**PM_{10}**	**$PM_{2.5}$**
Site Preparation	0.0	0.0	0.0	0.0
Grading	10.9	22.4	3.6	1.9
Building Construction	13.3	25.9	1.8	1.7
Asphalt Paving	13.9	27.3	2.0	1.8
Localized Significance Threshold	**449.0**	**126.0**	**4.0**	**3.0**
Exceed Threshold?	No	No	No	No

The data in Table 30 shows that no individual construction activity will result in on-site emissions exceeding the LST. None of the activities listed above will occur concurrently. Therefore, the table above represents the worst-case on-site emissions generated during the construction of the project.

Regional Construction Emissions

Table 4 presents the results of the total emissions calculations for the construction activities discussed above. This is a combination of the on-site emissions presented above and emissions from on-road vehicles traveling outside of the project boundaries. These emissions are compared to the Regional Significance Thresholds previously.

Table 4
Total Emissions By Construction Activity

	Emissions (lbs/day)					
Activity	**CO**	**NO_x**	**PM_{10}**	**$PM_{2.5}$**	**SO_x**	**VOC**
Site Preparation	0.0	0.0	0.0	0.0	0.0	0.0
Grading	15.9	33.9	4.2	2.4	0.0	4.3
Building Construction	30.3	70.6	4.0	3.6	0.1	8.0
Asphalt Paving	19.7	41.6	2.6	2.4	0.1	7.5
Significance Threshold	**550**	**100**	**150**	**55**	**150**	**75**
Exceed Threshold?	No	No	No	No	No	No

The data in Table 4 shows that none of the construction activities will result in emissions that exceed the significance thresholds. As stated earlier in this report, none of the separate construction activities listed above will occur concurrently. Therefore, the above table represents the worst-case construction emissions for the project. Construction activities will not exceed the SCAQMD significance thresholds.

SPREADSHEETS

Redmont Pump Station - LADWP

Project Site- 0.5 acres
20,255 Square Feet

Grading Schedule - 5 days
Year - 2008

Equipment Type	No. of Equipment	hr/day	Crew Size	Equipment Index
Rubber Tired Dozers	0	0.0	4	26
Graders	1	4.0		13
Tractors/Loaders/Backhoes	5	4.0		33

Construction Equipment Emission Factors

Equipment Type	CO lb/hr	NO_x lb/hr	PM_{10} lb/hr	$PM_{2.5}$ lb/hr	SO_x lb/hr	VOC lb/hr
Rubber Tired Dozers	1.5961	3.2672	0.1409	0.1296	0.0025	0.3644
Graders	0.6561	1.6191	0.0840	0.0773	0.0015	0.1936
Tractors/Loaders/Backhoes	0.4063	0.7746	0.0599	0.0551	0.0008	0.1204

Fugitive Dust Grading Parameters

Vehicle Speed (mph)	Vehicle Miles Traveled
3	0.07

Fugitive Dust Stockpiling Parameters

Silt Content	Precipitation Days	Mean Wind Speed %	TSP Fraction	Area (acres)
6.9	10	100	0.5	0.16

Fugitive Dust Material Handling

Aerodynamic Particle Size Multiplier	Mean Wind Speed mph	Moisture Content %	Dirt Handled cy	Dirt Handled lb/day
0.35	10	7.9	556	277,750

On-Road Vehicle Emission Factors

	CO lb/mile	NO_x lb/mile	PM_{10} lb/mile	$PM_{2.5}$ lb/mile	SO_x lb/mile	VOC lb/mile
Passenger Vehicle	0.010548	0.001103	0.000085	0.000053	0.000011	0.001079
Heavy-Duty Truck	0.013614	0.044580	0.002156	0.001900	0.000041	**0.003516**

On-Road Vehicles Trips and Trip Length

Vehicle	No. of One-Way Trips/Day	One Way Trip Length On-Site (miles)	Off-Site (miles)
Passenger Vehicles	6	0.1	12
Haul Truck	4	0.1	20
Water Truck & Sweeper	6	0.7	8

On-Site Emissions from Construction Equipment

Equation: Emission Factor (lb/hr) x No. of Equipment x Work Day (hr/day) = Onsite Construction Emissions (lb/day)

Equipment Type	CO lb/day	NO_x lb/day	PM_{10} lb/day	$PM_{2.5}$ lb/day	SO_x lb/day	VOC lb/day
Rubber Tired Dozers	0.00	0.00	0.00	0.00	0.00	0.00
Graders	2.62	6.48	0.34	0.31	0.01	0.77
Tractors/Loaders/Backhoes	8.13	15.49	1.20	1.10	0.02	2.41
Total	**10.8**	**22.0**	**1.5**	**1.4**	**0.0**	**3.2**

Fugitive Dust Emissions from Grading Operations

Equations:

Scraping: PM10 Emissions (lb/day) = 1.5 x (silt content/12)$^{0.9}$ x (mean vehicle weight)$^{0.45}$ x VMT x (1 - control efficiency)
Storage Piles: PM10 Emissions (lb/day) = 1.7 x (silt content/1.5) x ((365-precipitation days)/235) x wind speed percent/15 x TSP fraction x Area) x (1 - control efficiency)
Material Handling: PM10 Emissions (lb/day) = (0.0032 x aerodynamic particle size multiplier x (wind speed (mph)/5)$^{1.3}$/(moisture content/2)$^{1.4}$ x dirt handled (lb/day) /2,000 (lb/ton) x +(1 - control efficiency)

Description	Control Efficiency %	PM_{10} lb/day	$PM_{2.5}$ lb/day
Earthmoving	68	0.01	0.00
Storage Piles	68	2.02	0.42
Material Handling	68	0.02	0.00
Total		**2.05**	**0.43**

On-Site Emissions from On-Road Mobile Vehicles

Equation: Emission Factor (lb/mile) x No. of One-Way Trips/Day x 2 x Trip length (mile) = Mobile Emissions (lb/day)

Vehicle	CO lb/day	NO_x lb/day	PM_{10} lb/day	$PM_{2.5}$ lb/day	SO_x lb/day	VOC lb/day
Passenger Vehicles	0.01	0.00	0.00	0.00	0.00	0.00
Haul Truck	0.01	0.04	0.00	0.00	0.00	0.00
Water Truck	0.11	0.37	0.02	0.02	0.00	0.03
Total	**0.13**	**0.41**	**0.02**	**0.02**	**0.00**	**0.03**

Total On-Site Emissions from Grading Activities

Sources	CO lb/day	NO_x lb/day	PM_{10} lb/day	$PM_{2.5}$ lb/day	SO_x lb/day	VOC lb/day
On-site Emissions	**10.9**	**22.4**	**3.6**	**1.9**	**0.0**	**3.2**
Significance Threshold	*449.0*	*126.0*	*4.0*	*3.0*	*n/a*	*n/a*
Exceed Significance?	**NO**	**NO**	**NO**	**NO**	n/a	n/a

Off-Site Emissions from On-Road Mobile Vehicles

Equation: Emission Factor (lb/mile) x No. of One-Way Trips/Day x 2 x Trip length (mile) = Mobile Emissions (lb/day)

Vehicle	CO lb/day	NO_x lb/day	PM_{10} lb/day	$PM_{2.5}$ lb/day	SO_x lb/day	VOC lb/day
Passenger Vehicles	1.52	0.16	0.01	0.01	0.00	0.16
Haul Truck	2.18	7.13	0.35	0.30	0.01	0.56
Water Truck	1.31	4.28	0.21	0.18	0.00	0.34
Total	**5.00**	**11.57**	**0.56**	**0.49**	**0.01**	1.06

Total Emissions from Grading Activities

Sources	CO lb/day	NO_x lb/day	PM_{10} lb/day	$PM_{2.5}$ lb/day	SO_x lb/day	VOC lb/day
Total Emissions	**15.9**	**33.9**	**4.2**	**2.4**	**0.0**	**4.3**
Significance Threshold	*550*	*100*	*150*	*55*	*150*	*75*
Exceed Significance?	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**

Redmont Pump Station - LADWP

Project Site- **0.46** acres
20,255 Square Feet

Construction Schedule - 98 days
Year- 2008

Equipment Type	No. of Equipment	hr/day	Crew Size	Equipment Index
Forklifts	1	8.0	9	11
Cranes	1	4.0		6
Tractors/Loaders/Backhoes	4	4.0		33
Generator Sets	1	8.0		12
Welders	1	8.0		35

Construction Equipment Combustion Emission Factors

Equipment Type	CO lb/hr	NO_x lb/hr	PM_{10} lb/hr	$PM_{2.5}$ lb/hr	SO_x lb/hr	VOC lb/hr
Forklifts	0.2422	0.5982	0.0324	0.0298	0.0006	0.0799
Tractors/Loaders/Backhoes	0.4063	0.7746	0.0599	0.0551	0.0008	0.1204
Generator Sets	0.3461	0.6980	0.0430	0.0396	0.0007	0.1075
Welders	0.2309	0.3102	0.0288	0.0265	0.0003	0.0882

On-Road Vehicle Emission Factors

	CO lb/mile	NO_x lb/mile	PM_{10} lb/mile	$PM_{2.5}$ lb/mile	SO_x lb/mile	VOC lb/mile
Passenger Vehicle	0.010548	0.001103	0.000085	0.000053	0.000011	0.001079
Heavy-Duty Truck	0.013614	0.044580	0.002156	0.001900	0.000041	**0.003516**

On-Road Vehicle Emission Factors

Vehicle	No. of One-Way Trips/Day	One Way Trip Length On-Site (miles)	Off-Site (miles)
Passenger Vehicles	13.5	0.1	12
Material Delivery	30	0.1	15
Water Truck/Street Sweeper	6	0.7	8

On-Site Combustion Emissions from Construction Equipment

Equation: Emission Factor (lb/hr) x No. of Equipment x Work Day (hr/day) = Onsite Construction Emissions (lb/day)

Equipment Type	CO lb/day	NO_x lb/day	PM_{10} lb/day	$PM_{2.5}$ lb/day	SO_x lb/day	VOC lb/day
Forklifts	1.94	4.79	0.26	0.24	0.00	0.64
Tractors/Loaders/Backhoes	6.50	12.39	0.96	0.88	0.01	1.93
Generator Sets	2.77	5.58	0.34	0.32	0.01	0.86
Welders	1.85	2.48	0.23	0.21	0.00	0.71
Total	**13.1**	**25.2**	**1.8**	**1.6**	**0.0**	**4.1**

On-Site Emissions from On-Road Mobile Vehicles

Equation: Emission Factor (lb/mile) x No. of One-Way Trips/Day x 2 x Trip length (mile) = Mobile Emissions (lb/day)

Vehicle	CO lb/day	NO_x lb/day	PM_{10} lb/day	$PM_{2.5}$ lb/day	SO_x lb/day	VOC lb/day
Passenger Vehicles	0.03	0.00	0.00	0.00	0.00	0.00
Flatbed Truck	0.08	0.27	0.01	0.01	0.00	0.02
Water Truck	0.11	0.37	0.02	0.02	0.00	0.03
Total	**0.22**	**0.64**	**0.03**	**0.03**	**0.00**	**0.05**

Total On-Site Emissions from Construction Activities

Sources	CO lb/day	NO_x lb/day	PM_{10} lb/day	$PM_{2.5}$ lb/day	SO_x lb/day	VOC lb/day
On-Site Emissions	**13.3**	**25.9**	**1.8**	**1.7**	**0.0**	**4.2**
Significance Threshold	*449.0*	*126.0*	*4.0*	*3.0*	*n/a*	*n/a*
Exceed Significance?	**NO**	**NO**	**NO**	**NO**	**n/a**	**n/a**

Off-Site Combustion Emissions from On-Road Mobile Vehicles

Equation: Emission Factor (lb/mile) x No. of One-Way Trips/Day x 2 x Trip length (mile) = Mobile Emissions (lb/day)

Vehicle	CO lb/day	NO_x lb/day	PM_{10} lb/day	$PM_{2.5}$ lb/day	SO_x lb/day	VOC lb/day
Passenger Vehicles	3.42	0.36	0.03	0.02	0.00	0.35
Flatbed Truck	12.25	40.12	1.94	1.71	0.04	3.16
Water Truck	1.31	4.28	0.21	0.18	0.00	0.34
Total	**16.98**	**44.76**	**2.18**	**1.91**	**0.04**	3.85

Total Emissions from Building Construction Activities

Sources	CO lb/day	NO_x lb/day	PM_{10} lb/day	$PM_{2.5}$ lb/day	SO_x lb/day	VOC lb/day
Total Emissions (Mitigated)	**30.3**	**70.6**	**4.0**	**3.6**	**0.1**	**8.0**
Significance Threshold	*550*	*100*	*150*	*55*	*150*	*75*
Exceed Significance?	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**

Redmont Pump Station - LADWP

Project Site- **0.46** acres
20,255 Square Feet

Asphalt Paved Area - **3.60** acres

Construction Schedule - **5 days**
Year - **2008**

Equipment Type	No. of Equipment	hr/day	Crew Size	Equipment Index
Pavers	1	6.0	4	19
Paving Equipment	1	8.0		20
Rollers	1	7.0		24
Cement and Mortar Mixers	1	6.0		4
Tractors/Loaders/Backhoes	1	8.0		33

Construction Equipment Emission Factors

Equipment Type	CO lb/hr	NO_x lb/hr	PM_{10} lb/hr	$PM_{2.5}$ lb/hr	SO_x lb/hr	VOC lb/hr
Pavers	0.5874	1.0796	0.0769	0.0707	0.0009	0.1963
Paving Equipment	0.4616	0.9857	0.0681	0.0627	0.0008	0.1479
Rollers	0.4341	0.8607	0.0601	0.0553	0.0008	0.1328
Cement and Mortar Mixers	0.0447	0.0658	0.0044	0.0041	0.0001	0.0113
Tractors/Loaders/Backhoes	0.4063	0.7746	0.0599	0.0551	0.0008	0.1204

On-Road Vehicle Emission Factors

	CO lb/mile	NO_x lb/mile	PM_{10} lb/mile	$PM_{2.5}$ lb/mile	SO_x lb/mile	VOC lb/mile
Passenger Vehicle	0.010548	0.001103	0.000085	0.000053	0.000011	0.001079
Heavy-Duty Truck	0.013614	0.044580	0.002156	0.001900	0.000041	**0.003516**

Asphalt VOC Off-Gas Emission Factors

	CO lb/acre	NO_x lb/acre	PM_{10} lb/acre	$PM_{2.5}$ lb/acre	SO_x lb/acre	VOC lb/acre
Emissions/Acres Paved	0.0000	0.0000	0.0000	0.0000	0.0000	2.6200

On-Road Vehicle Number of Trips and Trip Length

Vehicle	No. of One-Way Trips/Day	One Way Trip Length On-Site (miles)	Off-Site (miles)
Passenger Vehicle	6	0.1	12
Delivery Truck	9	0.1	15
Water Truck	3	0.7	8

On-Site Emissions from Construction Equipment

Equation: Emission Factor (lb/hr) x No. of Equipment x Work Day (hr/day) = Onsite Construction Emissions (lb/day)

Equipment Type	CO lb/day	NO_x lb/day	PM_{10} lb/day	$PM_{2.5}$ lb/day	SO_x lb/day	VOC lb/day
Pavers	3.52	6.48	0.46	0.42	0.01	1.18
Paving Equipment	3.69	7.89	0.55	0.50	0.01	1.18
Rollers	3.04	6.02	0.42	0.39	0.01	0.93
Cement and Mortar Mixers	0.27	0.39	0.03	0.02	0.00	0.07
Tractors/Loaders/Backhoes	3.25	6.20	0.48	0.44	0.01	0.96
Total	**13.8**	**27.0**	**1.9**	**1.8**	**0.0**	**4.3**

On-Site Emissions from On-Road Vehicles

Equation: Emission Factor (lb/mile) x No. of One-Way Trips/Day x 2 x Trip length (mile) = Mobile Emissions (lb/day)

Vehicle	CO lb/day	NO_x lb/day	PM_{10} lb/day	$PM_{2.5}$ lb/day	SO_x lb/day	VOC lb/day
Passenger Vehicle	0.01	0.00	0.00	0.00	0.00	0.00
Delivery Truck	0.02	0.08	0.00	0.00	0.00	0.01
Water Truck	0.06	0.19	0.01	0.01	0.00	0.01
Total	**0.09**	**0.27**	**0.01**	**0.01**	**0.00**	**0.02**

On-Site Emissions from Asphalt Off-Gas

Equation: Emission Factor (lb/acre) x Area to be Paved (acre) / Days of Paving (days) = Asphalt Off-Gass Emissions (lb/day)

Vehicle	CO lb/day	NO_x lb/day	PM_{10} lb/day	$PM_{2.5}$ lb/day	SO_x lb/day	VOC lb/day
Passenger Vehicle	0.00	0.00	0.00	0.00	0.00	1.89

On-Site Emissions from Construction Activities

Sources	CO lb/day	NO_x lb/day	PM_{10} lb/day	$PM_{2.5}$ lb/day	SO_x lb/day	VOC lb/day
On-Site Emissions	**13.9**	**27.3**	**2.0**	**1.8**	**0.0**	**6.2**
Significance Threshold	*449.0*	*126.0*	*4.0*	*3.0*	*n/a*	*n/a*
Exceed Significance?	**NO**	**NO**	**NO**	**NO**	**n/a**	**n/a**

Off-Site Combustion Emissions from On-Road Vehicles

Equation: Emission Factor (lb/mile) x No. of One-Way Trips/Day x 2 x Trip length (mile) = Mobile Emissions (lb/day)

Vehicle	CO lb/day	NO_x lb/day	PM_{10} lb/day	$PM_{2.5}$ lb/day	SO_x lb/day	VOC lb/day
Passenger Vehicles	1.52	0.16	0.01	0.01	0.00	0.16
Flatbed Truck	3.68	12.04	0.58	0.51	0.01	0.95
Water Truck	0.65	2.14	0.10	0.09	0.00	0.17
Total	**5.85**	**14.34**	**0.70**	**0.61**	**0.01**	1.27

Total Emissions from Asphalt Laying Activities

Sources	CO lb/day	NO_x lb/day	PM_{10} lb/day	$PM_{2.5}$ lb/day	SO_x lb/day	VOC lb/day
Total Emissions (Mitigated)	**19.7**	**41.6**	**2.6**	**2.4**	**0.1**	**7.5**
Significance Threshold	*550*	*100*	*150*	*55*	*150*	*75*
Exceed Significance?	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**

Appendix B.

Phase I Environmental Assessment (Hazards and Hazardous Materials)

PHASE I ENVIRONMENTAL SITE ASSESSMENT

ROWLEY DEBRIS BASIN

COUNTY ASSESSOR'S PARCEL NUMBER 2557-010-900

SUNLAND, CALIFORNIA

Prepared For:

Los Angeles Department of Water & Power
111 North Hope St. Room 1044
Los Angeles, CA 90051-5700

Prepared By:

Essentia management services

5000 East Spring Street, Suite 720
Long Beach, CA 90815
Essentia Project No. 06-019-006

January 2007

FIGURES

APPENDICES

EXECUTIVE SUMMARY

Essentia Management Services LLC (Essentia) was retained by Jones and Stokes Associates Inc. (JSA) to conduct a Phase I Environmental Site Assessment (ESA) on a specified parcel in Sunland, California, Assessor's Parcel Number 2557-010-900 (Site). The Site is located at 10709 North Tujunga Boulevard. This Phase I ESA was performed in accordance with the American Society for Testing and Materials (ASTM) Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, Designation E 1527-05. This version of the ASTM standard complies with the Federal All Appropriate Inquiry (AAI) rule (40 CFR Part 312 – Standards and Practices for All Appropriate Inquiries). The Phase I ESA included a visual inspection of the property, observation of adjacent properties, and an environmental regulatory agency records review, review of available historical documents, available facility records, and interviews with knowledgeable personnel at the property.

The purpose of this Phase I ESA is to conduct a baseline environmental evaluation of the property in anticipation of a potential property transaction (e.g., sale of the property). The authorized scope of services for this project is presented in JSA's proposal to The Los Angeles Department of Water and Power (LADWP), dated October 10, 2006. The objective of this Phase I ESA is to identify Recognized Environmental Conditions (RECs) at the Site at the time of the site inspection and through the review of readily available information (environmental records, historical documents, facility-specific records, and site history via personnel interviews). An REC is defined in the American Society for Testing and Materials (ASTM) standards and is as follows:

> "The presence or likely presence of any hazardous substances or petroleum products on property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substance or petroleum products into structures on the property or into the ground, groundwater or surface water of the property. The term includes hazardous substances or petroleum products even under conditions in compliance with laws. *The term is not intended to include de minimis conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.*"

The Site is located at 10709 N. Tujunga Boulevard in Sunland, California (Figure 2). The Site is located on the northwest corner of N. Tujunga Canyon Boulevard and Hillrose Street. The Site consists of a four-sided, approximately 20,255.4-square-foot parcel with 129.09 feet of frontage along N. Tujunga Canyon Boulevard and 180.35 feet of frontage along Hillrose Street. The Site is located at approximately Latitude (north) 34°15'48.2", and Longitude (west) 118°17'39.8".

The Site is known as Los Angeles County Assessor's Parcel Number (APN) 2557-010-900, or Lots 23, 24, and 25 of Tract No. 3977. The Site is zoned One-Family Dwelling (R1). The Site has been owned by the Los Angeles County Flood Control District since 1953.

The land adjacent to the Site consists of single-family residences to the north; open space, single-family dwellings, and a small retail market to the east; multi-family residences to the south; and single-family residences to the east.

The Los Angeles County Department of Public Works - Flood Control District (LACFCD), the Site owner, was contacted on January 3, 2007, to discuss the history of the Site. Mr. Don Watts responded via email on January 8, 2007. Lots 23 and 24 of Tract No. 3977 were acquired by LACFCD via eminent domain on January 7, 1954, from Thomas J. Keaney and Alice L. Keaney. Lot 25 of Tract No. 3977 was acquired by LACFCD via eminent domain on December 7, 1953, from Irene Hazel. Mr. Watts stated that LADPW has no knowledge of RECs associated with the Site or of hazardous materials storage or use on the Site. The only indication of past use provided was that an earthen stream may have at one time traversed the Site which was once subject to inundation. The only known current use associated with the Site is that an underground, 60" reinforced concrete storm water pipe traverses beneath the Site. The storm water pipe was built in approximately 1955 to 1956.

The owner of the adjacent parcel north of the Site, Mr. Emeslo Aguilar, was interviewed on November 14, 2006. Mr. Aguilar has lived adjacent to the Site for approximately 15 years. During this time, the parcel has remained unused and unimproved. Additionally, Mr. Aguilar has not witnessed evidence of use, storage, or disposal of hazardous materials on the Site, although he has seen evidence of the unauthorized disposal of broken furniture.

This Phase I included a review of historical aerial photography, United States Geological Survey topographic maps, Sanborn® Maps, and a city directory; the Site has never been developed or improved.

Based on reviewed information and site observations during the performance of this Phase I ESA, no RECs have been identified, and no prior environmental investigations have been conducted on the subject property.

1.0 INTRODUCTION

Essentia Management Services LLC (Essentia) was retained by Jones and Stokes Associates Inc. (JSA) – Environmental Assessment Services provider to the Los Angeles Department of Water and Power (LADWP) - to conduct a Phase I Environmental Site Assessment (ESA) on the Rowley Debris Basin parcel in Sunland, California, Assessor's Parcel Number (APN) 2557-010-900 (Site). The Site is located at 10709 North Tujunga Boulevard and is the proposed location of a new pump station to replace LADWP's Redmont Pump Station. This Phase I ESA was performed in accordance with the American Society for Testing and Materials (ASTM) Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, Designation E 1527-05. This version of the ASTM standard complies with the Federal All Appropriate Inquiry (AAI) rule (40 CFR Part 312 – Standards and Practices for All Appropriate Inquiries). The Phase I ESA included a visual inspection of the property, observation of adjacent properties, and an environmental regulatory agency records review, review of available historical documents, available facility records, and interviews with knowledgeable personnel at the property.

1.1 PURPOSE AND OBJECTIVES

The purpose of this Phase I ESA is to conduct a baseline environmental evaluation of the property in anticipation of a potential property transaction (e.g., sale of the property). The objective of this Phase I ESA is to identify Recognized Environmental Conditions (RECs) at the Site at the time of the site inspection and through the review of readily available information (environmental records, historical documents, facility-specific records, and site history via personnel interviews). An REC is defined in the American Society for Testing and Materials (ASTM) standards and is as follows:

> "The presence or likely presence of any hazardous substances or petroleum products on property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substance or petroleum products into structures on the property or into the ground, groundwater or surface water of the property. The term includes hazardous substances or petroleum products even under conditions in compliance with laws. *The term is not intended to include de minimis conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.*"

This ESA was performed according to the recommended guidelines established by ASTM Designation E 1527-05, "Standard Practice for Environmental Site Assessments: Phase I

Environmental Site Assessment Process." This version of the ASTM standard complies with the Federal All Appropriate Inquiry (AAI) rule (40 CFR Part 312 - Standards and Practices for All Appropriate Inquiries).

For the purpose of this report, hazardous substances and petroleum products are jointly referred to as "hazardous materials." The extent of research to identify RECs is limited by the scope of services.

1.2 SCOPE-OF-SERVICES

The authorized scope of services for this Phase I ESA is in JSA's proposal to LADWP, dated October 10, 2006. The proposal includes the following general elements:

- Agency and Historical Records Review;
- Interviews with Knowledgeable Personnel;
- Site Inspection and Observation of Adjoining Properties; and
- Report Preparation

Specific tasks and activities delivered during the performance of this project are discussed further below.

1.2.1 Agency and Historical Records Review

- Essentia requested a 1-mile radius search of publicly available environmental database information from Environmental Data Resources Inc. (EDR). The EDR Radius Map with Geocheck® (EDR, 2006) is centered on the subject parcel. The environmental database information includes prior and current hazardous materials usage and known releases of hazardous materials and wastes for the subject parcel and within 1-mile of the Site. Our study area for the records review is based on the ASTM standard requirements and ranges from the subject property and adjoining properties for registered underground storage tanks (USTs) and Resource Conservation and Recovery Act (RCRA) generators; to a ½-mile radius for leaking USTs, landfill sites, and Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) sites; to a 1-mile radius for RCRA treatment, storage and disposal facilities, and state and federal Superfund sites. The EDR report is included as Appendix A.
- Essentia requested to review available records on the subject Site. The following agencies were contacted:
    - LADWP
    - City of Los Angeles of Department of Building and Safety (LADBS)
    - Los Angeles County Fire Department Public Health Investigation Division

- Department of Toxic Substances Control (DTSC)
- Los Angeles Regional Water Quality Control Board (LARWQCB)
- Los Angeles County Department of Agricultural Commissioner/Weights and Measures (ACWM)
- South Coast Air Quality Management District (SCAQMD)

- Essentia requested available aerial photographs (i.e., one per decade) from EDR that show the subject property. Aerial photographs of the Site were used to evaluate historical use of the Site and surrounding properties. Copies of these documents are presented in Appendix B.
- Essentia requested available Sanborn® Maps from EDR that show the subject property. Sanborn® Maps of the Site were not available for the subject property. A copy of a statement from EDR indicating that no Sanborn® Maps were available is presented in Appendix B.
- Essentia requested available U.S. Geological Survey (USGS) topographic maps from EDR that show the subject property. USGS topographic maps of the Site were used to evaluate historical use of the Site and surrounding properties. Copies of these documents are presented in Appendix B.
- Essentia contracted with EDR to research the availability of local street directories available for the Site and vicinity. The EDR City Directory is presented in Appendix B.
- Essentia contracted with EDR to prepare an environmental lien search report for the site. The report shows any environmental liens or other activity use limitations (AULs) listed for the subject site. The EDR Environmental Lien Search Report is presented in Appendix B.
- Essentia reviewed available California Division of Oil, Gas, and Geothermal Resources (CDOGGR) Wildcat Maps with locations of known drilled oil and gas wells on or near the Site.
- Essentia reviewed the NavigateLA web site maintained by the Los Angeles Department of Public Works (LADPW). This web site provides mapping showing public information the city maintains on the properties within the city limits including parcel information and infrastructure.
- Essentia reviewed the Parcel Profile Report obtained from the City of Los Angeles Department of City Planning web site on November 6, 2006 (City of Los Angeles, 2006). A copy of the Parcel Profile Report is included as Appendix C.
- Essentia reviewed the Title Report dated October 25, 2006 as provided to LADWP by First American Title Insurance Company. A copy of the Title Report is included as Appendix D.

1.2.2 Interviews with Knowledgeable Personnel

The owner of the adjacent parcel north of the Site, Mr. Emeslo Aguilar, was interviewed on November 14, 2006. Mr. Aguilar has lived adjacent to the Site for approximately 15 years. During this time, the parcel has remained unused and unimproved. Additionally, Mr. Aguilar has not witnessed evidence of use, storage, or disposal of hazardous materials on the Site, although he has seen evidence of the unauthorized disposal of broken furniture.

1.2.3 Site Inspection and Observation of Adjoining Properties

Essentia performed a site reconnaissance for indications of RECs such as current hazardous materials storage or use; stained soils, slabs, and pavements; drains, sumps, drums, tanks, and electrical transformers; stressed vegetation; and discarded hazardous materials containers. Photographs taken on the day of the site reconnaissance are included as Appendix E. The site inspection included an assessment of the property with the objectives of identifying releases, past releases, or material threat of releases of hazardous substances or petroleum products (or evidence of such) at the Site. This physical inspection addressed the following:

- Indications of spills or releases
- Evidence of on-site disposal practices
- Chemical, solid waste, and other environmental management practices
- Current or past usage of USTs and aboveground storage tanks (ASTs)
- Adjacent land uses
- Identification of physiographic features
- Wastewater treatment
- Evidence of standing surface water
- Sources of drinking water
- Visual indications of equipment that may contain polychlorinated biphenyls (PCBs), if applicable.
- An assessment, based on age, of the potential for lead-containing paint
- Potential sources of contamination or other environmental concerns.

1.2.4 Report Preparation

Essentia evaluated the information collected and prepared this report summarizing our findings, opinions, conclusions, and recommendations.

1.3 SPECIAL TERMS AND CONDITIONS

No special terms and conditions were imposed on this ESA.

1.4 DEVIATIONS

There were no deletions or deviations from the ASTM E1527-05 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process.

1.5 LIMITATIONS, ASSUMPTIONS, AND EXCEPTIONS

This Phase I ESA is limited in nature and should not be construed to be a characterization of environmental regulatory compliance or of conditions above or below grade. Essentia performed the ESA by focusing on hazardous materials and petroleum usage, storage and disposal areas. The Phase I ESA evaluations presented in this limited environmental assessment are based on information provided by JSA from LADWP's Environmental Services division, available site records, state file records, readily accessible historical documents, and observations made during the site inspection. In preparing this report, Essentia has accepted as true information provided by JSA from LADWP that pertains to current and historical uses of the Site.

Essentia warrants that the services performed were conducted in a competent and professional manner in accordance with sound consulting practices and procedures. Essentia cannot warrant the actual site conditions described in this report beyond matters amenable to visual confirmation within the limits of this site assessment program. Essentia makes no express or implied representation or warranty that this document or the information contained herein is fit for a particular purpose, nor does Essentia make any representation or warranty regarding the accuracy or reliability of information or documents provided by other parties that are contained or relied on herein.

This ESA is not a regulatory compliance audit or an evaluation of the efficiency of the use of any hazardous materials at the Site. No evaluation for the presence of (asbestos-containing building materials), urea-formaldehyde foam insulation, lead-based paint, or other hazardous building materials, methane, radon gas, lead in drinking water, wetlands, cultural and historic resources, industrial hygiene and health and safety, ecological resources and endangered species, indoor air quality, or high voltage power lines is included in our assessment.

Our findings and opinions are based on information available from public sources on specific dates (historical photographs, maps, and regulatory agency files, lists, and databases); this information is changing continually and is frequently incomplete. Unless we have actual knowledge to the contrary, information obtained from interviews or provided to us by JSA has been assumed to be correct and complete. Essentia does not assume any liability for information

that has been misrepresented, or for items not visible, accessible, or present on the Site at the time of the site reconnaissance.

We cannot warrant or guarantee that not finding indicators of hazardous materials means that hazardous materials do not exist on the Site. There is no investigation thorough enough to preclude the presence of materials on the Site, which presently, or in the future, may be considered hazardous. Because regulatory evaluation criteria are constantly changing, concentrations of contaminants present and considered to be acceptable may, in the future, become subject to different regulatory standards and require remediation.

When records indicate that prior remedial work or tank removals have occurred on subject properties, there is a risk that the work may not have been performed correctly or completely. In these cases, if the regulatory agency has approved the closure of the tank or other work conducted, we have assumed that the work was done correctly and completely. Opinions and judgments expressed herein, which are based on our understanding and interpretation of current regulatory standards, should not be construed as legal opinions.

This report and the associated work have been provided in accordance with the principles and practices generally employed by the local environmental consulting profession. This is in lieu of all warranties, expressed or implied. This document and the information, findings, opinions, and recommendations herein have been prepared for the benefit only of JSA and LADWP. No other parties are intended as a beneficiary or intended to rely on this document or the information herein unless otherwise expressly stated in writing by Essentia.

1.6 CERTIFICATION

The services provided by Essentia for this Phase I ESA have been performed in accordance with JSA's proposal to LADWP, dated October 10, 2006, and have been certified by the registered professional whose signature and registration appears below.

Prepared and Certified by:

_____

George L. Piantka, PE, REA I
Project Manager

2.0 SITE DESCRIPTION

2.1 LOCATION AND LEGAL DESCRIPTION

The Site is located at 10709 N. Tujunga Boulevard in Sunland, California (Figure 2). The Site is located on the northwest corner of N. Tujunga Canyon Boulevard and Hillrose Street. The Site is 20,255.4 square feet with 129.09 feet of frontage along N. Tujunga Canyon Boulevard and 180.35 feet of frontage along Hillrose Street. The Site is located at approximately Latitude (north) 34°15'48.2", and Longitude (west) 118°17'39.8". The Site is known as Los Angeles County Assessor's Parcel Number (APN) 2557-010-900, or Lots 23, 24, and 25 of Tract No. 3977 (Figures 3 and 4). The Site has been owned by the Los Angeles County Flood Control District since 1953.

2.2 SITE AND VICINITY GENERAL CHARACTERISTICS

The Site consists of 20,255.4 square feet with 129.09 feet of frontage along N. Tujunga Canyon Boulevard and 180.35 feet of frontage along Hillrose Street. The parcel is a relatively flat, unimproved dirt lot. The Site is zoned One-Family Dwelling (R1). The City of Los Angeles Parcel Profile Report is presented as Appendix C.

The land adjacent to the Site's western property line consists of three parcels zoned R1 and improved with single-family dwellings. Adjacent land on the Site's northern border is also zoned for (R1) and improved with a single-family dwelling. The Site is adjacent to Hillrose Street on its southern property line and N. Tujunga Canyon Boulevard on its eastern property line. South of Hillrose Street are parcels containing single-family dwellings zoned R1, and a parcel with an apartment building zoned Multiple Dwelling (R3). Three types of parcels with different land uses are located East of N. Tujunga Canyon Boulevard. A small grocery store is located on the southernmost parcel which is zoned Limited Commercial (C1); restrictions apply to this parcel to ensure compatibility with the surrounding property. North of the store is an undeveloped parcel zoned for single-family dwellings. North of the undeveloped parcel are more undeveloped parcels zoned Open Space (OS).

2.3 CURRENT SITE USE AND SITE IMPROVEMENTS

The Site, located at the corner of N. Tujunga Canyon Boulevard and Hillrose Street, is currently not in use and consists of a relatively flat, dirt lot. N. Tujunga Canyon Boulevard and Hillrose Street do not have curbs or sidewalks at the Site. The property line of the Site is delineated by a chain-link fence and a concrete block wall. Overhead utility lines run along the southern and

eastern property lines of the Site parallel with N. Tujunga Canyon Boulevard and Hillrose Street. Three poles for these lines are located on land adjacent to the Site.

2.4 DECRIPTIONS OF STRUCTURES

No structures are currently located on the subject parcel.

2.5 CURRENT USES OF THE ADJOINING PROPERTY

The Site is adjacent to two parcels on its western property line; one single family home is located on each of these parcels. One parcel is located adjacent to the Site's northern border with one single family home. These parcels are also zoned One-Family Dwelling (R1). The Site is adjacent to Hillrose Street on its southern property line and N. Tujunga Canyon Boulevard on its eastern property line. South of Hillrose Street are parcels containing one-family dwellings zoned R1 and a parcel with an apartment building zoned Multiple Dwelling (R3). Three types of parcels with different land uses are located East of N. Tujunga Canyon Boulevard. A small grocery store is located on the southernmost parcel; this parcel is zoned Limited Commercial (C1), however, restrictions apply to this parcel to ensure compatibility with the surrounding property. North of the store is a parcel zoned for and improved with a single-family dwelling. North of this parcel are more undeveloped parcels zoned Open Space (OS).

2.6 ENVIRONMENTAL SETTING

2.6.1 Site Topography

The Site is shown on the Sunland, California, 7 1/2-minute topographic quadrangle (USGS, 1995). The Site is located on a relatively flat parcel of land. The elevation of the Site is approximately 1,652 feet above sea level. The parcel is located approximately 0.5 mile to the south, southwest, and west of the Los Angeles National Forest, which includes the San Gabriel Mountains.

2.6.2 Regional Geology and Hydrogeology

The Site is located just south of the Transverse Range Geomorphic Provinces and East of the San Fernando Valley. The subject property is underlain by Tertiary stratified sequence rock of the Pliocene era. Soils are anticipated to vary from fine grained material (silt and clay) sand to coarse grained material (sand and gravel). Descriptions of soil conditions in the general area that includes the Site is discussed in "Geology of the Conterminous U.S. at 1:2,500,000 scale" - a

digital representation of the 1974 P.B. King and H.M. Biekman Map (PG. Schruben, R.E. Arndt, and W.J. Bawiec, USGS Digital Data Series DDS-11, 1994).

Depth to groundwater is unknown. The groundwater gradient is anticipated to be west to southwest based on information provided by EDR and the overall topography in this area.

3.0 USER-PROVIDED INFORMATION

This section describes documents provided to Essentia by JSA.

3.1 TITLE RECORDS

A Title Report was provided by LADWP and is included as Appendix D of this report. The Title Report indicates that the property title is vested in the Los Angeles County Flood Control District. The EDR provided Environmental Lien Search Report (Appendix B) indicates that the property title is vested in the Los Angeles County Flood Control District and that the title was received from Sam W. Orr, et al in 1953.

3.2 SPECIALIZED KNOWLEDGE

LADWP did not indicate any specialized knowledge of any consent orders or other environmental enforcement actions against the Site.

LADWP did not indicate that they are aware of any valuation reduction of the subject Site resulting from any current or historical environmental issues.

LADWP provided information that indicated the Site is referenced as assessor's parcel number 2557-010-900 (Lots 23, 24, and 25, Tract 3977), located in Sunland, California.

4.0 RECORDS REVIEW

To obtain a historical perspective of the Site, and the regulatory status of the Site and neighboring facilities, the following resources were ordered and/or reviewed:

- EDR Report with state and federal regulatory database records
- Historical aerial photographs
- Sanborn® Maps (no maps were available)
- USGS Topographic Maps
- City Directory
- Environmental Liens Search

4.1 STANDARD ENVIRONMENTAL RECORD SOURCES

A regulatory database report was obtained from EDR, Inc. for the property, in accordance with the ASTM recommended guidelines, and is included in this ESA as Appendix A. The EDR report presents the results of a search of 28 federal and 23 state and local databases, along with a description of each database that list addresses of sites of known USTs; landfills; hazardous waste generation or treatment, storage and disposal facilities; and subsurface contamination in the surrounding area up to within 1 mile of the center of the Site, and a figure showing the locations of sites listed on the databases.

The Site was not listed on any databases.

- One Resource Conservation and Recovery Act (RCRA)-large quantity generator of hazardous waste (RCRA-LQG) has been identified within 0.25 mile of the target property. The RCRA-LQG is identified as Verdugo Hills High School located at 10625 Plainview Ave. The hazardous waste is identified as "other inorganic solid waste."
- One RCRA-small quantity generator of hazardous waste (RCRA-SQG) has been identified within 0.25 mile of the target property. The RCRA-SQG is identified as John L. Ritter located at 10807 Tujunga Canyon Boulevard. The type of hazardous waste is not identified.

The objective of reviewing the database report is to identify whether the property of interest is included on one or more of the databases, and whether properties that have known and

documented environmental problems that may impact the subject Site are located within the applicable search radii. Criteria for considering a listed facility to be a potential concern include the following:

- The facility is listed on one or more of the databases of reported hazardous materials releases (Federal NPL, Federal CORRACTS, Federal CERCLIS, State SPL, State SCL, State LUST, State Deed Restrictions, and State Toxic Pits); is located potentially up gradient of the subject Site; and is not listed in the database as "closed" or "no further action" (including NFRAP).

- The facility is listed as a solid waste landfill and located potentially upgradient of the subject Site (not including transfer stations).

- The facility adjoins the subject Site and is listed as a RCRA large-quantity hazardous waste generator, a CERCLIS NFRAP site, or a UST operator.

No facilities or sites, according to the criteria discussed above, appear to be of potential concern to the subject property.

4.2 PHYSICAL SETTING

4.2.1 Topography

The Site is shown on the Sunland, California, 7 1/2-minute topographic quadrangle (USGS, 1995). The Site is located on a relatively flat parcel of land. The elevation of the Site is approximately 1,652 feet above sea level. The parcel is located approximately 0.5 mile to the south, southwest, and west of the Los Angeles National Forest, which includes the San Gabriel Mountains.

4.2.2 Geology

The Site is located just south of the Transverse Range Geomorphic Provinces and East of the San Fernando Valley. The subject property is underlain by Tertiary stratified sequence rock of the Pliocene era. Soils are anticipated to vary from fine grain (i.e., clay and silt) to coarse grain (sand to gravel). Descriptions of soil conditions in the general area of that includes the Site is discussed in "Geology of the Conterminous U.S. at 1:2,500,000 scale" - a digital representation of the 1974 P.B. King and H.M. Biekman Map (PG. Schruben, R.E. Arndt, and W.J. Bawiec, USGS Digital Data Series DDS-11, 1994).

4.2.3 Groundwater

Depth to groundwater is unknown. The groundwater gradient is anticipated to be west to southwest based on information provided by EDR and the overall topography in this area.

4.2.4 Watershed

Surface-water runoff from the Site, if observed, would likely flow southwesterly down the slope of N. Tujunga Canyon Boulevard, which slopes from north to south, and Hillrose Street, which slopes from east to west. The closest body of water is the Haines Canyon Flood Control Channel, approximately one mile south and west of the Site. The subject Site does not have permits for discharge of stormwater or wastewater according to records review and communications with local and State agencies.

4.2.5 Wetlands

No Federal Wetlands exist on the subject parcel or within a mile of the subject parcel. The nearest Federal Wetlands are not known.

4.3 PUBLIC RECORDS REVIEW

4.3.1 LADWP Records

Essentia requested to review available LADWP records on the subject Site. Three maps were available showing the locations of utility lines in the area. No LADWP utility lines traverse the subject Site. LADWP utility lines are shown along Hillrose Street and N. Tujunga Canyon Boulevard.

4.3.2 LADBS Records

Essentia requested to review available LADBS records on the subject Site. LADBS responded by fax on November 20, 2006. No files could be found pertaining to the Site.

4.3.3 Fire Department Records

Essentia requested to review available Los Angeles City Fire Department Public Health Investigation Division records on the subject Site. Los Angeles City Fire Department Public Health Investigation Division responded by fax on December 5, 2006. No files could be found pertaining to the Site.

4.3.4 DTSC Records

Essentia requested to review available DTSC records on the subject Site. DTSC responded by letter on November 14, 2006. No files could be found pertaining to the Site.

4.3.5 LARWQCB Records

Essentia requested to review available LARWQCB records on the subject Site. The Underground Storage Tank (UST) Unit responded by telephone on November 14, 2006. The Site Cleanup Unit (SLIC) and the Well Investigation Program/SLIC 2 Unit at the LARWQCB responded by email on November 15, 2006. No UST or SLIC files could be found pertaining to the Site.

4.3.6 ACWM Records

Essentia requested to review available ACWM records on the subject Site. ACWM responded by email on November 21, 2006. No files could be found pertaining to the Site.

4.3.7 CDOGGR Records

Essentia personnel reviewed the CDOGGR Regional Wildcat Map (Map W1-2) for oil or gas wells drilled on or near the Site. No wells are shown on or near the Site. Map W1-2 is available on the Web at http://www.consrv.ca.gov/DOG/.

4.3.8 LADPW Records

Essentia reviewed the NavigateLA web site at http://navigatela.lacity.org. This web site provides mapping showing public information the Los Angeles Bureau of Engineering of the Department of Public Works maintains regarding properties within the city limits including parcel information and infrastructure. LADPW mapping shows sewer lines running beneath Hillrose Street and N. Tujunga Canyon Boulevard. A storm water pipe traverses beneath the property in a northeast to southwest direction.

4.3.9 SCAQMD Records

Essentia requested to review available SCAQMD records on the subject Site. SCAQMD responded by mail on December 5, 2006. No files could be found pertaining to the Site.

4.4 AERIAL PHOTOGRAPHS

Essentia reviewed eight aerial photographs provided in the EDR Aerial Photo Decade Package. Copies of the aerial photographs are presented in Appendix B. The following is description of the respective aerial photographs, identified by year, that were reviewed:

- 1928: The region is mostly undeveloped containing what appear to be single family dwellings and orchards or farmland. The Site and surrounding parcels appear undeveloped.
- 1938: More development has occurred in the region. The Site and surrounding parcels appear undeveloped.
- 1956: The region and surrounding parcels appear developed with single family dwellings.
- 1965: Little recognizable change appears to have taken place between 1956 and 1965.
- 1976: Little recognizable change appears to have taken place between 1965 and 1976.
- 1989: The apartment building south of the subject parcel appears to have been built between 1976 and 1989.
- 1994: Little recognizable change appears to have taken place between 1989 and 1994.
- 2002: Little recognizable change appears to have taken place between 1994 and 2002.

No changes or improvements appear to have taken place on the Site since 2002. No RECs associated with the Site or surrounding properties were identified in the review of historical aerial photographs.

4.5 TOPOGRAPHIC MAPS

Essentia reviewed USGS historic topographic maps of the Site and vicinity available in the EDR Historical Topographic Map Report. The maps are dated 1900, 1939, 1947, 1953, 1966, 1972, 1988, 1991, and 1995. The Site appears relatively unchanged. The recognizable change over time is the addition of roads in the area. Copies of these maps are presented in Appendix B.

4.6 SANBORN® MAPS

Essentia contacted EDR to research the availability of Sanborn® Maps of the Site and vicinity. No Sanborn® maps were available that included the Site. The Sanborn Map Report® is presented in Appendix B.

4.7 CITY DIRECTORY

Essentia contracted with EDR to prepare a City Directory giving the names of the Site owners and the owners of nearby parcels of land. The City Directory gives no indication of past or present land uses which could involve RECs. The EDR City Directory is presented in Appendix B.

4.8 ENVIRONMENTAL LIENS

Essentia contracted EDR to prepare and environmental lien report for the site. According to EDR's search of records, no environmental liens or other activity use limitations (AULs) are listed for the subject Site. The lien report indicates that the property title is vested in the Los Angeles County Flood Control District and that the title was received from Sam W. Orr, et al in 1953. The EDR Environmental Lien Search Report is presented in Appendix B.

4.9 PREVIOUS ENVIRONMENTAL INVESTIGATIONS

No known environmental investigations or site assessments pertaining to the subject parcel have occurred.

5.0 SITE RECONNAISSANCE

A Site reconnaissance was conducted on November 14, 2006. Copies of photographs taken during the reconnaissance are included as Appendix E.

Essentia conducted the reconnaissance by visually observing the Site. The periphery of the Site was observed by foot and viewed from adjacent public thoroughfares.

5.1 GENERAL SITE SETTING

The Site consists of a relatively flat, rectangular, undeveloped 20,255.4-square-foot parcel on the northwest corner of N. Tujunga Canyon Boulevard and Hillrose Street. The parcel has 129.09 feet of frontage along N. Tujunga Canyon Boulevard, and 180.35 feet of frontage along Hillrose Street.

The Site is bordered by land improved with single-family homes to the north and west. Land northeast of the Site, across N. Tujunga Canyon Boulevard, is improved with single-family homes. Land east and southeast of the Site is occupied by open space (what appears to be a natural drainage area), a single-family home, and a small retail market. Land south and southwest of the Site, across Hillrose Street, is improved with an apartment building and single-family homes.

5.2 OBSERVATIONS

The following are descriptions of the general observations and operational information and observations made during the Site reconnaissance. Representative photographs taken during the site reconnaissance are included as Appendix E.

5.2.1 General Observations

- The Site is a relatively flat, unimproved dirt lot bordered by a concrete-block on the north, and a chain link fence on the east, south, and west.
- The Site has some vegetation along the west fence line.
- One piece of litter, a plastic bag, was noted in the southeast portion of the Site.
- Three poles with overhead lines are located on land adjacent to the south and east boundaries of the Site, each approximately 10 feet in distance from the Site boundary. No other utilities were observed on site.

- A pole-mounted transformer is located on the corner of N. Tujunga Canyon Boulevard and Hillrose Street. Oil staining was not observed beneath the transformer.

5.2.2 Environmental Conditions

No RECs were observed on or around the Site. Such RECs that were not observed or apparent from the review of available database information and files reviewed include: solid and hazardous waste, petroleum products, ASTs and USTs, groundwater contamination, soil contamination, wastewater and storm water, and air emissions. However, it should be noted that no soil, groundwater or air sampling was conducted during the performance of this Phase I ESA.

6.0 INTERVIEWS WITH KNOWLEDGEABLE PERSONEL

The Los Angeles County Department of Public Works - Flood Control District (LACFCD), the Site owner, was contacted on January 3, 2007, to discuss the history of the Site. Mr. Don Watts responded via email on January 8, 2007. Lots 23 and 24 of Tract No. 3977 were acquired by LACFCD via eminent domain on January 7, 1954, from Thomas J. Keaney and Alice L. Keaney. Lot 25 of Tract No. 3977 was acquired by LACFCD via eminent domain on December 7, 1953, from Irene Hazel. Mr. Watts stated that LADPW has no knowledge of RECs associated with the Site or of hazardous materials storage or use on the Site. The only indication of past use provided was that an earthen stream may have at one time traversed the Site which was once subject to inundation. The only known current use associated with the Site is that an underground, 60" reinforced concrete storm water pipe traverses beneath the Site. The storm water pipe was built in approximately 1955 to 1956.

The owner of the adjacent parcel north of the Site, Mr. Ernest Aguilar, was interviewed on November 14, 2006. Mr. Aguilar has lived adjacent to the Site for approximately 15 years. During this time, the parcel has remained unused and unimproved. Additionally, Mr. Aguilar has not witnessed evidence of use, storage, or disposal of hazardous materials on the Site, although he has seen evidence of the unauthorized disposal of broken furniture.

7.0 FINDINGS

The following is a summary of information reviewed and observations for the Site during the Phase I ESA.

- The Site has been owned by the Los Angeles County Flood Control District since 1953.
- The Site is 20,255.4 square feet with 129.09 feet of frontage along N. Tujunga Canyon Boulevard and 180.35 feet of frontage along Hillrose Street.
- RECs were not observed on the Site or apparent on the adjoining properties. A plastic bag was the only debris noted on site during the site reconnaissance, although the neighbor interviewed during the site reconnaissance indicated that he had observed broken furniture on the Site at one time.
- Based on the review of environmental databases, commercial and industrial activities in the area within 0.5 mile of the Site have not resulted in soil or groundwater contamination.
- A pole-mounted transformer is located on the corner of N. Tujunga Canyon Boulevard and Hillrose Street. Oil staining was not observed beneath the transformer.

8.0 CONCLUSIONS AND RECOMMENDATIONS

No RECs were identified for the subject parcel based on information review and observations of the subject parcel and adjoining parcels. Based on the findings, no additional investigations are recommended at this time.

9.0 REFERENCES

9.1 AERIAL PHOTOGRAPHS

Year	Photographer	Scale
1928	Fairchild	1″=500′
1938	Laval	1″=555′
1956	Fairchild	1″=400′
1965	Fairchild	1″=666′
1976	Teledyne	1″=666′
1989	USGS	1″=666′
1994	USGS	1″=666′
2002	USGS	1″=666′

9.2 TOPOGRAPHIC MAPS

Year	Quadrangle	Scale
1900	Fernando	1:62,500
1939	La Crescenta	1:24,000
1947	San Fernando	1:50,000
1953	Sunland	1:24,000
1966	Sunland	1:24,000
Photorevised: 1966-1972	Sunland	1:24,000
Photorevised: 1966-1988	Sunland	1:24,000
1991	Sunland	1:24,000
1995	Sunland	1:24,000

9.3 OTHER REFERENCES

American Society for Testing Materials, 2005, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process: Designation E 1527-05.

City of Los Angeles, 2006. Parcel Profile Report for APN 2557-010-900. November 6, 2006.

EDR, 2006. The EDR City Directory, Inquiry Number: 1791638.6. November 8, 2006.

EDR, 2006. The EDR Environmental Lien Search Report, Project Number: L06-8120. November 18.

EDR, 2006. The EDR Radius Map with Geocheck®, Inquiry Number: 1791638.5. November 7.

EDR, 2006. Sanborn® Map Report, Inquiry Number: 1791638.3. November 7.

NavigateLA web site. Maintained by the Bureau of Engineering of LADPW. http://navigatela.lacity.org

PG. Schruben, R.E. Arndt, and W.J. Bawiec, 1994. Geology of the Conterminous U.S. at 1:2,500,000 scale. A digital representation of the 1974 P.B. King and H.M. Biekman Map. USGS Digital Data Series DDS-11.

State of California - Department of Conservation, Division of Oil, Gas, and Geothermal Resources. Regional Wildcat Map W1-2. http://www.consrv.ca.gov/DOG/.