

L. UTILITIES AND SERVICE SYSTEMS

The purpose of this section is to assess the potential impacts to utilities and service systems serving the project and Add areas, including the local sewer system, regional wastewater treatment facilities, solid waste disposal facilities, and energy consumption. Demand generation for the proposed project and Add Area were calculated based on rates presented in the Los Angeles CEQA Thresholds Guide (City of Los Angeles 2006), and rates provided or used by other agencies including the County of Los Angeles and South Coast Air Quality Management District (SCAQMD). A Utility Report for the proposed project was prepared by Development Resource Consultants, Inc. in September 2008; this report is available in Appendix H of this document.

1. WASTEWATER

EXISTING CONDITIONS

The City of Los Angeles Department of Public Works Bureau of Sanitation (LABS) provides sewer conveyance infrastructure and wastewater treatment services to the project site. The LABS operates four treatment and water reclamation plants that serve over four million people. These facilities include the Hyperion Treatment Plant (HTP), Terminal Island Treatment Plant, Donald C. Tillman Water Reclamation Plant and the Los Angeles-Glendale Water Reclamation Plant.

Wastewater generated by the project site would be treated at the Hyperion Treatment Plant (HTP). The HTP, which has been designed to treat 450 million gallons per day (mgd) and currently treats an average of about 349 mgd to primary and secondary treatment standards, using three levels of filtration treatment before discharging the treated wastewater five miles offshore.¹ The remaining capacity of the HTP is, therefore, approximately 101 mgd or approximately 22 percent of its total capacity.

Local Sewer System

Project Site

The sewer infrastructure that serves the project site consists of an 8-inch sewer main located in Victory Boulevard. The 8-inch sewer in Victory Boulevard is at an average depth of 15 feet below existing grade and flows westerly. A dedicated public 8-inch sewer main extends northerly from Victory Boulevard into the project site.²

The existing uses on the project site currently discharge wastewater into the existing sewer system. **Table IV.L-1**, below, shows the calculated wastewater generated from the existing uses on-site. As shown in **Table IV.L-1**, the existing shopping center is expected to generate 47,267 GPD of sewerage based on standard generation rates, however, wastewater generation based on billing methodology is estimated to be about 46,094 gpd.³

¹ <http://www.lastormwater.org/Siteorg/general/hyperrn1.html> Accessed August 27, 2008.

² Development Resource Consultants, Inc. *Utility Report for the Plaza at the Glen*. September 2008; see Appendix H.

³ Development Resource Consultants, Inc., August 2008. This assumes a 151,806 square foot shopping center with a generation rate of 0.38865 Gal/Day/Sq Ft. The total demand was divided by 128% non-residential sewer consumption factor.

TABLE IV.L-1 EXISTING CALCULATED WASTEWATER GENERATION -- PROJECT SITE		
Use	Generation Factor ¹	Total Demand (GPD)
41,141 sq. ft. Health Club	0.80 gal/day/sq. ft.	32,913
32,000 sq. ft. Market	0.02 gal/day/sq. ft.	640
31,117 sq. ft. Drug Store	0.08 gal/day/sq. ft.	2,489
4,524 sq. ft. Restaurant	25 Gal/Day/Seat (302 seats) ²	7,550
3,324 sq. ft. Bank	0.15 gal/day/sq. ft.	499
39,700 sq. ft. Other ³	0.80 Gal/Day/sq. ft.	3,176
Total		47,267
SOURCE: Development Resource Consultants, Inc. September 2008, ¹ Generation Factors are based on unit of measurement found in the 2006 Los Angeles CEQA Thresholds Guide, Exhibit M.2-12 Sewage Generation Factor. ² 15 sq. ft./seat used to estimate seat count. ³ Various commercial and retail uses from 780 sq. ft to 4,524 sq. ft.		

Add Area

In its existing condition, the wastewater generated in the Add Area flows into 10-inch public sewer mains located in Morse Avenue, Hamlin Street, and Coldwater Canyon Avenue, and the eight-inch public main located in Victory Boulevard. The combined flow continues to flow south in Coldwater Canyon Avenue and ultimately heads east as a part of the City of Los Angeles public sewer network. As shown in **Table IV.L-2**, the existing Add Area is calculated to produce 16,993 GPD.

TABLE IV.L-2 EXISTING CALCULATED WASTEWATER GENERATION -- ADD AREA		
Use	Generation Factor ¹	Total Demand (GPD)
5,766 sq. ft. Retail	0.08 Gal/Day/sq. ft.	461
4,792 sq. ft. Restaurant	25 Gal/Day/Seat (320 seats) ²	8,000
18,356 sq. ft. Church	0.10 Gal/Day/sq. ft.	1,836
18,414 sq. ft. Warehouse	0.02 Gal/Day/sq. ft.	368
63,281 sq. ft. School	0.10 Gal/Day/sq. ft.	6,328
Total		16,993³
SOURCE: Development Resource Consultants, Inc. September 2008 ¹ Generation Factors are based on unit of measurement found in the 2006 Los Angeles CEQA Thresholds Guide, Exhibit M.2-12 Sewage Generation Factor. ² 15 sq. ft./seat used to estimate seat count. ³ Assumes there is currently sufficient capacity.		

ENVIRONMENTAL IMPACTS

THRESHOLD OF SIGNIFICANCE

The proposed project would result in significant impacts to wastewater and sewer services if it:

- Requires the expansion of existing regional wastewater treatment facilities or requires the construction of new regional wastewater treatment facilities which could result in significant environmental effects; or
- Place a substantial burden on local wastewater infrastructure, such that increased demand could not be met by available facilities or feasible local improvements.
- Causes a measurable increase in wastewater flows where, and/or at a time when, a sewer's capacity is already constrained or that would cause a sewer's capacity to become constrained; or
- Additional wastewater flows would substantially or incrementally exceed the future scheduled capacity of any one treatment plant by generating flows greater than those anticipated in the Wastewater Facilities Plan or General Plan and its Elements.

PROJECT IMPACTS

Project Site

The proposed project would clear all existing uses from the site, prior to construction. **Table IV.L-3** provides the estimated net calculated daily sewer generation that would occur with the proposed project. As **Table IV.L-3** shows, the proposed project is estimated to generate 431,650 gallons of wastewater per day, resulting in a net wastewater generation increase of 384,383 gallons of wastewater per day over the existing on-site generation. As noted above, actual wastewater generation based on the billing methodology is estimated to be about 46,094 gallons per day, which could result in a net increase in wastewater generation of 385,556 gallons per day.

An 8-inch sewer main with lift stations is proposed for the project site. Connection would occur to the existing 8-inch sewer line in Victory Boulevard. The City of Los Angeles Bureau of Sanitation has indicated they have the capacity in adjacent sewers to serve the project.⁴

It should be noted that this estimated wastewater generation does not reflect any benefits attributable to City of Los Angeles water conservation and sewer allocation ordinances, as well as benefits from application of LEED ND Reduced Use and Wastewater Management Credits as may implemented by the proposed project. Consequently, estimated wastewater generation for the proposed project is considered conservative. Actual wastewater generation of the project may be lower.

⁴ Letter dated September 24, 2008 to DRC (included in Appendix H of this EIR).

Add Area

As shown in **Table IV.L-2**, existing uses located on the Add Area are estimated to generate 16,993 gallons of wastewater per day. **Table IV.L-4** shows estimated wastewater generation under anticipated development of the Add Area. As **Table IV.L-4** shows, development of the Add Area is anticipated to generate 75,060 gallons of wastewater per day, resulting in a net wastewater generation increase of 58,067 gallons of wastewater per day over existing.

TABLE IV.L-3 CALCULATED WASTEWATER GENERATION -- PROPOSED SITE		
Use ⁵	Generation Factor ¹	Total Demand (GPD)
185,000 sq. ft. Retail	0.08 Gal/Day/sq. ft.	14,800
115,000 sq. ft. Restaurant	25 Gal/Day/Seat (7,666) ^{2,3}	191,650
200,000 sq. ft. Common Area	0.08 Gal/Day/sq. ft.	16,000
500,000 sq. ft. Office	0.18 Gal/Day/sq. ft.	90,000
50,000 sq. ft. Medical Office	0.25 Gal/Day/sq. ft.	12,500
68,500 sq. ft Theatre	4 Gal/Day/Seat (2,700 seats)	10,800
45,000 sq. ft. Gym	0.80 Gal/Day/sq. ft.	36,000
151,500 sq. ft. Hotel	130 Gal/Day/Room (230 rooms)	29,900
200,000 sq. ft. Residential	200 Gal/Day/Unit (150 units) ⁴	30,000
Total		431,650
<i>Less Existing Uses</i>		<i>47,267</i>
Total Net Increase		384,383
SOURCE: Development Resource Consultants, Inc. September 2008.		
¹ Generation factors are based on units of measurement found in the 2006 Los Angeles CEQA Threshold Guidelines, Exhibit M.2-12, Sewage Generation Factor.		
² 15 sq.ft/seat used for determining seat count.		
³ Restaurant generation factor based upon anticipated average types of restaurant uses.		
⁴ Residential generation factor based upon anticipated number of 2-bedroom and 3-bedroom condo units.		
⁵ Due to rounding and a conservative approach individual areas add to slightly more than the 1.5 million gross sf proposed.		

The anticipated design for the Add Area would include discharge into existing service laterals located in Morse Avenue, Hamlin Street, Coldwater Canyon and Victory Boulevard. According to the Utility Report prepared for the proposed project including Add Area, impacts to the public infrastructure located immediately adjacent to the site are considered to not be accumulative with the proposed project because the project site sewer system drains to the south-west and the sewers serving the Add Area flow to the south-east.⁵

Impacts resulting from anticipated development of the Add Area on the existing local infrastructure and the public system as a whole would need to be analyzed with the City of Los

⁵ Ibid.

Angeles Bureau of Sanitation during design of the Add Area. This could be considered a potentially significant impact.

TABLE IV.L-4 CALCULATED WASTEWATER GENERATION -- PROPOSED ADD AREA		
Use	Generation Factor ¹	Total Demand (GPD)
57,000 sq. ft. Shopping Center	0.08 Gal/Day/sq. ft.	4,560
18,350 sq. ft. Church	0.10 Gal/Day/sq. ft. ²	1,835
168,000 sq. ft. Office	0.18 Gal/Day/sq. ft.	30,240
20,250 sq. ft. School	0.10 Gal/Day/sq. ft. ²	2,025
222,000 sq. ft. Residential	200 Gal/Day/Unit (182 units)	36,400
Total		75,060
<i>Less Existing Uses</i>		<i>16,993</i>
Total Net Increase		58,067
SOURCE: Development Resource Consultants, Inc. September 2008.		
¹ Generation Factors are based on units of measurement found in the 2006 Los Angeles CEQA Threshold Guidelines, Exhibit M.2-12 Sewage Generation Factor.		
² Commercial generation factors were used for worst case scenario.		

Proposed Project and Add Area

Wastewater generation under the proposed project is anticipated to be 431,650 GPD. Anticipated development of the Add Area is expected to generate approximately 75,060 GPD. Therefore, a total of 506,710 GPD would be generated under development of the proposed project and Add Area. Incorporation of the following mitigation measures would reduce impacts to less than significant levels.

Mitigation measures are required to ensure that adequate sewer connections/improvements to serve the proposed project can be identified and implemented and that constraints to existing capacity have been remedied to the satisfaction of the City.

MITIGATION MEASURES

IV.L-1 In order to ensure that sufficient sewer capacity is available to serve the proposed project and anticipated Add Area development, as part of environmental review of proposed development, any future applicant(s) shall identify the dimensions and specifications of any sewer improvements as may be determined necessary by, and to the satisfaction of, the Wastewater Division of the Department of Public Works. Specific system requirements shall be incorporated into the project design, prior to issuance of any grading or building permits for the respective project.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Mitigation Measure IV.L-1 would ensure that sufficient improvements are provided with adequate capacity to serve the Add Area to the satisfaction of the Bureau of Sanitation. While the extent of improvements would be determined by the City and any future applicant(s),

pending further gauging of the existing sewer system at the time of development the applicant will be bound to providing improvements that are, at a minimum, sufficient to meet the needs of the proposed project within the capacity limits established by the City. Consequently, with implementation of mitigation, no significant unmitigated impacts would occur to the local sewer system or to HTP facilities as a result of the proposed project and anticipated development of the Add Area.

CUMULATIVE IMPACTS

The proposed project, anticipated development of the Add Area and the related projects would increase wastewater generation in the area and in the City in general. With implementation of Mitigation Measure IV.L-1, the Add Area would have less than significant impacts on the local sewer system and to the HTP infrastructure. As with the proposed project, each individual related project will be evaluated by the Bureau of Engineering to determine what, if any project specific improvements may be required to connect to the local system to ensure that sufficient capacity is available. Similar to anticipated development in the Add Area, specific improvements associated with the related projects will be required as conditions of approval which must be cleared by the City for that project to proceed. It is anticipated that localized improvements will be necessary, the extent of which can only be evaluated on a project-by-project basis. Each project will similarly be subject to connections fees and it is further anticipated that development in the North Hollywood area will provide the opportunity for the City to fund further area wide improvements. Consequently, the proposed and related projects would not result in significant unmitigated cumulative impacts associated with wastewater generation or infrastructure.

2. WATER SUPPLY

EXISTING CONDITIONS

The City of Los Angeles Department of Water and Power (LADWP) is responsible for ensuring that water demand in the City is met and that State and federal water quality standards are achieved. City of Los Angeles water supplies are derived from the following sources: 1) approximately 50 percent from the Los Angeles Aqueduct; 2) approximately 15 percent from groundwater; and 3) approximately 35 percent from purchases from the Metropolitan Water District (MWD).⁶ The amount of water obtained from these sources varies from year to year, and is dependent on weather conditions and demand. In addition, reclamation of wastewater is utilized for certain irrigation purposes.

In response to water supply uncertainties, including those impacting the MWD, the Mayor and LADWP released a Water Supply Action Plan (Action Plan) on May 17, 2008. The plan, entitled "Securing L.A.'s Water Supply," serves as a blueprint for creating sustainable sources of water for the future of Los Angeles to reduce dependence on imported supplies.⁷ The Action Plan's approach includes the following:

- investments in state-of-the-art technology;
- a combination of rebates and incentives;
- the installation of smart sprinklers,
- efficient washers and urinals;

⁶ City of Los Angeles Department of Water and Power, 2005 Urban Water Management Plan.

⁷ City of Los Angeles. MWD and LADWP Plans and Programs to Secure Future Water Supplies, Appendix H

- and long-term measures such as expansion of water recycling and investment in cleaning up the local groundwater supply.

The Action Plan also takes into account the realities of climate change and the dangers of drought and dry weather. (See Appendix H-MWD and LADWP Plans and Programs to Secure Future Water Supplies for further detail.)

Water Storage is essential for LADWP to supply water during high demand conditions and for firefighting and emergencies. The City Water System includes 104 tanks and reservoirs ranging in size from 10,000 to 60 billion gallons with a total capacity of 109 billion gallons.⁸ In addition to state regulation, LADWP has instituted its own water conservation measures, including:

- “The Emergency Water Conservation Plan of the City of Los Angeles” (LAMC Sections 121.00-121.11) – Provides for the implementation for citywide phases water conservation program to respond to dry weather periods based on the LADWP’s evaluation of the projected supply and demand of City water supplies. The phased conservation program provides for mandatory water conservation measures at the user level and customer curtailment of normal water usage.
- “Water Closet, Urinal, and Showerhead Regulations” (LAMC Sections 122.00-122.10) – Reduces Water Consumption by requiring new buildings to include water conservation fixtures, such as ultra-low flush toilets, urinals, taps, and showerheads and plumbing fixtures that reduce water loss from leakage in order to obtain City building permits.
- “The Landscape Ordinance” (Ordinance No. 170,978) Includes provisions requiring xeriscaping (i.e., the use of low maintenance, drought resistant plants).

Local Water System

Project Site

The nearest existing water line to the project site is a 16-inch water main in Victory Boulevard. An existing on-site 10-inch private fire main services the existing shopping center on the site. Based on utility bills, the domestic water demand of the existing shopping center is 59,000 gallons per day (GPD).⁹ Water use rates are based upon the 2007 average monthly bill for the existing shopping center. The actual use is below what would be calculated based on City of Los Angeles demand rates. The existing calculated water usage on the project site (60,502 GPD) is shown in **Table IV.L-5**.

Add Area

Public water mains in the area that provide service to the Add Area include 6-inch service lines in Morse Avenue and Hamlin Street, an 8-inch service main in Coldwater Canyon Avenue, and a 16-inch main in Victory Boulevard. A 66-inch trunk main is located in Coldwater Canyon Avenue. The estimated domestic water demand for the existing developments located on the Add Area is 21,751 GPD as shown in **Table IV.L-6**.

⁸ City of Los Angeles, Draft L.A. CEQA Thresholds Guide, 2006.

⁹ Development Resource Consultants, Inc., *Utility Report for the Plaza at the Glen*, September 2008; see Appendix H.

Regulatory Setting

The Urban Water Management Planning Act (Water Code Sections 10610-10656) states that every urban water supplier that provides water to 3,000 or more customers, or that provides over 3,000 acre feet of water annually, should make every effort to ensure that there is an appropriate level of reliability in its water service sufficient to meet the needs of its various categories of customers during normal, dry and multiple dry years. The Act identifies what should be included in the contents of required Urban Water Quality Management Plans, as well as how urban water suppliers should adopt and implement the plans. It is the intention of the Legislature, in enacting this act, to permit levels of water management planning commensurate with the numbers of customers served and volume of water supplied.

TABLE IV.L-5 EXISTING CALCULATED WATER USAGE -- PROJECT SITE		
Use	Generation Factor ¹	Total Demand (GPD)
41,141 sq. ft. Health Club	0.80 Gal/Day/sq. ft.	32,913
32,000 sq. ft. Market	0.02 Gal/Day/sq. ft.	640
31,117 sq. ft. Drug Store	0.08 Gal/Day/sq. ft.	2,489
4,524 sq. ft. Restaurant	25 Gal/Day/Seat (302 seats) ²	7,550
3,324 sq. ft. Bank	0.15 Gal/Day/sq. ft.	499
39,700 sq. ft. Other ⁴	0.08 Gal/Day/sq. ft.	3,176
Sub Total		47,267
Total (47,267 x 128.0% Non-Residential Water Consumption Factor)³		60,502
SOURCE: Development Resource Consultants, Inc. September 2008		
¹ Quantities based on units of measurement found in 2006 Los Angeles CEQA Thresholds Guidelines, Exhibit M.2-12 Sewage Generation Factors.		
² 15 sq. ft./seat used for determining seat count.		
³ Water consumption determined by increasing sewer generation rates by the appropriate water consumption factor appropriate to the use (Residential: 18%, Non-Residential: 28%).		
⁴ Various commercial and retail uses ranging in size from 780 sq. ft. to 4,524 sq. ft.		

Senate Bill 610 (Water Code Section 10910-10915) and Senate Bill 221 (Government Code Section 66473.7) amended state law effective January 1, 2002, to improve the link between information on water supply availability and certain land use decisions made by cities and counties. Senate Bill 610 and SB 221 are companion measures, which seek to promote more collaborative planning between local water suppliers and cities and counties. Both statues also require this detailed information be included in the administrative record that serves as the evidentiary basis for an approval action by the city or county on such projects.

TABLE IV.L-6 EXISTING CALCULATED WATER USAGE -- ADD AREA		
Use	Generation Factor ¹	Total Demand (GPD)
5,766 sq. ft. Retail	0.08 Gal/Day/sq. ft.	461
4,792 sq. ft. Restaurant	25 Gal/Day/Seat (320 seats) ²	8,000
18,356 sq. ft. Church	0.10 Gal/Day/sq. ft. ³	1,836
18,414 sq. ft. Warehouse	0.02 Gal/Day/sq. ft.	368
63,281 sq. ft. School	0.10 Gal/Day/sq. ft. ³	6,328
Sub Total		16,993
Total (16,993 x 128.0% Non-Residential Water Consumption Factor)⁴		21,751
SOURCE: Development Resource Consultants, Inc. September 2008.		
¹ Generation factors are based on units of measurement found in the 2006 Los Angeles CEQA Threshold Guidelines, Exhibit M.2-12 Sewage Generation Factors.		
² 15 sq. ft./seat used for determining seat count.		
³ Commercial generation factors were used for worst case scenario.		
⁴ Water consumption determined by increasing sewer generation rates by the appropriate water consumption factor appropriate to the use (Residential:18%, Non-Residential:28%).		

Both measures recognize local control and decision-making regarding the availability of water for projects and approval of projects. Under SB 610, water assessments must be furnished to local governments for inclusion in environmental documentation for certain projects (as defined in Water Code 10912 [a], i.e., 500+ new dwelling units or the equivalent) subject to CEQA. Under SB 221, approval by a city or county of certain residential subdivisions requires an affirmative written verification of sufficient water supply.

Water Code, Section 10910 requires the identification of any public water system that may supply water for proposed projects that are subject to CEQA and provides guidelines to include in the water supply assessment. A water supply assessment would be required under the following circumstances:

- A proposed residential development of more than 500 dwelling units;
- A proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space;
- A proposed commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space;
- A proposed hotel or motel, or both, having more than 500 rooms;
- A mixed-use project that includes one or more of the projects specified in this subdivision; or
- A project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500 dwelling unit project.

ENVIRONMENTAL IMPACTS

THRESHOLD OF SIGNIFICANCE

The proposed project would have a significant impact on water supply if:

- A project would require or result in the construction of new water facilities or expansion of existing facilities, the construction of which could cause significant environmental effects; or
- There were insufficient water supplies available to serve the project from existing entitlements and resources, or new or expanded entitlements were needed.
- The total estimated water demand for the project exceeds the planned amount for the area identified in the Urban Water Management Plan;
- Sufficient capacity does not exist in the water infrastructure that would serve the project, taking into account the anticipated conditions at project build out;
- The project would cause the projected growth in population, housing or employment for the Community Plan area to be exceeded in the year of project completion; and
- Scheduled water infrastructure improvements or project design features would not reduce or offset service impacts.

PROJECT IMPACTS

The California Water Code, Section 10910 requires the identification of any public water system that may supply water for projects that are subject to CEQA and provides guidelines to include in the water supply assessment. A water supply assessment is required if a project meets certain conditions (see above discussion of the Water Code).

The proposed project would include approximately 150 housing units and 1.3 million net (1.5 million gross) square feet of development. Based on the assessment guidelines, the proposed project requires a water supply assessment.¹⁰

During construction of the proposed project, a minimal amount of water consumption is anticipated. The main purpose of water consumption during the construction phase would be to comply with AQMD Rule 403 regarding fugitive dust containment. Water would also be used for mixing and pouring of concrete and other construction-related activities. Water usage for such purposes, however, would be temporary and would not exceed that of the proposed mixed-use development.

¹⁰ Formal Water supply assessment pending as of preparation of this document; however Tom Erb, Director of Water Resources, LADWP, E-Mail Communication, February 23,2009 indicates a calculated project water demand of 433,476 gpd and an “allowed water demand” of 232,632 gpd plus an existing water demand of 58,996 gpd resulting in required conservation of 141,848 gpd. The calculated water demand presented in the Draft EIR is higher than calculated by LADWP and therefore represents a conservative estimate; however mitigation measure IV.L.8 would commit the project to consuming no more than a net increase of 232,632 gpd.

Proposed Project

The proposed project would clear all existing uses from the site prior to construction. As shown in **Table IV.L-5**, calculated existing uses on the property are estimated to use approximately 60,502 gallons of water per day, although water bills show current use of 59,000 gallons per day. Water usage at the site would increase with construction of the project. **Table IV.L-7** provides the calculated net daily water usage (GPD) that would occur with the proposed project. The proposed project water usage is calculated by first calculating the total amount of water usage from all of the proposed project development then subtracting the actual existing usage of 60,502 gallons of water per day to arrive at the project's net increase in water usage.

TABLE IV.L-7 CALCULATED WATER USAGE -- PROPOSED SITE		
Use⁶	Generation Factor¹	Total Demand (GPD)
185,000 sq. ft. Retail	0.08 Gal/Day/sq. ft.	14,800
115,000 sq. ft. Restaurant	25 Gal/Day/Seat (7,666) ^{2,3}	191,650
200,000 sq. ft. Common Area	0.08 Gal/Day/sq. ft.	16,000
500,000 sq. ft. Office	0.18 Gal/Day/sq. ft.	90,000
50,000 sq. ft. Medical Office	0.25 Gal/Day/sq. ft.	12,500
68,500 sq. ft. Theatre	4 Gal/Day/Seat (2,700 seats)	10,800
45,000 sq. ft. Gym	0.80 Gal/Day/sq. ft.	36,000
151,500 sq. ft. Hotel	130 Gal/Day/Room (230 rooms)	29,900
200,000 sq. ft. Residential	200 Gal/Day/Unit (150 units) ⁴	30,000
Sub Total Residential		30,000
Sub Total Commercial		401,650
Total Residential (30,000 x 118.0% Residential Water Consumption Factor) ⁵		35,400
Total Commercial (401,650 x 128.0% Non-Residential Water Consumption Factor) ⁵		514,112
Total		549,512
<i>Less Existing Uses</i>		<i>60,502</i>
Total Net Increase		489,010
SOURCE: Development Resource Consultants, Inc. September 2008.		
¹ Generation factors are based on units of measurement found in the 2006 Los Angeles CEQA Threshold Guidelines, Exhibit M.2-12, Sewage Generation Factor.		
² 15 sq. ft./seat used for determining seat count.		
³ Restaurant generation factor based upon anticipated average types of restaurant uses.		
⁴ Residential generation factor based upon anticipated number of 2-bedroom and 3-bedroom condo units.		
⁵ Water consumption determined by increasing sewer generation rates by the appropriate water consumption factor appropriate to the use (Residential:18%, Non-Residential:28%).		
⁶ Due to rounding and a conservative approach individual areas add to slightly more than the 1.5 million gross sf proposed		

In addition to the domestic demand, the proposed project would deliver on-site fire hydrant flow in accordance with fire department requirements. The Los Angeles Fire Department has issued a minimum fire hydrant demand/flow of 4,000 GPM.¹¹ The existing facilities are sufficiently sized to deliver the required on-site fire flow.¹²

LADWP has worked with MWD in developing a framework for allocating water supplies during periods of shortage as well as surplus. MWD has a Water Surplus and Drought Management Plan that provides such a framework. LADWP intends to work within the framework established through the Water Surplus and Management Plan in acquiring its drought supplies from MWD in the future.

Even during shortages, MWD expects that it will be able to meet its member agencies' long-term needs through a combination of actions, including water transfer programs, outdoor conservation measures, and development of additional local resources, such as recycling, brackish water desalination, and seawater desalination. Additionally, MWD has more than approximately 3.8 AF of storage capacity available in reservoirs and banking/transfer programs.

As **Table IV.L-7** shows, the proposed project is estimated to use 549,512 gallons of water per day, resulting in a net usage increase of 489,010 gallons of water per day over the existing on-site generation. It should be noted that this estimated generation does not reflect any benefits attributable to City of Los Angeles water conservation and sewer allocation ordinances, as well as benefits from application of LEED ND Reduced Water Use and Wastewater Management Credits. Consequently, estimated water usage for the project is considered conservative, and in fact, may be lower.

Add Area

Anticipated development of the Add Area would remove many of the existing uses located in the Add Area. These include retail, warehouse, school and restaurant uses. Of the two existing schools, the one associated with the church would remain under anticipated development. As shown in **Table IV.L-6**, existing uses located on the Add Area are anticipated to consume 21,751 GPD. Anticipated water consumption under anticipated development of the Add Area would be 92,437 GPD as shown in **Table IV.L-8**. The net increase would be 70,686 GPD.

Anticipated development of the Add Area would connect to the existing mains located in Victory Boulevard and Coldwater Canyon Avenue. The anticipated fire flow requirement for the Add Area is 4,000 GPM. The increased domestic demand of the Add Area is considered accumulative with the impacts of the proposed project with respect to the public water infrastructure. Impacts resulting from anticipated development of the Add Area would be analyzed with LADWP in the design phase. This would be considered a potentially significant impact.

Proposed Project and Add Area

Water usage under the proposed project is anticipated to be 549,512 GPD. Anticipated development of the Add Area is expected to generate approximately 92,437 GPD. Therefore, a total of 641,949 of GPD is anticipated under development of the proposed project and Add

¹¹ Development Resource Consultants, *The Plaza at the Glen-Fire Flow Analysis*, July 2008.

¹² Ibid.

Area. Incorporation of the mitigation measures would reduce impacts to less than significant levels.¹³

TABLE IV.L-8 CALCULATED WATER USAGE -- ADD AREA		
Use	Generation Factor ¹	Total Demand (GPD)
57,000 sq. ft. Shopping Center	0.08 Gal/Day/sq. ft.	4,560
18,350 sq. ft. Church	0.10 Gal/Day/sq. ft. ²	1,835
168,000 sq. ft. Office	0.18 Gal/Day/sq. ft.	30,240
20,250 sq. ft. School	0.10 Gal/Day/sq. ft. ²	2,025
222,000 sq. ft. Residential	200 Gal/Day/Unit (182 units)	36,400
Sub Total Residential		36,400
Sub Total Commercial		38,660
Total Residential (36,400 x 118.0% Residential Water Consumption Factor) ³		42,952
Total Commercial (38,660 x 128.0% Non-Residential Water Consumption Factor) ³		49,485
Total		92,437
<i>Less Existing Uses</i>		<i>21,751</i>
Total Net Increase		70,686
SOURCE: Development Resource Consultants, Inc. September 2008.		
¹ Generation factors are based on units of measurement found in the 2006 Los Angeles CEQA Threshold Guidelines, Exhibit M.2-12, Sewage Generation Factor.		
² Commercial factors used as worst-case.		
³ Water consumption determined by increasing sewer generation rates by the appropriate water consumption factor appropriate to the use (Residential:18%, Non-Residential:28%).		

MITIGATION MEASURES

IV.L-2 Each applicant shall implement water conservation measures in new development that shall include but not be limited to the following:

- Installation of high-efficiency toilets (1.28 gallons per flush or less, includes dual flush)
- High-efficiency urinals (0.5 gallons per flush includes waterless)
- Restroom faucet flow rate of 1.5 gallons per minute or less
- Public restroom self-closing faucets
- Showerhead flow rate of 2 gallons per minute or less
- Limit of one showerhead per shower stall
- High efficiency clothes washers (water factor of 6.0 or less)
- High efficiency dishwashers (Energy Star rated)

¹³ Tom Erb, Director of Water Resources, LADWP, E-Mail Communication, February 23,2009 indicates a calculated project water demand of 433,476 gpd and an “allowed water demand” of 232,632 gpd plus an existing water demand of 58,996 gpd resulting in required conservation of 141,848 gpd. The calculated water demand presented in the Draft EIR is higher than calculated by LADWP and therefore represents a conservative estimate; however mitigation measure IV.L.8 would commit the project to consuming no more than a net increase of 232,632 gpd.

- Domestic water heating system located in close proximity to point(s) of use, as feasible; use of tankless and on-demand water heaters as feasible
- Cooling towers must be operated at a minimum of 5.5 cycles of concentration
- Install on-site water recycling as feasible
- Use of recycled water (if available) for appropriate end uses (irrigation, cooling towers, sanitary)
- Single pass cooling shall be prohibited (e.g. any vacuum pumps or ice machines)
- Irrigation shall include;
 - ✓ Weather-based irrigation controller with rain shutoff
 - ✓ Flow sensor and master valve shutoff (for large landscaped areas)
 - ✓ Matched precipitation (flow) rates for sprinkler heads
 - ✓ Drip/microspray/subsurface irrigation where appropriate
 - ✓ Minimum irrigation system distribution uniformity of 75%
 - ✓ Proper hydro-zoning, turf minimization and use of native/drought tolerant plant materials
 - ✓ Use of landscape contouring to minimize precipitation runoff

IV.L-3 Prior to the issuance of a building permit, the applicant shall consult with LADWP to identify feasible and reasonable measures that reduce water consumption, including, but not limited to, systems to use reclaimed water for landscaping (should reclaimed water become available to the City), drip irrigation, re-circulating hot water systems, water conserving landscape techniques (such as mulching, installation of drip irrigation systems, landscape design to group plants of similar water demand, soil moisture sensors, automatic irrigation systems, clustered landscaped areas to maximize the efficiency of the irrigation system), water conserving kitchen and bathroom fixtures and appliances, thermostatically controlled mixing valves for baths and showers, and insulated hot water lines, as per City adopted UBC requirements.

IV.L-4 The project shall incorporate Phase I of the City of Los Angeles Emergency Water Conservation Plan. The Plan prohibits hose watering of driveways and associated walkways, mandates decorative fountains to use recycled water, and provides that water leaks are repaired in a timely manner.

IV.L-5 The project shall comply with any additional mandatory water use restrictions imposed as a result of drought conditions.

IV.L-6 Automatic sprinkler systems shall be installed to irrigate landscaping during morning hours or during the evening to reduce water losses from evaporation. Sprinklers shall be reset to water less often in cooler months and during the rainfall season, so that water is not wasted in excessive landscape irrigation.

IV.L-7 Prior to issuance of building permits, the applicant shall pay any appropriate fees imposed by the Building and Safety Department. A percentage of building permit fees is contributed to the fire hydrant fund, which provides for Citywide fire protection improvements.

IV.L-8 LADWP has calculated the water use likely to have occurred under buildout of the site under the current zoning (232,632 gpd). Any net water demand (project use minus

existing use) above the demand calculated under the existing zoning is considered "unplanned water supply." The project shall provide for new water supply through a combination of water conservation (on and potentially off-site) and recycled water, such that the net increase in water demand (not including demand for recycled water) from the project and mitigation does not exceed the calculated demand under current zoning as approved by LADWP in their water supply assessment.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Development of the project in conjunction with the related projects would result in an increase in the demand for water service in LADWP's service area and would further increase the regional demand for water supplies. However, implementation of Mitigation Measures IV.L-2 through IV.L-7 would result in a less than significant impact with respect to water supply impacts of the proposed project and Add Area.

CUMULATIVE IMPACTS

The proposed project and the related projects would increase water usage in the project area. Like the proposed project, related projects in the City of Los Angeles would not be permitted to connect LADWP's water conveyance unless sufficient capacity exists to accommodate the additional demands. The related projects are anticipated to be constructed in accordance with State water conservation regulations and within the limits of the applicable Community and General Plans. With implementation of Mitigation Measures IV.L-2 through IV.L-7, the proposed project would have less than significant impacts on water supply. The UWMP accounts for existing development within the City as well as projected growth anticipated to occur through redevelopment of existing uses and the development of new uses. In addition, the UWMP evaluates the quality and reliability of existing and projected water supplies, as well as alternative sources of water supply and how they would be secured if needed. As stated earlier, the Urban Water Management Planning Act states that urban water suppliers should make every effort to ensure that there is an appropriate level of reliability in its water service sufficient to meet the needs of customers. A critical part of this effort is the guarantee of future water supplies through increased conservation practices. Based on the availability of supply to meet the anticipated water demand, and that related projects and development in the surrounding area are largely infill on previously developed sites with associated infrastructure, cumulative impacts to water services would be less significant. Therefore, with the incorporation of water conservation Mitigation Measures L-2 through L-8, the proposed project would not considerably contribute to cumulative impacts associated with water supply or infrastructure.¹⁴

3. SOLID WASTE

EXISTING CONDITIONS

Within the City of Los Angeles, the Los Angeles Bureau of Sanitation (LABS) administers solid

¹⁴ Tom Erb, Director of Water Resources, LADWP, E-Mail Communication, February 23, 2009 indicates a calculated project water demand of 433,476 gpd and an "allowed water demand" of 232,632 gpd plus an existing water demand of 58,996 gpd resulting in required conservation of 141,848 gpd. The calculated water demand presented in the Draft EIR is higher than calculated by LADWP and therefore represents a conservative estimate; however mitigation measure IV.L.8 would commit the project to consuming no more than a net increase of 232,632 gpd.

waste management, including collection and disposal services and landfill operation. The LABS collects single-family residential and limited multi-family residential refuse. Private contractors collect waste generated by most multi-family residential sources and all commercial and industrial sources. Construction waste is also collected by private contractors.

Waste disposal sites, or landfills, are operated by both the City and the County of Los Angeles (County) as well as by private companies. In addition, transfer stations are utilized to temporarily store debris until larger hauling trucks are available to transport the materials directly to the landfills. A materials recovery facility or materials reclamation facility (MRF) is a specialized plant that receives, separates and prepares recyclable materials for marketing to end-user manufacturers. Landfill availability is limited by several factors, including: (1) restrictions to accepting waste generated only within a landfill's particular jurisdiction and/or watershed boundary; (2) tonnage permit limitations; and (3) operational constraints.

Sunshine Canyon Landfill, located in Sylmar, has been handling the solid waste disposal needs for City and County of Los Angeles residents for approximately 50 years. The Sunshine Landfill is jointly operated by the City and the County (each operates separate portions of the landfill). In December 1999, the City approved Ordinance 172,933, which amended the Los Angeles Municipal Code to allow the City to expand the Sunshine Canyon Landfill and combine the City and County portions of the landfill.¹⁵ The plan (approved in Ordinance 172,933) allows the City to: (1) work with the County to combine the City and County portions of the landfill;¹⁶ (2) expand the landfill footprint to 194 acres in the City and 257 acres in the County; (3) increase capacity to 55 million tons in the City portion and increase the combined capacity of the City/County landfill to 90 million tons; (4) permit a daily maximum intake of 5,500 tons per day to the combining of the City and County portions of the landfill; (5) permit a combined City/County daily maximum intake of 11,000 tons following combining the City and County portions of the landfill; and (6) extend the estimated closure date to approximately 2029.¹⁷ The City has recently approved, and the California Integrated Waste Management Board (CIWMB) has concurred with, the solid waste facility permit for Phase I of that plan, which initially permits a maximum capacity of 17 million tons.¹⁸ According to the permit, the maximum permitted capacity is 37,315,352 cubic yards. The maximum daily permitted throughput of the Sunshine Canyon landfill is 12,100 tons per day, although the average daily intake is approximately 6,000-7,000 tons per day.¹⁹

On July 7, 2008, the California Integrated Waste Management issued a new solid waste facilities permit for the Sunshine Canyon City/County Landfill.²⁰ The permit allows a maximum daily permitted tonnage of 12,100 and has a design capacity of 140,900,000 cubic yards. According to the permit, the estimated closure date for the landfill is 2037.

The existing solid waste generation on the project site is shown in **Table IV.L-9**. **Table IV.L-10** shows the existing solid waste generation of the Add Area.

¹⁵ City of Los Angeles Ordinance 172,933 and its [Q] Qualified Conditions of Approval, approve December 10, 1999.

¹⁶ Ibid.

¹⁷ City of Los Angeles, Draft Subsequent Environmental Impact Report Sunshine Canyon Landfill, July 1997.

¹⁸ California Integrated Waste Management Board, Facility Site Summary Details, <http://www.ciwmb.ca.gov/SWIS/detail.asp?PG-DET&SITESCH=19-AA-0853&OUT=html>, accessed on November 8, 2007.

¹⁹ Diane Aballa, Sunshine Canyon Environmental Specialist-Compliance, *Phone Communication*, September 24, 2008

²⁰ <http://www.ciwmb.ca.gov/PermitToolbox/Notices/SunshineCnyn/Permits/July7Issued.pdf>. Accessed August 25, 2008.

TABLE IV.L-9 EXISTING CALCULATED SOLID WASTE -- PROJECT SITE			
Use	Measurement Unit Square Feet	Rate (Lbs./Day/Unit)	Solid Waste (Lbs./Day)
Shopping Center	151,806	0.005 Lbs./Day/Sq. ft.	759
Total			759
SOURCE: County of Los Angeles, Solid Waste Generation Factors, 2001. Sirius Environmental 2008.			

TABLE IV.L-10 EXISTING ESTIMATED SOLID WASTE -- ADD AREA			
Use	Measurement Unit Square Feet	Rate (Lbs./Day/Unit)	Solid Waste (Lbs./Day)
Self-Storage ¹	18,414	0.005 Lbs./Day/Sq. ft.	92
Church	18,356	0.007 Lbs./Day/Sq. ft.	128
School	63,281	0.007 Lbs./Day/Sq. ft.	443
Retail/Restaurant	10,558	0.005 Lbs./Day/Sq. ft.	53
Total			716
SOURCE: County of Los Angeles, Solid Waste Generation Factors, 2001. Sirius Environmental 2008.			
¹ Assumes Commercial Rate.			

REGULATORY SETTING

The California Integrated Waste Management Act of 1989 (AB939) was enacted to reduce, recycle, and reuse solid waste generated in the state to the maximum extent feasible. Specifically, the Act requires city and county jurisdictions to identify an implementation schedule to divert 50 percent of the total waste stream from landfill disposal by the year 2000. The Act also requires each city and county to promote source reduction, recycling, and safe disposal or transformation. Cities and counties are required to maintain the 50 percent diversion specified by AB 939 past the year 2000. In 1999, the Mayor directed City departments to develop strategies to achieve the citywide recycling goal of 70 percent by 2020.²¹

AB 939 further requires each city to conduct a Solid Waste Generation Study and to prepare a Source Reduction and Recycling Element (SRRE) to describe how it would reach the goals. The SRRE contains programs and policies for fulfillment of the goals of the Act, including the above-noted diversion goals and must be updated annually to account for changing market and infrastructure conditions. As projects and programs are implemented, the characteristics of the waste stream, the capacities of the current solid waste disposal facilities, and the operational status of those facilities are upgraded, as appropriate. California cities and counties are required to submit annual reports to the CIWMB to update it on their progress toward the AB 939 goals. To date, implementation of AB 939 has proven to be a successful method of reducing landfill waste in the City by approximately 62 percent.

²¹ City of Los Angeles Solid Resources Program Fact Sheet, November 2000, page III.

ENVIRONMENTAL IMPACTS

THRESHOLD OF SIGNIFICANCE

The proposed project would have a significant impact on solid waste if:

- The landfill serving a project did not have sufficient permitted capacity to accommodate the project's solid waste disposal needs; and/or
- The project would not comply with federal, state, and local statutes and regulations to solid waste;
- The amount of project waste generation, diversion, and disposal during demolition, construction and operation of the project, considering proposed design and operational features would exceed typical waste generation rates;
- The project would result in the need for additional solid waste collection route(s), or recycling or disposal facility to adequately handle project-generated waste; and
- The project could conflict with solid waste policies and objectives in the Source Reduction Recycling Element or its updates, City of Los Angeles Solid Waste Management Policy Plan Framework Element, or the Curbside Recycling Program, including consideration of land use specific waste diversion goals contained in Volume 4 of the SRRE.

PROJECT IMPACTS

Proposed Project

Construction of the proposed mixed-use project would generate waste from demolition activities, materials used to construct buildings, and from construction employees (food waste). Because the City of Los Angeles has already achieved a 62 percent solid waste diversion rate, this percentage is assumed in this analysis. Additionally, the project is expected to recycle a minimum of 50% of construction waste in accordance with LEED ND Construction Waste Management Credits. The site will total approximately 359,497 sq. ft. of pavement removal. Taking into account the 50% minimum requirement mentioned above, the project will therefore be required to recycle at least 179,749 sq. ft. of pavement debris. Additionally, it is estimated that the proposed project would generate approximately 57,400 cubic feet of demolition debris/waste. Therefore, at least 28,700 cubic feet of the debris would be recycled.

The proposed residences and businesses that would operate under the proposed project would be required to contract with a private collection agency for the pick-up and disposal of solid waste. **Table IV.L-11** shows the estimated amounts of solid waste to be generated by project uses. The total calculated solid waste anticipated to be generated by the proposed project would be 7,368 lbs. per day. The existing operational solid waste generated on the project site is 759 lbs. per day. The net solid waste generation for the proposed project would be 6,609 lbs. per day. As stated above, 62 percent of this solid waste produced at the site must be diverted from landfills. With 62 percent diverted, 2,511 lbs. of solid waste generated from the proposed project would be transported to landfills. The solid waste produced by the operation of the proposed project would not be in exceedance of the permitted throughput capacity of the

Sunshine Canyon Landfill. Therefore, a less-than-significant impact with mitigation incorporation is associated with solid waste generation.

The total calculated solid waste anticipated to be generated by the proposed Add Area would be 1,612 lbs. per day. The existing operational solid waste generated on the Add Area is 716 lbs. per day. The net solid waste generation for the proposed Add Area would be 896 lbs. per day. As stated above, 62 percent of this solid waste produced at the site must be diverted from landfills. With 62 percent diverted, 340 lbs. of solid waste generated from the proposed project would be transported to landfills.

Add Area

Similar to the proposed project, construction of anticipated development on the Add Area would generate waste from demolition activities, materials used to construct buildings, and from employees (food waste). As stated above, the City of Los Angeles' 62 percent solid waste diversion rate in addition any associated construction debris recycling undertaken per the City's pending Green Building Program (which requires LEED compliance for projects greater than 50 units or 50,000 square feet) are assumed under anticipated development of the Add Area.

As stated in the Project Description, the existing church and associated school are assumed to remain under anticipated development of the Add Area. As with the proposed project, the anticipated residences and businesses that would operate on the Add Area would be required to contract with a private collection agency for the pick-up and disposal of solid waste. **Table IV.L-12** shows the estimated amounts of solid waste to be generated by these land uses. The total operational solid waste generated on the Add Area would be 1,612 lbs. per day. The existing operational solid waste generated on the Add Area site is 716 lbs. per day. The net solid waste generation for the proposed project would be 896 lbs. per day. As stated above, 62 percent of the solid waste produced must be diverted from landfills. With 62 percent diverted, 340 lbs. of solid waste generated from the Add Area would be transported to landfills. The solid waste produced by the operation of the Add Area would not be in exceedance of the permitted throughput capacity of the Sunshine Canyon Landfill. Therefore, a less-than-significant impact with mitigation incorporation in regards to solid waste generation is anticipated for the Add Area.

Proposed Project and Add Area

Solid waste generation under the proposed project is anticipated to be 7,368 lbs. Anticipated development of the Add Area is expected to generate approximately 1,612 lbs. of solid waste. Therefore, a total of 8,980 lbs. of solid waste would be generated under development of the proposed project and Add Area. Incorporation of the following mitigation measures would reduce impacts to less than significant levels.

MITIGATION MEASURES

IV.L-9 At a minimum, the proposed project and the proposed development of the Add Area shall recycle and/or salvage at least 50% of non-hazardous construction and demolition debris. A construction waste management plan that, at a minimum, identifies the materials to be diverted from disposal and whether the materials will be sorted on-site or comingled shall be developed and implemented. Excavated soil and land-clearing debris do not contribute to the amount of recycled/salvaged debris. Calculations can be done by weight or volume, but must be consistent throughout.

TABLE IV.L-11 CALCULATED SOLID WASTE -- PROPOSED PROJECT			
Use	Area (Sq. Ft./Units/Rooms)	Rate (Lbs./Sq. Ft.)	Solid Waste (Lbs.)
Retail/Restaurant	300,000	0.005 Lbs./Day/gsf	1,500
Office	550,000	0.006 Lbs./Day/gsf	3,300
Hotel	230	2 Lbs./Day/Room	460
Gym	45,000	0.005 Lbs./Day/gsf	225
Common Area	200,000	0.005 Lbs./Day/gsf	1,000
Theatre ¹	68,500	0.005 Lbs./Day/ gsf	343
Residential	150	3.6 Lbs./Day/Unit	540
Total			7,368
<i>Less Existing Uses</i>			759
Total Net Increase			6,609
Less 62% Diversion			2,511
¹ Assumes Retail Rate.			
² Due to rounding and a conservative approach individual areas add to slightly more than the 1.5 million gross sf proposed <i>County of Los Angeles, Solid Waste Generation Factors, 2001. Sirius Environmental 2008.</i>			

TABLE IV.L-12 CALCULATED SOLID WASTE FROM DEVELOPMENT -- ADD AREA			
Use	Area (Sq. Ft./Units/Rooms)	Rate (Lbs./Sq. Ft.)	Solid Waste (Lbs.)
Retail	57,000	0.005 Lbs./Day/Sq. ft.	285
Office	168,000	0.006 Lbs./Day/Sq. ft.	672
Residential	182	3.6 Lbs./Day/Unit	655
Total			1,612
<i>Less Existing Uses</i>			716
Total Net Increase			896
Less 62% Diversion			340
<i>County of Los Angeles, Solid Waste Generation Factors, 2001. Sirius Environmental 2008.</i>			

IV.L-10 The new project and Add Area developments shall institute a recycling program to reduce the volume of solid waste going to landfills in compliance with the City's current goal of a 62 percent reduction in the amount of waste going to landfills, with the 2020 goal of a 70 percent reduction of waste going to landfills. Additionally, recycling bins shall be provided at an appropriate location on-site to promote recycling.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

With implementation of Mitigation Measures IV.L-8 and IV.L-9, the proposed project would have a less than significant impact with respect to the City's solid waste facilities.

CUMULATIVE IMPACTS

Although the proposed project and the related projects would increase the daily solid waste generation in the project area, the Sunshine Canyon Landfill is permitted to receive up to 12,100 tons of solid waste each day from the City of Los Angeles, and it currently receives only 6,000-7,000 tons per day. As the City develops solutions to meet the future disposal needs at a regional level (i.e., expanding existing landfills, transporting waste to other landfills, converting waste to energy, recycling, and waste reduction), additional capacity to accommodate the cumulative disposal needs of the proposed project and the related projects may become available. Furthermore, all of the related projects would be required to comply with mandated waste diversion rates and would divert at least 62 percent of construction and operational solid waste through waste reduction, recycling, and composting. As such, the proposed project and the anticipated development of the Add Area would not considerably contribute to cumulative impacts associated with construction or operational solid waste.

4. Energy

EXISTING CONDITIONS

ELECTRICITY

Project Site

Energy consumption including electricity, by new buildings in California, is regulated by the State Building Energy Efficiency Standards, embodied in Title 24 of the California Code of Regulations (CCR). The efficiency standards apply to new construction of both residential and non-residential buildings, and regulate energy consumed for heating, cooling, ventilation, water heating, and lighting. The building efficiency standards are enforced through the local building permit process. Local government agencies may adopt and enforce energy standards for new buildings, provided that these standards meet or exceed those provided in Title 24 guidelines.

The Los Angeles Department of Water and Power (LADWP) supplies nearly 22 billion kilowatt (kW) hours of electricity a year for the city's 1.4 million electric customers.²² The utility was established more than 100 years ago to provide water and electric needs to the City's businesses and residents. LADWP serves a 465-square-mile area and is the largest municipal utility in the nation. In total, LADWP operates 20 receiving stations and 174 distribution stations to provide electricity to LADWP customers, with additional facilities to be acquired as their load increases. LADWP provides service to the project site and Add Area.

An existing overhead system runs east and west along the frontage of the property. The current on-site electric facilities are provided from this overhead system to an off-site riser pole, which feeds an underground distribution system servicing multiple buildings on the site.

Existing electricity consumption on the project site is calculated to be 5,609 Kilowatt Hours per Day (KWhd) as shown in **Table IV.L-13**. Electrical estimates are based on existing use, building square footages, and the South Coast Air Quality Management District, 1993 Air Quality Handbook standard consumption rates (which do not take into account energy reduction rates achieved in the past several years).

²² Los Angeles Department of Water and Power Website: <http://www.ladwp.com/ladwp/cms/ladwp001557.jsp> accessed on August 5, 2008.

Add Area

The Add Area is serviced from LADWP overhead lines located on Victory Boulevard and Coldwater Canyon Avenue. Existing overhead lines and power poles enter the Add Area from Coldwater Canyon Avenue through an existing alley. As shown in **Table IV.L-14** the estimated demand for the existing Add Area is 3,217 KWhd.

NATURAL GAS

Project Site

Southern California Gas Company (SoCal Gas), a subsidiary of Sempra Energy and the nation's largest natural gas supplier, distributes natural gas to 19.5 million residential, commercial, and industrial customers throughout southern California. SoCal Gas owns and operates 95,000 miles of gas distribution mains and service lines, as well as nearly 3,000 miles of transmission and storage pipeline. The utility also owns gas transmission stations and underground storage facilities. An existing 4-inch steel medium pressure gas line runs east west along Victory Boulevard, approximately 24 feet north of the center line of the street.

Existing natural gas consumption on the project site is estimated at 14,626 cubic feet per day (CFD) as shown in **Table IV.L-13**. Gas estimates are based on existing use, building square footages, and the South Coast Air Quality Management District, 1993 Air Quality Handbook standard consumption rates.

Add Area

The Add Area is serviced from Southern California Gas Company gas lines located in Morse Avenue, Hamlin Street, Coldwater Canyon Avenue, and Victory Boulevard. The existing gas demand (shown in **Table IV.L-14**) for the existing developments in the Add Area is calculated to be 10,048 CFD.

ENVIRONMENTAL IMPACTS

THRESHOLD OF SIGNIFICANCE

In accordance with Appendix F of the State CEQA Guidelines, CEQA requires that EIRs include a discussion of the potential energy impacts of the proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy. As no specific thresholds of significance are suggested in Appendix F or G to the State CEQA guidelines, the applicable thresholds of are derived from the City of Los Angeles *Draft L.A. CEQA Thresholds Guide*, which provides that the proposed project would result in a significant impact to electricity resources or utility systems if either of the following would result from project implementation:

- Create a need for new supply facilities, distribution infrastructure, or capacity enhancing alterations to existing facilities; or
- Conflict with adopted energy conservation plans.

**TABLE IV.L-13
CALCULATED ENERGY USE – EXISTING PROJECT SITE**

Use	Generation Factor¹	Total Demand (KWh/D or CFD)
ELECTRICITY	KWh/Day	
41,141 sq. ft. Health Club	0.037 KW Hr./Day/Sq. Ft.	1,522
32,000 sq. ft. Market	0.037 KW Hr./Day/Sq. Ft.	1,184
31,117 sq. ft. Drug Store	0.037 KW Hr./Day/Sq. Ft.	1,151
4,524 sq. ft. Restaurant	0.037 KW Hr./Day/Sq. Ft.	167
3,324 sq. ft. Bank	0.035 KW Hr./Day/Sq. Ft.	116
39,700 sq. ft. Other ²	0.037 KW Hr./Day/Sq. Ft.	1,469
Total Existing Electricity Consumption¹		5,609
NATURAL GAS	CF/Day	
41,141 sq. ft. Health Club	0.097 Cu. Ft./Day/Sq. Ft.	3,991
32,000 sq. ft. Market	0.097 Cu. Ft./Day/Sq. Ft.	3,104
31,117 sq. ft. Drug Store	0.097 Cu. Ft./Day/Sq. Ft.	3,018
4,524 sq. ft. Restaurant	0.097 Cu. Ft./Day/Sq. Ft.	439
3,324 sq. ft. Bank	0.067 Cu. Ft./Day/Sq. Ft.	223
39,700 sq. ft. Other ²	0.097 Cu. Ft./Day/Sq. Ft.	3,851
Total Existing Natural Gas Consumption		14,626
SOURCE: Development Resource Consultants, Inc., September 2008.		
¹ Quantities are based on units of measurement found in the 1993 South Coast Air Quality Management District CEQA Air Quality Handbook.		
² Various commercial and retail uses ranging in size from 780 sq. ft. to 4,524 sq. ft.		

PROJECT IMPACTS

Project Site

The proposed project would result in both short-term and long-term energy consumption impacts. Short-term energy consumption, which would occur during construction of the proposed project, would result from demolition, excavation, grading, and building construction activities. The short-term energy consumption would not be significant due to the temporary duration of construction activities.

Long-term energy consumption would result from heating, cooling, lighting, driving, and other operational needs associated with the commercial and residential land uses. **Table IV.L-15** shows the increase in electrical and natural gas consumption for the proposed project. Existing electrical consumption is calculated to be 5,609 KWhd. Under the proposed project, electrical consumption is calculated to be 48,541 KWhd. The net new consumption would be 42,932 KWhd (before mitigation). On-site electric service would be provided from the LADWP mainline system in Victory Boulevard, whether from the existing overhead or converted underground LADWP facilities. According to the Utility Report prepared for the project, LADWP has issued a will serve letter for the proposed project and does not anticipate any upsizing of existing facilities will be necessary based upon preliminary review.²³ This would be considered a less than significant impact with mitigation incorporation.

²³ Development Resource Consultants, *Plaza at the Glen-Utility Report*, September 2008.

TABLE IV.L-14 EXISTING CALCULATED ENERGY USE – ADD AREA		
Use	Generation Factor ¹	Total Demand (KWh/D or CFD)
ELECTRICITY		KWh/Day
5,766 sq. ft. Retail	0.037 KW Hr./Day/Sq. ft.	213
4,792 sq. ft. Restaurant	0.037 KW Hr./Day/Sq. ft.	177
18,356 sq. ft. Church	0.029 KW Hr./Day/Sq. ft.	532
18,414 sq. ft. Warehouse	0.025 KW Hr./Day/Sq. ft.	460
63,281 sq. ft. School	0.029 KW Hr./Day/Sq. ft.	1,835
Total Existing Electricity Consumption		3,217
NATURAL GAS		CF/Day
5,766 sq. ft. Retail	0.097 Cu. Ft./Day/Sq. ft.	559
4,792 sq. ft. Restaurant	0.097 Cu. Ft./Day/Sq. ft.	465
18,356 sq. ft. Church ²	0.097 Cu. Ft./Day/Sq. ft.	1,781
18,414 sq. ft. Warehouse	0.06 Cu. Ft./Day/Sq. ft.	1,105
63,281 sq. ft. School ²	0.097 Cu. Ft./Day/Sq. ft.	6,138
Total Existing Natural Gas Consumption		10,048
SOURCE: Development Resource Consultants, Inc. September 2008.		
1 Quantities are based on units of measurement found in the 1993 South Coast Air Quality Management District CEQA Air Quality Handbook.		
2 Commercial generation factors were used for worst-case scenarios.		

The existing natural gas consumption is calculated to be 14,626 CFD while under the proposed project it is calculated to be 142,300 CFD. This would result in a net new consumption of 127,674 CFD (before mitigation).

Add Area

Similar to the proposed project, anticipated development of the Add Area would result in both short-term and long-term energy consumption impacts. Short-term energy consumption, which would occur during construction of the development on the Add Area, would result from demolition, excavation, grading, and building construction activities. The short-term energy consumption would not be significant due to the temporary duration of construction activities.

Long-term energy consumption would result from heating, cooling, lighting, driving, and other operational needs associated with the commercial and residential land uses. **Table IV.L-16** shows the increase in electrical and natural gas consumption for the development anticipated for the Add Area. Existing electrical consumption in the Add Area is calculated to be 3,217 KWhd. Under anticipated Add Area development, electrical consumption is calculated to be 11,994 KWhd. The net new consumption would be 8,777 KWhd. LADWP would need to be consulted during the design phase to determine if the existing infrastructure has the necessary capacity to serve the proposed development. This would be considered a less than significant impact with mitigation incorporation.

The existing natural gas consumption is calculated to be 10,048 CFD while under anticipated development of the Add Area, it is calculated to be 44,949 CFD. This could result in a net new

consumption of 34,901 CFD.

The anticipated design of the Add Area would be to connect to the existing gas lines located in Victory Blvd. and Coldwater Canyon Ave. The increased demand due to the Add Area is considered accumulative with the impacts due to the proposed project. As stated earlier, gas consumption for the proposed project is estimated at 142,300 CFD. Proposed Add Area gas consumption is anticipated to be 44,949 CFD. Therefore, gas consumption for both the proposed project and Add Area is estimated at 187,249 CFD. The impacts of the Add Area on the existing infrastructure and the gas system as a whole would be determined by The Southern California Gas Company at time of design. This would be considered a less than significant impact with mitigation incorporation.

Tables IV.L-15 and IV.L-16 do not reflect energy efficiency benefits that would be implemented through the LEED certification process.

Proposed Project and Add Area

As stated earlier, electrical consumption for the proposed project is estimated at 48,541 KWh/D. Proposed Add Area electrical consumption is anticipated to be 11,994 KWh/D. Therefore, electrical consumption for both the proposed project and Add Area is estimated at 60,535 KWh/D. Mitigation Measures provided below would reduce impacts to less than significant levels.

Natural gas consumption for the proposed project is estimated at 142,300 CFD. Proposed Add Area natural gas consumption is anticipated to be 44,949 CFD. Therefore, natural gas consumption for both the proposed project and Add Area is anticipated to be 187,249 CFD. Mitigation measures provided below would reduce impacts to less than significant levels.

MITIGATION MEASURES

- IV.L-11 The project applicant shall diligently pursue multiple Energy Efficiency points under the LEED ND standard.
- IV.L-12 During the design process, the project applicant shall consult with the Department of Water and Power, Energy Services Subsection and the Southern California Gas Company, the Commercial, Industrial or Residential Staff Supervisor, regarding possible Energy Conservation Measures for the proposed project and the Add Area.
- IV.L-13 The proposed project will comply with LADWP requirements and recommendations, including the implementation of a removal work order for all existing on-site electric facilities, but not limited to meters, transformer, vault and poles. Proposed street improvements and conditions of approval may require the conversion of the overhead lines on Victory Boulevard to an underground conduit system, which will include vaults and/or transformer in sidewalk or landscape area along the frontage of the property. This conversion will also require removal of three power poles. The overhead electric line providing service to the south side of Victory Boulevard will require either boring or cutting and trenching Victory Boulevard to a riser on the service pole. Such improvements shall be undertaken to the satisfaction and specifications of the LADWP and the Bureau of Engineering prior to issuance of a Certificate of Occupancy for any part of the project.

TABLE IV.L-15 CALCULATED ENERGY USE – PROPOSED PROJECT		
Use¹	Generation Factor¹	Total Demand (KWh/D or CFD)
ELECTRICITY		
	KWh/Day	
185,000 sq. ft. Retail	0.037 KW Hr./Day/sq. ft.	6,845
115,000 sq. ft. Restaurant	0.037 KW Hr./Day/sq. ft.	4,255
200,000 sq. ft. Common Area	0.037 KW Hr./Day/sq. ft.	7,400
500,000 sq. ft. Office	0.035 KW Hr./Day/sq. ft.	17,500
50,000 sq. ft. Medical Office	0.037 KW Hr./Day/sq. ft.	1,850
68,500 sq. ft. Theatre	0.037 KW Hr./Day/sq. ft.	2,535
45,000 sq. ft. Gym	0.037 KW Hr./Day/sq. ft.	1,665
151,500 sq. ft. Hotel	0.027 KW Hr./Day/sq. ft.	4,091
200,000 sq. ft. Residential	0.012 KW Hr./Day/sq. ft.	2,400
Total Proposed Electricity Consumption		48,541
NATURAL GAS		
	CF/Day	
185,000 sq. ft. Retail	0.097 Cu. Ft./Day/sq. ft.	17,945
115,000 sq. ft. Restaurant	0.097 Cu. Ft./Day/sq. ft.	11,155
200,000 sq. ft. Common Area	0.097 Cu. Ft./Day/sq. ft.	19,400
500,000 sq. ft. Office	0.067 Cu. Ft./Day/sq. ft.	33,500
50,000 sq. ft. Medical Office	0.097 Cu. Ft./Day/sq. ft.	4,850
68,500 sq. ft. Theatre	0.097 Cu. Ft./Day/sq. ft.	6,645
45,000 sq. ft. Gym	0.097 Cu. Ft./Day/sq. ft.	4,365
151,500 sq. ft. Hotel	0.16 Cu. Ft./Day/sq. ft.	24,240
200,000 sq. ft. Residential	0.101 Cu. Ft./Day/sq. ft.	20,200
Total Proposed Natural Gas Consumption		142,300
SOURCE: Development Resource Consultants, Inc. September 2008.		
¹ Quantities are based on units of measurement found in the 1993 South Coast Air Quality Management District CEQA Air Quality Handbook.		
² Due to rounding and a conservative approach individual areas add to slightly more than the 1.5 million gross sf proposed		

LEVEL OF SIGNIFICANCE AFTER MITIGATION

With implementation of Mitigation Measures IV.L-10 through IV.L-12, the proposed project and the Add Area would have a less than significant impact with respect to the City's electrical and natural gas infrastructure.

TABLE IV.L-16 CALCLATED ENERGY USE – ADD AREA		
Use	Generation Factor¹	Total Demand (KWh/D or CFD)
ELECTRICITY	KWh/Day	
57,000 sq. ft. Shopping Center	0.037 KW Hr./Day/sq. ft.	2,109
18,350 sq. ft. Church	0.029 KW Hr./Day/sq. ft.	532
168,000 sq. ft. Office	0.035 KW Hr./Day/sq. ft.	5,880
20,250 sq. ft. School	0.029 KW Hr./Day/sq. ft.	587
222,000 sq. ft. Residential	0.013 KW Hr./Day/sq. ft.	2,886
Total Proposed Electricity Consumption		11,994
NATURAL GAS	CF/Day	
57,000 sq. ft. Shopping Center	0.097 Cu. Ft./Day/sq. ft.	5,529
18,350 sq. ft. Church	0.097 Cu. Ft./Day/sq. ft.	1,780
168,000 sq. ft. Office	0.067 Cu. Ft./Day/sq. ft.	11,256
20,250 sq. ft. School	0.097 Cu. Ft./Day/sq. ft.	1,964
222,000 sq. ft. Residential	0.11 Cu. Ft./Day/sq. ft.	24,420
Total Proposed Natural Gas Consumption		44,949
SOURCE: Development Resource Consultants, Inc. September 2008		
¹ Quantities are based on units of measurement found in the 1993 South Coast Air Quality Management District CEQA Air Quality Handbook.		

CUMULATIVE IMPACTS

The proposed project, the anticipated development of the Add Area, and the related projects would increase demand on energy resources in the project area. The related projects would be served by SoCal Gas. Under the City Charter, the LADWP has an obligation to serve the citizens of the City. Therefore, the projects within the City of Los Angeles have been factored in to the projected electricity demands. The City proposes to initiate a General Plan re-designation for the Add Area once the applicant's case is deemed complete. Such initiation will further serve to implement the Community Center vision for the project area as called out by the GPF.

Furthermore, all of the related projects would be required to comply with Title 24 of the CCR, which establishes energy conservation standards for new construction, and many of these projects would be subject to the City's pending Green Building Program and associated LEED Energy and Atmosphere pre-requisites, which requires that Title 24 be exceeded. It is anticipated that construction of the 90 related projects would also result in temporary energy consumption that would not be significant when compared to operational energy consumption. The proposed project would result in less than significant impacts associated with energy consumption with implementation of Mitigation Measures of IV.L-10 through IV.L-12. Therefore, the proposed project would not considerably contribute to cumulative impacts associated with energy consumption.